Analysis of the Offshore Wind Industry with respect to Maine's Wind Energy Act through Systematic Content Analysis

By

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Table of Contents

List of Tables

List of Figures

Abstract

Through systematic content analysis, this thesis explores the interplay of available technology, global environmental imperatives, and political willpower in the Gulf of Maine's offshore wind industry. Historically, Maine has been resistant to developments, and the offshore wind industry has faced significant pushback from fishermen and coastal stakeholders alike. To track changes in sentiment over time, this study will focus on written media from public and governmental sources. The central question of this thesis requires temporal and political contextualization, thus relying on an analysis of the Maine Wind Energy Act. The progression and evolution of the MWEA serve as a timeline to chart changes in sentiment over time. By examining shifts in Maine's state leadership within the scope of the Act, this thesis considers the fluctuations that enable or hinder offshore wind. Utilizing NVIVO software to code written media documents, this study categorizes public-facing narratives as positive, negative, neutral, or mixed. It was determined that there was a positive correlation between the democratic governor in office and the volume of media produced surrounding renewable energy, particularly offshore wind. There was a primarily positive and neutral tone from the public and government facing offshore wind that peaked in the most recent democratic political era.

Similarly, the results found that the *MWEA* was more legally obligatory in the third era. The results of the narrative and textual analysis results underpin two things. The significance of democratic state leadership for of renewably portfolio standards, and thus offshore wind procurement. Written media is also a tool for assessing the efficacy, measured through public or governmental narrative, of legislation like the MWEA.

Acknowledgements

This study was conducted in K'jipktuk (Halifax, Nova Scotia), the traditional ancestorial land and unceded territory of the Mi'kmaq people. In the 18th century the Mi'kmaq peoples and British Crown established historical peace and friendship treaties. We are all Treaty people.

This paper would not be possible without the support of my advisor Dr. Andrew Bergel for his continual willingness to look at my work and chart a course through my many ideas. I would like to thank my friends both near and far for their continued trust and support for this interesting project. Thank you to Dr. Melanie Zurba and Mr. Steven Mannell for their guidance and patience.

Chapter 1: Introduction

Anthropogenic greenhouse gas emissions have unequivocally caused global warming, raising global surface temperatures 1.1°C above the 1850-1900 historical mean in 2010-2020 (IPCC 2023). The international panel on climate change is in agreeance that greenhouse gas emissions (GHG) have continued to increase over the 2010-2019 period with unprecedented contributions from unsustainable energy use, land use changes, and the scale of human consumption patterns (2023). The historical net anthropogenic emissions are highest in North America and yet Clark, et al. agree that until 2100 there is a window of time where intelligent and informed decision making can rethink the ways humans produce energy and support our food systems (Clark, P., et al. 2016).

This thesis is guided from the understanding that the unprecedented changes to global climate require political, social, and economic institutions to consider how they can adapt to design a world that meets the needs of the present without jeopardizing the ability of future generations to meet their own needs (UCLA, 2023).

There is consensus that major GHG emitters within North America must address the climate crisis to decrease GHG emissions. The United States is positioned to utilize the vast renewable energy resources that vary dramatically across geographies, each offering its own unique natural resource for potential energy generation, in the case of offshore wind the United States capacity has increased to 52,687 megawatts (Department of Energy, 2023). In the Northeastern United States, the small state of Maine has a

diverse set of regional natural resources that can be used for renewable energy (International Renewable Energy Agency, 2023).

The rocky coast of Maine is uniquely positioned to host significant offshore wind development (GEO 2023). The University of Maine estimates there is about 156 gigawatts of offshore wind potential off the coast and a 144-megawatt research lease has been granted within state waters by the sitting, 2023, Governor Janet Mills (U.S. Department of Energy, 2023). An offshore wind array will be a critical component in the envisioned diverse energy portfolio that is required to decarbonize Maine's economy and replace greenhouse gases (Governor's Energy Office, 2023). The Offshore wind development may be propelled by Mainers and the Maine Governor's Energy Office devised a roadmap that explicitly lays out the pathways to engage with the broad public to consult community members, researchers, businesses, fishers, entrepreneurs, coastal stakeholders and is not without opposition from Maine's fishermen, coastal property owners, and environmental groups (Goodale, W. and Perry, J. 2022). The decisions to effect change, actualizing climate agendas, must be informed by well-integrated and well-informed policy and it is necessary to consider the public acceptance of renewable energy projects well before they are developed (Sokoloski et al 2018).

In addition to the regional statewide support for offshore wind development, President Biden issued Executive order 14008 in January of 2021, directing federal agencies to "deploy the full capacity of its agencies to combat the climate crisis[.]" leveraging the combined support of state and federal agencies (The White House). Today,

in 2023, federal and state policy makers discuss the steps to use the oceans to generate electricity for energy generation. The fossil fuel economy's global and domestic operations have been maximized for profits to the detriