Environmentalism, Anti-environmentalism and Deep Stories about Wind Energy Development in Rural Alberta

by

Aleksandra Afanasyeva

A thesis submitted in partial fulfillment of the requirements for the degree of

Master of Science

in

Rural Sociology

Department of Resource Economics and Environmental Sociology
University of Alberta

Abstract

The energy transition mandated by the Government of Alberta has put wind energy at the center of discussions about transforming the electrical grid, with goals of reducing emissions and taking action on climate change. Based on in-depth interviews with 36 landowners and key informants (government and industry representatives) as well as excerpts from an Alberta Utilities Commission (AUC) public hearing, a range of perspectives on wind energy development are documented. Discourses that encourage and promote the development of wind energy in the Province of Alberta are paralleled by wide-ranging oppositional voices, as well as deep-set reservations tied to environmentalism, community, landscape, energy, and identity. This thesis examines landowner and community reservations about wind energy, and the complexities of defining environmentalism, meanings of community, and the rural farming identity. In particular, this work takes place in the context of broader context of Alberta's unique economic and social position in relation to energy production. Chapter 2 sets out to address whether those opposing wind energy development come from an anti-environmental standpoint. I demonstrate that a misalignment in discourses about what constitutes environmentalism is one of the most prevalent struggles in the wind energy debate in Alberta. Perspectives that oppose green energy initiatives cannot be dismissed as anti-environmentalist rhetoric. The tensions between strong environmentalist perspectives at the farm level and green energy politics at the provincial level are explored. The chapter concludes with reflections on environmentalism and anti-environmentalism in western Canada, and possibilities for more meaningful dialogue between groups with different political ideologies, environmental sensibilities and perspectives on energy development. Chapter 3 addresses notions of community and identity through Hochshild's (2018) lens of the deep story. Deep stories signify what matter most to rural residents in relation to incoming wind energy projects. The importance of a rural farming identity and neighboring is explored in terms of the perceived threats to community cohesion, landscape, and the broader provincial identity. The rural farming identity is also explored in relation to its links to landscapes of energy development, and the inextricable link between industrial agriculture and oil and gas development. Deep stories of fairness, loss, division, and attachments to places and people are brought out in excerpts from landowners in relation to the impacts of wind energy development on their land and in their communities.

Preface

This thesis is an original work by Aleksandra Afanasyeva. The research project, of which this thesis is a part, received research ethics approval from the University of Alberta Research Ethics Board, Project Name “A Comparative Study of the Social Perceptions of Wind and Unconventional Gas Development in Alberta”, No. Pro00074145, July 2017- July 2018.

Acknowledgments

I would like to thank my supervisor John Parkins for giving me the opportunity to be a part of the broader research project: Imagination, Expectation, and Deliberation: Pathways to Wind Energy Landscape Transition in Alberta. I would like to acknowledge the source of funding that so generously allowed me to pursue graduate studies. Thank you to the Social Sciences and Humanities Research Council Insight Grant. I would like to thank my co-supervisor Debra Davidson for all the feedback and encouragement throughout the process. Thank you both for your efforts, and patience. It was a privilege working with you. Your dedication and passion for your work is admirable. Universities need more professors like you to continue to pursue the most salient social issues.

Special thanks to arm's length examiner Lars Hallstrom and the Chair Henry An.

I would like to thank all of the interview participants for welcoming me into their homes and opening up during the interview process. Thank you for allowing me to experience rural Alberta in all its glory. Thank you for all that you do as farmers. Thank you to all the key informants who took the time out of their busy schedules to sit down with me.

Thank you to my sister Lera Afanasyeva, my future sister in law Jessica Federspiel for all you have done for me while I was out conducting interviews and spending my days writing. Thank you to all my friends for being there for me when I needed your company.

Thank you to Nathan Billington for your unwavering support, and love despite everything.

Table of Contents

List of Tables

Chapter 1- Introduction and Research Background

Energy Transition Background

Wind energy has become a topic of interest due to its unique position in many governmental climate change mitigation strategies and resolutions, as well as in broader discussions of decarbonisation (Barry, Ellis & Robinson, 2008; Hess & Brown, 2017; Klass, 2011) and emission reduction (Hyland & Bertsch, 2018; Bidwell, 2013; Woods, 2003; Devine- Wright, 2005 & 2007). In general, there is a wide "consensus" on the benefits of wind energy development (Phillips & Dickie, 2015). This support results from the accepted environmental benefits of green energy, specifically in relation to carbon-based electricity generation. Wind energy has become associated with addressing climate concern (Devine-Wright, 2005; Phillips, & Dickie, 2015; Barry et al, 2008; Szarka, 2004) and the associated imperative to reduce global carbon emissions in addressing climate change (Jacquet & Stedman, 2014; Bidwell, 2013; Hess & Brown, 2017). In the social sphere, wind energy has become symbolic of broader social challenges of energy transitions given the many paradoxes in values, perceptions or notions of acceptance and environmentalism that it embodies.

Canada has re-entered these discussions in recent years through the Pan-Canadian Framework on Clean Growth and Climate Change, as a step towards meeting the targets of the Paris Agreement (Government of Canada, 2018a, 2018b; MacNeil & Paterson, 2018). This plan sets out the ways in which Canada will move in the direction of addressing climate change. Both at the provincial and the national levels in Canada, wind energy has gained much importance as an alternative in discussions about the greening of the grids across Canada (Government of Canada, 2018a, 2018b; Songsore and Buzzelli, 2014). Ontario has been at the center of wind energy development with an approximate 40 percent of wind capacity in Canada (CANWEA, 2018c). The Green Energy and Green Economy Act (GEA) passed in 2009 resulted in increased wind energy development in Ontario and aligned with the broad national goals of climate change mitigation (Songsore & Buzzelli, 2014; Walker, Baxter and Ouellette, 2014). The implementation of this Act limited the ability of communities to dispute projects, and put citing and environmental assessment under provincial jurisdiction, and therefore became quite contentious (Walker et al, 2014). It has also put the notion of public opposition at the forefront of discussions. In Canada, many insights around the notion of community acceptance and opposition have come from the

Ontario experience with wind energy development (Fast et al, 2016; Songsore and Buzzelli, 2014; Walker, Baxter & Ouellette, 2015; Walker et al, 2014).

In the Province of Alberta, the situation is different in many respects, although parallels and examples from Ontario can inform the Alberta situation. In Alberta, the Climate Leadership Plan implemented by the NDP (New Democratic Party) elected in late spring of 2015, started an energy transition towards 30 percent renewable energy by 2030. A central piece of this transition involves a complete phase-out of coal-powered electricity by 2030 (Alberta Government, 2016; Government of Alberta, 2018a, 2018b). Six of 18 units in Alberta would have continued to operate past 2030, which are now requiring transition payments from the government for mandated early shutdowns (Government of Alberta, 2018b). The elimination of coal-fired electricity generation is also backed at the federal level with proposed amendments to the coal-fired electricity regulations. Under this regulation amendment, coal plants will be required to reach performance standards that are expected to lead to closures rather than compliance by 2030 (Government of Canada, 2018a).

The Alberta government has initiated its own emission reduction targets and the REP (Renewable Electricity Program) which sets up contracts for the provision of renewable electricity generating capacity with renewable energy companies (Alberta Government, 2016). In Canada, Alberta ranks third in installed wind energy capacity at about 1500 MW (megawatts). There are 37 projects in the province currently, with more proposed (CANWEA, 2018a). The first round of the REP program set a record low price per MW hour of electricity and resulted in a contractual securing of 600MW of capacity (Government of Alberta, 2018a; CANWEA, 2018a). The second and third rounds are expected to secure a combined 700MW of capacity (Government of Alberta, 2018a). A series of these procurements will continue to occur contingent on the political support for the REP. The following section of this introductory chapter sets up the discussion surrounding the notions of acceptance, support, and opposition to wind energy development. It is essential to define the meanings of these terms as they drive much of the research that aims to understand the multitude of social issues that seem to accompany wind energy development.

Support for Wind Energy

Based on general public surveys wind energy has been cited as receiving a fair amount of support (Groth & Vogt, 2014), not only in Canada (CANWEA, 2018b) but also in the United States (Ansolabehere & Konisky, 2009). "Socio-political acceptance denotes the broad social consensus that wind energy technologies and policies are beneficial. This acceptance is represented by general public support for wind energy" (Bidwell, 2013, p.190). In Canada, the notions of acceptance and opposition are thoroughly examined by the case of wind energy development in Ontario. Despite the prevalence of the often-negative Ontario cases in mainstream media, one Canadian national poll shows broad support (82% nationally) for the development of renewable energy, and a support for the phase-out of coal (73% nationally) (Clean Energy Canada, 2016). Additionally, a 2017 survey conducted by the Canadian Wind Energy Association (CANWEA), showed 60% support for the development of renewable energy in the province of Alberta (CanWEA, 2018b). One study confirmed that in Alberta the AUC (Alberta Utilities Commission) has received few complaints related to wind energy projects between 2000 and 2013, which can be viewed as being indicative of little active opposition (Thibaut, Angen &Weis, 2013). It is important, therefore, to not overestimate the level of negative perceptions about wind energy in the province. However, larger scale studies and opinion polls can lead to very different kinds of insights than smaller-scale studies that focus more directly on impacted landowners and communities. Large opinion polls, for example, do not capture the complexity of discourses and perspectives at play. Within Alberta, recent developments in climate change and renewable energy policies have changed the nature of discussions and altered the nature of support. The energy transition context in the province provides a contemporary and dynamic environment for understanding wind energy development at a local scale and the complexities of its implementation.

Wind energy is usefully described as a "'learning laboratory' for the concept of social acceptance" (Fournis & Fortin, 2017). Understanding both acceptance and opposition to projects has become one of the most prevalent ways of framing the social responses that accompany wind energy development (Boyd & Paveglio, 2015; Wüstenhagen, Wolsink & Bürer, 2007; Devine-Wright, 2007; Fast et al, 2016). Acceptance in terms of renewable energy development can significantly vary by scale, temporalities, and definitions (Wüstenhagen et al, 2007). One way of categorizing acceptance is by classifying it into socio-political, community, and market

acceptance (Wüstenhagen et al, 2007). For the purposes of this research the idea of "community acceptance" is highly relevant especially as it pertains to socio-political acceptance at the provincial level. Fournis & Fortin (2017) propose that there are three "heuristic" levels of acceptance that have prevailed in literature "micro, meso, and macro"; they suggest that the "meso" approach is the combined assessment of all levels (Fournis and Fortin, 2017). "Micro" spans the individual level perceptions while "macro" pertains to global notions of renewable energy markets, decarbonization, and industrial development. For the purposes of the following chapters, discourses of environmentalism, for example, will be addressed at both micro, and meso levels. The research findings are presented at the micro level, or at the level of individual perceptions based on individual interviews.

Although support and acceptance tend to be used interchangeably, acceptance for the purpose of this project is theorized and abstracted, support is localized, tangible and relevant to individual decisions made to host turbines. General acceptance can only be theorized, but support as well as the opposition are regional and localized to the project area (Woods, 2003). This discrepancy in levels of theorized support is documented by many authors (Groth and Vogt, 2014; Bidwell, 2013; Fournis & Fortin, 2017; Barry et al, 2008), and pertains very much to this study. Understanding the perceptions and tensions that are not obvious on the surface can bring a lot of value to the discussions around energy transitions and the meanings of environmentalism in the province.

Opposition to Wind Energy

Many authors show that Not- In-My- Backyard (NIMBY) or NIMBYism as an understanding of local opposition to wind projects is highly insufficient (Van der Horst, 2007; West, Bailey & Winter, 2010; Groth & Vogt, 2014). The main concern is that the NIMBY approach dismisses individual concerns and paints opponents as 'self-interested" (Wolsink, 2000; Barry, et al, 2008) and driven by parochial arguments (Devine-Wright & Howes, 2010; Devine-Wright, 2005; Devine-Wright, 2009; Fast et al, 2016; Jacquet & Stedman, 2014; Wolsink, 2000). Barry and colleagues (2008), in their analysis of discourses pertaining to wind energy opposition, stated that "accusations of the populist NIMBY concept can be extremely damaging to anti-development protests" due to the stigma attached to individualistic concerns, and their apparent and relative illegitimacy (Barry et al, 2008, p.82). It is detrimental to both opponents and proponents of projects to dismiss concerns as NIMBYism. "The best way to protest against a

project but avoid being seen as self-interested is obviously to stress other, seemingly more legitimate, reasons for opposition" (Van der Horst, 2007, p. 2711). The purpose of this work is to extend understanding beyond these conventional characterizations of local opposition and seek a deeper and more nuanced way of seeing conflicts surrounding wind energy. As such, this study takes an approach to understanding resistance that is more in line with literature on place protection, place attachment, sense of place (Shepherd & Billington, 2011), place identity (Jacquet & Stedman, 2014; Devine-Wright; 2009) and community identity (Fast et al, 2016; Jacquet & Stedman, 2014).

Van der Horst (2007) states that the NIMBY concept begs the definition of what a "backyard" is to individuals, and therefore assumes that proximity has a direct effect on perceptions or attitudes. The scope of localized opposition to wind energy projects more often than not goes beyond the concern for one's own "backyard" and extends towards concern for the generalized notions of "environment", "community" (Bidwell, 2013) as well as beyond the community (Walker et al, 2014). In this study, I draw on these perspectives from the literature and examine closely the connections to concepts of community and environmentalism that appear threatened by wind power projects in the province.

Opposition and resistance to wind energy developments have been one of the most prevalent ways of categorizing local efforts to halt or protest projects. Although it is important to understand the active and influential campaigns against wind energy projects, it is equally if not more important to understand more passive forms of opposition. Resistance in the form of legal challenges to the projects was encountered during the field research. However, a more nuanced, and passive kind of opposition was very real and spanned across landowner interviews- both hosting and non- hosting.

Devine-Wright (2007) critically analyzes the notion of public opposition and its saliency and urgency in determining the success of wind energy projects. Given the complexities of regional and territorial decision making, public opposition alone is not the sole determinant of project outcomes (Aitken, McDonald, & Strachan,2008; Ogilvie & Rootes, 2015; Wolsink, 2000). It is therefore vital to understand the decision-making process that puts a limit on the power that municipalities have, and the power that landowners have in influencing project outcomes. According to Devine-Wright (2007), the decision-making process needs to be considered before

assumptions about the saliency of "opposition" or "resistance" can be made. The definition of resistance is important to consider because it can be both "active' and "passive" (Van der Horst, 2007). Van der Horst (2007) suggests that it is the active kind of opposition that has been most prevalently emphasized in the sociology of wind energy. In the context of this research, both active and passive forms of resistance were encountered. The notion of resistance in the context of this research captures not only the formal legal challenges and hearings but also the "undercurrents" of resistance. Informal and below the surface forms of opposition can stem from many ideological, deeper arguments. Chapter 2 demonstrates that one facet of resistance to wind energy projects can come from the disputed notion of environmentalism. Wind energy can come to embody environmentalism and be disputed on the basis of a perceived lack of environmental benefits, perceived costs to the environment, the community, and the local region. Notions of resistance and acceptance surrounding a particular project, in a particular area, are therefore not always clear-cut and can evoke a multitude of possible interpretations and forms of opposition.

Some authors have criticized the dichotomous nature of acceptance and opposition (Liebe, Bartczak & Meyerhoff, 2017; Fournis and Fortin, 2017) and the mischaracterizations of this dichotomy. Resistance or opposition has long been addressed as a "deficit" whereby it is framed as something that needs to be fixed or diminished, and this bias has existed for a while in the literature on wind energy (Fournis & Fortin, 2017). "Those who oppose turbine developments are tacitly or overtly cast in the role of barriers to sustainable energy development" (Walker et al, 2014, p. 731). However, according to Jami and Walsh (2017), there is a "silent majority" that does not voice concerns or actively resist wind projects that may become underrepresented at the community level. Reframing barrier-oriented understandings of individual and community resistive actions allows for delving deeper into the narratives around the environment, sustainability, and community. Discourses and framing of issues are fundamental factors influencing negative and "resistive" actions and attitudes towards wind projects in rural Alberta. The following chapters demonstrate that resistance and opposition to projects are complex, and intertwined in notions of community, rurality, and identity.

Acceptance and opposition have received much attention in wind energy-related literature, ranging from large-scale broad quantitative studies (Hyland & Bertsch, 2018; Liebe et al, 2017; Fergen & Jacquet 2017; Wolsink, 2000) to more in-depth, discourse and individual level

perception analyses of qualitative nature (Boyd & Paveglio, 2015; Jami & Walsh, 2017). This research falls into the category of the latter with a focus on in-depth interviews, and discourses. There are limitations to both approaches, but for the purposes of this research, the qualitative approach was more appropriate for exploring "symbolic, effective and discursive aspects of facility siting disputes" (Devine-Wright, 2007, p. 10).

Research Objectives & Questions

The initial stage of this research provided an opportunity to explore very broad and open-ended questions. The objectives at the beginning were to contribute to an understanding of the perspectives surrounding wind energy development in the Province of Alberta. Given the government mandate to phase out coal and increase the development of wind energy in Alberta, the research happened at an interesting time, where both a shift in government, and the energy transition set the scene, and electricity became a topic of significant interest. The research was guided by the following objectives:

1) To contribute to the sociological understanding of wind energy development by documenting various perspectives on related issues, and to understand the processes involved
2) To understand opposing perspectives, and the articulation of resistance to wind energy development in the province
3) To understand the uniqueness of wind energy development in Alberta in terms of its political contexts, and the context of carbon-based energy development such a coal, oil and natural gas
4) To delve into the deeper meanings that are ascribed to wind energy development; to understand the misalignment of discourses of environmentalism between wind energy advocates and landowners in rural Alberta
5) To provide a way of understanding perspectives on wind energy development beyond describing the politicization and polarization of the energy transition

The thesis is organized into four stand-alone chapters. This chapter and Chapter 4 are introductory and conclusion chapters, respectively. Given that this is a paper-based thesis, Chapters 2 and 3 are both stand-alone chapters. Chapter 2 focuses on the notion of environmentalism. The dynamics of environmentalism and the emergence of its

countermovement, anti-environmentalism, provides an opportunity to explore the broader context in which wind energy debates are situated. The basic guiding questions for Chapter 2 are:

1) What does anti-environmentalism mean in the context of opposition to wind energy mandates? Are those who oppose government green energy mandates coming from an anti-environmental stance?
2) What can be learned about the discourses and misalignment of discourses surrounding environmentalism?
3) What is the importance of acknowledging the different versions of environmentalism in rural Alberta?
4) How can the framing of wind energy development as coming from the environmental stance result in skepticism about its benefits?

Chapter 2 offers one way of understanding the conflicting views about wind energy development. Through a literature review on environmentalism, anti-environmentalism and the discourse coalitions surrounding wind energy, this chapter offers a way of understanding both active and passive opposition to wind energy development. Environmentalism and its meaning are contested between the government, wind energy proponents and landowners in rural Alberta.

Chapter 3 is written through the frame of the "deep story" adopted by from Arlie Hochschild. The chapter attempts to piece together the deep story of energy transition in rural Alberta by looking beyond the typically described social factors. The deep story lens allows for a story to emerge that is situated in the unique context of rural Albertan communities in which neighborly relations, notions of community and the landscape shape identity. Given that wind energy development will increasingly be situated in rural Alberta, it is not enough to understand the reservations in terms of technical factors. Measurable factors such as financial incentive and proximity, for example, do not capture the essence of the deeper issues people perceive and articulate. There is a complex rural identity that emerges, created not only by close neighbor relations, but also by the landscape of energy development significantly tied to the farming way of life. Rural communities have a long history of oil and gas devolvement, as well as coal, in some communities. It is vital to situate this research in the context of the already present and welcomed development, and in the pre-existing identity of rural Albertan farmers. Chapter 3 is guided by the following basic questions:

1) What can be learned about the deep story of people with reservation about wind energy?
2) How does a threat to neighbor relations through the process challenge the rural neighbor identity?
3) How are normalized energy landscapes and the rural identity connected? Where does wind energy fit into a landscape shaped by carbon energy development?

Study Setting

This study was conducted in the Province of Alberta starting in the early summer of 2017. The collection of interview data required me to travel across the province. Once enough referrals were obtained, two particular areas of the province were selected, and that's where most of the landowner interviews were collected. These two areas were Vulcan County and Paintearth County. Paintearth County is located in central Alberta. The interviews collected in Paintearth County were around the existing Capital Power Halkirk 1 wind (150 MW) project and the anticipated proposed Halkirk 2 (second phase) of roughly equal capacity. The Halkirk 1 project consists of 83 Vestas (1.8MW) turbines and became operational in late 2012. There are now a handful of other projects proposed in Paintearth County. The Battle River Coal Fired Generating Station, which is set to be phased out by 2030 is located on the Battle River, adjacent to the proposed Halkirk 2 project. The second set of landowner interviews were collected in Vulcan County around the large 300 MW Blackspring Ridge project owned and operated by EDF Renewables and Enbridge. This project was completed in the spring of 2014 and consists of 166 Vestas (1.8MW) turbines.

Two semi-structured interview guides were prepared for landowners and key informants (See Appendix A and B) During the course of fieldwork, 30 interview sessions were conducted with 36 individuals (See Table 1 for details). Of the 36 individuals that were interviewed, 18 were in the County of Paintearth, 9 were in Vulcan County, and 9 key informant interviews were spread out across the province. Key informants or representatives were interviewed in both Paintearth County and Vulcan County as well as in Calgary, Lethbridge, Pincher Creek, Magrath, Morrin, and Edmonton. The goal of interviewing the key informants in different areas was to get a more generic and province-wide sense of what wind energy development looks like across the province. However, the majority of participants were landowners with differing opinions about the wind energy development existing or proposed in these areas.

Methodology

Collective Case Study

The initial stages of research followed a qualitative comparative case study approach, whereby two cases were to be compared across a number of domains highlighting differences. This approach would have entailed a strong focus on the cases of wind energy development in two specific localities with little focus on more general information and perceptions outside two localities. It was recognized early on, however, that "intra" locality differences were as, and in some cases more interesting than "inter"- locality comparisons. The nature of comparisons had to shift from just inter-community to intra-community. Different dynamics were found between the two study areas, but an even greater variation in perspectives was found between individuals in these communities.

All interviews and information collected were part of one case, rather than separated out explicitly on the basis of location or other factors. Comparative case studies can take many forms, but this research entailed a synthetic approach. Synthetic comparative approaches are described by Ragin (1987) as a combination of variable oriented and case-oriented studies. There are many variations of case study approaches, and the definition of what constitutes case studies varies significantly by the subject matter, extent, and unit of analysis. Creswell (2006) provides one such description of what constitutes a case study: "case study research is a qualitative approach in which the investigator explores a bounded system (a case) or multiple bounded systems (cases over time through detailed, in-depth data collection involving multiple sources of information and reports a case description and case-based themes)" (Creswell, 2006; p. 73). The bounds within which a case study is conducted are set to try and pin down a focus of the study rather than attempting to answer a multitude of questions (Baxter & Jack, 2008; Yin, 2003; Stake, 1995). The case for this study is bounded by its subject matter to wind energy development in the Province of Alberta. Specifically, the study happened to be centered around landowners who have experienced wind energy development in their community in the last 4-8 years, as well as around key informants who have participated in decision making or deliberations around wind energy projects through their work. The collection of interviews in this way falls in line with the method described as "multiple case study" … "[which] enables the researcher to explore differences within and between cases… allow the researcher to analyze

within each setting and across settings" (Baxter & Jack, 2008, p.548-550). Another definition of the case study is offered by Hamel, Dufour, & Fortin (1993):

> "In this approach, the empirical details that constitute the object under study are considered in the light of the remarks made in context. This approach gives depth and dimension to the sociological explanation produced by this study. The object under sociological investigation is more than mere facts or items. It is, first and foremost, an experience containing the meanings and symbols involved in the interactions of the social actors. These meanings and symbols enter into the actors' interactions and define their points of view on these interactions" (Hamel et al, 1993.p.16-17)

The qualitative case study is well suited for the "exploration of a phenomenon within its context using a variety of data sources… the issue is not explored through one lens, but rather a variety of lenses which allows for multiple facets of the phenomenon to be revealed and understood" (Baxter & Jack, 2008, p.544). The initial stages of the research were intentionally broad and specific themes were uncovered throughout the data collection process. The nature of the qualitative interview data collected did not allow for a comparison of factors across cases explicitly. The analysis was more organic, occurring at multiple levels at once, and each case (or interview with an individual) was unique, and therefore did not lend itself well to variable based analysis. Instead, commonalities and common threads of discourses and framing were the focus of analysis. "Synthetic strategy should allow analysis of parts in a way that does not obscure wholes" (Ragin, 1987, p. 83).

Paintearth County and Vulcan County in Alberta, could not be classified as separate cases for comparison. They shared many characteristics including having a large-scale, fairly recent wind energy project, and landowners with highly variable perspectives. Some differences, however, included the scale of the project (300MW in Vulcan County, and 150MW in Paintearth County), additional proposed wind energy developments (Paintearth County), and the location of the Battle River Generating Station (Paintearth County). For the purposes of this study, the differences in perspectives between the two dominant areas could not be strictly compared, therefore a synthetic or combined case study approach best describes this research. Additionally, categorization of landowners as supportive and unsupportive of wind projects in their community was not as clear-cut as anticipated, and therefore comparison could not take place on the basis of the arguments they provided for or against the project in their community. A combined or a synthetic comparative case study approach was used because it "offers the possibility of a middle

road between emphasizing relationships among variables and structural explanations, on the one hand, and emphasizing the chronological particularities of cases and human agency on the other" (Ragin, 1987, p.71).

Internally, two projects in Paintearth and Vulcan County were the focus of landowner interviews with the rest scattered across the province, making this a "multi-site" case study (Creswell, 2006). Creswell (2006) suggest that multiple sites and cases provide an opportunity to explore an issue from multiple perspectives and angles. This research attempted to capture the most diverse perspectives through what Creswell (2006) called "purposeful maximal sampling". Landowners were asked to refer individuals with different perspectives than their own. Key informants were selected to maximize the diversity of information gathered. Interviews with municipal, county, ENGO, industry, and government representatives allowed for the inclusion of diverse expertise, and viewpoints.

The use of multiple sites and multiple cases in understanding different insights and perspectives on the development of wind energy is indicative of the collective case study approach. Following the work of Yin, (2003), Baxter & Jack suggest that context is as important as the phenomenon in question (Baxter & Jack, 2008). Information had to be gathered around the context of the energy transition before important topics emerged in the interviews. Salient issues emerged out of a combined assessment and analysis of interviews with a variety of different individuals, across a variety of locations, utilizing a combination of methods.

Conducting Interviews

Prior to research commencing, an Ethics Certificate (Study ID: Pro00074145) was obtained from the University of Alberta Research Ethics Board. This step helped to ensure that preliminary guidelines were followed for the maintenance of anonymity and respect of privacy. Two semi-structured interview guides were drafted for two separate types of interviews: landowners and key informants (See Appendix). These semi-structured interviews were revised and slightly modified for each interview session if there was additional information that could be gathered form a particular individual, in a particular organization or setting. Although the semi-structured interviews are difficult to prepare in advance, they have a flexibility to them that other methods don't. Some questions were altered to align with new directions of inquiry, and some omitted. It was important to be aware of the tone, the body language and the answers provided by the

interviewees (Wengraf, 2001), and be responsive and active in initiating prompts. Using a semi-structured interview method "allows the interviewees a degree of freedom to explain their thoughts and to highlight areas of particular interest" (Horton, Macve & Struyven, 2004, p. 340). It also allows for the further questioning of points of interest in depth and the "resolution of contradictions" (Horton et al, 2004, p.340).

The initial stages of the research were very open-ended, and there were challenges in pinning down the specific locations to focus on visiting. Given that wind projects (existing and proposed) are all over the province, a starting point was required. To make the approach more organized, all the proposed and existing projects were planned in a detailed Alberta Roadmap Book. All locations were physically marked on the maps and by name in the map book. By laying out all these projects physically, both the distances and proximities between locations and the estimated level of effort to get to them were considered. Initial contacts were made with municipal and county offices all over the province. The initial contact was usually made by email, then if the response was favorable, contact was made by phone. Reaching out to representatives first allowed additional participants to be identified. Some locations were dropped either due to initial non-response, lack of interest from county representatives, or time and budget constraints. The method of recruiting participants was in line with "network" (Trotter, 2012), or "referral sampling" (Weiss, 1995). Network samples focus on specific relationships as well as their intensity, directionality, and frequency. "A network sample is designed to describe a larger segment of a community or group that is tied together by some common relationship" (Trotter, 2012, p.400). In the case of this research, participants were asked for referral to members of their community who had a stake in the projects and could offer insights that were different from their own. Interviews were collected up to the point were little new insights were gathered, and there was repetition in themes. Data collection was concluded when travel to rural locations was getting difficult through the winter months.

Because the research relied on referrals to additional landowners and representatives (alternatively called snowball sampling), it was important to remain within the communities where there was an uptake and a willingness to participate. Generous information sharing and referrals by some interview participants resulted in a focus on interviews in the Counties of Paintearth and Vulcan.

The research method used has its challenges and limitations (which are readdressed in Chapter 4), but it was the only method by which such rich and diverse data could be captured. The data collected is not representative of the wider population of rural Alberta. It is merely a snapshot of perspectives held in a particular place at a particular time. Therefore, this research cannot be generalizable to larger segments of the population but can be useful in generating new ways of looking at the complex issues of the energy transition and wind energy development in Alberta.

Discourse Analysis

Analysis began in the early stages of the interview collection process. Because new themes emerged with every interview, they were incorporated into the interviews that followed. The transcription of interviews by hand allowed a more direct interpretation and "hands-on" approach to data analysis. Interview data was already familiar, from the transcription stage, and was imprinted into memory, which made recalling specific passages and relevant content easier. The analysis in NVIVO proceeded at multiple levels. Individual interviews and the specific cases of each participant were examined in addition to the identification of common themes. Following the work of Yin, (2003), Creswell (2006) suggests that discourse analysis occurs at the level of each case (individual interview) and at the broader level where discourse spans across interviews and "common themes transcend the cases." Common themes were found across interviews and coded in NVIVO - around 30 nodes were created. Passages from interviews were classified not only based on content but on implied meanings and discourse. According to Johnstone (2018, p.6), "discourse analysis is useful in the study of personal identity and social identification." This was particularly the case when the idea of discourse coalitions was encountered.

For the purposes of this research discourse is defined as the framing of arguments, and aligning with certain arguments, but not others, while considering both meaning and the abstraction of language (Johnstone, 2018). A discourse was identified based on its repetition, and consistencies across interviewees, and the common threads of meaning or themes that were brought up by interviewees. "Discourse is the mode of talk spontaneously chosen by the subject" (Wengraf, 2001, p.7). Discourse not only captures the explicit meaning of phrases and passages but the implicit meanings as well. Discourse analysis differs from other qualitative analyses in that it attempts to uncover the motivations that guide what is being said, and what is left out (Holsti, 1969). "Discourse is both the source of knowledge… and the result of it (people apply what they already know in creating an interpreting new discourse" (Johnstone, 2018, p. 2). This also ties

into the idea of discourse coalitions whereby people follow pre-existing lines of thinking or align themselves with certain camps while discrediting others. Fairclough (2003) defines discourse as the "select[ion] of certain possibilities defined by language, and exclusion of others" (Fairclough, 2003, p.23). All these definitions were applicable to how I perceived discourse while coding for themes in NVIVO. Essentially each node consisted of cases where participants shared particular feelings, ideas and ways of framing their arguments. In the words of Creswell (2006) the "within case analysis" and the "cross-case analysis" go hand in hand as themes develop within and between interviews (Creswell, 2006). A separation of long "stretches of discourse", such as a long interview transcript, into manageable, categorizable parts makes discourse analysis an effective tool for dealing with lots of data filled with meaning (Johnstone, 2018).

Considering the interaction of analysis within and between cases, "analysis often proceeds at one level (perhaps the individual level) and the explanation is couched at another level usually "macrosocial level" (Ragin, 1987, n.p.). A multi-level analysis allows for the "an iterative and ongoing pursuit of meaning" (Galletta, 2012, p. 18). The individual level (microsocial) interviews are interpreted at the level of discourse and discourse coalitions, which exist at a higher level (the macrosocial). This macrosocial and abstracted level of meaning is very much in line with the meso- level of analyses suggested by Fournis & Fortin, (2017), in understanding the meaning of wind energy in a community. The internal (interviews) and the external (broader macrosocial meaning) is also another way of understanding the synthetic case study approach, where themes emerge out of a holistic understanding rather than piecemeal approach to interviews (Janoski, 1991). Similarly, for this research, although interviews focus on the individual, discourses are understood, shared (discourse coalitions) and misaligned beyond the individual, but between groups of individuals. The "weaving in and out of the multiple levels of interpretation" [is] a synthesis that "draws on the empirical and the theoretical" (Galletta, 2012, p.150). Overall, the definition of discourse was intentionally left open-ended to accommodate the data that was collected. Notions of discourse are important for the following chapters where results are presented and interpreted.

References

Aitken, M., McDonald, S., & Strachan, P. (2008). Locating 'power' in wind power planning processes: the (not so) influential role of local objectors. *Journal of Environmental Planning and Management*, *51*(6), 777-799.

Alberta Government, (2016). Climate Leadership Plan. Retrieved from https://www.alberta.ca/climate-leadership-plan.aspx

Ansolabehere, S., & Konisky, D. M. (2009). Public attitudes toward construction of new power plants. *Public Opinion Quarterly*, *73*(3), 566-577.

Barry, J., Ellis, G., & Robinson, C. (2008). Cool rationalities and hot air: a rhetorical approach to understanding debates on renewable energy. *Global environmental politics*, *8*(2), 67-98.

Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The qualitative report*, *13*(4), 544-559.

Bidwell, D. (2013). The role of values in public beliefs and attitudes towards commercial wind energy. *Energy Policy*, *58*, 189-199.

Boyd, A. D., & Paveglio, T. B. (2015)." Placing" Energy Development in a Local Context: Exploring the Origins of Rural Community Perspectives. *Journal of Rural and Community Development*, *10*(2).

CANWEA, (2018a). Wind Energy in Alberta. Retrieved from https://canwea.ca/wind-energy/alberta/

CanWEA, (2018b). Public Opinion on Wind Energy in Alberta and Ontario. Retrieved from https://canwea.ca/wp-content/uploads/2018/03/CanWEA-SurveyReport-Feb2018-Released.pdf

CANWEA (2018c). Wind Energy in Ontario. Retrieved from https://canwea.ca/wind-energy/ontario/

Clean Energy Canada (2016). *Canadian's Opinions on the Clean Energy Transition. Retrieved from* http://cleanenergycanada.org/wp-content/uploads/2016/10/Backgrounder-Clean-Energy-Transition-Polling-Nanos-CEC.pdf

Creswell, J. W. (2006). *Qualitative Inquiry and Research Design: Choosing among Five Approaches. Second Edition*. SAGE Publications (CA).

Devine-Wright, P. (2005). Beyond NIMBYism: towards an integrated framework for understanding public perceptions of wind energy. *Wind energy*, *8*(2), 125-139.

Devine-Wright, P. (2007). Reconsidering public attitudes and public acceptance of renewable energy technologies: a critical review.

Devine-Wright, P. (2009). Rethinking NIMBYism: The role of place attachment and place identity in explaining place-protective action. *Journal of community & applied social psychology*, *19*(6), 426-441.

Devine-Wright, P. & Howes, Y. (2010). Disruption to place attachment and the protection of restorative environments: A wind energy case study. Journal of Environmental Psychology, 30(3), 271-280.

Fairclough, N. (2003). Analysing discourse: Textual analysis for social research. Psychology Press.

Fast, S., Mabee, W., Baxter, J., Christidis, T., Driver, L., Hill, S., McMurtry, J. & Tomkow, M. (2016). Lessons learned from Ontario wind energy disputes. *Nature Energy*, *1*(2), 15028.

Fergen, J., & Jacquet, J. B. (2016). Beauty in motion: Expectations, attitudes, and values of wind energy development in the rural US. *Energy Research & Social Science*, *11*, 133-141.

Fournis, Y., & Fortin, M. J. (2017). From social 'acceptance 'to social 'acceptability 'of wind energy projects: towards a territorial perspective. *Journal of environmental planning and management*, *60*(1), 1-21.

Galletta, A. (2012). Mastering the Semi-Structured Interview and Beyond: From Research Design to Analysis and Publication. New York: NYU Press.

Government of Alberta, (2018a). Renewable Electricity Program. Retrieved from https://www.alberta.ca/renewable-electricity-program.aspx

Government of Alberta, (2018b). Phasing Out Coal Pollution. Retrieved from https://www.alberta.ca/climate-coal-electricity.aspx

Government of Canada, (2018a). Climate Change Canada: Proposed Amendments to Coal-Fired Electricity Regulations and Proposed Natural-Gas-Fired Electricity Regulations. Retrieved from www.canada.ca/en/environment-climate change/news/2018/02/proposed_amendmentstocoal-firedelectricityregulationsandproposed.html.

Government of Canada, (2018b). Canada Gazette – Regulations Amending the Reduction of Carbon Dioxide Emissions from Coal-fired Generation of Electricity Regulations. Retrieved from http://www.gazette.gc.ca/rp-pr/p1/2018/2018-02-17/html/reg3-eng.html

Groth, T. M., & Vogt, C. A. (2014). Rural wind farm development: Social, environmental and economic features important to local residents. *Renewable Energy*, *63*, 1-8.

Hamel, J., Dufour, S., & Fortin, D. (1993). *Case study methods.* Newbury Park, Calif.: Sage.

Hess, D. J., & Brown, K. P. (2017). Green tea: clean-energy conservatism as a countermovement. *Environmental Sociology*, *3*(1), 64-75.

Holsti, O. R. (1969). *Content analysis for the social sciences and humanities*. Addison-Wesley Pub. Co.

Horton, J., Macve, R., & Struyven, G. (2004). Qualitative research: experiences in using semi-structured interviews. *The real-life guide to accounting research*, 339-357

Hyland, M., & Bertsch, V. (2018). The role of community involvement mechanisms in reducing resistance to energy infrastructure development. *Ecological Economics*, *146*, 447-474.

Jacquet, J. B., & Stedman, R. C. (2014). The risk of social-psychological disruption as an impact of energy development and environmental change. *Journal of Environmental Planning and Management*, *57*(9), 1285-1304.

Jami, A. A., & Walsh, P. R. (2017). From consultation to collaboration: A participatory framework for positive community engagement with wind energy projects in Ontario, Canada. *Energy research & social science*, *27*, 14-24.

Janoski, T. (1991). Synthetic Strategies in Comparative Sociological Research: Methods and Problems of Internal and External Analysis1. *International Journal of Comparative Sociology*, *32*(1), 59-81.

Johnstone, B. (2018). *Discourse analysis* (Vol. 3). John Wiley & Sons.

Klass, A. B. (2011). Property Rights on the New Frontier: Climate Change, Natural Resource Development, and Renewable Energy. *Ecology Law Quarterly*, 63-119.

Liebe, U., Bartczak, A., & Meyerhoff, J. (2017). A turbine is not only a turbine: The role of social context and fairness characteristics for the local acceptance of wind power. *Energy Policy*, *107*, 300-308.

MacNeil, R., & Paterson, M. (2018). Trudeau's Canada and the challenge of decarbonization. *Environmental Politics*, *27*(2), 379-384.

Ogilvie, M., & Rootes, C. (2015). The impact of local campaigns against wind energy developments. Environmental Politics, (6), 874.

Phillips, M., & Dickie, J. (2015). Climate change, carbon dependency and narratives of transition and stasis in four English rural communities. *Geoforum*, *67*, 93-109.

Ragin, C. (1987). The comparative method: Moving beyond qualitative and quantitative methods. *Berkeley: University of California*.

Shepherd, D., & Billington, R. (2011). Mitigating the Acoustic Impacts of Modern Technologies: Acoustic, Health, and Psychosocial Factors Informing Wind Farm Placement. Bulletin of Science, Technology & Society, 31(5), 389-398.

Songsore, E., & Buzzelli, M. (2014). Social responses to wind energy development in Ontario: The influence of health risk perceptions and associated concerns. *Energy Policy*, *69*, 285-296.

Stake, R. E. (1995). *The art of case study research*. Sage.

Szarka, J., 2004. Wind Power, Discourses Coalitions and Climate Change: Breaking

the Stalemate? *European Environment* 14 (4): 317–330

Thibault, B., Angen, E., & Weis, T. (2013). Survey of complaints received by relevant authorities regarding operating wind energy in Alberta. Calgary, Alberta: Pembina Institute, 2013.

Trotter, R. T. (2012). Qualitative research sample design and sample size: Resolving and unresolved issues and inferential imperatives. *Preventive medicine*, *55*(5), 398-400.

Van der Horst, D. (2007). NIMBY or not? Exploring the relevance of location and the politics of voiced opinions in renewable energy siting controversies. *Energy policy*, *35*(5), 2705-2714.

Walker, C., Baxter, J., & Ouellette, D. (2014). Beyond rhetoric to understanding determinants of wind turbine support and conflict in two Ontario, Canada communities. *Environment and Planning A*, *46*(3), 730-745.

Walker, C., Baxter, J., & Ouellette, D. (2015). Adding insult to injury: The development of psychosocial stress in Ontario wind turbine communities. Social Science & Medicine, 133358-365.

Weiss, R. S. (1995). *Learning from strangers: The art and method of qualitative interview studies*. Simon and Schuster.

Wengraf, T. (2001). *Qualitative research interviewing: Biographic narrative and semi-structured methods*. Sage.

West, J., Bailey, I., & Winter, M. (2010). Renewable energy policy and public perceptions of renewable energy: A cultural theory approach. *Energy Policy*, *38*(10), 5739-5748.

Wolsink, M. (2000). Wind power and the NIMBY-myth: institutional capacity and the limited significance of public support. *Renewable energy*, *21*(1), 49-64.

Woods, M. (2003). Conflicting environmental visions of the rural: windfarm development in Mid Wales. *Sociologia ruralis*, *43*(3), 271-288.

Wüstenhagen, R., Wolsink, M., & Bürer, M. J. (2007). Social acceptance of renewable energy innovation: An introduction to the concept. *Energy policy*, *35*(5), 2683-2691.

Yin, R. K. (2003). Case study research: Design and methods (3rd ed.). Thousand Oaks, CA: Sage.

Chapter 2-Understanding Discourses of Environmentalism and Anti-Environmentalism Surrounding Wind Energy Development in Rural Alberta

Introduction

The energy transition and the development of wind energy in Alberta are strongly linked to rural landscapes. In Alberta, the New Democratic Party (came to power late spring of 2015) mandated the phase-out of coal, and the expansion of renewable energy to reach the target of 30 percent renewable energy in the grid by 2030, as part of the Climate Leadership Plan (Government of Alberta, 2018a, 2018b). Wind energy is often cited as receiving broad public support in Canada (CanWEA, 2018b), with various polls indicating the wider population is supportive of wind energy development and embraces the environmental benefits that are said to come from the greening of the grid. One Canadian poll shows 82% national support for the development of renewable energy, and 73% national support for the coal phase-out (Clean Energy Canada, 2016). General surveys that indicate broad support, however, do not capture the nuances of localized opposition (Woods, 2003). Although wind energy development in Alberta also has high levels of support (60% support provincially indicated by the Canadian Wind Energy Association (CanWEA)), it is lower than those indicated by the national polls. Local support is more tenuous, with landowners resisting wind power in ways that are both formal (e.g., AUC hearings) and informal (e.g., oppositional discourses, social media etc.). The media has also emphasized the lack of support in Alberta for other initiatives within the Climate Leadership Plan, such as the carbon tax. Citing a survey by ThinkHQ Public Affairs, an article in the Calgary Herald stated that “on the Notley government’s climate change strategy, which beyond the carbon tax includes a cap on oil sands emissions, and an accelerated phase-out of coal power, 53 percent of respondents disapproved, while 37 percent approved” (Wood, 2016). A National Observer article states that: “Alberta's environment minister says there is a steadfast, "non-factual, vicious form" of climate denial among those on the right of the political spectrum” later referencing that “Alberta residents are the least likely to believe the planet is warming” (Meyer, 2018).

Lower support for environmentally oriented policies in Alberta is indicative of the uniqueness of the politicization that has occurred both in relation to environmental policies and wind energy more specifically. Many authors contribute to a deeper understanding of the discrepancies that exist between general and localized support for wind energy (Bidwell, 2013; Groth and Vogt, 2014; Fournis & Fortin, 2017; Barry, Ellis & Robinson, 2008; Hyland & Bertsch, 2018).

Contributing to this literature, this paper attempts to uncover discrepancies between support and opposition to wind power in relation to discourses of environmentalism and anti-environmentalism.

A focus on environmentalism and anti-environmentalism matters because it clarifies how we might respond to wind power opposition. Is resistance to wind energy development (and environmental policies more generally) a case of anti-environmentalism in rural Alberta? If the answer is yes, then we can more easily disregard this resistance, push against it, and paint it as a barrier to overcome in the development of wind energy. If the answer is no, then we can appreciate that resistance may be compatible with other versions of environmentalism and we are therefore more likely to learn and understand those who will be living with wind energy developments. In other words, we are invited to appreciate the environmental concern they put forth in relation to wind energy projects and understand why some hesitate to accept these projects on their land on the basis of environmental concern or deeply held views about environmentalism and its meanings.

Literature Review

Defining Environmentalism

Environmentalism (McCarthy, 2002; Dunlap & Mertig, 2014; Gottlieb, 2005) has been strongly tied to political actions and inactions on issues pertaining to the protection of the environment (Mol, 2000) and more recently in addressing climate change (Jamison, 2010; Antonio & Brulle, 2011). Environmental social movements take many forms but are broadly defined as "a collective form of social behavior that is explicitly organized for political action…by which human and material resources are mobilized in trying to affect political change" (Jamison, 2010 p.812). During the 1960s, through the efforts of Rachel Carson and others, environmental issues came to the forefront of political discussions (Jamison, 2010). The creation of the Environmental Protection Agency (EPA), and Council on Environmental Quality in the United States represented the saliency of the environmental movement in institutionalizing environmental protection within the government (Dunlap & Mertig, 2014). In sociology the New Ecological Paradigm (NEP) (Dunlap & Van Liere,1978; Dunlap et al, 2000) located values, and individual behavior dynamics at the center of discussions about environmental concern, and action (Stern, Dietz, & Guagnano,1995) and contributed to understanding how "day to day experiences influence values and worldview - how specifics influence the general" (Stern et al, 1995 p. 740).

By the 1970's, climate change became a key component of environmentalism (Jamison, 2010), therefore the environmental movement has encouraged the growth of the wind energy industry (Vasi, 2011; Sine & Lee, 2009). Green energy made its way into environmental discourses surrounding climate change (Klass, 2011; Groth &Vogt, 2014), emission reductions (Hyland & Bertsch, 2018; Hess & Brown, 2017) and a transition to a 'low-carbon society" (Jamison, 2010, p. 811). Developments in environmentalism also determined the direction of the countermovement (McCright, & Dunlap, 2011; Antonio and Brulle, 2011) that began to question the causes, consensus, and the validity of climate science (Hess & Brown, 2017).

Environmentalism in Canada and Alberta

Climate change policy is now a central piece of many of the environmental initiatives in Canada and Alberta, although there is debate about the effects of Alberta's energy transition and the role wind energy plays in addressing climate change. The Pan-Canadian Framework on Clean Growth and Climate Change in Canada and the Climate Leadership Plan in Alberta are examples of how recently, environmentalism and climate science have come to permeate political discussions at the federal and provincial levels. One of the central pieces is the elimination of coal-fired electricity generation by 2030 whereby by 2055: "estimated environmental benefits from avoided climate change damage and improved health outcomes are $4.9 billion" (Government of Canada, 2018a, 2018b).

The notion of ecological modernization described by Mol (2000) involved "decentralized, flexible and consensual styles of national governance with less top-down hierarchic command-and-control regulation", which in Canada extended to environmental policies (Mol, 2000, p.45-46). Environmental regulation in Canada aligned itself with economic trade policies (Paehlke, 2000; Bernstein & Cashore, 2001). Although environmentalism emerged out of Canada's self-image, Canada, "in the face of strong opposition from the government of the oil, natural gas, and coal producing Province of Alberta… did not take a strong leadership role on the issue of climate change in Kyoto" (Paehlke, 2000, p. 162). The drive to maintain the "Alberta Advantage" was strong and both lower taxation and; industrial electricity rates, as well as deregulation, were some of the major components of the advantage (Bernstein & Cashore, 2001).

The election of the NDP government in late spring of 2015, and the implementation of the Climate Leadership Plan in 2016 resulted in many changes to environmental policies but also

have come to be associated with other strong discourses such as the "The End of the Alberta Tax Advantage" (Butterfield, 2018; Eisen, Lafleur, & Palacious, 2018). These discourses are prevalent in the media, and undoubtedly the expansion of wind energy is included in the discussion. This quote below, from a popular opinion columnist in a provincial newspaper, exemplifies this sentiment:

> "The Alberta Advantage is dead and the Notley NDP killed it. Notley's taxes, fees, regulations, and emission controls have scared away tens of billions in investment. But if the Alberta Advantage was still alive on New Year's Day, the 50 percent increase in the carbon tax finished it off… Also, as the NDP shut down our coal-fired power plants and replace them with heavily-subsidized wind farms, we are seeing electricity prices and taxpayer payouts to utility companies rise, too" (Gunter, 2018).

The politically charged statements criticizing the government extends to a critique of government environmental policies. Many questions exist around how well received the new environmental policies have been in the Province of Alberta. However, how are these policies playing out in the context of rural farming communities in Alberta?

Discourses of Environmentalism and Wind Energy Development

Szarka (2004), and Barry and colleagues (2008) suggest the notion of "discourse coalitions" to characterize the constellations of different ideas and arguments surrounding wind energy. "Conservative environmental narratives" show that there is "underlying contradictions within an overall social acceptance of the emerging wind sector and its tenuous relationship to mainstream environmentalism" (Jepson et al, 2012, p. 852). Work by Jepson et al (2012) highlights an emergent position of wind energy participants in Texas as "reflexive environmental skepticism", where rural residents do not subscribe to the broad environmental arguments for wind energy (Jepson et al, 2012). Despite a lack of subscription to these arguments, there is a broad support for wind projects.

The promotion of wind energy tends to align itself with broader environmental and climate change perspectives. "A common discursive move made by pro-wind energy discourses is to insist that the context for discussing wind energy must be climate…any objection to wind energy cannot do so without reference to this context" (Barry et al, 2008, p. 85). The discourse that promotes wind energy in this light loses some groups of people who do not subscribe to the same discourse despite the normative imperatives often posed by these arguments. "Renewables are perhaps different to some other types of facilities as 'green' is seen by most people as a good

thing in principle, i.e. as a moral issue… Most people would find it politically incorrect or socially unacceptable to express opinions that are the opposite of green" (Van der Horst, 2007, p. 2711). In this way, those who refuse the moral, or normative premises behind green energy can often fall into the category of anti-environmentalism.

Some authors have noted the polarizing nature of climate change debates (Antonio & Brulle, 2011; McCright & Dunlap, 2011 Szarka, 2004). A study by Szarka looking at discourses surrounding energy describes a "split within green consciousness". "Pro-wind advocates claim they are 'saving the planet', anti-wind campaigners argue they are 'saving the environment'" (Szarka, 2004, p.326). Similarly, the split is often referred to in the literature as a "green on green" debate (Warren et al, 2005). This characterization suggests that both the project proponents and the hosting communities may have the same goals or intentions to protect the environment. However, due to differences in scale of benefits, and the level of abstraction of these benefits, and politics, the meaning of environment and its protection become convoluted, and often times incompatible. In fact, broader climate change and greenhouse gas reduction discourses may diminish the level of support individuals are willing to express for wind energy projects because of the discourse coalitions they belong to.

One of the discourse coalitions can be considered pro-wind. Pro-wind arguments often articulate that climate change will cause the more direct and impactful change to the landscape, and the visual effect of wind energy is justifiable and necessary to avoid the arguably more drastic and devastating climatic effects (Barry et al, 2008). As well, claims of the "rationality" from the pro-wind position, often establish the more subjective, and emotive arguments as "irrational" (Barry et al, 2008). Very technical, and rational environmental arguments for wind energy have been adopted by the Government of Alberta. Is it these arguments that are being contested in rural Alberta?

Environmentalism, Farming, and Rurality

To understand the notion of environmentalism, it needs to be acknowledged at the farm level because it is substantially different than the environmentalism put forward by policymakers, mainstream environmental organizations, and wind energy proponents. Some authors suggest that farmers have a unique social identity, and unique environmental ethics related to their land (Paolisso & Maloney, 2000; Silvasti, 2003). This version of environmentalism entails a

relationship with the land that is more localized, where for landowners "[the] view of their environmental impacts relies heavily on their immediate, material environments" (Kessler, Parkins, & Kennedy, 2016, p. 189). The notion of land stewardship (Ryan, Erickson, & De Young, 2003) and the concept of the "good farmer" (Silvasti, 2003) is fundamental to understanding the types of actions that are prioritized by landowners. According to Beckley (2017), the influence of wind energy development on the conceptions of rurality, "land stewardship", "the meaning of land ownership", and "conservation behavior" is vital to consider, given rural settings are the primary areas for such developments. Ryan et al, (2003) suggest that government initiatives "need to be restructured to take into consideration the aesthetics of management practices and farmers' desire to be perceived as good stewards of their land" (Ryan et al, 2003; p. 34). This is highly relevant for the changes in one's perceived land stewardship that occurs when a landowner decides to host the very visible and symbolic wind turbines on their property. Failure to understand "farmers' sense of obligation to their community", is detrimental to the reception of any government program (Ryan et al, 2003; p. 33).
Furthermore, the protection of local landscapes has become synonymous with the protection of the broader environment (Leibenath & Otto, 2014; Macnaghten & Urry, 1998). There is a "conflation of protecting the countryside with protecting the environment" (Woods, 2003, p. 274). Views of landscape as "natural" or pristine can elicit significantly different responses, however, than views of the landscape as purely a means to make a living (Fergen & Jacquet, 2016). Leibenath & Otto, (2014), draw attention to the importance of the typology of the landscape (status of protection, farmland, industrial use) stating that they can be thought of as categorizations or "homogenous". But even in the presence of industrial agricultural and energy activities, the landscape and its perceived or real "naturalness" continue to play an important role in driving a protective response from rural communities. "Although farmers have adopted modern, effective, and industrial ways of farming, they still consider their work as a harmonious and respectful cooperation with nature" (Silvasti, 2003, p. 143). Farmers already have a well-entrenched environmental ethic. The ethics or moral imperatives presented by mainstream environmentalism can clash with established rural environmental ethics. "A challenge of the environmental movement continues to be the need to reconnect and re-envision the question of the environment in the context of community, place, family and daily life needs and concerns" (Gottlieb, 2005, p.409). Arguably, the broader notions of environmentalism presented by the

mainstream environmental movement challenge the pre-existing notions of environmentalism in rural communities.

Place identities, community identities, and regional identities (Liebe, Bartczak & Meyerhoff, 2017) can be threatened by large-scale developments that are immobile, permanent and highly visible (Pasquletti, 2011; Fournis & Fortin, 2017). Place has emotional associations and a threat to place identity can result in defensive viewpoints and frame wind energy projects as "impositions" (Jami & Walsh, 2017; Leibenath & Otto, 2014). Place attachment can also initiate "place protection actions" that are linked to anxiety and sense of loss with the perceived imposition of a new technology (Fast et al, 2016). For example, sense of place is strongly associated with rurality and the traditional aesthetics of agricultural land, and notions of "cottage country" in Ontario, which played into wind energy conflicts there (Fast et al, 2016; Fast & Mabee, 2015). Jefferson (2018) suggests that increasingly, energy developments visually intrude on the rural landscape, yet this intrusion is naturalized by terms like "energy landscape" or "wind farm", but "losing valued landscapes extends far beyond losing a view" (Jefferson, 2018, p.193). The complexities of rural farm environmentalism are also demonstrated in a study by Fergen & Jacquet (2016):

> "Respondents with stronger environmental attitudes were more likely to expect more negative impacts to the environment (wildlife interference, health impacts, decreases in visual beauty) and were less satisfied with the perceived economic development of wind energy in their community (job creation, economic benefits to the county, tax benefits, decreases in energy prices)…Individuals with high environmental attitudes prioritize the conservation of landscape for its natural setting over the economic gains associated with the development of renewable energy" (Fergen & Jacquet, 2016, p.139).

Others have suggested that it isn't the environmental values that drive localized opposition, but rather "opposition to renewables was fueled by a general conservativism… generally inconsistent with a pro-environment worldview" (Bidwell, 2013, p. 198). Here lies the challenge of categorizing environmentalism. The challenge of representing and understanding environmentalism and anti-environmentalism in a rural setting is "the ongoing centrality of locally and regionally contingent meanings, [and] identities" (McCarthy, 2002, p. 1298). Discourses of environmentalism do not often operate at this level. "Cultural identity, local knowledge as an alternative to expert science, reinventions of community and tradition, a resolute defense of the local" are therefore more applicable to rurality, such as in the Wise Use

movement (McCarthy, 2002). Similar motivations can be found behind resistance to wind energy developments, and anti-environmentalism can easily come to characterize these oppositional views. Perhaps the central difference and point of misalignment is the notion of land stewardship. Are landowners environmentalists if they host, or refuse to host wind turbines on their land? The strong local, protectionist environmentalism, albeit different than mainstream environmentalism can be easily misrepresented as anti-environmentalism. The following section will highlight some thematic consistencies underlying depictions of anti-environmentalism and highlight why it might be tempting to make them applicable to the case of resistance or opposition to wind energy projects.

Defining Anti-Environmentalism

Western environmentalism and the environmental movement has also given rise to what is called a "green backlash" or a countermovement, predicated on a variety of anti-regulation, anti-centralization, and anti-environmental sentiments (Mol, 2000; Brick, 1995; Rowell, 2017). Some have described the response as a "conservative countermovement that supported neoliberal policies" and was predominantly enabled by the election of a conservative government in the US Congress (Hess & Brown, 2017, p.64). The most often referenced starting point for this countermovement in North America is the Wise-Use movement in the United States. This section briefly explores the emergence of anti-environmentalism and illustrates the necessity to address it in the context of wind energy development in Alberta. The arguments presented by the countermovement at large can (on the surface) be echoed in the context of Alberta's politicised implementation of provincial environmental policies, including the expansion of wind energy.

To understand why a lack of alignment with government mandated environmental policies might be dismissed as anti-environmentalism, it must first be defined. One possible definition of anti-environmentalism as suggested by Rowell (2017) is as something that is "actively working *against* someone who is *working for* ecological protection" (Rowell, 2017, n.p). The morals that are called upon in such definitions make it easy to refute any position that comes or seems to come from an anti-environmental standpoint (Van der Horst, 2007). Are people who oppose the governments' environmental policies in Alberta coming from similar political and anti-regulatory sentiments as those described in the American countermovement to environmentalism? Others describe anti-environmentalism as having "traditional strongholds in

agriculture, labor, and industry that have consistently resisted the costs imposed by environmental regulations" (Brick, 1995, p.20). The definition offered by Brick calls upon traditional agriculture and industry connections and links rurality to the countermovement. The strong connections to agriculture, oil and gas, and other extractive industries in rural Alberta falls in line with what Brick (1995) suggests leads rural communities to uphold views linked to anti-environmentalism. McCarthy argues that the environmental countermovement is:

> "composed of members of rural communities, whose livelihoods have long depended on a wide variety of uses of the lands and natural resources surrounding their homes…the movement's central complaint is that community members are losing access to and control over these lands and resources because of ever more vigorous pursuit of environmental goals by the resource conservation branches of the central governmental trend spurred on largely by the interventions of distant, highly bureaucratic, and professionalized environmental groups" (McCarthy, 2002, p.1281).

The premises behind the environmental movement, therefore, are said to be in direct conflict with the rural way of life, and traditional uses of rural land. The environmental movement, therefore, loses support when it takes away certain freedoms or results in government mandates. The Wise Use Movement in the United States was initiated by the Center for the Defence of Free Enterprise and is described by Rowell as: "a growing coalition of ranchers, miners, loggers, farmers, fishermen, trappers, hunters, off-road vehicle users, property right advocates, industry associations, corporate front groups and right-wing activists who are rising up against the environmental movement across the USA" (Rowell, 2017, n.p.). It was closely tied to the Sagebrush Rebellion whereby groups argued that the federal government had too much control over the land in Western USA (Peeples, 2005). Overall, one of the core arguments of the counter-movement is a resistance to environmental over-regulation (Antonio & Brulle, 2011; McCright & Dunlap, 2011; Brick, 1995; McCarthy, 2002). One core tenet of the countermovement is the expression of the "deep-seated frustration with what is perceived to be heavy-handed, arbitrary, and unreasonable federal regulation of public lands" (Babbitt 1982, p.853).

The Wise-Use movement and more generally the countermovement has paralleled the span and diversity of the environmental movement in the USA, through "the organization of this opposition, as well as major segments of the population, into one movement that uses similar kinds of strategies as the environmental movement" (Mol, 2000). The breadth and inclusion of

various groups therefore directly challenges the environmental movement's "claim to represent the larger public interest" (Brick, 1995, p.19; Peeples, 2005). By general definitions, the polarization seen in Alberta today falls in line with the movement and countermovement dynamics of environmentalism and the discourses that surround environmental policies in the province. Unfortunately, the polarization of environmentalism continues to be associated with a few key dichotomies and does not lend itself well to overlap and engagement between the different deep-seated ideologies, making it of utter importance to address. One association often made in literature is the link between anti-environmentalism and neoconservatism. The claim is that "neoconservatism has been consistently and deeply hostile to environmental protection in every country in which it has emerged" (Paehlke, 1989). McCright and Dunlap (2011) suggest that by the early 1990's the countermovement to environmentalism changed and was "spearheaded by conservative foundations, think tanks, and politicians, [that] emerged in response to the rise of global environmentalism…The movement sought to delegitimize global environmental problems, particularly anthropogenic global warming, in order to undermine the call for regulatory action" (McCright & Dunlap, 2011, p. 158). The question lies in whether certain political ideologies are more easily identifiable with a kind of anti-environmentalism or if they actually come from an anti-environmental stance. Conservative think tanks have been one of the labels associated with climate change denial or skepticism (McKinnon, 2016; Dunlap & Jacques, 2013). The relationship between traditional conservative ideologies and the liberal ideologies are bridged by neoliberalism, premised on environmental deregulation (Nakano, 2015). "Climate change denial is a latecomer to neoliberal anti-environmentalism, it has now become the countermovement's pivotal issue in battles against environmental regulations" (Antonio & Brulle, 2011, p. 197). Climate change is in "a field of contention" as a result of the anti-environmentalism (Jamison, 2010). Although climate change denial and its links to anti-environmentalism are often discussed in the literature, so are the deeper, more emotive aspects of the denial. Important insights from psychology show that climate change denial is a "rejection not of the information, but the psychological, political or moral implications of it" (Phillips &Dickie, 2015, p. 95; Norgaard, 2011).

Political ideology alone does not determine a clear-cut orientation towards environmentalism or green energy. Rather ideology orients the relation of humans to nature and orients the response to environmental regulation (Pepper, 1996). For example, in the USA, the recent emergence of

"clean energy conservatism" is a response to the recent turn in environmentalism, that "use[s] core conservative frames – such as support for free markets and opposition to taxes and government mandates... best understood as a movement within conservatism rather than as an embrace of progressive environmentalism" (Hess & Brown, 2017, p.73). The energy transition mandate and the Renewable Electricity Program (REP) implemented by the Government of Alberta was designed to offer renewable energy companies contracts for securing renewable energy capacity to the grid (Alberta Government, 2016). REP has a relatively strong mandate as a pseudo-subsidy to the industry and therefore raises questions about the extent of government involvement in electricity markets.

The arguments maintained by the countermovement are premised on limiting the "undesirable expansion of bureaucratic power" (Brick, 1995). These sentiments encapsulated environmental regulations and therefore were associated with an anti-environmental stance (Brick, 1995). But, another framing of the countermovement also suggests that:

> "…Arrogant, ignorant outsiders [are] intruding on local communities and denying them their livelihoods and right to self-determination. The movement thus had strong populist overtones: appeals to local knowledge, local rights, and `common sense' as opposed to expert knowledge…" (McCarthy, 2002, p.1283)

Wind energy development in Alberta is a perfect opportunity to illustrate the complexity of anti-environmentalism. What kind of assumptions can be made about anti-environmentalism and its link to wind energy opposition? The following sections demonstrate why it might be tempting, but erroneous to make the assumption that opposition to wind energy comes from an anti-environmental stance.

Research Methodology

A more detailed account of the methodology is provided in Chapter 1 of this thesis. In brief, a qualitative collective case study method was used to collect in-depth interviews through referral. This research took place predominantly in Vulcan County around the Blackspring Ridge Project (300 MW capacity), and Paintearth County (existing 150 MW Halkirk 1 Wind Project, and the proposed Halkirk 2 project of matching capacity). Some interviews were collected outside these counties in Calgary, Edmonton, Pincher Creek, Morrin, and Magrath. Two semi-structured interview guides were prepared specifically for landowners, and for key informants (See Appendices A and B). The questions in the interview guides focused on the experiences landowners have with wind projects in their community. Landowners were asked about their

views, their concerns, political orientations, and environmental goals, as well as their views of the process. Key informants were asked about their experiences with the projects in the communities they represent and work in. Thirty in-depth, face to face interview sessions were conducted with 36 individuals with a stake in a wind project in their community. Interviews were conducted with landowners who host wind turbines, who are willing hosts for future projects and those who had negative views about the development in their community. Key informant interviews included municipal government representatives, industry project proponents, and NGO representatives. All interviews were audio recorded, transcribed by hand, and analyzed in qualitative data software NvivoPro. Qualitative data in the form of direct transcript quotations was organized in conceptual nodes at both the level of content and the level of discourse.

Research Findings

This section contains data from interviews that demonstrate the discourses of anti-environmentalism and environmentalism that were encountered. Interviewees articulated their positions in relation to environmentalism, climate change, government environmental regulations, and the energy transition mandate in Alberta. Direct interview quotes and excerpts are used in these sections to illustrate the various discourses that were encountered. Many of the discourses presented were shared by multiple interviewees, while others were fairly unique to each individual. Pseudonyms are used for ease of reference, and each excerpt is followed by a brief description of the individual's relation to a wind energy project at the time of the interview (Details in Table 1). The first section of the results identifies discourses that fall in line with the theoretical characterizations of anti-environmentalism. These discourses follow the anti-regulatory sentiments, climate change skepticism, and denial that are typically characterized as tenets of anti-environmentalism. The second main section of the results returns to the discourses of environmentalism highlights the ways that they are very different than those of mainstream environmentalism. The second section demonstrates that the perspectives of those opposing wind energy do not come from an anti-environmental stance, reflecting a more nuanced understanding of local environmental values that are often inconsistent with industrial wind farm development. Table 1 below provides a description of individuals interviewed by the pseudonyms they were assigned.

Table 1- Interview Participant Pseudonyms and Descriptions of Their Relation to Proposed or Existing Wind Energy Projects

Interview Participant Pseudonym	Description of participant relation to wind project
Adam	Wind energy industry representative, active wind energy developer in Alberta and across Canada
Aden	Landowner with wind turbines on property; Julia's husband.
Alex	Landowner adjacent to a proposed project does not host any proposed turbines but will see them
Allison	Landowner in community adjacent to the proposed project; Rick's wife
Anthony	Landowner unwilling to host turbines part of the proposed project, generally negative about wind energy development
Bruce	Municipal Government representative, generally supportive of wind energy development in the county he represents
David	A landowner with turbines on property, generally supportive of wind energy in the area
Dylan	Wind energy developer, active wind energy developer in Alberta and across Canada
Harry	Landowner hosting wind turbines on his property, generally receptive to wind energy development. Ruby's husband.
Jared	Municipal Government representative, generally supportive of energy development in the county he represents
Jim	A landowner with wind turbines on property, generally supportive of development
Julia	Landowner with wind turbines on property; Aden's Wife
Liam	Landowner unwilling to host turbines on his property, generally negative about the project, will be adjacent to proposed project
Lola	Municipal Representative supportive of wind energy development in her rural community
Marcus	Provincial government representative
Mavis	Landowner willing to host turbines part of the proposed project
Mike	Landowner willing to host turbines part of the proposed project
Nick	Landowner with turbines on property, generally positive about wind energy development
Olivia	Landowner with turbines on property, generally positive about the development
Paul	A non-hosting landowner in the proposed project area, generally not positive about the proposed project, will be adjacent to the development
Rick	Landowner in community adjacent to the proposed project; generally, very negative about existing and any proposed projects; does not see the development from his property; Allison's husband
Ruby	Landowner hosting wind turbines; Harry's wife
Sam	Municipal government representative, generally positive about wind energy development in the county he represents
Sandra	A landowner with wind turbines on the property; Jim's wife.
Shawna	NGO representative working on environmental and energy-related issues across Canada
Tom	A municipal government representative, generally positive about wind energy development in the county he represents
William	A municipal government representative, generally very positive about wind energy development in the county he represents
Zachary	Municipal government representative
Landowners Participating in the AUC Hearing	Landowners 1-9. No pseudonyms given to protect the privacy of individuals. Quotes are taken directly from the publicly available AUC hearing that was temporarily open to the public on the AUC website.

Discourses of Anti-Environmentalism

Anti-government, Anti-regulation Discourses, and Politicization of Wind Energy

This section focuses on the excerpts from landowners and municipal government representatives, and the way they articulate and take account of the anti-government and anti-regulatory sentiments that dominate the discourses surrounding environmental policies. Jared, in the excerpt below, presents his view of the changes that occurred with the election of the NDP. These arguments fall in line with many of the anti-government and anti-regulatory sentiments that are typically described in the literature. Jared is skeptical of the benefits of the energy transition and does not find it justifiable in terms of the costs it presents to the economy of Alberta.

> "And that's where Alberta used to be one of the best… Alberta was the first or second most advantageous market in North America… in terms of attractiveness for business…cost of operation have gone up and our workforce is leaving us in droves, simply because of government policy…."
>
> "Having clean energy is never bad. But there is a balance in how far you want to go to trash our economy to do so. And I know that's a political kind of government slogan or whatever, but when I look at it, and this is perhaps more of my view here…is that climate change is happening, but what is actually…like what does that mean? …But do we want to trash our entire way of life for something that could be… when the rest of the world is doing nothing?" –Jared (Municipal Government Representative)

Jared is candid about his reservations in relation to the transition. His sentiment is echoed by Rick in the following excerpt where he critically refers to the "Notley Government":

> "She just destroyed our province…I mean there is a ton of people without jobs here, and [it's] directly related to her energy policies and her wind policies"- Rick (Landowner in the community adjacent to the proposed project)

The anti-government sentiment is also echoed by people who are opposed to other government environmental policies such as the recently-implemented province-wide carbon tax. Other policies that stand independently from the renewable energy transition also fall into the anti-regulatory sentiments. The frustration is evident when the research participants make reference to the negative impacts of these policies felt by rural communities. In talking about the carbon tax Harry says the following:

> "A lot of people just view it as another tax… It's not gonna help the climate. That's the take on it here. The NDP- their ideology is yes that's their plan to move forward with it and it's quite hurtful for us out here"- Harry (Landowner hosting wind turbines on his property)

Then, when asked about why wind energy may be received negatively in their community Harry and his wife Ruby engage in the following exchange:

> Harry: "I think it's misinformation."
>
> Ruby: "Well you do. But I think it's… from what I read on Facebook…I think it's got to do with the current government of Alberta, and it's a resentment because they're bringing in solar and wind power, and it's an underlain resentment against the government. People aren't happy…I think that we all want to blame somebody, so we'll blame the current government…It might not be right, but I think that's the mindset"

Political conservatism and the ideologies associated with conservative governments have historically been tied to anti-regulatory sentiments. Below, the interviewees make reference to how ideology results in negative perceptions of environmental policies and wind energy projects in communities where these two individuals live and work. Bruce is a municipal government representative. When asked about the package of environmental policies and its reception in the rural community where he works, Bruce said the following:

> "And I mean I think it's safe to say as a rural community we are probably a little bit more right-wing than what the NDP is. Yah… I don't think it's been well received" - Bruce (Municipal Government Representative)

Dylan is a wind energy developer in the province, and when asked about how the election of the NDP government affected the views of their projects he said the following:

> "But here in Alberta, yeah, I mean it's really played to what people think about renewables...as a left-wing kind of… not conspiracy- it's a left-wing industry, and that's really not the case…I've always voted for the conservatives. I kind of see conservatism as playing into the renewable energy industry perfectly…I think for the landowners it's less about the environment and more about the legacy of the farm and being able to diversify their revenue stream for the farm…So, from the landowner's perspective, I think it is more economic than it is environmental."- Dylan (Wind energy developer)

Here the link between conservatism and anti-environmentalism is directly challenged. The wind energy proponent reflects on the dichotomy of ideology that wind energy represents and asserts that he himself does not subscribe to the ideology that is typically thought to be symbolic of wind energy and environmentalism more broadly. Dylan makes sense of the negative perspectives of wind energy in terms of what it represents and goes on to say that landowners subscribe more to the economic benefits of wind energy than any representation of environmental benefits. In the following excerpt, William brings to light some of the political

dynamics that serve to hinder renewable energy development in the province, he demonstrates that although conservatism is prevalent in the MD (Municipal District), it did not have the expected outcomes. He suggests through this excerpt, however, that there may be links between conservatism and resistance to environmental policies:

> "I think in general terms; some political parties will try to stigmatize the alternative energy industry and try to convince their constituents that all solar and wind and so on is some sort of mistake in policy. But I think it's largely based on misinformation and misdirection, for political ends… And there may be an element of that in some far-right political parties- to try to discourage projects in this area. But I'm not seeing that in this region, and this region is very conservative" -William (Municipal Government Representative)

Tom is also a municipal government representative and suggests that political ideology has been detrimental to the development of renewable energy in the community where he works. He makes the case for how people in the community make sense of this split in ideology and how it has affected the view of wind energy. Sam too is a municipal government representative who highlights how the political environment changed the nature of opposition:

> "Um, there has been a little bit of pushback I think based on some of the politics out here in the rural area. I think you can argue that the NDP getting in power was worse for renewable energy…And it becomes a bit of an, "us against them" thing as soon as the NDP starts pushing it, then people think well that's associated with killing all the coal plant jobs, right?... Yah so they're upset about that, and they start associating that with renewable energy, right?" -Tom (Municipal Government Representative)

> "Well and I think that's you know prior to this, prior to the government involved in renewables, right, you know it was the market that was driving everything. And a lot of these projects went ahead without any major sort of opposition" -Sam (Municipal Government Representative)

Liam in the excerpts below is actively opposing the proposed project and provides a description of how he views the government policy and the push for wind energy development. He demonstrates his frustration with both the regulation of the industry and the way the government will encourage the development through the REP program which he views as pure subsidization:

> "They need to have rules in place to encourage the development of clean energy. Not subsidize it- but encourage it… The direction of our government is they want to become dictators. And but they don't understand the rules of what they're dictating…[the] approach could have been very different, and it would have been supported by all Albertans. But they chose to dictate changes as opposed to engaging changes" -Liam (Landowner unwilling to host turbines).

Mike, a long-time farmer in the area articulates his reservations despite agreeing to host turbines:

> "The Green thing that she's doing- I don't have a real problem with it. I don't. The only problem I have -I just know as a taxpayer, that it's gonna cost us a lot of money to put up these windmills" -Mike (Landowner willing to host turbines on property)

Alex in this excerpt presents his frustration and summarizes that in his eyes the trade-off for subsidizing the development of renewable energy is provincial government debt. He also makes reference to how symbolically the government came to represent a different ideology than the one he had hoped for:

> "Going billions and billions into debt while saying you're making the world better, by going further into that... that's a sense of frustration. I'm personally, genuinely disappointed because I have thought okay here is a chance we are going to get a new government…we can make some changes. You know here's a chance to step in and not be viewed as a left-wing radical [government]- we don't care about the costs or the jobs or anything"- Alex (Landowner adjacent to the proposed project)

This section provided a glimpse of the kinds of anti-regulatory, anti-government, and specifically anti-NDP- Government sentiments that were expressed by interview participants. Because anti-environmentalism is often described as stemming from similar sentiments, it is important to illustrate these linkages within the interview data. Overall, the discourses portrayed in this section fall in line with what was described in the literature review in relation to conservatism, a frustration with the use of public money and a skepticism about the benefits of government environmental policies and regulations. This is one discourse coalition. The next section explores another important characteristic of anti-environmentalism as it is described in literature - climate change skepticism or denial.

Questioning the Premise of Climate Change

One of the main premises of developing wind energy in the province is the issue of climate change. Federal and provincial level initiatives to phase out coal are premised on the reduction of pollutants, particulate and GHG emissions. Although the premise behind reducing emissions to help climate change are depicted as widely accepted, and understood, there seemed to be a general skepticism about these arguments when interviewees discussed their views on climate change. Although outright denial of this information was rare, skepticism was not. In fact, many interview participants shared similar sentiments and were critical of the 'taken-for-grantedness' of claims about the consensus on climate science. This dynamic in discourses presents yet another opportunity to understand why it is tempting to link them back to a kind of anti-

environmentalism. This is because, as evidenced by the literature review, climate skepticism, similar to conservatism, is at the core of the recent theorized wave of the countermovement to environmentalism. Shawna is an NGO representative who said the following about what could be called skepticism or climate denial in the province:

> "That ladder for not taking action on climate... We start with the science is wrong... First of all, the science is wrong, the climate is not changing. Then, the climate is changing... but it is because of sunspots or other reasons. Then yes, it is changing yes… because of anthropogenic activities, but we can't do anything about it... Then, yes, we can do something about it, but Canada shouldn't because it is not our responsibility"- Shawna (NGO Representative)

Shawna then goes on to say the polarization that she perceives is problematic for advancing the discussions on environmental policies in the province:

> "I think it is tied more to tribalism, and identity politics, than it is with a certain economic or political ideology. There's no reason... How would you define classical conservatism? Not that I'm an expert in that... You know there's nothing in there that says you must deny climate science" -Shawna (NGO Representative)

Here, it is evident that there is a split in the discourses that exist around climate change. Rick, in the excerpt below, holds a completely different view on the issue.

> "Well, I mean it's not fact, I mean we aren't denying climate.... and I mean as a person you can't deny the climate changes, but it isn't driven by what they are trying to tell us it is. I mean they aren't scientists. And if you really get into it they are not scientists" - Rick (Landowner in the community adjacent to the proposed project)

Rick describes his skepticism about climate change in the excerpt above. He makes reference to the validity of the science and brings up an important point about the sources of information people choose to trust. Rick emphasizes his trust for alternative sources of information such as Rebel Media, Friends of Science, and Grassroots Alberta (Centre for the Alberta Taxpayer: Citizens' Initiative). These organizations focus on providing counterinformation to both climate change information and mainstream environmentalism and are deeply critical of the current government policies. This includes a deep critique of carbon dioxide emission reductions and alternative energy including wind development. This highlight an interesting role that both information and misinformation play in climate skepticism discourses.

> "Friends of Science I mean they have a big organization if you want to find scientific stuff they have it, and there is a lot of stuff published that is never read by the carbon people…"

> "…Green energy as so-called is basically close to a religious cult. You know that these people are so sold on green energy they will do anything. There is like- Grassroots Alberta has a kind of a study out by a whole bunch of scientists. They say like CO2, they would like to cut it back to below 200 (ppm), and we're at 400 now. 400 makes crops and stuff grow better. These scientists figure that we'd be better at 1200"- Rick

Much distrust in mainstream information is demonstrated by Rick in the above statements. Both Olivia and Sandra in the following excerpt shares their reservations about mainstream climate change information. Despite the fact that they actually accepted wind turbines on their properties, they disagree with the environmental premises:

> "I think people with their own personal interest are deceiving the public for their own personal gain. It's not that what we are going to do is really going to change where the climate is going. I really don't think it is. But we can use that, to get people to do what we want" -Sandra (Landowner with wind turbines)

> "Climate change is climate change…. And the only one who made money on the "climate change" was David Suzuki" -Olivia (Landowner hosting turbines)

Olivia brings to light a deep skepticism about the broader notions of environmentalism brought forth by individuals like David Suzuki among a myriad of other celebrities critical of Alberta. In the interviews, there is a striking contrast and disconnect between the discourses of mainstream environmentalism and the discourses found in rural Alberta. One of the most prevalent ones is a sort of disagreement with the mainstream discourses on climate change, and the global nature of the "carbon issue". Although it is not essential to support wind energy on the basis of its wider and boarder environmental benefits, in some cases, these broader discourses actually diminish the level of support shown, by directly calling into question these benefits. In the excerpt below, David, a large-scale farmer demonstrates a deep-set skepticism about the extent to which carbon dioxide is an issue. David hosts turbines but does not subscribe to the idea of emission reductions to help the climate- a mainstay argument for wind energy development.

> "I think the climate has been changing basically forever, people want to all green right now. There is no guarantee that if we change now we are going to stay within those limits anyway. And I think that's a bit of a paradox, and I think someone is telling us that- and I don't believe all that"-David (Landowner with wind turbines on property)

> "…On the pro-climate change side… Let's see… Let's go there. There is a lot of hypocrisy on their end in their views because they say that these wind projects like this are going to make a world of difference. But, I don't think it is. I really don't think it's going to make a darn bit of difference" -Nick (Landowner with turbines on property)

Nick is a smaller scale farmer in Vulcan County. The narrative that Nick presents misaligns with the broader narratives about the role renewable energy will play into the future as presented for example by the Government of Alberta. The interviewee rejects the notion of wind energy being the silver bullet to a problem he does not fully believe exists. Below, Adam indicates the reservations of the company to talk about broader climate benefits when securing private land for their projects:

> "Frankly a lot of farmers and ranchers are experiencing climate change at a rapidly advancing rate too… However, we've always gone in to talk about commercial opportunities. If people want to ask about philosophy, we can talk about it. But for the deal to make sense to someone who is a steward of their land and thinking about the next generation…And so you basically talk the economics." – Adam (Wind energy industry representative)

Coming from a considered pro-wind standpoint, Adam provides an example of the links that can be made between the industry and broader environmental goals. The quote demonstrates that the wind industry in Alberta must subdue the stance on climate change to operate in rural Alberta, rather highlighting a more locally relevant presentation of economic rather than environmental benefits.

Alberta's energy transition is accompanied by a series of arguments related to health, emission and pollution reduction, climate change benefits, as well as a diversification of energy development. Some interview participants refute the premise of climate change, as often presented by pro-wind discourses. The importance of highlighting the skepticism of climate change information is to illustrate why some of the discourses might be perceived as anti-environmental, and therefore, dismissed. The following section highlights the discourses that distance themselves from association with mainstream environmentalism, including the perceived "environmentalist" arguments for wind energy development.

Refuting Mainstream Environmentalism: "I'm not an environmentalist"

> "I'm not an environmentalist, but I believe in conservation, and in using your head…But they better start realizing that it's the consumers, the ultimate taxpayer that- they better consider more than the fantasyland policy, the feel-good notion that we are saving the planet" -Jim (Landowner with wind turbines on property)

Jim defends his position by articulating his lack of association with environmentalism. The discourse coalition he aligns with refutes environmentalism and the broader discourses that already exist around it. The quote subliminally questions the validity, and rationality of pro-

environmental discourses, and distances itself from what is typically considered mainstream environmentalism. Some landowners were careful not to be perceived as coming from a certain stance on environmental issues, policies, and wind energy. Like Jim, Paul and Jared present the mainstream environmental arguments for wind energy as emotionally driven. The prevalence of emphasizing the emotional nature of environmentalism aims at questioning the rationality of such positions. Pro-wind discourse coalitions often emphasize the lack of rationality of anti-wind discourses, those who are more critical of wind energy present environmental ideas in a similar light.

> "You're trying to get our hearts in it by saying you are benefiting the environment. But then there's so much counter information towards that, that they are not really defending off..." – Paul (Non-hosting landowner in proximity to the proposed project)

> "It ultimately leads to cleaner electricity going onto the system. And they're doing the environment a favor by not having emission-based generation. So, I think they're… everyone likes to have that kind of warm and fuzzy feel good… I did something good, you know. And I think the supporting green energy that's kind of one of the driving forces" -Jared (Municipal Government Representative)

Going back to a more critical discourse, it is evident that some individuals very blatantly distinguish and distance themselves from what they consider mainstream environmentalism. Environmentalism here is portrayed as something irrational and driven by a sort of propaganda.

> "Breitbart News…they most of the time tell you both sides of the issue, but they won't back away from saying that environmentalists are crazy. I mean here you don't want to watch CBC News cause they're in the tank. They are the ones that are selling this" - Rick (Landowner in the community adjacent to project with negative views about wind energy)

> "You know like what the whole environmental movement has done is everybody is pointing at [you] "you got to change, you got to change" … But I don't have to change. They're always pointing fingers at somebody, but instead of doing it, and lead[ing] by example" -David (Landowner with wind turbines on property)

David expresses his frustration with the environmental movement, implying that there exists that particular discourse coalition or an "otherness". Marcus, a provincial government representative. When asked about the polarization of wind energy policies, he replied that he believes there are "camps" or "teams" in relation to how information is interpreted and what information is taken up.

> "If you want to be against things because it's not your team, then you are willing to believe these things that are truthy. Like they sound like they could be right, but they are

> bogus… And I think that goes to like- it's your teams, you know. Like that wind turbines are just not the things that I want on my landscape living here."-Marcus (Provincial Government Representative)

Discourses of anti-environmentalism seem to be distinct and demonstrate that different people contest environmentalism in a variety of different ways. The division seen, however, does not do justice to illustrating the motivations and intentions of those who are more critical of mainstream environmentalism. Especially, those against the premises of climate change distance themselves from "environmentalism" and hold on to the often-self-proclaimed conservative views. The goal of this section was to illustrate why anti-environmentalism might be the go-to description of those who disagree with the values often presented by mainstream environmentalism and wind energy. The next section illustrates why anti-environmentalism does not capture the true motivations or values of people who have reservations about wind energy.

Discourses of Environmentalism

Although many paradoxes exist in the way people articulate their positions, there remains a version of environmentalism within these interviews that is not often recognized and understood. The excerpts in this section set out to demonstrate the nuances of environmentalism and its meaning in rural Alberta and to capture the more felt and in-depth articulations of environmentalism. What is articulated by participants in this section, dismisses the accusations of anti-environmentalism and begs for a different definition. When uncovered, arguments that seem to come from an anti-environmental stance, are expressions of genuine concern, and attachment to one's land.

Anti-government, but pro-regulation

In nearly all interviews, there was a deep environmental concern for the land. Specifically, people were concerned about the strength of the regulations guiding wind energy development. Such concerns suggest that anti-environmentalism isn't an appropriate term to describe opposing landowners. Anti-environmentalism is usually accompanied by anti-regulatory sentiments. Where does this leave people who want to see a better regulatory process? Liam is strongly opposed to the development in his community and around his land. He articulates his concerns as such:

> "The development of the coal... the companies took a very strong support for the environment…with wind energy, you're seeing more detriments to wildlife cause it's affecting the migration zones… It's affecting the ducks and the geese and the owls and

> the predator birds that are being disrupted. Its affecting things that people don't talk about yet- the production of livestock…
>
> …They weren't regulated on where they could put a tower, or whether they could move dirt from one farm to the next, they weren't regulated on how they had to reclaim when a wind a tower was decommissioned" – Liam (Landowner unwilling to host turbines)

Liam questions in this excerpt the way environmental protection is ensured by the wind energy industry. This sentiment is shared in different ways by nearly all landowners interviewed. Nick, shares Liam's' concern, but unlike Liam, Nick hosts turbines:

> "I am concerned about animals in these projects"-Nick (Landowner hosting turbines)

Concern for livestock and wildlife were central to landowners articulating their reservations. There were a lot of concerns surrounding the environmental impacts of wind turbines on wildlife, farming operations, as well as about the thoroughness of decommissioning and reclamation. The pro-regulation sentiments expressed are directly countering the anti-regulatory arguments that are often associated with anti-environmentalism. In many cases, interview participants implied that the wind energy needs to do a better job of assessing its environmental impacts during the construction, operation and reclamation stages. Jared makes a similar point:

> "…Our land use bylaw…we're updating that to more reflect what our current residents want in terms of wind farm regulations…we brought it to the province's attention, that there is a lack of provincial policy, on governing of these green energy projects" -Jared (Municipal Government Representative)

There were substantial concerns about the thoroughness of regulations the wind industry must follow. These pro-regulatory sentiments speak to the concerns many landowners face when confronted by a wind energy company. It was common for landowners to express that these concerns are not taken seriously enough by the incoming project proponents. Anthony is a landowner refusing to host a project proposed on and around his land, and says the following about regulations of the wind energy industry:

> "Yeah, and there are no regulations in the province to protect landowners. That's one of my biggest concerns…The wind industry has no regulations. They sign up quarters, they figure they have the right to put the towers where they want, they can run their lines in any direction. They don't have to keep their footprint as small as possible" - Anthony (Landowner unwilling to host turbines)

Liam and Anthony are both hesitant to accept wind energy on their land because they perceive it as environmentally deleterious, and insufficiently regulated. These sentiments do not reflect anti-environmentalism, because one of the most important premises of their opposition is environmental concern. The following section will demonstrate the discourses of environmentalism that exist in direct contrast to anti-environmentalism.

Farm Level Environmentalism: "My biggest concern is that they don't wreck our land"

Environmentalism at the local level, at the level of the farm, and at the level of the individual are substantially different than versions of environmentalism presented by pro-wind advocates or even the government. In essence, the development of wind energy in rural communities comes in with strong associations with other versions of environmentalism, often times without acknowledging genuine concerns, feelings, and connections to the land. Lola recalls her experience during the construction of a project in the community where she works:

> "I had an interesting conversation [with] one of the gentlemen that worked for one of the companies that were here, and he said when he came out from Ontario to be part of this project, he was coming out to teach everybody about green energy, and climate change, and all of this- how to do it... and he said, and I realized that when I came out, that the farmers and the people in the area are already great stewards of the land. Like they have to be because their livelihood depends on it" -Lola (Municipal Representative)

Lola makes reference to land stewardship and emphasizes how the protection of their land is a priority for landowners. She makes reference to the way people in her community have dedicated a significant amount of time and effort to better the environment and speaks to the lack of incorporation of these positives in the broader discourses surrounding wind energy:

> "You can't tell people how they have to be good stewards of the land. You can't tell people how they have to embrace climate change. You can't tell people how they have to switch their energy sources because it would not matter if they supported you, the majority of the people when you tell them they have to-they're going to fight you on it." -Lola (Municipal Representative)

Alex, who is hesitant to embrace the version of environmentalism the wind industry is bringing in, and who articulated anti-government sentiments (in earlier sections) then articulates his environmental position as such:

> "My stance on the environment is, especially being close to the environment, as I am, I'm one of the ones... before all of the programs were coming in to preserve riparian areas and to preserve native grasslands and all this… We were ahead of that…If you're

> concerned at all about the environment and you're moving somewhere to be… you know, to probably put yourself in a little better position to help out, personally. You do take the environment personally" -Alex (Landowner near proposed project)

A similar idea was presented by Mavis, who is a willing host to turbines part of the proposed project. She emphasized the challenges she is facing in her community, and the divisions she is witnessing because of differing perspectives on wind energy. She articulates the environmentalism that she believes living in rural Alberta entails. She indicates a disconnect between broader climate change and energy transition discourses and the realities at the farm level:

> "I think climate change would be more accepted if they included the stewards of the land... So, the people that are making the decisions for climate change don't live in rural Alberta, don't own land, don't own animals, generally. They may have an understanding of it, but they don't live it…Again, farmers worry about their farm and their family. And not that people in the city and in town don't. It's just that what we have to do for our farm to survive, may or may not be in line with climate change, but it doesn't mean we don't care about the environment"- Mavis (Landowner willing to host turbines)

Mavis expresses the ways in which landowners may be wrongfully portrayed as coming from an anti-environmental stance of issues such as climate change, for example. This quote resonates with what many of the landowners expressed about their land and their way of life. Reservations about wind energy may be a result of deep connections to one's land, and strong environmental ethic. The following quote demonstrates the deeper meanings Mike associates with his land. He makes it clear that his land gives him a sense of place which is a sentiment shared by many interview participants. He refers here to the project he agreed to host on his land, and is articulating his concerns with it:

> "If they're coming, we understand- we've already signed up, we agreed that they are coming. My biggest concern is that they don't wreck our land. And that's my wife's biggest concern…ATCO guys just come and say well it's just a piece of dirt. That piece of dirt means a lot to us…I said can I come to your front lawn in the city and rip it up and then you look at it? It's the same as us out there. That piece of dirt means as much to us as our front lawn, you know? And we just don't want our land wrecked. That's our biggest concern"- Mike (Landowner willing to host turbines)

Mike emphasized his deep connection to the land that he farms. He critiques the technocratic ways companies approached him in the past, disregarding the deeper sense of place and failing to place his version of environmentalism at the forefront of discussions about utilizing his property.

The same concerns extend towards wind energy- he is hopeful they will treat his land with respect. Lola expressed her views of environmental stewardship she sees in her community:

> "Our livelihood depends on taking good care of the land"- Lola (Municipal Government Representative)

The relationship between the health of the land and farmer stewardship or environmentalism were at the heart of the articulated concerns by both people who strongly opposed or actively were fighting against a project and those who have wind turbines or are willing hosts to future projects. Alex in the following excerpt calls for a change to the way wind energy companies approach the question of environmental responsibility and reclamation. He thinks that much is missing from the process in terms of articulating and demonstrating respect for the land secured for projects.

> "If they go broke, or if their wind towers fall on their head, they're not responsible financially. And that is just, that is just simply business…If you're a stockholder or shareholder it's a great business…if you're environmentally responsible, I view that you should be responsible for your projects, as someone who cares about the land and the landscape"- Alex (Landowner near proposed project)

Alex highlights an important gap in the approach that wind energy companies take, suggesting landowners need to feel that their concerns about environmental responsibility and outcomes for the health of their land are respected. Table 2 below, offers a summary of the discourses and coalitions presented. The discourses of mainstream environmentalism and anti-environmentalism presented in the last two subsections offer a counterargument to the claims of anti-environmentalism, which on the surface can come to categorize anti-government sentiments, anti-mainstream environmentalism sentiments, and climate change skepticism. There is still much to be learned about environmentalism and what it means because active or passive resistance or opposition to wind energy projects cannot be categorized as anti-environmentalism by the definitions offered in the literature. The discussion section provides insight into the implications of this research and the discourses that were discussed here.

Table 2-Summary of Discourses and Discourse Coalitions Presented in the Findings Section

	Pro-wind Energy Stance	Anti-Wind Energy Stance
Discourses of Mainstream Environmentalism	• Wind Energy is green, and clean and is essential to addressing environmental issues related to electricity generation • Alberta has a significant role to play in reducing environmental impacts • Climate change is real, threatening, and needs to be addressed with emission reductions, of which wind energy is a part • The renewable energy target of 30 percent implemented by the NDP Government will have net benefits for the people of Alberta	• May exist in relation to long-term environmental costs of turbines production • Concerns in relation to environmental impacts on wildlife at the local scale over the long-term
Discourses of Anti- Mainstream Environmentalism	• Landowners who do not believe in the environmental benefits of wind energy care about the economic benefits from leasing land to projects • Climate change denial or skepticism should not, and is not detrimental to the perception of wind energy • Opposition to wind energy is driven by ideological and political reasons rather than environmental concerns	• The NDP Government Climate Leadership Policy is detrimental economically to Alberta • Mandated energy transition is detrimental to coal-dependent communities, and jobs • Wind energy contributes little to the prosperity of the province and is costly to taxpayers • Alberta's role in environmental impact is limited, or far less than other places globally • Wind energy is not green or clean and does not contribute to emission reductions • Climate change is contestable and is not as significant as other issues Alberta faces
Discourses of Rural Localized Environmentalism	• Wind energy is an opportunity for landowners but should be done carefully to ensure land is respected • Landowners are stewards of their land and direct incorporation of this by wind energy proponents needs to occur • Climate change is not the most important premise for accepting wind energy and it needs to be recognized how it is viewed differently by landowners in rural Alberta	• Regulation of the environmental impacts of wind energy projects is not sufficient • Reclamation standards are not sufficient to address long-term project impacts • Climate change is in a field of contestation, and producers have a direct, and immediate interaction with day to day weather and have a nuanced understanding of climate • Concerns over the localized impacts on wildlife, livestock and agricultural production • Landowners are responsive and respectful of the environment, and their land without the need for government mandates

Discussion

This chapter set out to address the question of whether resistance to wind energy projects (active or passive) are indicative of a kind of anti-environmentalism. The environmentalism and anti-environmentalism dichotomy provides an interesting lens through which opposition to green energy initiatives could be assessed, and through which the notion of anti-environmentalism can be questioned. The importance of this analysis is its contemporary salience in unpacking the polarization of environmental policies (Antonio & Brulle, 2011), not only in the Province of Alberta but in the Noth America large. Polarizing discourses are generated in relation to not only political ideologies but also in relation to environmentalism. As the Province of Alberta moves through the energy transition, perhaps conditional on the next provincial election, it is important to understand why a polarization in relation to green energy mandates and environmental policies more broadly occurs and might continue to occur. Arguably, to facilitate and enhance the energy transition within the province, it is of utter importance to keep the polarization of environmental policies to a minimum but is difficult to achieve if there is a lack of understanding about why and how people justify the positions they hold, and what discourse coalitions they align themselves with. Table 2 offers one way of outlining the discourse coalitions at work, although there could be a multitude of other ways of understanding these discourse coalitions. When it comes to wind energy development in Alberta, discourse coalitions around environmentalism and what it means, play an important role in directing the views that individuals have about wind energy projects and whether they actively or passively, support or oppose, projects in their communities.

Reconsidering Anti-environmentalism

Anti-environmentalism as a broad countermovement to Western environmentalism is characterized by several key tenets. A brief literature review indicated that anti-regulation (Antonio & Brulle, 2011; Rowell, 2017) anti-government sentiments, a general political, and fiscal conservatism (Dunlap & Jacques, 2013; Hess &Brown, 2017; McKinnon, 2016) along with climate change skepticism by and large drive the countermovement. The anti-environmental movement or the countermovement, according to literature, also encompasses many different interests, and appeals to diverse groups of people. Some of these groups include rural residents who subscribe to the ideas that counter those of the environmental movement at large (Rowell, 2017, Brick, 1995; McCarthy, 2002). Wind energy development is very likely to continue to

expand in rural Alberta, which is typically characterized in a certain light in terms of political orientations, relationship to regulation, and environmentalism. Consistent with the literature on environmental counter-movements, overarching characterizations of rural Alberta typically include conservatism, anti-government (particularly anti-NDP- Government) sentiments, and climate change skepticism. The historically conservative orientation of Alberta offers one way of understanding where some of the views are coming from about the current government. The notion of anti-environmentalism historically developed around certain ideologies about the role of government. In particular, a call for fewer regulations, and government involvement can easily translate into a call for less environmental regulation and appear to be detrimental to environmental protection.

These factors and characterizations make it easy to dismiss opposing views surrounding current provincial and federal government environmental policies, the energy transition and wind energy as anti-environmentalism. The findings section depicts three main discourses that subscribe to what would be considered typical counterarguments to environmentalism: Anti-government; climate change skepticism and distancing oneself from mainstream environmentalism. Anti-government sentiments were strong. Interviewees were quite critical of the environmental policy changes (the provincial carbon tax for example, as well as the renewable energy mandate) and called into question how wisely taxpayer dollars are used, and the difference it would make in the long term. The discourses of climate change skepticism, rather than denial, were very prevalent in the interviews. The discourses of climate skepticism fall line with the theorizations of climate change skepticism as a protective mechanism through which individuals articulate uncertainty, and reservations (Phillips &Dickie, 2015, Norgaard, 2011) rather than something that comes from an anti-environmental stance. Uncertainty about the usefulness of climate change discourses to engage landowners in the energy transition discussion still exists. Undermining the position of individuals who are skeptical of climate change information can serve to diminish their support for wind energy due to the strong attachment to discourse coalition they fall into. People will not align themselves with information that calls into question the other discourses they uphold.

Many premises and arguments for wind energy as presented by both the energy transition policies of the government and pro-wind energy advocates do not carry the same meaning for

many rural landowners. Through some of the recent developments in environmentalism and climate change discourse, wind energy has become a hallmark for addressing climate change and broader environmental issues (Vasi, 2014; Groth & Vogt, 2014; Jamison, 2010). Climate change arguments made some interview participants more skeptical about wind energy rather than contributing to positive views of it. Climate change skepticism is prevalently characterized as one of the key tenets of the most recent wave of anti-environmentalism (McCright& Dunlap, 2011). On the surface level, making the connection to climate skepticism in rural Alberta can lead to a presumed anti-environmental stance, especially if individuals align themselves with campaigns and organizations aimed at discrediting mainstream environmentalism and any efforts in that direction. Many of the interviewees subscribed to a so-called "happy medium", where they were skeptical of information on both sides of climate change, emission reduction, and green energy arguments. The complexity of the climate change skepticism discourse arguably lies in discourse coalitions (Barry et al, 2008), and has guided this chapter which is best understood as people subscribing to one discourse but not another. Mainstream environmentalism has established the notions of consensus around climate change, and its relevance. It has also established that green energy, regardless of other discourses, is a morally, ethnically and socially sound option, and is premised on the reduction of emissions, and a reduction of climate change impacts. When followed backward, predicated on these arguments, if one does not subscribe to believing in climate change, they also do not subscribe to the premise of emissions reductions, green energy, and therefore broader notions of environmentalism. So, blatantly, these perspectives can be characterized as coming from an anti-environmental stance. The discourse of "I'm not an environmentalist" was prevalent in the interviews indicating that there is a reservation on the part of the landowners to fall into that particular camp especially when hosting turbines that are often representative of a different type of environmentalism- a version embraced by the current government, wind energy proponents, and "environmentalists". Farmers do not subscribe to the same characterizations of what constitutes environmentalism, and this needs to be considered when project proponents come into a farming community to establish a project.

Misalignment in Environmental Discourses

One of the driving forces for this research was to understand the perspectives of what on the surface looks like anti-environmentalism. Anti-environmentalism cannot describe the stance of

the people that come to actively or passively oppose wind energy, regardless of the arguments they present that may appear as such. It is not and should not be the goal to try and categorize groups of people on the basis of their political, ideological or environmental views, but to delve more deeply into the meanings and 'taken-for-granted' notions surrounding environmentalism. In the end, all interviewees share similar reservations that fall in line with genuine environmental concern. Although much literature has described the land ethic and environmentalism that are unique to rurality and farming, fewer have addressed the discourses coalitions that exist around wind energy and views it brings out in relation to farmer environmentalism.

Scales of environmentalism are key to understanding the concerns people articulate. Local vs. global are often presented as a sort of dualism of environmental concern. The localized stewardship of farmers that has been well documented (Ryan et al, 2013; Beckley, 2017; Silvasti, 2003) and described, but the tenuous ways that farm level environmentalism fits into mainstream environmentalism are often missed. The "green on green" characterization of wind energy conflicts offers one way of representing the different environmentalisms (Szarka, 2004); or as environmentalists against each other (Warren et al, 2005). The notion of scale, however, is only one way of understanding conflicting versions of environmentalism. Interviewees expressed a concern for the local- but it did not diminish their concern for the global, but rather highlighted a kind of skepticism about the extent of benefits of the energy transition, and Alberta's role in addressing the broader climate change. Others in literature, have approached the discourses directly and demonstrated a misalignment in terms of what environmentalism means for those considered pro-wind, and concerned landowners (Barry et al, 2008; Warren et al, 2005). In the case of Texas, it is a discourse misalignment that yields "reflexive environmental skepticism" and general support for wind energy (Jepsen et al, 2012). What does the discourse misalignment yield in Alberta? The research findings suggest that mainstream environmentalism is not beneficial to the perceptions around wind energy and therefore needs to be understood more closely. The notion of being associated with a kind of mainstream environmentalism yields a sort of reactionary discourse of opposition countering it, regardless of whether a landowner hosts or rejects the development on their property. Ideas of environmentalism articulated by the government seem to not align with the localized, and farm level concerns of rural residents.

This study set out to demonstrate that anti-environmentalism is a loose term, which does not do justice to the stance people take when choosing to oppose or be critical of wind energy projects. In fact, the opposite is true. An analysis of this nature helps to understand why we need to be careful about the polarizing nature of terms, and rather than dismissing perspectives, we need to attempt to uncover the motivations behind what is being said, rather than take it at face value. The type of environmental values portrayed by the interviewees are inconsistent with typical descriptions of anti-environmentalism, but discourse coalitions exist nonetheless and need to be acknowledged. It is helpful at this point in Alberta to uncover the true reservations, worries, and motivations of the people who will have to live with the implications of the energy transition. Projects will go ahead perhaps despite pockets of opposition, and it would not be correct to say that Alberta is facing anti-wind movement per se as seen in Ontario. But the implications of misunderstanding can have lasting effects on the energy future of this province.

Conclusion

The purpose of this study was to delve into understanding the discourses surrounding wind energy that exist in rural Alberta. Based on in-depth interviews, approaching the notion of discourses of environmentalism and anti-environmentalism, this study provides another way of understanding the polarizing nature of debates not only about wind energy but about the broader energy transition mandated by the current Government of Alberta. The literature reviews laid out the premises that categorize and have come to describe both environmentalism and anti-environmentalism. The basic question guiding this chapter: 'Is opposition to wind energy in rural Alberta driven by a kind of anti-environmentalism?' was debated. The findings from interview excerpts with municipal, government, and industry representatives, and landowners demonstrated that there exists a discourse misalignment or divergence on what environmentalism means. Table 2 above, offers one way of describing the discourses at play, and how an alignment with one discourse limits incorporating from another, and this may lead to what Szarka (2004) call a discourse coalition. In particular, selected interview excerpts presented a snapshot of why certain opposing perspectives might be dismissed as anti-environmentalism if they fall into anti-government, and anti-regulatory, and climate change skepticism sentiments. It is the argument of this chapter that the conservatism, anti-government sentiments, climate skepticism as well as a rejection of mainstream environmentalism can at face value be called anti-environmentalism. However, this dismissal is detrimental to the fundamental understanding of the discourses of

environmentalism unique to rural farming areas. As well it serves to take away from the understanding of legitimate environmental concerns of landowners. This study has provided another lens through which polarization of environmental policies can be viewed and offered a contemporary example of the discourses of environmentalism and anti-environmentalism unfolding. The main takeaway is a call for more care to be used when broadly describing where resistance to wind energy projects is actually coming from.

References

Alberta Government, (2016). Climate Leadership Plan. Retrieved from https://www.alberta.ca/climate-leadership-plan.aspx

Antonio, R. J., & Brulle, R. J. (2011). The unbearable lightness of politics: climate change denial and political polarization. *The Sociological Quarterly*, *52*(2), 195-202.

Babbitt, B. (1982). Federalism and the Environment: An Intergovernmental Perspective of the Sagebrush Rebellion. *Environmental Law*, *12*(4), 847-861.

Barry, J., Ellis, G., & Robinson, C. (2008). Cool rationalities and hot air: a rhetorical approach to understanding debates on renewable energy. *Global environmental politics*, *8*(2), 67-98.

Bidwell, D. (2013). The role of values in public beliefs and attitudes towards commercial wind energy. *Energy Policy*, *58*, 189-199.

Beckley, T. M. (2017). Energy and the Rural Sociological Imagination. *Journal of Rural Social Sciences*, *32*(2), 69.

Bernstein, S., & Cashore, B. (2001). Globalization, Internationalization, and Liberal Environmentalism: Exploring Non-Domestic Sources of Influence on Canadian Environmental Policy. *Canadian Environmental Policy: Ecosystems, Politics and Process*, 212-230

Brick, P. (1995). Determined opposition: The wise use movement challenges environmentalism. *Environment: Science and Policy for Sustainable Development*, *37*(8), 17-42.

Butterfield, M. (2018). Alberta Advantage Gone Under NDP Government, Fraser Institute Finds. Retrieved from https://www.huffingtonpost.ca/2017/01/06/alberta-advantage-no-more_n_14003228.html

CanWEA, (2018b). Public Opinion on Wind Energy in Alberta and Ontario. Retrieved April 12, 2018, from *https://canwea.ca/wp-content/uploads/2018/03/CanWEA-SurveyReport-Feb2018-Released.pdf*

Clean Energy Canada, (2016). Canadian's Opinions on the Clean Energy Transition. Retrieved from *http://cleanenergycanada.org/wp-content/uploads/2016/10/Backgrounder-Clean-Energy-Transition-Polling-Nanos-CEC.pdf*

Dunlap, R. E., & Jacques, P. J. (2013). Climate change denial books and conservative think tanks: Exploring the connection. *American Behavioral Scientist*, *57*(6), 699-731.

Dunlap, R. E., & Mertig, A. G. (2014). The evolution of the US environmental movement from 1970 to 1990: An overview. In *American environmentalism* (pp. 13-22). Taylor & Francis.

Dunlap, R. E., & Van Liere, K. D. (1978). The "new environmental paradigm". *The journal of environmental education*, *9*(4), 10-19.

Dunlap, R. E., Van Liere, K. D., Mertig, A. G., & Jones, R. E. (2000). New trends in measuring environmental attitudes: Measuring endorsement of the new ecological paradigm: a revised NEP scale. *Journal of social issues*, *56*(3), 425-442.

Eisen, B., Lafleur, S., & Palacious, M. (2018). The End of the Alberta Tax Advantage. Fraser Institute. Retrieved from: https://www.fraserinstitute.org/sites/default/files/end-of-the-Alberta-tax-advantage.pdf

Fast, S., & Mabee, W. (2015). Place-making and trust-building: The influence of policy on host community responses to wind farms. *Energy Policy*, *81*, 27-37.

Fast, S., Mabee, W., Baxter, J., Christidis, T., Driver, L., Hill, S., McMurtry, J. & Tomkow, M. (2016). Lessons learned from Ontario wind energy disputes. *Nature Energy*, *1*(2), 15028.

Fergen, J., & Jacquet, J. B. (2016). Beauty in motion: Expectations, attitudes, and values of wind energy development in the rural US. *Energy Research & Social Science*, *11*, 133-141.

Fournis, Y., & Fortin, M. J. (2017). From social 'acceptance 'to social 'acceptability 'of wind energy projects: towards a territorial perspective. *Journal of environmental planning and management*, *60*(1), 1-21.

Gottlieb, R. (2005). *Forcing the spring: The transformation of the American environmental movement*. Island Press.

Government of Alberta, (2018a). Renewable Electricity Program Retrieved from: https://www.alberta.ca/renewable-electricity-program.aspx

Government of Alberta, (2018b). Phasing Out Coal Pollution. Retrieved from: https://www.alberta.ca/climate-coal-electricity.aspx

Groth, T. M., & Vogt, C. A. (2014). Rural wind farm development: Social, environmental and economic features important to local residents. *Renewable Energy*, *63*, 1-8.

Government of Canada, (2018a). Climate Change Canada: Proposed Amendments to Coal-Fired Electricity Regulations and Proposed Natural-Gas-Fired Electricity Regulations. Retrieved from www.canada.ca/en/environment-climate change/news/2018/02/proposed_amendmentstocoal-firedelectricityregulationsandproposed.html.

Government of Canada, (2018b). Canada Gazette – Regulations Amending the Reduction of Carbon Dioxide Emissions from Coal-fired Generation of Electricity Regulations. Retrieved from http://www.gazette.gc.ca/rp-pr/p1/2018/2018-02-17/html/reg3-eng.html

Gunter, L. (2018). Gunter: What Alberta Advantage? Retrieved from http://edmontonsun.com/opinion/columnists/gunter-what-alberta-advantage

Hess, D. J., & Brown, K. P. (2017). Green tea: clean-energy conservatism as a countermovement. *Environmental Sociology*, *3*(1), 64-75.

Hyland, M., & Bertsch, V. (2018). The role of community involvement mechanisms in reducing resistance to energy infrastructure development. *Ecological Economics*, *146*, 447-474.

Jami, A. A., & Walsh, P. R. (2017). From consultation to collaboration: A participatory framework for positive community engagement with wind energy projects in Ontario, Canada. *Energy research & social science*, *27*, 14-24.

Jamison, A. (2010). Climate change knowledge and social movement theory. *Wiley Interdisciplinary Reviews: Climate Change*, *1*(6), 811-823.

Jefferson, M. (2018). Safeguarding rural landscapes in the new era of energy transition to a low carbon future. *Energy Research & Social Science*, *37*, 191-197

Jepson, W., Brannstrom, C., & Persons, N. (2012). "We Don't Take the Pledge": Environmentality and environmental skepticism at the epicenter of US wind energy development. *Geoforum*, *43*(4), 851-863.

Kessler, A., Parkins, J. R., & Huddart Kennedy, E. (2016). Environmental harm and "the Good Farmer": Conceptualizing discourses of environmental sustainability in the beef industry. *Rural Sociology*, *81*(2), 172-193.

Klass, A. B. (2011). Property Rights on the New Frontier: Climate Change, Natural Resource Development, and Renewable Energy. *Ecology Law Quarterly*, 63-119.

Liebe, U., Bartczak, A., & Meyerhoff, J. (2017). A turbine is not only a turbine: The role of social context and fairness characteristics for the local acceptance of wind power. *Energy Policy*, *107*, 300-308.

Leibenath, M., & Otto, A. (2014). Competing Wind Energy Discourses, Contested Landscapes. *Landscape Online*, *38*.

Macnaghten, P., & Urry, J. (1998). *Contested natures* (Vol. 54). Sage.

McCarthy, J. (2002). First World political ecology: lessons from the Wise Use movement. *Environment and Planning A*, *34*(7), 1281-1302.

McCright, A. M., & Dunlap, R. E. (2011). The politicization of climate change and polarization in the American public's views of global warming, 2001–2010. *The Sociological Quarterly*, *52*(2), 155-194.

McKinnon, C. (2016). Should We Tolerate Climate Change Denial? *Midwest Studies in Philosophy*, *40*(1), 205-216.

Meyer, C. (2018). 'Vicious' right-wing politics fueling climate denial in Alberta, says

environment minister Phillips. National Observer. Retrieved from: https://www.nationalobserver.com/2018/05/22/news/vicious-right-wing-politics-fueling-climate-denial-alberta-says-environment-minister

Mol, A. P. (2000). The environmental movement in an era of ecological modernization. *Geoforum*, *31*(1), 45-56.

Nakano, T. (2015). Neoliberalism and conservatism. In *Beyond Global Capitalism* (pp. 67-75). Springer, Tokyo.

Norgaard, K. M. (2011). *Living in Denial: Climate Change, Emotions, and Everyday Life*. MIT Press.

Paehlke, R. C. (1989). Environmentalism and the future of progressive politics. *New Haven*.

Paehlke, R. (2000). Environmentalism in one country: Canadian environmental policy in an era of globalization. *Policy Studies Journal*, *28*(1), 160-175.

Paolisso, M., & Maloney, R. S. (2000). Recognizing farmer environmentalism: Nutrient runoff and toxic dinoflagellate blooms in the Chesapeake Bay region. *Human Organization*, 209-221.

Pasqualetti, M. J. (2011). Opposing wind energy landscapes: a search for common cause. *Annals of the Association of American Geographers*, *101*(4), 907-917.

Peeples, J. A. (2005). Aggressive mimicry: The rhetoric of wise use and the environmental movement. *The environmental communication yearbook*, *2*(1).

Pepper, D. (1996). *Modern environmentalism: an introduction*. Psychology Press.

Phillips, M., & Dickie, J. (2015). Climate change, carbon dependency and narratives of transition and stasis in four English rural communities. *Geoforum*, *67*, 93-109.

Rowell, A. (2017). *Green Backlash: Global Subversion of the environmental movement*. Routledge.

Ryan, R. L., Erickson, D. L., & De Young, R. (2003). Farmers' motivations for adopting conservation practices along riparian zones in a mid-western agricultural watershed. *Journal of Environmental Planning and Management*, *46*(1), 19-37.

Silvasti, T. (2003). "The Cultural Model of 'the Good Farmer' and the Environmental Question in Finland." *Agriculture and Human Values* 20(2):143–50.

Sine, W. D., & Lee, B. H. (2009). Tilting at windmills? The environmental movement and the emergence of the US wind energy sector. *Administrative Science Quarterly*, *54*(1), 123-155.

Stern, P. C., Dietz, T., & Guagnano, G. A. (1995). The new ecological paradigm in social-psychological context. *Environment and behavior*, *27*(6), 723-743.

Szarka, J. (2004). Wind Power, Discourses Coalitions and Climate Change: Breaking the Stalemate? *European Environment* 14 (4): 317–330

Van der Horst, D. (2007). NIMBY or not? Exploring the relevance of location and the politics of voiced opinions in renewable energy siting controversies. *Energy policy*, *35*(5), 2705-2714.

Vasi, I. B. (2011). *Winds of change: The environmental movement and the global development of the wind energy industry*. Oxford University Press.

Warren, C. R., Lumsden, C., O'Dowd, S., & Birnie, R. V. (2005). 'Green on green': public perceptions of wind power in Scotland and Ireland. *Journal of environmental planning and management*, *48*(6), 853-875.

Wood, J. (2016). *New poll shows strong opposition to Alberta carbon tax*. [online] Calgary Herald. Retrieved from: http://calgaryherald.com/news/politics/new-poll-shows-strong-opposition-to-alberta-carbon-tax [Accessed 6 Jun. 2018].

Woods, M. (2003). Conflicting environmental visions of the rural: windfarm development in Mid Wales. *Sociologia ruralis*, *43*(3), 271-288.

Chapter 3- Community, Landscape, and the Albertan Identity - A Deep Story of Reservations about Wind Energy

Introduction

Alberta is undergoing an energy transition whereby 30 percent of electricity is to come from renewable sources by 2030, of which wind energy will be a large part. Research surrounding wind energy has contributed significantly to understanding the factors that lead to favorable outcomes for projects, with attention to issues of identity (Jami &Walsh, 2017; Devine-Wright, 2005) ties to the community (Hyland &Bertsch, 2018) and psychosocial dimensions (Walker, Baxter & Ouellette, 2015). Most literature focuses on factors or variables that lead to more acceptance. Distilling such factors, although useful, serves to undermine the process of uncovering the lived experiences and motivations of people who face wind energy development in their community.

Through an analysis of in-depth interviews conducted with landowners, as well as government and industry representatives, a deep story about community and identity emerges. The chapter makes its way through the subsurface meanings people ascribe to community relations, their landscapes and the oil and gas industry that shaped the landscape and agricultural practices. Wind energy is a new development in many parts of the province, and it challenges the pre-existing conceptions and identities surrounding rural communities. By challenging an existing order, wind energy (for some) comes to represent a threat, imposition, and disruption to their long-formed identities. This chapter explores this notion of identity through a variety of levels. This identity disruption spans neighbor relations, meanings of the existing landscape, and arguably challenges the Albertan identity, which has long been associated with oil and gas development.

Looking at this energy transition through the lens of Arlie Russell Hochschild's deep story (Hochschild, 2018), deep-set reservations are uncovered. Beyond the analysis of content and discourse, the 'deep story' approach allows researchers to uncover the more emotive and complex meanings people ascribe to development. The findings section flushes out many of the worldviews, ideas, and concerns of a sample of rural Albertans. Their deep story must be understood as an expression of "the hopes, fears, pride, shame, resentment and anxiety": a grounded and sympathetic approach to grasping what people perceive is at stake (Hochshild,

2018, p. 135). This approach is novel in that it brings forward the human and emotive aspects of how individuals perceive threats to pre-existing notions of community, landscape, and broader notions of identity.

Literature Review

Beyond Variables and Factors to "Deep Story"

Approaches to understanding resistance to wind projects often focus on single factors or combination of factors that influence the success of implementing wind energy projects (Jami & Walsh, 2017; Fournis & Fortin, 2017). The literature on psychosocial dimensions of development (Hall, Hards & Bulkeley, 2013; Jacquet & Stedman, 2014) delves deeper into understanding the felt experiences of people (Barry, Ellis & Robinson, 2008; Van der Horst, 2007). Additionally, much literature has also focused on the notions of culture and cultural theory as a "useful heuristic device for identifying and comprehending the reasoning behind different individuals' responses to RE (Renewable Energy)" (West, Bailey & Winter, 2010, p. 5747). Overall, the study of social factors spans many scales and subject matters. Groth and Vogt (2014) argue that "not one sole barrier will prohibit wind development, but a complex intertwining of variables" (Groth and Vogt, 2014, p. 7) or what Songsore & Buzzelli (2014) called the "confounding" of factors and variables.

This chapter emphasizes that beyond these factors and barriers, the often-unarticulated threats and feelings also dictate, perhaps more strongly, how individuals proceed to engage with wind energy in their community. The goal of this chapter is not to iterate, confirm nor flush out factors that may lead to more acceptance. If intra-community factors are identified with the goal of understanding resistance or how it can be diminished, research may then fall into what many have called a 'barrier oriented' approach (Fournis & Fortin, 2017; Devine- Wright, 2005). Aitken (2010) suggests that characterizing opposition as a barrier "perpetuates the underlying supposition that opponents are less legitimate than supporters" (Aitken, 2010, p. 1837). Critics of the 'barrier-oriented' approach identify the "need to transcend the common goal of mitigating resistance within studies" (Songsore & Buzzelli, 2014, p. 292), and attempt to understand the deeper meanings people ascribe to the community and landscape (Songsore & Buzzelli, 2014; Aitken, 2010).

The relevance of understanding emotions in the context of wind energy is its ability to shift the frame of reference and place human experience at the center of discussions. The difficulties of incorporating emotions are highlighted by several authors, who suggest that emotional labels can serve to hinder the perceptions of those expressing them by labeling them as irrational and misinformed. In their rhetorical analysis, Barry and colleagues (2008), describe how discourses of rationality prevail over emotive ones in wind energy disputes, and are not fully incorporated into decision making. The deeper narratives of those with reservations often get lost but can be uncovered by the deep story -an account of what matters most to people, and what they perceive is threatened. "A deep story is a feel as if story - it's the story feelings tell us, in the language of symbols… It removes judgment. It removes fact. It tells us how things feel" (Hochschild, 2018; p.135). This chapter focuses primarily on two types of threats that are not often recognized within the social science of wind energy: threats to the meanings of community, and threats to rural Albertan identity. The rural Albertan identity and landscape - comprised of industrial agriculture, oil and gas development, and tight-knit communities - are key to uncovering people's motivations, reservations, and perceptions of change. The literature below focuses on reviewing potential threats to meanings of community, the neighboring identity, landscape change, and the provincial identity.

Threats to the experiences and meanings of community

There a number of potential threats wind energy development can introduce to the meanings people ascribe to their community. It is important to understand that neighbor to neighbor relations make up the community, and the dynamics of long-term and tight-knit relationships in community settings can result in a very real perception of threat to the social fabric of a rural area. Financial fairness, the land acquisition process, and issues related to proximity all constitute potential threats to how people view their community. The three sub-sections below highlight the deeper meanings of the changes that are potentially introduced by an incoming wind energy project.

Fairness and Compensation

Financial incentives have long dominated the discussion of influencing willingness and participation in projects, and are generally well understood (Groth & Vogt, 2014; Fast et al, 2016; Cass, Walker, & Devine-Wright, 2010). What is less understood, are the not- so obvious

inter-personal dynamics that compensation and financial benefits introduce to a community, and what they take away from the meanings people ascribe to the community and their relations to others around them. "Neighboring involves the social interaction, the symbolic interaction, and the attachment of individuals with the people living around them and the place in which they live" (Unger & Wanderman, 1985, p. 162). How are relations changed when the non-uniform potential for financial benefits are introduced?

The introduction of money to other-wise neighborly relation dynamics introduces a different way of people relating to one another- a way of relating that is perhaps unfamiliar to people who have been friends or neighbors for decades. Acceptance of wind projects for financial benefits alone may represent something beyond just taking advantage of an opportunity but be perceived as putting something more important at stake. Some authors are critical about the use of financial benefits (community and individual) to increase acceptance of projects (Gross, 2007; Songsore & Buzzelli, 2014). Many authors highlight the importance of compensation schemes on intra-community relations, and divisions, and call for greater attention to neighbor to neighbor relations (Fast et al, 2016).

> "Unfortunately, the distribution of payments is highly skewed across community members, and the terms of agreements are not transparent… neighbors currently receive no compensation despite experiencing noise and visual impacts. These arrangements exacerbate pre-existent socio-economic disparity and contribute to community division and opposition, especially as they are deemed private contracts, thus being subject to much speculation and gossip" (Fast et al 2016, p.4).

The common notions of threats to the community, however, do not always encompass the immediacy and the potency of neighbor relations. But also, the overromanticizing of neighborly relationships and the "…rosy rhetorical image of close-knit rural communities, must be subject to the realities of the fractures and disputes that can open up when people feel, legitimately or otherwise, that they have been misled" (Walker et al, 2010, p. 2662). The financial component opens up the dialog about the fairness of impacts and benefits (Walker et al, 2010). Although ownership structures have been thoroughly studied (Liebe, Bartczak & Meyerhoff, 2017; Jami & Walsh, 2017; Walker & Devine-Wright, 2008; Hyland & Bertsch, 2018), the felt experiences of exclusion, and division that people articulate, regardless of the ownership structure, and potential gain of benefits are more important to understand. Perhaps it's the sense of division and loss that

precedes all attempts to reconcile economic issues within the community even by offering a better or more fair compensation scheme.

> "What was a legitimate and successful community project to some—was an entirely illegitimate and misrepresented notion of community to others, a misrepresentation which itself provoked distrust and opposition…community cohesion and trust …is not universally ensured just because a project is given a community label" (Walker et al, 2010, p. 2662).

The perceived lack of fairness in benefits and impact distribution can elicit strong responses from neighbors (Gross, 2007; Bidwell, 2013). The confidential negotiations and asymmetrical information provided to individuals about compensation in close-knit communities can also confound divisions and disputes (Fast et al, 2016). Some contend that ownership schemes and financial benefits play a minimal role in acceptance: "…significant proportion of the population are ideologically either opposed to or in favour of wind farm…and offering some form of compensation or project ownership does not change this" (Hyland and Bertsch, 2018). In any case, individual compensation and community ownership schemes do play a role in the way projects are interpreted. But if the 'public' or 'community' "is conceived of in an over-simplistic and monolithic manner" there is a risk of "failing to take account of the role social identities, social representations and social networks" that influence a complexity of perceptions (Devine-Wright, 2005, p.135).

Engagement and Threats of the Land Acquisition Process

Community engagement has become one of the most studied factors emphasized in the literature (Jami & Walsh, 2017; Fournis & Fortin, 2017; Groth and Vogt, 2014). Many have found that community involvement has a positive outcome on the implementation of wind projects (Hyland & Bertsch 2018), and it is often presumed that more engagement is better. Despite the fact that "participation process plays a prominent role in acceptance" the ambiguity of the notion of stakeholder participation adds to uncertainty about its effectiveness, fairness, and its subsequent perceptions (Jolivet & Heiskanen, 2010). Another significant area of study is procedural and participatory fairness (Bell et al, 2013; Liebe et al, 2017). However, community participation as a means to achieve project implementation is a limited and barrier-oriented definition (Aitken, 2010).

"Rather than engaging the public in order to change them, these processes provide a platform in which values can be openly discussed" (Bidwell 2013, p. 198). Through the complex citing process (negotiating, signing leases, respecting setbacks, and ensuring compliance with provincial environmental guidelines), acquisition of enough land base for the project, often becomes the first priority. Contacts and lease agreements may be subject to sales tactics, confidentiality or privacy issues, and asymmetrical or false information provision. All of these things introduce a general sense of disorientation community. This disorientation can manifest itself as gossip, and distrust between neighbors (Fast, et al 2016). This first steps of the land acquisition process arguably set the stage for the rest of the process and can taint anything that follows. This may pose a threat to those valued relations - which is difficult to overcome for rural Albertan communities. Beyond gossip, and hard feelings, the sudden division may bring into question the whole community identity. Little attention in literature has been given to the direct implication of initial neighbor divisions on the rest of the project implementation process and should arguably be the point of departure for understanding the roots of reservations and feeling of threat. When people follow up with their neighbor about the process and the information provided, questions, suspicions, and discrepancies arise and introduce a new sense of both distrust, and of loss of the "good neighbor"- a well-entrenched social identity in rural communities. The loss of the good neighbor manifests itself as a threat to the "nested social identities" and challenges the pre-existing conceptions of what community means (Devine-Wright, 2005).

Wellbeing and Proximity

A vast amount of literature catalogs the impacts of wind turbines on human health and wellbeing (Krogh, 2011; Bolin et al, 2011; Jeffrey, Krogh & Horner, 2014; Shepherd & Billington, 2011). Proximity to wind turbines has been linked to noise pollution (Lane et al, 2016). Sounds generated by the turbines have been associated with stress, a sense of unease and anxiety (Walker et al 2015; Jeffrey et al, 2014), as well as restlessness and sleep deprivation (Lane et al, 2016; Shepherd & Billington, 2011), and a general diminished level of wellbeing (Jalali et al, 2016; Walker, Baxter & Ouellette, 2014; Bolin et al, 2011). It is important to touch on these issues, as they came up in the interview data, either because they were directly experienced or because they were anticipated with the proposed project. Walker and colleagues (2014) suggest

that wellbeing impacts have been understudied in literature, even though in many cases opposition stems from such concerns.

Fast and colleagues (2016) suggest that concerns cannot be so simply dismissed because "psychosocial stress" is an indication of wellbeing and perceived wellbeing threats can be "confounded" (Songsore & Buzzelli, 2014). "The psychosocial environment of conflict, rhetoric, and denigration simply makes things worse for concerned locals" thus, the debate about wellbeing impacts is complex (Walker et al, 2014, p. 741). All the concerns are embedded in a social context, and localized perspectives and technical solution such as setback or improvements in design may not resolve tensions (Shepherd & Billington, 2011). Although proximity, for some individuals, is a key issue, the "proximity hypothesis" does not always hold. In other words, the perceived wellbeing impacts are not always correlated with proximity (Devine-Wright, 2005; Liebe et al, 2017). Proximity is also interesting because individuals are often not in the position to choose where the turbines go on neighboring properties. Issues persist and go beyond one's "backyard" and extend towards a common community landscape. In some respects, the NIMBY portrayal of concerns is not applicable, because the placement of turbines in the "neighbors' yard" can be just as impactful and meaningful.

> "…Concepts of attachment and identity may be much more critical to understanding oppositional behavior than is proximity to the development. Residents' concern over disruptions to closely-held place and community identities can help to explain support or opposition to local development projects" (Jacquet & Stedman, 2014 p. 1286).

The following section will work through the literature on the meaning of backyard, landscape, and changes to the landscape that may threaten rural identity.

Visibility and Landscape Identity

Wind energy projects have a direct interaction with the landscape, and its aesthetics (Gipe, 1993), and their visible nature has been thoroughly studied as a key issue (Woods, 2003; Pasqualetti, 2011). Reservations may stem directly from the aesthetic changes to the landscape, but also from the symbolic meanings people ascribe to both the change and the landscape (Brittan, 2001; Woods, 2003; Wolsink, 2000).

> "Whatever we do to make the wind turbines less conspicuous, we can do nothing to make them invisible. That, in a nutshell, is the problem. People see them, hear them, and even feel them, and in response, they often reject them" (Pasqualetti, 2011).

Visible aesthetic change to a landscape is an inescapable fact of wind energy projects which is different than the other, often times "invisible", energy infrastructures such as underground pipelines and transmission lines (Fergen & Jacquet, 2016; Hirsh & Sovacool, 2013). "Energy issues are pervasive but often invisible in our society", and wind energy is a direct challenge to this invisibility (Beckley, 2017, p.89). Wind projects are unique because unlike oil and gas infrastructure that so many landowners across rural Alberta host, turbines transcend landowner boundaries and involve a visual landscape change that can be just as impactful or more impactful for the neighboring property as it is for the individuals hosting turbines. This introduces a new dynamic to decision making because neighbor relations can come to dominate the decisions to host. Although turbines are placed on privately owned land, neighbors may be impacted in the vicinity who do not agree with the project. The concept of neighboring becomes important:

> "Residents perceive built and physical environments of their neighborhoods to symbolically communicate meaning such as ownership and privacy…[and] can use their physical environment to express themselves and manage their neighborhood environment, particularly the areas around their homes such as front and back yards" (Unger & Wandersman, 1985, p. 150).

The importance of conveying things visually to neighbors is also consistent with what Ryan, Erickson & De Young (2003) found about conservation practices: those that are "visible on the land convey the message of good stewardship better than less visible conservation practices" (Ryan et al, 2003, p. 33). Ultimately hosting turbines also sends a particular message to neighbors given that more often than not, neighbors can see them. To some, it may come to represent a disregard for stewardship if, for example, a neighboring individual perceives the project as detrimental to the local environment. The relationship between environmental concern and negative views of wind energy projects have been highlighted in the literature (Fergen & Jacquet, 2016). What is a landowner communicating when refusing to host turbines among neighbors who may have agreed? Perhaps the turbines visually come to represent a divergence from an existing rural identity of what neighboring means?

Many have studied how individuals perceive their landscape and visual changes, through the notion of place attachment (Devine- Wright, 2009; Pasqualetti, 2011). Place attachment has been described as the emotive, psychological and deep connections that are formed around a particular place. Wind energy developments challenge the "emotional bonds between people and places" (Cass & Walker, 2009, p. 63). Intra-community bonds are cohesive and of utter importance to

individuals in maintaining both the identity of the community and the identity of the "good neighbor" (Boyd & Paveglio, 2015; Cass & Walker, 2009). The bonds that previously held neighbors together, come to be threatened. This, in essence, is one part of the deep story. The deeper reservations are "more than a reaction just to the landscapes that wind turbines reshape… It is a response to the threat they pose to the way we fashion how we live" (Pasqualetti, 2011, p. 915). Although concerns are often articulated as visual in nature, they are "not simply based on an aesthetic or visual appreciation of the landscape but reflect the experience of living or spending time in a particular place" (Bell et al, 2013, p. 123). Arguably, the attachment is also to the notion of community that a particular place embodies because often long time periods are shared with neighbors. In the context of wind energy, space also comes to be shared more directly. The relationship between the landscape, and identity is often described in the literature as place identity (Devine-Wright, 2009; Pasqualetti, 2011). Although many studies have been done surrounding the particular concept of place identity, Alberta's convergence of landscapes of energy and ideas surrounding rurality, make it an interesting context for the energy transition. Evans and Garvin (2009) describe the complexity of landscape identity rooted in rural ideals and energy, that landowners must navigate in resisting oil and gas development whereby:

> "These struggles were wrapped up with the place-bound social meanings of specific industries, their role in local economies, and global images of provincial identity…On the other hand, at the local scale, some rural residents equate 'good' with a way of life rooted in the idyllic surroundings of rural Alberta." (Evans & Garvin, 2009, p.65).

The rural Albertan landscape consists of private landowners who have long accepted energy development on their properties. Wind energy has now emerged alongside into this fossil-fuel based energy mix on the landscape, and reservations stem from the deeper story of landscape identity. It is challenging to articulate landscape identity in decision-making processes about wind projects, as it is both abstract and subjective. Following the work of Davis (1999) Cass & Walker (2009) suggest that "aesthetic values expressed by members of the public and embodied in emotional responses to threats to places, were seen by planning officers as both impossible and inappropriate to bring into decision-making processes…scientific and economic rationalities dominates their representation of the issues at stake" (Cass & Walker, 2009, p. 64). Economic and rational approaches to planning may dismiss articulations of rural landscape identity.

Energy and the Albertan Identity

Wind energy in Alberta is situated in a unique position. A careful consideration of the political, and cultural backdrop reveals why it is detrimental for wind energy to be "judged against conventional fossil-fuel sources of energy such as coal, oil and gas" (Barry et al, 2008). Alberta is often called the "oil and gas province" of Canada, providing a significant amount of prosperity, revenue, employment and often considered as the "engine of the national economy" (Shrivastava & Stefanick, 2012). The narratives of Alberta's prosperity and abundance of energy resources continues to have many implications going into the energy transition. These implications span provincial politics, environmental policies, and have arguably enveloped the development of renewable energy currently mandated by the NDP Government. "The province's physical, social and cultural landscape has been shaped by over 50 years of intensive oil and gas extraction and production…which in turn, shapes the imagination, territorialization and rule of a place" (Evans & Garvin, 2009, p. 50). The narratives of resource-rich Alberta and significant potential for gas recovery (natural gas has been termed the transition fuel), makes wind energy somewhat difficult to argue for within a landscape of already abundant energy resources. These feelings are exacerbated by reservations by many Albertans about the "premature" phase-out of coal-fired electricity generation which will have tremendous impacts on employment in communities like Hanna, Alberta. Employment in the coal industry (Battle River Generating Station; Sheerness Generating Station that were visited) comes to represent another kind of working identity, one that people in rural communities respect and try to protect. "Identities and daily activities of energy laborers…would make a significant difference in the ability of communities to plan for energy transitions…new energy systems threaten to disrupt the social webs that form local communities" (Miller & Richter, 2014, p. 80).

Private agricultural land in rural Alberta, beyond being adjacent to coal mines and large power plants is also a landscape of oil and gas development. The agricultural industry and oil and gas go hand in hand on the landscape. "The general public…doesn't understand that most oil and gas wells are on private property, nor do they realize that in Alberta, landowners cannot refuse to allow energy development" (Glen, 2018). The oil and gas industry established the benchmarks and much more tangible ways of relating to rural Albertans by being ever present and developing standards for community approaches. CAPL (Canadian Association of Petroleum Landmen), for example, is a liaison between "agricultural and petroleum and natural gas interests" (CAPL,

2018, p. 24). A long-tested history of energy developers dealing with communities often results in trust, familiarity, and support (Boyd & Paveglio, 2015). In Alberta, Mineral Rights acquired by a company can be pursued regardless of whether above ground surface rights are granted. Wind energy is very different in that respect whereby the landowner has complete control over granting permission to place of turbines on their land. There is a long history between private landowners engaged in agriculture and the development of energy. Oil and gas development is normalized and is more often than not welcomed on the landscapes of rural Alberta. These energy landscapes have been termed by Haarstad & Wanvik (2017) as "carbonscapes" or spaces:

> "… created by material expressions of carbon-based energy systems and the institutional and cultural practices attached to them…carbonscapes are shaped at the intersection of infrastructures, technologies, the built environment, and various social, cultural and political regimes that govern them" (Haarstad & Wanvik, 2017, p.433).

Huber (2013) articulates a similar notion of carbon dependent landscapes as "a spatial practice". The agricultural way of life and the rural identity are by and large shaped by the oil and gas industry, whereby everything from farm fuels, combines, fertilizers are physical manifestations of "carbonscapes". The farming identity is embedded in these carbonscapes. Beyond this, the narratives of "feeding the world", which so many farmers proudly articulate, become difficult to uphold without reference to the oil and gas industry.

The concept of "way of life" or livelihood is commonly mobilized as the claim to justify access to resources; "[it] is a formation of moral economies around resource practices" (Huber, 2013, n.p.). Economic benefits in the form of lease payments from oil and gas provide income vital for the continuation of farming operations. Wind energy offers similar financial benefits to private landowners, but an evasive relationship exists between hosting wind energy and wells. This relationship consists of individuals not only benchmarking the citing, consultation and reclamation processes in the oil and gas industry but also benchmarking wind energy development in broader narratives about what rural Alberta has been and what it should be. Wind energy landscapes do not manifest themselves in the same way, and they are not yet part of the rural Albertan landscape, although arguably the MD of Pincher Creek has made this transition. Other parts of Alberta are experiencing wind energy development for the first time.

Much literature has articulated the importance of energy in understanding deeper meanings surrounding identity. Much of this literature is situated in the United States. Strauss, Rupp &

Love (2016) describe such instances in coastal Louisiana in their book: *Cultures of energy: Power, Practices, Technologies*, where energy extractive industries take up the symbolic meanings of stability, security, and prosperity that even the Deepwater Horizon disaster did not shift. Hochschild (2018), in uncovering the deep story, found that the oil and gas industry, despite pervasive environmental issues in Louisiana, was welcomed, and defended. "The logic was this. The more oil, the more jobs. The more jobs the more prosperity, and less need for government aid" (Hochschild, 2018, p.73). Independence, honest hard work, and sacrifice in Hochschild's account, played a key role in defending the right to a "good life". And in Alberta, "in light of competing moral geographies rooted in the goodness of petroleum development, defending the good life seemed to be linked with an ethical imperative to be seen as virtuous and respect-worthy" (Evans & Garvin, 2009, p. 66). The ethical imperatives of ensuring the success of the oil and gas industry are embraced in the public sphere are in many ways the essence of some of the recent political polarization. The Canadian Association of Petroleum Producers states the imperative as such:

> "Canada is falling behind. Rising government costs, the burden of inefficient regulations, and the lack of infrastructure to move Canadian energy to growing markets are all undermining investor confidence in Canada and negatively affecting the country's ability to attract the capital needed to create jobs and national prosperity" (CAPP, 2018).

At the provincial level, the sentiments are echoed by discourses that portray the essentiality of the industry to Alberta: "Alberta is Canada's energy province… The production and export of natural gas is also critical to the province's economy (Alberta Government, 2018). No such narratives exist yet in relation to renewable energy in the province. In fact, can wind energy be challenging these very narratives? An elusive dynamic exists between oil and gas developments on private properties and wind energy projects. Diffen (2008), referring to the Mineral State in Texas, shows how, beyond the symbolic and identity-related struggles, wind energy infrastructure can physically challenge other forms of infrastructure for space and right of way.

The notions of prosperity, job creation, ensuring security and the good life are embraced by industry, the government, and the general public. Unlike the oil and gas industry, wind energy in Alberta is often accompanied by narratives of fewer jobs, use of taxpayer dollars, and is portrayed in the light of dialectical opposition. In many respects, it threatens the working identity

of individuals at the coal power plants and supporting the oil and gas industries, as is articulated by some of the interviewees. The situation in Alberta diverges in many respects from those told about oil and gas-dependent states in the US. Backed by claims of world-class regulations, the explicit portrayal of pervasive environmental issues is not necessarily the norm in Alberta. Competing discourses surrounding environmental issues and the provincial prosperity have not yet been reconciled in the public domain. The notion that the provincial prosperity is dependent on oil and gas is highlighted in the following excerpt:

> "Royalties and other direct income from fossil fuel extraction consistently made up 30 to 40 percent of the government's total revenues….But that plunged to a historic low of just 6.5 percent in 2015…That's a tough hand to be dealt as a government (NDP)…No Alberta government — of any stripe — has run a surplus without relying on oil and gas money in the past half-century… Remove the resource revenue and every single budget would be in a deficit position" (Fletcher, 2018).

Hochschild's (2018) notion of deep story is highly relevant and applicable to rural Alberta because threats to an industry that came to represent a provincial trademark can represent a threat to individual identity as well. These things are, however, never easily articulated. Evans & Garvin (2009) in their study of narratives of individuals opposing sour gas wells in Alberta identify the stigmas of countering this provincial identity. They found through their interviews that a "certain degree of stigma was attached to activism, individual and collective, against oil and gas development…participants struggled to reconcile their newfound identities as sour gas opponents with their allegiance to Alberta as a province whose identity is intricately linked to oil and gas development" (Evans & Garvin, 2009, p. 62). Similarly, Davidson (2018) writes about the trauma experienced by people impacted by fracking in their communities and notes that activism against the industry challenged the identity of her interview participants (Davidson, 2018, p. 206). This curious and elusive relationship between energy and identity is not often brought out in wind energy debates and encompasses the new uniqueness of the political situation in Alberta.

"Landowners have benefitted from the energy industry and generally continue to support it as an important economic driver…The NDP government is pushing for pipelines to tidewater and is sensitive to any suggestions that it is hindering Alberta's energy industry" (Glen, 2018). Public support is also paralleled by landowner concerns about abandoned wells, and the insufficiencies

of the Orphan Well Program. During a hearing at the Supreme Court regarding reclamation bonds, a CAPP lawyer iterated that requiring companies to put money up front would "effectively sterilize a "vast amount of capital" when the industry could be spending it in the public interest by exploring for, developing and producing energy" (Seskus, 2018). The argument carries through many public conversations and debates and spills over into the recent political battles over pipelines. No similar augments were found in relation to wind energy. Is wind energy less in the public interest and if so why is it perceived that way? The politicisation of energy policies in Alberta put renewable energy devolvement in an interesting situation.

Research Methodology

A qualitative collective case study method was used to collect in-depth interviews through referral. This research took place in 2017, predominantly in Vulcan County around the Blackspring Ridge Project (300 MW capacity), and Paintearth County (150 MW Halkirk 1 Project). In Paintearth County, there were other projects proposed: Halkirk 2 (150MW), and Paintearth Wind Project (150MW), now among others. Some interviews were collected in Calgary, Edmonton, Pincher Creek, Morrin, and Magrath. Two semi-structured interview guides were prepared specifically for landowners, and then for key informants (See Appendices A and B). Thirty in-depth, face to face interview sessions were conducted with 36 individuals. Landowners were approached through referral by email or phone and asked if they were interested in participating in the research. The questions in the interview guides focused on the experiences landowners have with wind projects in their community. Landowners were asked about their views, their concerns, political orientations, and environmental values, as well as their views of the process. Hosting, non-hosting, willing and unwilling landowners were interviewed, both relative to existing and proposed projects. Key informants were asked about their experiences with the projects in the communities they represent and work in. Interviews were recorded with a voice recorder, transcribed by hand, and analyzed in qualitative data software NvivoPro. Interview data in the form of direct transcript quotations was organized in conceptual nodes at both the level of content and broader themes. The approach for this chapter involves uncovering the deeper meanings and reservation people articulated through the interviews through the "deep story" lens adopted from Hochshild (2018). For ease of reference,

individuals are given pseudonyms, followed by a brief description of their relation or position relative to an existing or proposed wind project (See Table 1 for details)

Alongside the interviews, data was also obtained from a publicly available audio recording on the Alberta Utilities Commission website. The hearing process provided an outlet for individuals intervening in the wind project approval process. Landowners provided evidence, and a description of how the project would impact their properties, landscape, and lifestyles. The quotes from the hearing are followed by a description "Landowner # (AUC Hearing)". This is to ensure that the identities of the individuals who participated in the hearing are kept anonymous. The data was in the public domain, but because the group of individuals was small, extra precautions were taken to ensure individuals are not identifiable.

Findings

The findings section is divided into several subsections. The first two subsections contain excerpts from individuals who feel their rural identity and the familiar identity of their neighbors is called into question. The remaining section consists of excerpts about the broader ties between industry and identity in rural Alberta. One of the most surprising things that was found during the interview process was the expression of feelings of imposition through the loss of neighborly relations and divisions within the community. Arguably, this is one of the deep stories - the story of loss of both the experiences of community and the loss of meaning given to relations within the community. Divisions are difficult to overcome if the identity of the "good neighbor" is threatened. The strain on neighbor relations calls into question the identity of a community, and its ability to work through issues in the fashion that they have been worked through traditionally. Some interviewees articulated the threats to neighborly relations as one of the main reservations. Division during the land acquisition process set the precedence for the whole project process. Many were troubled deeply by what felt like an imposition in the community, and how it created unprecedented division.

Fairness, Division, and Neighbours – "This isn't about the land, this is about people"

Paul is a middle-aged farmer who has lived in the area with his family for most of his life. He articulates his experience with divisiveness in the community, calling for a different approach to involving landowners in the development of wind energy projects. The threat to neighborly relations in his rural community as one of his central reservations about the project. He

articulates that his views, and the views of local residents, would have been different if the approach involved groups of neighbors with a stake in the project.

> "Farmers, you know, they gossip and all that…like... give us a big meeting, a big town hall meeting… So, we all hear the same talk. So that we can see each other's reactions, we all have questions. It's like any project we involve more than one-person in. You have to be open, be transparent, and they weren't. It was very quick, very rushed…whether or not we're misinterpreting what they're saying, or whether they're telling us different things... But, when you hear half a dozen farmers are meeting with these guys secretly... and then you call them up and they are like…I don't know what you're talking about"- Paul (Non-hosting landowner in proximity to the proposed project)

The confusion created by the process of signing up land for the project is paralleled by neighbors communicating with each other, expressing their concerns to each other, and forming their position on the basis of this communication. But, the process interrupts the normal and familiar pathways of information flow between neighbors. Some people felt they were left in the dark, or misinformed about what their neighbors were doing, and about the position they should take within the project. Financial compensation was also the subject of debate. Approaches to compensation played a significant role in establishing a sense of fairness. Jared is a Municipal Government Representative who describes the reservations he heard landowners express about the process used to acquire land.

> "If they'd come out and said this is our best scenario agreement, everyone's gonna get offered the same, that might have been more easily accepted by some of them. As opposed to I'm gonna play farmer versus farmer if I can get this guy's cheaper than this guy. So... I think that might be part of the objection out there" –Jared (Municipal Government Representative)

> "There is dissension in the community here regarding this …they are so far behind on how they are addressing landowners and the way that they are dealing with them, money aside" – Alex (Landowner near proposed project)

Despite the fact that the project affects the landscape of the whole community, private landowners with enough land make their own decisions about hosting turbines. The acceptance of the private financial benefits was a central criticism between neighbors. Anthony's views of the incoming project are negative. Having farmed in the area his whole life, Anthony believes the project is detrimental to the land and the sense of community. He is critical of what he has witnessed:

> "And I would say, just doing random surveys, myself, the majority of the residents in the county do not want them. The few that get signed up decide they want the dollars, those are the ones...that's all they are worried about is the money…There is an attitude out there... I heard it up here a few times...well…. there's nothing we can do to stop them... so we might as well be in with them" – Anthony (Landowner not willing to host turbines)

Anthony makes the point that accepting the financial benefits is not always the right decision to make in terms of what it means for the whole community. This sentiment is echoed by the following quotes from the AUC Hearing:

> "[The] land agent…made the comment that there is very little or no resistance to the project- that was not true. I knew it couldn't be because of the neighbors we have. They have higher values than that, they are not gonna sell out for what [they were] offering at that time" – Landowner 1(AUC Hearing)

Landowner 1 describes the notion of selling out. The deep story here is that neighbors who decide to host fall outside of the community orientated, rural identity of the good neighbor, and diverge on what they value. Landowner 2 makes reference to the unfairness of the property value loss. Mavis, a farmer who has accepted the proposed project on her land provides a counter-argument:

> "…If people want towers in their place, put them where they don't affect other people" – Landowner 2 (AUC Hearing)

> "You hope that you take care of your neighbors, and like I would hope that my neighbor would not put one right in front of my house, but business is business- you have to take care of yourself and your farm and your family…I can't have a turbine or any income on that land because you live there? I don't know if that's fair either"-Mavis (Landowner hosting turbines)

Many landowners articulated concerns that stemmed from the deep story of loss of neighbors and neighborliness. The deep story of the loss of neighbor is emotive, and deeply felt by this particular landowner:

> "We're very concerned about how it's going to change our way of life out there….So this has been a very interesting process …lots of information and lots of numbers, but the most important number that I feel has not been brought up and that is over half of the residents of this project area do not want the wind turbines in the area. This has divided the community to the point that some neighbors avoid others… About the good neighbor policy… if you have dealings with your neighbors, you should personally go and talk to them. This has not been done here…Contracts [were] signed, before finding out if they were even welcome in the area- good neighbors don't do this"- Landowner 3 (AUC hearing)

Landowner 4 at the AUC Hearing articulates his deep story of imposition and threat to the rural identity of neighbors. He articulates that the impacts extend beyond financials and beyond the impact on the landscape but threaten relations and community cohesion.

> "It is a divide and conquer method. It has left the neighborhood in shambles. It's like a civil war out there right now. You have family against family. You have family members against family members. Friends that used to be friends since school- since childhood aren't getting along. People aren't talking. There is a lot of anger- and over what? It's over money-money isn't everything. They'll go home they will collect their money, they will send out a few cheques and yet the people in that area that used to be friends- are never going to be friends again. There are a lot of people that feel bought out by their friends- it's a sad state of affairs, and it could have been all avoided by having a town hall meeting first and meeting everyone first instead of trying to divide and conquer…. This isn't about land, this is about people" – Landowner 4 (AUC Hearing)

Mavis, along with her husband have farmed in the area for most of their adult lives. They have accepted turbines on their property as part of the proposed project. Mavis articulates the deep story of agreeing to turbines. In the following excerpts, she talks about what happened to the relationship with their neighbors.

> "I think that people are upset because we took them. We agreed to them…our neighbors were awesome- helped me out… ever I needed anything he would be there. I could phone him up, he runs over. Now he won't even wave to me"-Mavis (Landowner hosting turbines)

Mavis describes here how relations are directly impacted by wind energy development. She articulated that the loss of the neighborly relations is very real, although unanticipated consequence of choosing to host turbines. The acceptance of wind on their property signaled something important to their neighbors. Agreeing to wind turbines does not only encompass the obvious fact of financial benefit but also encompasses more symbolically a change in identity or a change to how willing hosts fit into the community identity. This deep story is not often directly given attention but is a real expression of what has occurred in the community with the incoming wind project. Narratives like the one above were common in the AUC Hearing, and people felt that the real implications for the community were not anticipated. People also referred to how the human aspects of their experiences are trumped by technical and rational arguments.

> "[Mentions Company Name] expresses concern for the community, and I do appreciate that, but…Don't tell me how community involved you are when you constantly refer to guidelines…"- Landowner 5 (AUC Hearing)

The deep story frame helps to understand the feelings and emotions that guide people's responses to wind energy projects and is relevant for understanding what is important to people in rural communities. The following section represents interview excerpts that highlight the deep story of rural Alberta's identity in relation to landscape, agriculture, and energy.

Landscape and the Rural Identity

Many participants situated their reservations with the wind projects in the aesthetic changes that it brings to the community landscape. The aesthetic component is complex and involves a deeper perceived threat to a landscape or place identity. Marcus makes reference to the way he perceives landowners react to the visual change. He suggests rural agricultural Alberta needs not be overromanticized and is an energy-intensive landscape. His views are very different from those of the landowners I spoke with:

> "I think that's always going to be wind's challenge is that these machines are huge, and you can see them. Especially on the prairies where you can see forever, they do kind of change the visual component of the land... I think part of it also is that oil and gas again have a longer history, and there's a bit more sort of familiarity with it. Oh, you know my neighbors have had this pumpjack… This is the way it was when I grew up…change can be difficult. We romanticize this as some sort of untouched natural ecosystem, which it is not anymore. It is very much an industrial process. And energy is... and then put into that process at the end of the day"- Marcus (Alberta Government Representative)

A different deep story about landscape change was articulated by the landowners who feel their way of life and identity is threatened by the proposed wind energy project:

> "It's probably the most beautiful land that I could ever dream of owning…that's our vacation. We work here- we don't just work here 8 hours a day- we're here pretty much 24/7, 365 days of the year. This is what we do…we live, eat and breathe work- that's what we do. Unfortunately, the towers are there also 24/7, 365 days a year so we have to learn to live with them or move on" -Landowner 6 (AUC Hearing)

Landowner 6 makes reference to the way of life, and the distinct relationship that they have with their property, and their local landscape. The wind turbines challenge both. Landowner 7 articulates how the thought of losing a valued landscape feels to her.

> "So, we have this magnificent view… I'm gonna see red blinking lights at night and these tall structures that obstruct that view…so I had this sinking feeling this morning is this going to end for us? And we can look at all the facts- there is always rebuttal- and not all things can be measured. This project is altering the landscape of a whole area of a community, of a beautiful community. It's a very distinct area, and the changes will be permanent, and they will be drastic and once they are, there is no reversing it. And it also

> alters out lifestyle as farmers, as people who live off the land…we are passionate about our farm and our land and our home...Take away the noise and the flicker and not that we are not concerned about those - but it goes beyond that - it is about altering our lifestyle - Landowner 7 (AUC Hearing)

Landowner 7 shares the feeling of many of the landowners who spoke at the hearing. She makes reference to the fact that those things that matter most to landowners are not measurable factors but are really about their deep story of the farming identity and the symbolic meanings the landscape adds to that identity.

> "The land agent told these people that most of their neighbors had signed up, and if they didn't sign, they were going to see the windmills across the fence from them, but they would not get compensation…we prized our ability to look at the horizon without obstructions on it. That, we felt, was more valuable to us than having turbines on our property" -Landowner 8 (AUC Hearing)

Landowner 8 makes reference to the priceless nature of the property they own, subliminally in their quote the landowner makes reference to the incompatibility of maintaining a valued landscape and hosting turbines. This sentiment is part of the deep story, and it is this narrative that both landowners and project proponents have difficulty navigating and applying to the often-technical analysis of impacts.

Normalization of "Carbonscapes"

Individuals often benchmarked the landscape change in the oil and gas industry. Oil and gas seemed to be normalized and an accepted part of the landscape and the rural agricultural identity. The perceptions surrounding industry standards in the oil and gas industry diverged significantly from the critical perspectives on Albertan energy policies. The three individuals below articulate the deep story that is situated in benchmarking wind energy in relation to the oil and gas industry.

> "There is no provincial legislation that I am aware of that protects- like in the oil industry. …many assumed that green energy would have to follow the same rules as oil and gas and mining- they are shocked to find out this is not the case…" -Landowner 9 (AUC Hearing)

> "The oil and gas industry has been around for 100 years, and in that time, there have been tons of regulations written through the Alberta Energy Regulator. The wind industry has no regulations. They sign up for quarters, they figure they have the right to put the towers where they want. So, they wouldn't even cooperate with landowners, they wanted full complete control. And so, I said no I won't do it"- Anthony (Landowner unwilling to host turbines)

> "They're not held up to the same standards for anything. Like oilfield would never get away with that. I mean these windmills kill all kinds of birds and bats, and the only thing you hear about it is the tailings ponds at Fort MacMurray" -Rick (Landowner outside the project area)

Jared in the following quote makes a clear distinction between the energy infrastructures:

> "Oil and gas, are rather non-obtrusive on prairie landscape, pump jacks don't stick up that high, and you can't even see them if they're tucked behind trees…they've been so commonplace, over the last 50 years in Alberta, that we just kind of expect to see them wherever. And it's like as common as seeing a coyote, or a gopher or a cow, out there. Whereas turbines- they're still in the infancy stage in this part of the province…I would almost bet you that some of the objectors to the turbines being placed in or around their properties probably already have oil wells or sites or whatever on their properties that they don't care about. Cause noise is probably a lot less, there's zero visual impact… there is a lot more receptiveness to oil development as opposed to wind" -Jared (Municipal Government Representative)

The normalization of other energy infrastructure on the landscape established expectations for incoming wind projects. Wind turbines were associated with landscape change, and oil and gas infrastructures were associated with the landscape, which proved to be an interesting dynamic to pursue in the interviews:

> "It's our natural setting. Sixty years I have lived here, and our family has been here for like 100, and we have seen tons of changes. Building roads... and oil companies will come and go. People take trees out, people plant trees… It's all sort of natural stuff. When you all of the sudden have these towers... these towers are going to be close to 500 ft. tall [interviewee exaggerates estimate], it's just unnatural… It is a big industrial mess." – Anthony (Landowner unwilling to host turbine)

Most of the landowners that I spoke with were very familiar with oil and gas development of their properties, or on neighboring properties. Oil and gas leases usually have no visual effect on neighbors and involve private individual decisions, that often do not involve the whole community. Wind energy, on the other hand, was perceived to be intrusive by some. Discussions surrounding changes to the rural landscape opened the conversation to further pursue the links between landscape and identity. The following section highlights the deep story of the rural Albertan identity as an energy-rich, agricultural province. Energy industries take on a variety of symbolic meanings, and these meaning are part of the deep story (Miller & Richter, 2014; Evans & Garvin, 2009; Hochschild, 2018).

Wind Energy and Agriculture in an "Oil and Gas Province"

In the excerpts below, landowners, and municipal representatives situate the energy transition in the resource-rich context of Alberta and articulate what they believe is the deep story of the rural Albertan identity in relation to energy. Below are excerpts from the conversation with Rick and his wife Allison. They share their perceptions of how energy fits into their rural identity, and what it contributes:

> *R: "*A lot of people don't have jobs- and there is no chance of them getting jobs until that NDP government is gone. I mean all they care about is killing oil and coal jobs and supposedly telling you that wind energy produces all kinds of jobs, and it doesn't" -Rick (Landowner outside the project area)
>
> R: "…Wind doesn't run a tractor"
>
> A: "And having that offsite job in oil and gas for one member of the family farm enables them to carry on in tough years, and so it just works so well with agriculture…" (Allison, Rick's wife)
>
> R: "You've seen the huge tractors they run and how much fuel they use. I mean that fuel comes from oil and trying to cut out oil and do the carbon tax hurts everyone in a farming community".
>
> A: "Oil and gas is just a part of life now. You know it's a part of our society and people the by-products and all the plastics and everything and so we just accepted as much as we do agriculture, it doesn't have quite the history but it's just a part of life"

Besides just being an important part of life, oil and gas were also articulated to be an essential part of the farming way of life, and in maintaining the identity of producers. Anthony makes this point:

> "And we are blessed with cheap natural fuels. As a farmer we have to burn diesel fuel, that's the only way we can produce crops. There's no going back to horses, type thing. The world would starve to death if we didn't. I don't see us cutting down…"- Anthony (Landowner unwilling to host turbines)

Employment and financial stability of residents in rural communities were by and large attributed to the presence of the energy industry. Harry, below, describes how he sees oil and gas in his community:

> "Oh yeah. Absolutely. That's been our bread and butter for many years. Oil and gas. Like right [here] you talk about employment, there is a lot of people employed here with the oil and gas industry. Like a lot of young families" – Harry (Landowner with wind turbines on property)

In the following exchange Aden and his wife Julia discuss the impact of energy devolvement on their property:

> A: "And to be honest, oil companies- it has changed our lives. The oil companies have treated us well…they have treated us well, financially. And, it has made a big difference on our lifestyle…. more importantly, we're into this generational transfer, and now we have enough cash flow…we can do the transfer a lot easier now"- Aden (Landowner with wind turbines on property)

> J: "But the oil wells, a lot of that money then we could live on…Let the farm pay for itself…send kids to University, pay for hockey fees, all this sort of stuff"- Julia (Aden's wife)

> A: "Yep, because green energy I don't think employs as many people. And it won't be as easy money. Oil is highly speculative... and there are guys that made fortunes on it. And everyone had that dream."

Nick emphasizes how energy industries contribute to rural communities. He compares the industries on the basis of both the local financial benefits, as well the province more broadly:

> "Usually, the oil industry... pumps a lot of money into the community as well. There is a historical mindset, that we have as people that live in this province. We have obtained our wealth so to speak in the province...There's no history of us receiving all of this wealth from green energy. Because green energy has always got... it costs us money. And that's where the negativity comes from"- Nick (landowner with turbines on property)

Olivia makes this point clearly and succinctly:

> "Oil and gas-it's money. It sustains a lot of lives" -Olivia (Landowner with turbines on property)

One of the most interesting things found through the interview process is the way people situated their rural identity in the context of the broader narratives of the Albertans identity as an oil and gas province. The energy transition in many respects is challenging not only the identity of communities and rural residents as "good neighbors", but it is also challenging the identity of the rural landscape, the identity of rural Alberta.

> "When oil and gas are doing well everyone wanted to grow and expand into new things…But when it's retreated, and you know, they don't really trust the politicians too much and people are losing their jobs, its kind of that rally atmosphere. You know, protect what we have…They don't know what wind is gonna bring…It's funny when we had lots

> of money and oil was going through it was very easy to push renewable projects."- Tom (Municipal Government Representative)

Tom makes a direct link between politics, oil and gas, and its almost dialectical position in relation to wind energy. Adam makes a similar connection and articulates how he thinks wind energy projects are perceived in rural communities. He makes reference to what he thinks the deep story is:

> "Change. Fundamentally humans don't like change, and especially if the change is to their environment. So that's where a visual change first hits them in the gut. So, I think there is that. I think there is also, especially if you have family that has worked in the oil patch in Alberta, there is a feeling that they are being attacked" -Adam (Wind Energy Industry Representative)

Like Adam, Dylan is also a representative from the wind energy industry and makes the following statement when asked about how oil and gas as an industry came to be identified with Alberta. He was asked about where some of the deep-set resentment towards the energy transition may be coming from and suggested that:

> "I think that is coming from that most Albertans support the oil and gas industry and I would say a lot of them don't understand renewables and probably see renewables a threat to the oil and gas industry"- Dylan (Wind Energy Representative)

> "So, people don't want something that's going to threaten their way of life or their job"- Olivia (Landowner with Turbines on Property)

Zachary is a Municipal Government representative and said the following when asked about how energy is tied to the provincial identity, and what wind energy brings to the table:

> "It's cultural. It's partly what you know, it's partly what employs your relatives. I mean who in Alberta doesn't have large sections of their family work in the oil and gas industry right? So, lots of it is protecting your own. The value that oil and gas brings Albertans is incrementally higher- and I'll debate this with anyone… higher than what renewables will ever [bring] … all the sudden people started coming in, they treated it like a gold rush." - Zachary (Municipal Government Representative)

Liam illustrates in this quote the comparison that often exists in public discourses surrounding energy in the Province of Alberta. He suggests that the expansion of green energy is not in itself a priority.

> "Oil and gas is what pays for our hospitals and has paid for our schools and has drawn the type of people to Alberta that's here…The green energy and the social conscious follows that." – Liam (Landowner unwilling to host turbines)

Discussion

This chapter identifies the deep stories of people with reservations about wind energy. Interviews collected in 2017, as well as an audio recording of the AUC Hearing, were reviewed to bring out a variety of deep stories of residents with strong reservations about incoming and existing projects. The literature review addressed existing work that aims to bring forward the factors and isolate aspects of wind energy development that influence receptivity and acceptance. If the purpose of research on energy transition becomes focused on how to increase acceptance, then opposition to wind energy can be dismissed as illegitimate, or a barrier to development (Fournis & Fortin, 2017; Devine-Wright, 2005). Emotive, meaningful, yet unarticulated reservations can be labeled as irrational (Barry et al, 2008). In contrast, the deep story lens adopted from Hochshild (2018) in many ways allows for research to transcend variables and factor analysis and work towards understanding the deeper meanings ascribed to wind energy development in rural Albertan communities. In the literature review, three sections were dedicated to understanding the more in-depth story. The threats to community cohesion were described in terms of financial fairness, engagement, and the perceptions of the land acquisition process, as well as issues related to proximity and effects on wellbeing. The next section addressed the idea of landscape identity drawing together how landscape change and energy infrastructure affect and define the meanings associated with the rural landscape. The last section was dedicated to understanding where the energy transition fits into the Albertan identity as an oil and gas province. The findings section has provided insight into the deep stories of a sample of people in rural Alberta, whose neighbor relations, and identity as a good neighbor are challenged by the incoming wind energy projects. Quotes from the interviews and the AUC hearing demonstrated how individuals envision their identities as rural Alberta farmers in the context of the provincial identity as an oil and gas province. Drawing on the literature review, and the collective case study interviews, the deep stories are discussed below.

Neighbouring and Challenges to Community Cohesion

A significant amount of literature deals with the community implications of wind energy development, but what is often missed are the deep stories of community cohesion and the way people perceive changes to their relations through the processes of wind project development. The findings section presented how financial fairness or lack thereof manifests itself into community relations. The notion of financial fairness and community relations have been well

studied (Fast et al, 2016; Gross, 2007; Walker et al, 2010). The central arguments suggested that those who accept wind energy on their properties are undermining the higher values ascribed to both, community relations and rurality. The acceptance of benefits of wind energy was in many cases associated with compromising the more valued landscapes, and to some the farming way of life. The notion of neighbors "having higher values" than agreeing to host projects symbolizes that there is a deep story associated with refusing to host turbines. The deep story of unwilling hosts encompassed both the moral imperatives of protecting the land and protecting neighbor relations from the perceived imposition. Many interviewees as well as landowners at the hearing, articulated their issues with the process of land acquisition. Neighbors who host turbines come to be characterized in a certain light, and according to some landowners undermine their identity as the "good neighbor". The identity of the "good neighbor" appeared to be central to the way relations were understood and contested, in line with what Jacquet & Stedman (2014) suggested- that identity is central to understand where reservations come from. Financial benefits aside, people ascribed more value to neighbor relations, and in maintaining what Devine-Wright called the "nested social identities" (Devine-Wright, 2005). The threat to neighbor relations expands to become a threat to the social fabric of the community. This link to broader community relations is not often given explicit attention in literature even though it is an important change. Through the lens of the deep story, community impact is a central theme in this study. Discourses about selling out, and "it's all about the money" serve to undermine the expression of a deeper story of ruined relations, loss of friends, and loss of standing in the community. Empirical research about factors that influence community acceptance often miss the very fundamental notions of neighboring that operate in rural communities and serve to help people make sense of the development. Neighbor to neighbor relations are fundamental to consider as neighbors convey their values through what they choose to do on their land (Unger & Wandersman, 1985). If the intricacies of neighbor relations are not considered, intentional or unintentional division can directly challenge what community means and set a precedence for the rest of the project process.

The land base acquisition process was not consistent with the norm of how landowners interact with one another and introduced a complex financial and spatial dynamic to an otherwise neighborly relation. Overall, much literature has addressed the importance of fair, consistent and inclusive approaches to community decision making and individual landowners (Fast et al,

2016). The inconsistencies in information provision, non-disclosure and sales tactics that invoke tensions in neighborly relations were detrimental to how the projects were perceived. People felt their trust and identities of the good neighbor were challenged and there were moral imperatives associated with hosting and choosing to challenge the incoming project. Intra-community bonds and community cohesion are central to the maintenance of a community identity (Cass & Walker, 2009). The deep story of the loss of neighborly relations challenges the more conventional economic and rational approaches to project development and uncovers the centrality of emotive attachments between people and places. Walker and colleagues (2010) suggest that the ideal of a close-knit rural community is challenged by emotive disputes that place emphasis on fairness in the benefits and honesty in the process. In the section of the findings that addressed the loss of neighbor relations, many people articulated the very real and immediate changes that occurred to the long-term relations between neighbor as a result of the development. The decision-making process that exacerbates these tensions has been called the "divide and conquer method" by some at the AUC Hearing. Division is not introduced solely by the land acquisition process, however, it also was found to be stem from the perceived changes to the landscape, landscape identity, and through reference to the rural "way of life".

Rurality, Energy & Landscape Identity

Much research has situated the importance of the landscape in relation to identity, often terming these concepts of place identity (Devine-Wright, 2009), or place attachment (Bell et al, 2013; Devine-Wright, 2005). Interviewees expressed the expectation that the landscape change would result in a fundamental change to their lifestyle. In particular, people expressed the sense of loss the familiar valued view, not only from their homes but across the landscape where they work and live. This is the deep story- the perceived threat to landscape, that more often than not can not be explained and articulated in a setting that rationalizes facts. According to Bell and colleagues (2013), threat to place extends to a threat to experiences, attached to a particular place. This was a central point for many research participants. The deep story of place attachment emerged both in the interviews and even more strongly during the AUC hearing. For people who are challenging the incoming wind project, concerns transcend the placement of the turbines. Some articulated a sense of imposition on the landscape which could not be resolved by placing turbines further away, albeit on the neighboring property. The lack of consideration for the underlying neighbor dynamics of turbine placement also come to be associated with a threat

to the identity of the good neighbor. Wind turbines become a very visual portrayal of the choices the landowner has made. Ryan and colleagues (2003) highlight that it is the visible practices (such as conservation) that are vital to understanding how people are perceived by their neighbors (Ryan et al 2003). Wind energy is the pinnacle of visual portrayal between neighbors. Although people referenced the inadequacy of setbacks, even on neighboring properties, the deeper story stems from neighbor relations. The wind energy landscape is perceived as an identifier for loss of an aesthetic value, but also extends to the loss of neighboring. Wind energy proponents need to consider the neighbor relationships first before identifying individual properties and signing leases with private landowners. The inclusion of neighbors in lease negotiations, according to some landowners, would have changed the way they view the development as the placement of neighboring properties matters to people who do not host turbines, and vise versa.

Wind energy in rural Alberta is different than many energy infrastructures and the inescapable fact of visibility has long been studied as a key issue (Gipe 1993; Woods 2003; Pasqualetti, 2001). But the way the visual component is registered in many respects is benchmarked in what is already existing on the landscape. Agriculture and oil and gas development occupied the same space (private landowners hosting oil and gas developments) (Glen, 2018), and has shaped the rural Albertan landscape for over half a century (Evans & Garvin, 2009). It was surprising that participants spontaneously situated their expectations of wind energy in relation to the oil and gas industry. The existing energy infrastructure on the landscape seemed to establish expectations (Boyd & Paveglio, 2015) and to be embedded in the rural identity of the communities (Evans & Garvin, 2009), as well as understandings of the provincial identity more broadly. Landowners make reference to how the visibility aspects of oil and gas are very different and less intrusive than the landscape change that occurs with the development of wind energy. People articulated both their willingness to host and support the oil and gas industry. In essence, wind energy is a change to a "spatial practice" (Huber, 2013), or a challenge to the pre-existing "carbonscapes" (Haarstad &Wanvik, 2017) that has long been established by industrial farming, oil and gas development, and in some communities, coal-powered generating stations. The landscape becomes the means by which these deeper stories are articulated through references to community, lifestyle, energy, and identity. The landscape of agriculture and energy extraction

take on deeper meanings tied to what people perceive to be the rural farming identity, as well as the provincial identity.

Situating the Energy Transition in Energy-Rich Alberta: "Wind Doesn't Run a Tractor"

One of the most interesting findings was the way people situated their identity as farmers and producers in the context of Alberta's history of energy development and prosperity. There was a tremendous amount of pride articulated when people were asked about Alberta's energy industry, and the role it has played and continues to play in their communities. Many interview participants articulated how their financial situation, an in some cases farming operations, depend on the benefits derived from lease sites on their properties. Although wind energy brings financial benefits to the table, it wasn't articulated in the same light. Oil and gas were strongly associated with notions of provincial independence, prosperity, and pride, or otherwise positive identifiers. Wind energy, on the other hand, was not associated with the same positive identifiers. Some articulated how the political decisions surrounding the energy transition challenges the identity of Alberta as an oil and gas province. The identity emerges on a variety of levels. Although there is often an oversimplification of what actually constitutes the provincial identity at the political level and in the public domain, it shapes perceptions around the energy transition. The impact of the provincial identity on the perceptions of the energy transition is not often addressed. This provincial identity also has an effect on how landowners situate their farming identity. Hochshild's deep story lens is very useful in articulating the conflicts surrounding identity. Hochschild's depiction of Louisiana, and the deep stories that are formed around the oil and gas industry and environmental harms resonates well with Alberta's situation. However, Alberta's standards (environmental and social) in energy development, and the unmatched contribution to the provincial economy (Fletcher, 2018), make it unique. Many others have written about the tolerance of harms as a part of the moral imperatives surrounding support for independence and prosperity energy development brings (Straus et al, 2016). However, this research is in line with the studies that have focused on rural Alberta and the uncovering the history of identity tied to oil and gas (Evans & Garvin, 2009; Davidson, 2018).

What about wind energy in the resource-rich Alberta? The provincial identity is at the center of polarizing political debates and is consistently redefined, and in many cases simplified by the media. This identity has impacted the way rural countryside is perceived. Dominated by industrial agriculture, rural areas are inextricably tied to the provincial identity. The deep story of

"wind doesn't run a tractor" was found to be significant in shaping how landowners feel about wind energy, especially in relation to oil and gas. Barry and colleagues (2008) articulated how wind energy is compared to fossil fuels in environmental impact, and often articulated as the greener, and socially beneficial alternative. But, the rural farming identity as articulated by many landowners is inextricably linked to fossil fuels. Farmers continually articulated how their way of life "feeds the world" and can't continue without input from fossil fuels. Huber (2013) similarly addresses the deep connection between energy and the articulation of a "way of life" which was brought up by many interviewees. In this light, people with reservations about wind energy articulate the embeddedness of these reservations in the political, and identity context of Alberta, and in their rural identity as farmers. The complexities of the deep stories must be continually incorporated into all steps of the process of wind energy development.

Conclusion

The purpose of this chapter was to explore the deep stories of people with significant concerns and reservation about wind energy. The significant contribution of the deep story lens brings forward the subliminal, meaningful and emotive stories about wind energy development that matter a great deal to people in rural Alberta. These deep stories are often left unaddressed by decisionmakers, project proponents, and research on the sociology of wind energy. The new context of the energy transition makes it pertinent to try and understand how it may come to be politicized and contested. Much literature that addresses the social factors of wind energy development, but fewer studies aim to uncover the deep story of people with reservations. Drawing on interviews and quotes taken from the AUC hearing, this chapter set out to articulate the deep stories (Hochschild, 2018) surrounding community and identity. This chapter brings to light the stories that are often missing from public discourses surrounding wind energy and attempted to bring them to the forefront of discussion. The literature review addressed material relevant to the potential points of departure for understanding deep stories: fairness in compensation, the land acquisition process, the complexity of proximity, visibility, and landscape identity, and the links between energy and identity. These points of departure offered a way to approach the data and distill the deep stories. The deep stories span the individual, local, community, and the provincial levels. The findings section offered insight into the deep stories of division, loss of neighborly relations, the deep story of landscape change, and the incorporation of energy into the rural landscape. Threats to neighbor relations were found to challenge the

sense of community cohesion and threaten the rural farming identity, and the identity of the 'good neighbor'. The research then delved into understanding the meanings people ascribe to the landscapes and the way energy industries have shaped the agricultural landscape of rural Alberta. The landscape bridged the exploration of identity in terms of Alberta's identifying characterization as an oil and gas province. Wind energy was not only found to challenge the identity of the rural farmer reliant on oil and gas for revenue and for the fundamental production of food, it was also found to be challenging a provincial identity. The deep story of identity threat uncovered the perceptions of the energy transition in the energy-rich province of Alberta. This research adds to the literature on the sociology of wind energy, through this attempt to uncover the deeper, but perhaps some of the most meaningful perceptions of what is at stake for people in rural Alberta.

References

Aitken, M. (2010). Why we still don't understand the social aspects of wind power: A critique of key assumptions within the literature. *Energy Policy*, *38*(4), 1834-1841.

Alberta Government (2018). Oil and gas, Alberta Canada. Retrieved from http://www.albertacanada.com/business/industries/oil-and-gas.aspx

Barry, J., Ellis, G., & Robinson, C. (2008). Cool rationalities and hot air: a rhetorical approach to understanding debates on renewable energy. *Global environmental politics*, *8*(2), 67-98.

Beckley, T. M. (2017). Energy and the Rural Sociological Imagination. *Journal of Rural Social Sciences*, *32*(2), 69.

Bell, D., Gray, T., Haggett, C., & Swaffield, J. (2013). Re-visiting the 'social gap': public opinion and relations of power in the local politics of wind energy. *Environmental Politics*, *22*(1), 115-135.

Bidwell, D. (2013). The role of values in public beliefs and attitudes towards commercial wind energy. *Energy Policy*, *58*, 189-199.

Bolin, K., Bluhm, G., Eriksson, G., & Nilsson, M. E. (2011). Infrasound and low-frequency noise from wind turbines: exposure and health effects. Environmental research letters, 6(3), 035103.

Boyd, A. D., & Paveglio, T. B. (2015). " Placing" Energy Development in a Local Context: Exploring the Origins of Rural Community Perspectives. *Journal of Rural and Community Development*, *10*(2).

Brittan Jr, G. G. (2001). Wind, energy, landscape: reconciling nature and technology. *Philosophy & Geography*, *4*(2), 169-184.

(CAPL) Canadian Association of Petroleum Landmen (2018). Energy &Agricultural Land Connection. Retrieved from https://landman.ca/publications/Connection/2011/Connection%202011.pdf

(CAPP) Canadian Association of Petroleum Producers (2018). Canadian Economic Contribution. Retrieved from https://www.capp.ca/canadian-oil-and-natural-gas/canadian-economic-contribution

Cass, N., & Walker, G. (2009). Emotion and rationality: The characterisation and evaluation of opposition to renewable energy projects. *Emotion, Space and Society*, *2*(1), 62-69.

Cass, N., Walker, G., & Devine-Wright, P. (2010). Good neighbors, public relations, and bribes: the politics and perceptions of community benefit provision in renewable energy development in the UK. *Journal of environmental policy & planning*, *12*(3), 255-275.

Davidson, D. J. (2018). Evaluating the effects of living with contamination from the lens of trauma: a case study of fracking development in Alberta, Canada. *Environmental Sociology*, *4*(2), 196-209.

Davies, A. R. (1999). Where do we go from here? Environmental focus groups and planning policy formation. *Local Environment*, *4*(3), 295-316.

Devine-Wright, P. (2005). Beyond NIMBYism: towards an integrated framework for understanding public perceptions of wind energy. *Wind Energy: An International Journal for Progress and Applications in Wind Power Conversion Technology*, *8*(2), 125-139.

Devine-Wright, P. (2009). Rethinking NIMBYism: The role of place attachment and place identity in explaining place-protective action. *Journal of community & applied social psychology*, *19*(6), 426-441.

Diffen, B. H. (2008). Energy from above and Below-Who Wins When a Wind Farm and Oil & (and) Gas Operations Conflict. *Tex. J. Oil Gas & Energy L.*, *3*, 240.

Evans, J., & Garvin, T. (2009). 'You're in Oil Country': Moral Tales of Citizen Action against Petroleum Development in Alberta, Canada. *Ethics Place and Environment (Ethics, Place & Environment (Merged with Philosophy and Geography))*, *12*(1), 49-68.

Fast, S., Mabee, W., Baxter, J., Christidis, T., Driver, L., Hill, S., McMurtry, J. & Tomkow, M. (2016). Lessons learned from Ontario wind energy disputes. *Nature Energy*, *1*(2), 15028.

Fergen, J., & Jacquet, J. B. (2016). Beauty in motion: Expectations, attitudes, and values of wind energy development in the rural US. *Energy Research & Social Science*, *11*, 133-141.

Fletcher, R. (2018). Alberta's budget: You've heard the spin, now take a look at the real numbers. CBC News. Retrieved from https://www.cbc.ca/news/canada/calgary/alberta-budget-real-numbers-2018-data-1.4559769

Fournis, Y., & Fortin, M. J. (2017). From social 'acceptance 'to social 'acceptability 'of wind energy projects: towards a territorial perspective. *Journal of environmental planning and management*, *60*(1), 1-21.

Gipe, P. (1993). The wind industry's experience with aesthetic criticism. *Leonardo*, *26*(3), 243-248.

Glen, B. (2018). Orphan wells: Alberta's $47 billion problem. Retrieved from https://www.producer.com/2018/03/orphan-wells-albertas-47-billion-problem/

Gross, C. (2007). Community perspectives of wind energy in Australia: The application of a justice and community fairness framework to increase social acceptance. *Energy policy*, *35*(5), 2727-2736.

Groth, T. M., & Vogt, C. A. (2014). Rural wind farm development: Social, environmental and economic features important to local residents. *Renewable Energy*, *63*, 1-8.

Haarstad, H., & Wanvik, T. I. (2017). Carbonscapes and beyond: Conceptualizing the instability of oil landscapes. *Progress in Human Geography*, *41*(4), 432-450.

Hall, S.M., Hards, S., Bulkeley, H., (2013). New approaches to energy: equity, justice, and vulnerability. Introduction to the special issue. Local Environment 18 (4), 413–421.

Hirsh, R. F., & Sovacool, B. K. (2013). Wind turbines and invisible technology: unarticulated reasons for local opposition to wind energy. *Technology and Culture*, *54*(4), 705-734.

Hochschild, A. R. (2018). *Strangers in their own land: Anger and mourning on the American right*. The New Press.

Huber, M. T. (2013). *Lifeblood: Oil, freedom, and the forces of capital*. U of Minnesota Press.

Hyland, M., & Bertsch, V. (2018). The role of community involvement mechanisms in reducing resistance to energy infrastructure development. *Ecological Economics*, *146*, 447-474.

Jacquet, J. B., & Stedman, R. C. (2014). The risk of social-psychological disruption as an impact of energy development and environmental change. *Journal of Environmental Planning and Management*, *57*(9), 1285-1304.

Jalali, L., Bigelow, P., McColl, S., Majowicz, S., Gohari, M., & Waterhouse, R. (2016). Changes in quality of life and perceptions of general health before and after operation of wind turbines. Environmental Pollution (Barking, Essex: 1987), 216608-615.

Jami, A. A., & Walsh, P. R. (2017). From consultation to collaboration: A participatory framework for positive community engagement with wind energy projects in Ontario, Canada. *Energy research & social science*, *27*, 14-24.

Jeffery, R. D., Krogh, C. M., & Horner, B. (2014). Industrial wind turbines and adverse health effects. Canadian Journal of Rural Medicine, (1), 21.

Jolivet, E., & Heiskanen, E. (2010). Blowing against the wind—An exploratory application of actor-network theory to the analysis of local controversies and participation processes in wind energy. *Energy Policy*, *38*(11), 6746-6754.

Krogh, C. E. (2011). Industrial Wind Turbine Development and Loss of Social Justice? Bulletin of Science, Technology & Society, 31(4), 321-333.

Lane, J. D., Bigelow, P. L., Majowicz, S. E., & McColl, R. S. (2016). Impacts of Industrial Wind Turbine Noise on Sleep Quality: Results from a Field Study of Rural Residents in Ontario, Canada. Journal of Environmental Health, 79(1), 8-12.

Liebe, U., Bartczak, A., & Meyerhoff, J. (2017). A turbine is not only a turbine: The role of social context and fairness characteristics for the local acceptance of wind power. *Energy Policy*, *107*, 300-308.

Miller, C. A., & Richter, J. (2014). Social planning for energy transitions. *Current Sustainable/Renewable Energy Reports*, *1*(3), 77-84.

Pasqualetti, M. J. (2011). Opposing wind energy landscapes: a search for common cause. *Annals of the Association of American Geographers*, *101*(4), 907-917.

Ryan, R. L., Erickson, D. L., & De Young, R. (2003). Farmers' motivations for adopting conservation practices along riparian zones in a mid-western agricultural watershed. *Journal of Environmental Planning and Management*, *46*(1), 19-37.

Seskus, T. (2018, February 21). Orphan well costs could sting Alberta taxpayers if regulator loses court battle | CBC News. Retrieved from https://www.cbc.ca/news/business/alberta-orphan-wells-1.4543559

Shepherd, D., & Billington, R. (2011). Mitigating the Acoustic Impacts of Modern Technologies: Acoustic, Health, and Psychosocial Factors Informing Wind Farm Placement. Bulletin of Science, Technology & Society, 31(5), 389-398.

Shrivastava, M., & Stefanick, L. (2012). Do oil and democracy only clash in the global south? petropolitics in Alberta, Canada. *New Global Studies*, *6*(1).

Songsore, E., & Buzzelli, M. (2014). Social responses to wind energy development in Ontario: The influence of health risk perceptions and associated concerns. *Energy Policy*, *69*, 285-296.

Strauss, S., Rupp, S., & Love, T. (2016). *Cultures of energy: power, practices, technologies*. Routledge.

Unger, D. G., & Wandersman, A. (1985). The importance of neighbors: The social, cognitive, and affective components of neighboring. *American Journal of Community Psychology*, *13*(2), 139-169.

Van der Horst, D. (2007). NIMBY or not? Exploring the relevance of location and the politics of voiced opinions in renewable energy siting controversies. Energy Policy 35 (5), 2705–2714.

Walker, C., Baxter, J., & Ouellette, D. (2014). Beyond rhetoric to understanding determinants of wind turbine support and conflict in two Ontario, Canada communities. *Environment and Planning A*, *46*(3), 730-745.

Walker, C., Baxter, J., & Ouellette, D. (2015). Adding insult to injury: The development of psychosocial stress in Ontario wind turbine communities. Social Science & Medicine, 133358-365.

Walker, G., & Devine-Wright, P. (2008). Community renewable energy: What should it mean? *Energy policy*, *36*(2), 497-500.

Walker, G., Devine-Wright, P., Hunter, S., High, H., & Evans, B. (2010). Trust and community: Exploring the meanings, contexts, and dynamics of community renewable energy. *Energy Policy*, *38*(6), 2655-2663.

West, J., Bailey, I., & Winter, M. (2010). Renewable energy policy and public perceptions of renewable energy: A cultural theory approach. *Energy Policy*, *38*(10), 5739-5748.

Wolsink, M. (2000). Wind power and the NIMBY-myth: institutional capacity and the limited significance of public support. *Renewable energy*, *21*(1), 49-64.

Woods, M. (2003). Conflicting environmental visions of the rural: windfarm development in Mid Wales. *Sociologia ruralis*, *43*(3), 271-288.

Chapter 4- Conclusion

Overview of Thesis and Objectives

This research addressed some of the major issues surrounding wind energy development in Alberta. Chapter 2 and 3 explore issues situated in the context of the energy transition, and the political context that enabled it. Chapter 2 was centered around the discourses of environmentalism that wind energy introduces to the political context and to rural communities. The objectives of Chapter 2 were to understand the ways in which wind energy becomes contested on the basis of the discourses that surround it. The notion of discourse misalignment was introduced briefly, and it was demonstrated that environmentalism at the level of provincial decision making does not represent the same things as it does to farmers. Landowners perceived themselves as stewards of their land, and the introduction of environmentalist discourses of climate change, government energy transition mandate and the mandatory coal phase-out did not resonate with the landowners. The objective then was to address the notion of anti-environmentalism and the way in which climate change skepticism, anti-government, and anti-regulatory sentiments expressed by the interview participants can be wrongly painted as anti-environmentalism. It was also demonstrated that farmers, as stewards of their land, subscribe to other versions of environmentalism which wind energy development does not acknowledge or bring to the forefront of addressing concerns. Overall, the lenses of environmentalism and anti-environmentalism proved to be fundamental to understanding discourses surrounding wind energy and may prove to be useful in addressing a myriad of polarized topics related to the environment and energy.

The main objective of Chapter 3 was to understand the deeper reservations of landowners around wind energy development through Hochshilds' (2018) lens of the deep story. The objectives of the chapter included uncovering the more emotive, deeper reservations related to wind energy. The chapter started out with addressing the literature on the social factors that influence acceptance and receptivity to wind energy. This research goes beyond the literature that aims to understand ways to increase acceptance, and delves into the core issues surrounding community, landscape, and identity. The deep story lens offers a different way of approaching people with deep reservations around wind energy and the energy transition more broadly by exploring the narratives that are often undermined by technical and rational approaches to decision making. The concept of neighboring and its ties to the rural farming identity was explored. Then

understandings of landscape bridged the two levels of identity between farmers as producers, whose identity and way of life is dependent on energy, and the links between the Albertan identity and energy development. Wind energy was novel in many communities and to some represented both an immediate threat to neighbor relations, as well as a challenge to identity at several levels. The deep story provided an opportunity to explore the complexities of subjective and emotive narratives that emerged throughout the interviews process and the AUC hearing (from which excerpts were used in Chapter 3).

Research Limitations

The biggest limitation to this research is representativeness and the inescapable challenge of data interpretation. The data analysis process and the creation of nodes in NVIVO involved a process of selection, which could have been done in a variety of different ways by different individuals. Thirty interview sessions were conducted with 36 individuals across a number of communities, so the sample is not representative of any particular rural population. It represents the group of individuals that were interviewed, but beyond that can not be generalized to people in similar positions, or to any rural community. Every rural community is unique in its approach and experience with wind energy development. This research attempted to collect interview data that represented a variety of landowner and key informant positions relative to wind projects. Best attempts were made to incorporate perspectives from landowners who were willing and unwilling to host the project, those who were already hosting, and those who have negative views about wind energy development. A variety of municipal and provincial government representatives, industry representatives among other key informants were also interviewed. Because the research relied on completely voluntary participation, there also may have been sample bias in relation to those who were willing to participate as opposed to those who did not want to participate. Although the focus was on collecting interviews in Paintearth and Vulcan Counties with landowners, it was necessary to collect interviews with key informants to continuously inform the direction for potential topics to incorporate in the interview process. Key informant interviews collected across the province lead to a better understanding of the context of wind energy development in Alberta more generally. Another key limitation is the fact that the data collected is a snapshot of perceptions and narratives in time. At the time of data collection, many things were happening at the same time, projects were being proposed and contested, and new political topics surrounding energy were developing. The situation for many of the

landowners in Paintearth County, for example, would now be quite different as the contested proposed project has been approved. Therefore, narratives of opposition are not followed all the way through to understand the outcomes. It would have been quite interesting to pursue interviews after the approval of a contested project, to understand which deep stories stay and which fall away or change when the fact of development becomes inescapable for unwilling hosts in their community. The cross-sectional nature of research only allowed for a snapshot of perspectives in a particular place, at a particular time, so the dynamics between neighbors post project approval are not revealed. The other limitation of this research is replicability. Although similar perspectives would probably be found in a variety of different study settings in the Province of Alberta, there is no way of telling whether perspectives were unique to specific project areas. Although it was fortunate that a variety of diverging perspectives were encountered and could be represented in this study. The referral technique used, could not, however, guarantee a representation of all perspectives. Although interviewees were asked to introduce neighbors and key informants with perspectives different than their own, this was also a challenge given that interactions were impacted by the development prior to this research. The limitation of the referral approach lies in that it may limit the diversity of interviewees included in the study. Referral directly influenced who participated in this study, and therefore interviewees were left in the position to subjectively evaluate their relations and compare their views with the individuals they referred me to. The list of potential interview participants was always updated, as more references were given, and of course, participation directly depended on availability, and willingness to participate. In any case, this research offers a snapshot of important issues at the heart of the energy transition in Alberta, and despite limitations, adds to the understanding of what the energy transition entails for rural Albertan communities.

Policy Implications of Research

There are some implications of this research both in terms of provincial and county level policies, as well as for the process of wind project development. One take away from this research is that it is essential to understand how environmental policies are perceived by rural residents owning large parcels of land and engaged in agriculture. The climate change, and emission reduction benefits of the proposed energy transition may be contested in rural areas, and this needs to be incorporated into decision making. The framing of mandates (coal phase-out, and renewable energy target) must not be dismissive. Careful attention needs to be given to

how mandates are framed and tailored towards acknowledging rural communities that will be impacted the most by both mandates. For example, communities such as Forestburg and Hanna need to be directly given opportunities and assistance throughout the transition process. The phase-out of coal in these resource-based communities will set a negative precedence for the implementation of wind energy because many livelihoods have depended on this industry. It must be understood how perceptions are shaped in communities experiencing multiple effects the policies at once.

The unique politicization surrounding environmentalism and energy that occurs in Alberta must be considered in terms of the framing of wind energy in the context of Alberta as an oil and gas province, with broad public support for the development of energy. Environmentalism should be framed and understood in terms of what landowners understand it to be rather than portraying wind energy as addressing broader global concerns. Not all people subscribe to the premises and promises of wind energy development, and this needs to be directly considered both in political discourses surrounding environmental policies and by wind energy developers. Instead of taking for granted that addressing climate change, and reducing emissions are widely accepted premises, farm level, localized environmentalism, and environmental concerns need to lead the interactions between landowners and developers. Landowners are concerned about the environmental impacts of development on their properties and therefore more effort needs to be put into framing wind energy development as feeding into this farm level environmentalism. People in rural Alberta do not subscribe to the same notions of environmentalism, and there is a lot of criticism of the discourses surrounding environmentalism. Landowners need to see the connection between what they do on their land as farmers, and producers, and how wind energy will fit into their unique way of life, their environmental values and their role as neighbors and stewards of their land. Special attention needs to be given to how stewardship is framed. For some, wind energy may be incompatible with land stewardship, and this must not be overlooked or ignored.

Because there was a lot of reference to the lack of regulations surrounding wind energy development, issues associated with the construction phase of wind development and reclamation standards, provincial level regulations, rather than guidelines and best practice standards need to evolve and keep pace with the political and technical change in the energy

sector. Many participants made reference to how much better the oil and gas industry is regulated and that they expect the same binding standards for the wind industry. Solidifying binding regulations needs to be considered by the provincial government. This also applies to land acquisition standards for landmen, whereby licensing needs to become another norm for the industry. The contribution of the deep story lens offered by Hochschild (2018) can lead to many implications politically. It is well understood that discourses surround energy are tied to identity. This is especially true for the rural farming communities of Alberta dependent on the use of fossil fuels for the production of crops, and lease payments that enable some to continue farming.

Another significant contribution of the deep story lens is that it offers a novel way of approaching the meanings surrounding community and landscape. Although much literature has addressed the symbolic meanings people ascribe to these, the deep story is one of neighboring. The developers of wind energy need to place the neighbor relations at the center of the engagement, land acquisition, and negotiation processes. The deep story of the good neighbor identity needs to be considered as it is challenged by the processes of energy development if there is division and distrust between neighbors throughout the citing and land acquisition processes. Intentional or unintentional community division is harmful and sets the precedence for the rest of the project and ascribes community division to the project. There needs to be an open, transparent negotiation, and land acquisition process with neighbors, because the deep story of division and lost neighbor relations was found to be central to how people articulated their perceptions and reservations. There is more at stake than just financial benefits. Rural residents have a unique situation in relation to their neighbors in that wind energy links landscape and people, and the decision of one neighbor effects the landscape of potentially the whole community. It is therefore vital to think of the land acquisition process in terms of community landscape because it is never as simple as signing on individual landowners without considering neighbor relations and their embedded identities.

Future Research Directions

The two chapters provide insight into the possibility for future research opportunity. Given the topic for Chapter 2, the future direction for this research might address how landowners perceive environmentalism and anti-environmentalism, and how they view political discourses and energy policies. Future direction for work of this nature might include a more in-depth probing of the term anti-environmentalism. The notion of discourse coalitions can be presented to interview

participants, so they can reflect on their own stance in relation to mainstream environmentalism and provide insight into what environmentalism means at the local level of the farm. People could be asked about what sorts of things they associate with wind energy development, and how it can better fit into the local landscapes where people are stewards of their land. Understanding deeper motivations, concerns and discourses can help lessen the polarizing nature of environmental debates, not only in the specific context of wind energy in rural Alberta but across a variety of contemporary issues. Hochshild' (2018) lens of the 'deep story' in Chapter 3 offers many new opportunities to engage with social science research on energy-related topics. The deep story represents a significant shift in the ways that experiences can be understood, and unlike many empirical studies that measure factors, offers a holistic and more flexible approach to understanding the deepest reservations. Future direction for research might include a direct focus on asking people how they feel about the changes that energy projects bring to their sense of self, their neighbors and their community. The notion of identity can be further explored in terms of its formation by both the idea of neighboring and by the idea of what constitutes the provincial identity of Alberta. More work needs to be done specific to the Albertan context, to understand why it may be more difficult to engage the rural population in the development of renewable energy. Future research can focus on gathering discourses surrounding oil and gas energy development and how people link this development to their way of life as farmers. Research can also address the political polarization by asking people about what sort of ideological predispositions they identify that would lead to critical views of the energy transition. Conditional on the political situation, the energy transition and the government change offered an interesting backdrop to this research. As we move through to the next provincial election, it would be interesting to continue pursuing the topic of wind energy development in rural communities. This research provided starting points for alternative ways of understanding what is important to rural landowners and what is at stake for people in rural Alberta.

References

Aitken, M. (2010). Why we still don't understand the social aspects of wind power: A critique of key assumptions within the literature. *Energy Policy*, *38*(4), 1834-1841.

Aitken, M., McDonald, S., & Strachan, P. (2008). Locating 'power' in wind power planning processes: the (not so) influential role of local objectors. *Journal of Environmental Planning and Management*, *51*(6), 777-799.

Alberta Government, (2016). Climate Leadership Plan. Retrieved from https://www.alberta.ca/climate-leadership-plan.aspx

Alberta Government (2018). Oil and gas, Alberta Canada. Retrieved from http://www.albertacanada.com/business/industries/oil-and-gas.aspx

Ansolabehere, S., & Konisky, D. M. (2009). Public attitudes toward construction of new power plants. *Public Opinion Quarterly*, *73*(3), 566-577.

Antonio, R. J., & Brulle, R. J. (2011). The unbearable lightness of politics: climate change denial and political polarization. *The Sociological Quarterly*, *52*(2), 195-202.

Babbitt, B. (1982). Federalism and the Environment: An Intergovernmental Perspective of the Sagebrush Rebellion. *Environmental Law*, *12*(4), 847-861.

Barry, J., Ellis, G., & Robinson, C. (2008). Cool rationalities and hot air: a rhetorical approach to understanding debates on renewable energy. *Global environmental politics*, *8*(2), 67-98.

Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The qualitative report*, *13*(4), 544-559.

Beckley, T. M. (2017). Energy and the Rural Sociological Imagination. *Journal of Rural Social Sciences*, *32*(2), 69.

Bell, D., Gray, T., Haggett, C., & Swaffield, J. (2013). Re-visiting the 'social gap': public opinion and relations of power in the local politics of wind energy. *Environmental Politics*, *22*(1), 115-135.

Bernstein, S., & Cashore, B. (2001). Globalization, Internationalization and Liberal Environmentalism: Exploring Non-Domestic Sources of Influence on Canadian Environmental Policy. *Canadian Environmental Policy: Ecosystems, Politics and Process*, 212-230

Bidwell, D. (2013). The role of values in public beliefs and attitudes towards commercial wind energy. *Energy Policy*, *58*, 189-199.

Bolin, K., Bluhm, G., Eriksson, G., & Nilsson, M. E. (2011). Infrasound and low frequency noise from wind turbines: exposure and health effects. Environmental research letters, 6(3), 035103.

Boyd, A. D., & Paveglio, T. B. (2015)." Placing" Energy Development in a Local Context: Exploring the Origins of Rural Community Perspectives. *Journal of Rural and Community Development*, *10*(2).

Brick, P. (1995). Determined opposition: The wise use movement challenges environmentalism. *Environment: Science and Policy for Sustainable Development*, *37*(8), 17-42.

Brittan Jr, G. G. (2001). Wind, energy, landscape: reconciling nature and technology. *Philosophy & Geography*, *4*(2), 169-184.

Butterfield, M. (2018). Alberta Advantage Gone Under NDP Government, Fraser Institute Finds. Retrieved from https://www.huffingtonpost.ca/2017/01/06/alberta-advantage-no-more_n_14003228.html

CANWEA, (2018a). Wind Energy in Alberta. Retrieved from https://canwea.ca/wind-energy/alberta/

CanWEA, (2018b). Public Opinion on Wind Energy in Alberta and Ontario. Retrieved from https://canwea.ca/wp-content/uploads/2018/03/CanWEA-SurveyReport-Feb2018-Released.pdf

CANWEA (2018c). Wind Energy in Ontario. Retrieved from https://canwea.ca/wind-energy/ontario/

(CAPL) Canadian Association of Petroleum Landmen (2018). Energy &Agricultural Land Connection. Retrieved from https://landman.ca/publications/Connection/2011/Connection%202011.pdf

(CAPP) Canadian Association of Petroleum Producers (2018). Canadian Economic Contribution. Retrieved from https://www.capp.ca/canadian-oil-and-natural-gas/canadian-economic-contribution

Cass, N., & Walker, G. (2009). Emotion and rationality: The characterisation and evaluation of opposition to renewable energy projects. *Emotion, Space and Society*, *2*(1), 62-69.

Cass, N., Walker, G., & Devine-Wright, P. (2010). Good neighbours, public relations and bribes: the politics and perceptions of community benefit provision in renewable energy development in the UK. *Journal of environmental policy & planning*, *12*(3), 255-275.

Clean Energy Canada (2016). Canadian's Opinions on the Clean Energy Transition. Retrieved from http://cleanenergycanada.org/wp-content/uploads/2016/10/Backgrounder-Clean-Energy-Transition-Polling-Nanos-CEC.pdf

Creswell, J. W. (2006). *Qualitative Inquiry and Research Design: Choosing among Five Approaches. Second Edition*. SAGE Publications (CA).

Davidson, D. J. (2018). Evaluating the effects of living with contamination from the lens of trauma: a case study of fracking development in Alberta, Canada. *Environmental Sociology*, *4*(2), 196-209.

Davies, A. R. (1999). Where do we go from here? Environmental focus groups and planning policy formation. *Local Environment*, *4*(3), 295-316.

Devine-Wright, P. (2005). Beyond NIMBYism: towards an integrated framework for understanding public perceptions of wind energy. *Wind Energy: An International Journal for Progress and Applications in Wind Power Conversion Technology*, *8*(2), 125-139.

Devine-Wright, P. (2007). Reconsidering public attitudes and public acceptance of renewable energy technologies: a critical review.

Devine-Wright, P. (2009). Rethinking NIMBYism: The role of place attachment and place identity in explaining place-protective action. *Journal of community & applied social psychology*, *19*(6), 426-441.

Devine-Wright, P. & Howes, Y. (2010). Disruption to place attachment and the protection of restorative environments: A wind energy case study. Journal of Environmental Psychology, 30(3), 271-280.

Diffen, B. H. (2008). Energy from above and Below-Who Wins When a Wind Farm and Oil & (and) Gas Operations Conflict. *Tex. J. Oil Gas & Energy L.*, *3*, 240.

Dunlap, R. E., & Jacques, P. J. (2013). Climate change denial books and conservative think tanks: Exploring the connection. *American Behavioral Scientist*, *57*(6), 699-731.

Dunlap, R. E., & Mertig, A. G. (2014). The evolution of the US environmental movement from 1970 to 1990: An overview. In *American environmentalism* (pp. 13-22). Taylor & Francis.

Dunlap, R. E., & Van Liere, K. D. (1978). The "new environmental paradigm". *The journal of environmental education*, *9*(4), 10-19.

Dunlap, R. E., Van Liere, K. D., Mertig, A. G., & Jones, R. E. (2000). New trends in measuring environmental attitudes: measuring endorsement of the new ecological paradigm: a revised NEP scale. *Journal of social issues*, *56*(3), 425-442.

Eisen, B., Lafleur, S., & Palacious, M. (2018). The End of the Alberta Tax Advantage. Fraser Institute. Retrieved from: https://www.fraserinstitute.org/sites/default/files/end-of-the-Alberta-tax-advantage.pdf

Evans, J., & Garvin, T. (2009). 'You're in Oil Country': Moral Tales of Citizen Action against Petroleum Development in Alberta, Canada. *Ethics Place and Environment (Ethics, Place & Environment (Merged with Philosophy and Geography))*, *12*(1), 49-68.

Fairclough, N. (2003). Analysing discourse: Textual analysis for social research. Psychology Press.

Fast, S., & Mabee, W. (2015). Place-making and trust-building: The influence of policy on host community responses to wind farms. *Energy Policy*, *81*, 27-37.

Fast, S., Mabee, W., Baxter, J., Christidis, T., Driver, L., Hill, S., McMurtry, J. & Tomkow, M. (2016). Lessons learned from Ontario wind energy disputes. *Nature Energy*, *1*(2), 15028.

Fergen, J., & Jacquet, J. B. (2016). Beauty in motion: Expectations, attitudes, and values of wind energy development in the rural US. *Energy Research & Social Science*, *11*, 133-141.

Fletcher, R. (2018). Alberta's budget: You've heard the spin, now take a look at the real numbers. CBC News. Retrieved from https://www.cbc.ca/news/canada/calgary/alberta-budget-real-numbers-2018-data-1.4559769

Fournis, Y., & Fortin, M. J. (2017). From social 'acceptance 'to social 'acceptability 'of wind energy projects: towards a territorial perspective. *Journal of environmental planning and management*, *60*(1), 1-21.

Galletta, A. (2012). Mastering the Semi-Structured Interview and Beyond: From Research Design to Analysis and Publication. New York: NYU Press.

Gipe, P. (1993). The wind industry's experience with aesthetic criticism. *Leonardo*, *26*(3), 243-248.

Glen, B. (2018). Orphan wells: Alberta's $47 billion problem. Retrieved from https://www.producer.com/2018/03/orphan-wells-albertas-47-billion-problem/

Gottlieb, R. (2005). *Forcing the spring: The transformation of the American environmental movement*. Island Press.

Government of Alberta, (2018a). Renewable Electricity Program. Retrieved from https://www.alberta.ca/renewable-electricity-program.aspx

Government of Alberta, (2018b). Phasing Out Coal Pollution. Retrieved from https://www.alberta.ca/climate-coal-electricity.aspx

Government of Canada, (2018a). Climate Change Canada: Proposed Amendments to Coal-Fired Electricity Regulations and Proposed Natural-Gas-Fired Electricity Regulations. Retrieved from www.canada.ca/en/environment-climate change/news/2018/02/proposed_amendmentstocoal-firedelectricityregulationsandproposed.html.

Government of Canada, (2018b). Canada Gazette – Regulations Amending the Reduction of Carbon Dioxide Emissions from Coal-fired Generation of Electricity Regulations. Retrieved from http://www.gazette.gc.ca/rp-pr/p1/2018/2018-02-17/html/reg3-eng.html

Gross, C. (2007). Community perspectives of wind energy in Australia: The application of a justice and community fairness framework to increase social acceptance. *Energy policy*, *35*(5), 2727-2736.

Groth, T. M., & Vogt, C. A. (2014). Rural wind farm development: Social, environmental and economic features important to local residents. *Renewable Energy*, *63*, 1-8.

Gunter, L. (2018). Gunter: What Alberta Advantage? Retrieved from http://edmontonsun.com/opinion/columnists/gunter-what-alberta-advantage

Haarstad, H., & Wanvik, T. I. (2017). Carbonscapes and beyond: Conceptualizing the instability of oil landscapes. *Progress in Human Geography*, *41*(4), 432-450.

Hall, S.M., Hards, S., Bulkeley, H., (2013). New approaches to energy: equity, justice, and vulnerability. Introduction to the special issue. Local Environment 18 (4), 413–421.

Hamel, J., Dufour, S., & Fortin, D. (1993). *Case study methods.* Newbury Park, Calif.: SAGE.

Hess, D. J., & Brown, K. P. (2017). Green tea: clean-energy conservatism as a countermovement. *Environmental Sociology*, *3*(1), 64-75.

Hirsh, R. F., & Sovacool, B. K. (2013). Wind turbines and invisible technology: unarticulated reasons for local opposition to wind energy. *Technology and Culture*, *54*(4), 705-734.

Hochschild, A. R. (2018). *Strangers in their own land: Anger and mourning on the American right*. The New Press.

Holsti, O. R. (1969). *Content analysis for the social sciences and humanities*. Addison-Wesley Pub. Co.

Horton, J., Macve, R., & Struyven, G. (2004). Qualitative research: experiences in using semi-structured interviews. *The real-life guide to accounting research*, 339-357

Huber, M. T. (2013). *Lifeblood: Oil, freedom, and the forces of capital*. U of Minnesota Press.

Hyland, M., & Bertsch, V. (2018). The role of community involvement mechanisms in reducing resistance to energy infrastructure development. *Ecological Economics*, *146*, 447-474.

Jacquet, J. B., & Stedman, R. C. (2014). The risk of social-psychological disruption as an impact of energy development and environmental change. *Journal of Environmental Planning and Management*, *57*(9), 1285-1304.

Jalali, L., Bigelow, P., McColl, S., Majowicz, S., Gohari, M., & Waterhouse, R. (2016). Changes in quality of life and perceptions of general health before and after operation of wind turbines. Environmental Pollution (Barking, Essex: 1987), 216608-615.

Jami, A. A., & Walsh, P. R. (2017). From consultation to collaboration: A participatory framework for positive community engagement with wind energy projects in Ontario, Canada. *Energy research & social science*, *27*, 14-24.

Jamison, A. (2010). Climate change knowledge and social movement theory. *Wiley Interdisciplinary Reviews: Climate Change*, *1*(6), 811-823.

Janoski, T. (1991). Synthetic Strategies in Comparative Sociological Research: Methods and Problems of Internal and External Analysis1. *International Journal of Comparative Sociology*, *32*(1), 59-81.

Jefferson, M. (2018). Safeguarding rural landscapes in the new era of energy transition to a low carbon future. *Energy Research & Social Science*, *37*, 191-197

Jeffery, R. D., Krogh, C. M., & Horner, B. (2014). Industrial wind turbines and adverse health effects. Canadian Journal of Rural Medicine, (1), 21.

Jepson, W., Brannstrom, C., & Persons, N. (2012). "We Don't Take the Pledge": Environmentality and environmental skepticism at the epicenter of US wind energy development. *Geoforum*, *43*(4), 851-863.

Johnstone, B. (2018). *Discourse analysis* (Vol. 3). John Wiley & Sons.

Jolivet, E., & Heiskanen, E. (2010). Blowing against the wind—An exploratory application of actor-network theory to the analysis of local controversies and participation processes in wind energy. *Energy Policy*, *38*(11), 6746-6754.

Kessler, A., Parkins, J. R., & Huddart Kennedy, E. (2016). Environmental harm and "the Good Farmer": Conceptualizing discourses of environmental sustainability in the beef industry. *Rural Sociology*, *81*(2), 172-193.

Klass, A. B. (2011). Property Rights on the New Frontier: Climate Change, Natural Resource Development, and Renewable Energy. *Ecology Law Quarterly*, 63-119.

Krogh, C. E. (2011). Industrial Wind Turbine Development and Loss of Social Justice? Bulletin of Science, Technology & Society, 31(4), 321-333.

Lane, J. D., Bigelow, P. L., Majowicz, S. E., & McColl, R. S. (2016). Impacts of Industrial Wind Turbine Noise on Sleep Quality: Results from a Field Study of Rural Residents in Ontario, Canada. Journal of Environmental Health, 79(1), 8-12.

Liebe, U., Bartczak, A., & Meyerhoff, J. (2017). A turbine is not only a turbine: The role of social context and fairness characteristics for the local acceptance of wind power. *Energy Policy*, *107*, 300-308.

Leibenath, M., & Otto, A. (2014). Competing Wind Energy Discourses, Contested Landscapes. *Landscape Online*, *38*.

Macnaghten, P., & Urry, J. (1998). *Contested natures* (Vol. 54). Sage.

MacNeil, R., & Paterson, M. (2018). Trudeau's Canada and the challenge of decarbonization. *Environmental Politics*, *27*(2), 379-384.

McCarthy, J. (2002). First World political ecology: lessons from the Wise Use movement. *Environment and Planning A*, *34*(7), 1281-1302.

McCright, A. M., & Dunlap, R. E. (2011). The politicization of climate change and polarization in the American public's views of global warming, 2001–2010. *The Sociological*

Quarterly, *52*(2), 155-194.

McKinnon, C. (2016). Should We Tolerate Climate Change Denial? *Midwest Studies in Philosophy*, *40*(1), 205-216.

Meyer, C. (2018). 'Vicious' right-wing politics fueling climate denial in Alberta, says environment minister Phillips. National Observer. Retrieved from: https://www.nationalobserver.com/2018/05/22/news/vicious-right-wing-politics-fueling-climate-denial-alberta-says-environment-minister

Miller, C. A., & Richter, J. (2014). Social planning for energy transitions. *Current Sustainable/Renewable Energy Reports*, *1*(3), 77-84.

Mol, A. P. (2000). The environmental movement in an era of ecological modernization. *Geoforum*, *31*(1), 45-56.

Nakano, T. (2015). Neoliberalism and conservatism. In *Beyond Global Capitalism* (pp. 67-75). Springer, Tokyo.

Norgaard, K. M. (2011). *Living in Denial: Climate Change, Emotions, and Everyday Life*. MIT Press.

Ogilvie, M., & Rootes, C. (2015). The impact of local campaigns against wind energy developments. Environmental Politics, (6), 874.

Paehlke, R. C. (1989). Environmentalism and the future of progressive politics. *New Haven*.

Paehlke, R. (2000). Environmentalism in one country: Canadian environmental policy in an era of globalization. *Policy Studies Journal*, *28*(1), 160-175.

Paolisso, M., & Maloney, R. S. (2000). Recognizing farmer environmentalism: Nutrient runoff and toxic dinoflagellate blooms in the Chesapeake Bay region. *Human Organization*, 209-221.

Pasqualetti, M. J. (2011). Opposing wind energy landscapes: a search for common cause. *Annals of the Association of American Geographers*, *101*(4), 907-917.

Peeples, J. A. (2005). Aggressive mimicry: The rhetoric of wise use and the environmental movement. *The environmental communication yearbook*, *2*(1).

Pepper, D. (1996). *Modern environmentalism: an introduction*. Psychology Press.

Phillips, M., & Dickie, J. (2015). Climate change, carbon dependency and narratives of transition and stasis in four English rural communities. *Geoforum*, *67*, 93-109.

Ragin, C. (1987). The comparative method: Moving beyond qualitative and quantitative methods. *Berkeley: University of California*.

Rowell, A. (2017). *Green Backlash: Global Subversion of the environmental movement*. Routledge.

Ryan, R. L., Erickson, D. L., & De Young, R. (2003). Farmers' motivations for adopting conservation practices along riparian zones in a mid-western agricultural watershed. *Journal of Environmental Planning and Management*, *46*(1), 19-37.

Seskus, T. (2018, February 21). Orphan well costs could sting Alberta taxpayers if regulator loses court battle | CBC News. Retrieved from https://www.cbc.ca/news/business/alberta-orphan-wells-1.4543559

Shepherd, D., & Billington, R. (2011). Mitigating the Acoustic Impacts of Modern Technologies: Acoustic, Health, and Psychosocial Factors Informing Wind Farm Placement. Bulletin of Science, Technology & Society, 31(5), 389-398.

Shrivastava, M., & Stefanick, L. (2012). Do oil and democracy only clash in the global south? petropolitics in Alberta, Canada. *New Global Studies*, *6*(1).

Silvasti, T. (2003). "The Cultural Model of 'the Good Farmer' and the Environmental Question in Finland." *Agriculture and Human Values* 20(2):143–50.

Sine, W. D., & Lee, B. H. (2009). Tilting at windmills? The environmental movement and the emergence of the US wind energy sector. *Administrative Science Quarterly*, *54*(1), 123-155.

Songsore, E., & Buzzelli, M. (2014). Social responses to wind energy development in Ontario: The influence of health risk perceptions and associated concerns. *Energy Policy*, *69*, 285-296.

Stake, R. E. (1995). *The art of case study research*. Sage.

Stern, P. C., Dietz, T., & Guagnano, G. A. (1995). The new ecological paradigm in social-psychological context. *Environment and behavior*, *27*(6), 723-743.

Strauss, S., Rupp, S., & Love, T. (2016). *Cultures of energy: power, practices, technologies*. Routledge.

Szarka, J., 2004. Wind Power, Discourses Coalitions and Climate Change: Breaking the Stalemate? *European Environment* 14 (4): 317–330

Thibault, B., Angen, E., & Weis, T. (2013). Survey of complaints received by relevant authorities regarding operating wind energy in Alberta. Calgary, Alberta: Pembina Institute, 2013.

Trotter, R. T. (2012). Qualitative research sample design and sample size: Resolving and unresolved issues and inferential imperatives. *Preventive medicine*, *55*(5), 398-400.

Unger, D. G., & Wandersman, A. (1985). The importance of neighbors: The social, cognitive, and affective components of neighboring. *American Journal of Community Psychology*, *13*(2), 139-169.

Van der Horst, D. (2007). NIMBY or not? Exploring the relevance of location and the politics of voiced opinions in renewable energy siting controversies. *Energy policy*, *35*(5), 2705-2714.

Vasi, I. B. (2011). *Winds of change: The environmental movement and the global development of the wind energy industry*. Oxford University Press.

Walker, C., Baxter, J., & Ouellette, D. (2014). Beyond rhetoric to understanding determinants of wind turbine support and conflict in two Ontario, Canada communities. *Environment and Planning A*, *46*(3), 730-745.

Walker, C., Baxter, J., & Ouellette, D. (2015). Adding insult to injury: The development of psychosocial stress in Ontario wind turbine communities. Social Science & Medicine, 133358-365.

Walker, G., & Devine-Wright, P. (2008). Community renewable energy: What should it mean? *Energy policy*, *36*(2), 497-500.

Walker, G., Devine-Wright, P., Hunter, S., High, H., & Evans, B. (2010). Trust and community: Exploring the meanings, contexts, and dynamics of community renewable energy. *Energy Policy*, *38*(6), 2655-2663.

Warren, C. R., Lumsden, C., O'Dowd, S., & Birnie, R. V. (2005). 'Green on green': public perceptions of wind power in Scotland and Ireland. *Journal of environmental planning and management*, *48*(6), 853-875.

Weiss, R. S. (1995). *Learning from strangers: The art and method of qualitative interview studies*. Simon and Schuster.

Wengraf, T. (2001). *Qualitative research interviewing: Biographic narrative and semi-structured methods*. Sage.

West, J., Bailey, I., & Winter, M. (2010). Renewable energy policy and public perceptions of renewable energy: A cultural theory approach. *Energy Policy*, *38*(10), 5739-5748.

Wolsink, M. (2000). Wind power and the NIMBY-myth: institutional capacity and the limited significance of public support. *Renewable energy*, *21*(1), 49-64.

Wood, J. (2016). *New poll shows strong opposition to Alberta carbon tax*. [online] Calgary Herald. Retrieved from: http://calgaryherald.com/news/politics/new-poll-shows-strong-opposition-to-alberta-carbon-tax.

Woods, M. (2003). Conflicting environmental visions of the rural: windfarm development in Mid Wales. *Sociologia ruralis*, *43*(3), 271-288.

Wüstenhagen, R., Wolsink, M., & Bürer, M. J. (2007). Social acceptance of renewable energy innovation: An introduction to the concept. *Energy policy*, *35*(5), 2683-2691.

Yin, R. K. (2003). Case study research: Design and methods (3rd ed.). Thousand Oaks, CA: Sage.

Appendix A- Landowner Semi-Structured Interview Guide

Landowner Interview Guide

Interview questions are subject to change, depending on the situation, and the willingness of the participant to answer questions.

Introductory Questions:

- Please provide a brief description of your background, occupation and your connection to the area.
- How long have you lived here? How would you describe your lifestyle?
- What drew you to this place or community? How does it compare to other places?
- Do you feel there is a sense of community in this region? Why or why not?
- What does your community take pride in? What are the sources of cultural heritage? Prosperity?
- Describe the proposed project; capacity, output and how it affects your property? What has your general response been to the project in the area?
- Please describe the consultation or notification that occurred? - if applicable
- Was this enough? Why or why not? Was it enough?
- Would a different approach impact your views? How do you think those changes would impact the receptivity to the project?
- How much of your land will be impacted by the development? How many turbines are going on your property?

Wind Energy Development:

- What is your opinion on wind energy in general?
- Do you think we need to change the energy system in Alberta? Make it greener?
- What has the recent election changed for your community?
- How will the potential shut down of the coal plants impact your community? Your family?
- Have any of the policies implemented (such as Climate Leadership Plan) impacted your way of life?
- What do you think about the push towards renewable energy in Alberta?
- Do you support the push to renewables? Please explain why or why not?
- Do you think wind energy is a good way forward into the renewable energy transition?
- What are its main challenges, do you think?
- What is your opinion about the development in your area?
- Do you derive (or will you in the future) any direct benefits from the wind development?
- Do you experience any direct or indirect impacts of wind turbines?
- Please describe what they are- if any.
- What is your biggest concern about it?
- What do you like about the project?

- Do you think the project is fairly distributing the benefits to landowners in the area?
- Has the installation impacted your relations to neighbors and the community? How?

Landscapes and Culture

- Do you think the wind energy landscape fits into the way of life and culture of the community?
- Do you think the wind farm landscape is compatible with your view of what the rural landscape is?
- What is taken away from your sense of place? What is added?
- Do you think Alberta's heritage is defined by other energy industries such as oil and gas?
- Do you think wind energy is compatible with Alberta's heritage as an oil and gas province?

Oil and Gas

- Are there any wells on your property?
- Do you derive benefits from wind on your land?
- Please describe the consultation or notification that occurred.
- What were your primary concerns for when it came to hosting a wellsite on your property?
- Have you experienced any effects from oil and gas wells? Have your neighbors?

Comparative questions

- What are your views on climate change? Are you accepting or skeptical of climate change information? Do you seek it out?
- Where do you think Alberta stands in the discussion of climate change?
- What are your views on the discussions of emissions reductions?
- How do you think the natural gas and wind industries compare?
- Do you think wind energy is an alternative?
- Natural gas will pick up the majority of lost capacity- How do you view that?
- In general, based on what you know which industry has more environmental impacts?
- Where do you think the government should direct energy development?
- What do you think the landscape of Alberta will look like in the next two decades?
- Do you think there will be more wells? More turbines?
- What do you think the Albertan landscape should look like?
- Do you think that one industry is more accepted than the other? Why do you think that is?
- Do you think that support for oil and gas in this province is linked to a lack of support for wind energy?

Cultural Questions

- How do you think Alberta differs culturally from other provinces?
- Do you think there is a sense of prosperity in Albert not present elsewhere?
- In what ways do you think the energy landscapes represent that prosperity?

- What is your definition of prosperity?
- Are you generally optimistic about the energy situation in Alberta?
- How do you think we compare to other places in the world?
- What is your vision for Alberta, or your county…What would you like to see happen?

Expression of gratitude for time and willingness to participate! Wrap up and follow up information if applicable.

Appendix B- Key Informant Semi-Structured Interview Guide

Key Informant Interview Guide

Introductory Questions

- Please tell me about your job/ position and how you arrived at this position. What does your work entail?
- Please provide a brief description of your background and your connection to the community/particular wind energy projects
- How was the project initiated and what was your involvement with it?
- At what stage is the project now? How close is it to approval? completion? take-down?
- From what you have experienced what is the community response to the project from the community, region etc.?
- Is there contention over the project?

Proponent Guiding Questions

Project Specific Questions

- Please tell me more about the company and its goals for this project?
- In what ways was the project promoted or introduced to the area? Information sessions? Open houses?
- How was the community notified and consulted about the project?
- How were landowners (those who are hosting the development/ adjacent to the development) identified and consulted?
- Will the community derive any benefits from the wind project?
- What are the direct or indirect benefits of the project to the hosting landowners? (if applicable)
- What was the community response towards the wind project (s)?
- If there is contention- What is/ are the sources of contention over the project?
- What are the points of concern that you have become aware of through your work?
- How has the company addressed/ will address those concerns?

Community Representative Guiding Questions

Project Specific Questions

- What is the community like? What does it take pride in? What are its main strengths and sources of prosperity?
- How would you describe the lifestyle in this community?
- In what ways was the project promoted or introduced to the area?
- How was the community notified and consulted about the project?
- How were landowners (those who are hosting the development/ adjacent to the development) identified and consulted?
- What are the direct or indirect benefits of the project to the hosting landowners? (if applicable)
- Will the community derive any benefits from the wind project?
- What was/ is the community response towards the wind project?

- What was/ is the role of the municipality in facilitating discussions about the project?
- Were there events such as open houses and information sessions that occurred? How?
- How was the project received?
- If there is contention- What is/ are the sources of contention over the project?
- What are the points of concern that you have become aware of through your work?
- How has the municipality/ county addressed/ will address those concerns?

General Question About the Wind Industry

- What policies and legislative changes have affected the county with the most recent election?
- What were some effects at the community level?
- How have the components of the Climate Leadership Plan (carbon tax, coal phase) affected the county/ community thus far?
- What has changed with the Climate Leadership Plan for renewable energy companies in Alberta?
- Do you think the government has headed in the right direction with regards to promoting the development of renewable energy?
- What industries in the county are / will be impacted by the Plan?
- Do you think wind energy is at the frontier of the energy transition?
- What is your opinion on the expansion of unconventional gas sectors as a way towards the energy transition?
- Has the community had any experience with hydraulic fracturing? How receptive have landowners been to this technology?
- What are the biggest benefits of wind energy development?
- What is the greatest challenge in establishing more wind energy projects in Alberta?
- What are the biggest threats to wind energy as an industry?
- What are the greatest social challenges the industry faces?
- What do you think about the resistance/ anti-wind movements? Why?
- Do you think there is a social acceptability of wind energy in Alberta?

Comparative questions

- How do you think wind energy compares to other technologies such as unconventional gas well sites on the land?
- How do you think the receptivity to hosting wind farms differs from hosting well pads or well sites on a property?
- How do you think the heritage of the region influences the receptivity to wind energy?
- Do you think that wind energy is compatible with the cultural heritage or the landscape of the region? Why?
- What do you think primarily drives a positive response to wind energy?
- What do you think drives a negative response to wind energy?
- Do you think there is a certain level of comfort with oil and gas infrastructure on the landscape? Why or why not?
- Do you think that oil and gas are a part of Alberta's identity? Why do think that is?

- In what ways do you think traditional/ familiar energy landscapes represents prosperity in Alberta?
- What do wind farms or turbines represent?
- Are you generally optimistic about the energy situation in Alberta?
- How do you envision the county/ community?

Expression of gratitude for time and willingness to participate!

Ask about the possibility of emailing information sheet for distribution to community members.

Wrap up and follow up information if applicable.

Appendix C-Landowner Letter of Contact and Consent Form

Comparing Public Perspectives on Wind and Carbon Energy Development in Alberta

Background

This study is part of a master's thesis through the University of Alberta. The aim of this research is to contribute to a greater understanding of public perspectives on wind energy development in Alberta. Your perspectives will provide insights into the challenges and opportunities of future energy development in the province. We are contacting you because there is an existing or proposed wind energy development in your area, and you may have experience with other energy infrastructure in the area. The purpose of this research is to gain a further understanding of your experience of wind and carbon energy industries. We are particularly interested in how these energy technologies impact your way of life, your community, your experience with the land, and your sense of the future.

Benefits and Risks

You will not benefit directly from participating in this study. However, you will be given an opportunity to express your views, concerns, and opinions about existing or future energy development in your area. Your contributions and insights will help to uncover valuable perspectives, and to contribute to the literature on wind energy development in Alberta. Your participation in the study can provide much-needed insights that are often missing from discussions about energy development, and the challenges of transitioning to low carbon energy systems. With your participation, we do not anticipate any risks to you, however, some community members may be aware that you were referred to participate in the study. Also, there may be opportunities to engage in topics that may potentially trouble or upset you, as they may pertain to your land or wellbeing. However, you are free to not answer questions and stop the interview at any time.

Procedures

You were identified for this study based on your proximity to the energy developments of interest, or through referral. Up to 30 interviews will be done with landowners in various areas of the province where there are existing /proposed wind projects. We are asking you to participate in an interview at a location, and time that is convenient for you, and that you are comfortable with. You will be asked to sign a consent form. The interview will take approximately 45 minutes, with the possibility of extending the time as needed. The interview will be audio recorded for the purposes of transcription and analysis. If an in-person interview is not possible, we may conduct the interview by phone/ skype instead, and your consent will be obtained via emailed/scanned form or verbally. The audio recording will be transcribed, and then deleted. Transcripts with identifying information will be kept indefinitely by researchers for future use that would require a University of Alberta ethics review. Transcripts will be coded and analyzed using various qualitative methods. All reporting, publication, and use of data will ensure anonymity, and at no point will participants be identifiable in findings.

Voluntary Participation

Your participation in voluntary, and at any point, you may withdraw from the study if you no longer wish to participate. If you wish to participate, you are not obliged to respond to specific questions and you may skip any prompt or question you wish not to answer. The depth and level of detail you wish to provide will be at your own discretion. After the interview, you may withdraw

from the study up to three months from the date of the interview. Past this point, thesis writing will commence, and therefore the interviews will already be subjected to data analysis. A $10 gift card will be given to you as a token of appreciation.

Confidentiality & Anonymity

All data reported will be anonymous. At no point will the information you provide be identified or linked back to you in any work that results from the interview data. Quotes and paraphrases will be completely anonymous and identifying information such as details about your identity, property or community will be omitted. Referrals from other study participants will be the only time where anonymity will not be guaranteed. Only the primary researcher (Aleksandra Afanasyeva) and the supervisors listed will see the identifying transcripts in full. Transcripts and all other research material will be stored on a secure, password protected University of Alberta drive, in a locked office space. Identifying transcripts will be kept indefinitely for future work and your contact information may be retained for follow-up, with your consent.

Further Information

The plan for this study has been reviewed for its adherence to ethical guidelines by a Research Ethics Board at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Research Ethics Office at (780) 492-2615. If you wish to make any changes to your participation; if you have any concerns or additional comments you may contact the researchers listed below.

Aleksandra Afanasyeva- Primary Investigator
Graduate Student
Department of Resource Economics and Environmental Sociology (REES)
University of Alberta
Phone number: (780) 990-5411
Email: aafanasy@ualberta.ca

John Parkins- Supervisor
Professor in REES
University of Alberta
Phone number: (780) 492-3610
Email: john.parkins@ualberta.ca

Debra Davidson -Co-supervisor
Professor in REES
University of Alberta
Phone number: (780) 492-4598
Email: ddavidso@ualberta.ca

Consent Form

By signing this form, you are consenting to voluntary participation in this research study. By signing you are confirming that you have read and understood the information provided in the information sheet. A copy of the information or consent sheet will be left with you for your records.

Participant's Name (printed)	Signature	Date

Please indicate which of the following you consent to by providing your signature.

I consent to participate in an interview _____

I consent to the use of an audio recorder _____

I consent to having my contact information retained for follow-up about this study _____

I consent to having my contact information retained for future research _____

I, the researcher, will abide by the standards and procedures set out in the information sheet and by the University of Alberta Ethics Review Board:

Researcher Name (printed)	Signature	Date

Appendix D-Key Informant Letter of Contact and Consent Form

Comparing Public Perspectives on Wind and Carbon Energy Development in Alberta

Background

This study is part of a master's thesis through the University of Alberta. The aim of this research is to contribute to a greater understanding of public perspectives on wind energy development in Alberta. We are contacting you because of your position within the community and/ or your involvement with the wind project. You have been identified through publicly available website information/ referral because of potentially valuable insights you may provide about the existing/ proposed development in the area. As well, your ability to refer us to other potential participants will be invaluable to this research project. Your participation may consist of a brief conversation with the researcher about wind project(s), or referral of participants. You are also asked to participate in an interview with the researcher as specified below.

Benefits and Risks

You will not benefit directly from participating in this study, however, you will be given an opportunity to express your views, concerns, and opinions about existing and future energy development in the area. Your contributions and insights will help us better understand the possibilities and challenges associated with wind energy development in Alberta. Your participation in the study can provide much-needed insights that are often missing from discussions about the energy development and the challenges of transitioning to low carbon energy sources. With your participation, we do not anticipate any risks to you, however, some community members may be aware that you were referred to participate in the study.

Procedures:

Up to 25 interviews will be done with landowners/ key informants in areas where there are existing/ proposed wind projects and other energy developments such as unconventional oil and gas. We are asking you to participate in an interview at a location, and time that is convenient for you, and that you are comfortable with. You will be asked to sign a consent form. The interview will take approximately 45 minutes, with the possibility of extending the time as needed. The interview will be audio recorded for the purposes of transcription and analysis. If an in-person interview is not possible, we may conduct the interview by phone/ skype instead, and your consent will be obtained via emailed/scanned form or verbally. The audio recording will be transcribed, and then deleted. Transcripts with identifying information will be kept indefinitely by researchers for future use that will require a University of Alberta ethics review. Transcripts will be coded and analyzed using various qualitative methods. All reporting, publication, and use of data will ensure anonymity, and at no point will participants be identifiable in findings.

Voluntary Participation

Your participation in voluntary, and at any point, you may withdraw from the study if you no longer wish to participate. If you wish to participate, you are not obliged to respond to specific questions and you may skip any prompt or question you wish not to answer. The depth and level of detail you wish to provide will be at your own discretion. After the interview, you may withdraw from the study up to three months from the date of the interview. Past this point, thesis writing will commence, and therefore the interviews will already be subjected to data analysis. A $10 gift card will be given to you as a token of appreciation.

Confidentiality & Anonymity

All data reported will be anonymous. At no point will the information you provide be identified or linked back to you in any work that results from the interview data. Quotes and paraphrases will be completely anonymous and identifying information such as details about your identity, will be omitted. Referrals from other study participants will be the only time where anonymity will not be guaranteed. Only the primary researcher (Aleksandra Afanasyeva) and the supervisors listed will see the identifying transcripts in full. Transcripts and all other research material will be stored on a secure, password protected University of Alberta drive, in a locked office space. Identifying transcripts will be kept indefinitely for future work and your contact information may be retained for follow-up, with your consent.

Further Information

The plan for this study has been reviewed for its adherence to ethical guidelines by a Research Ethics Board at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Research Ethics Office at (780) 492-2615. If you wish to make any changes to your participation; if you have any concerns or additional comments you may contact the researchers listed below.

Aleksandra Afanasyeva
Graduate Student
Department of Resource Economics and Environmental Sociology (REES)
University of Alberta
Phone number: (780) 990-5411
Email: aafanasy@ualberta.ca

John Parkins
Professor in REES
University of Alberta
Phone number: (780) 492-3610
Email: john.parkins@ualberta.ca

Debra Davidson
Professor in REES
University of Alberta
Phone number: (780) 492-4598
Email: ddavidso@ualberta.ca

Consent Form

By signing this form, you are consenting to voluntary participation in this research study. By signing you are confirming that you have read and understood the information provided in the information sheet. A copy of the information and consent sheet will be left with you for your records.

Participant's Name (printed)	Signature	Date

Please indicate which of the following you consent to by providing your signature.

I consent to participate in an interview _____

I consent to the use of an audio recorder _____

I consent to having my contact information retained for follow-up _____

I consent to having my contact information retained for future research _____

I, the researcher, will abide by the standards and procedures set out in the information sheet and by the University of Alberta Ethics Review Board:

Researcher Name (printed)	Signature	Date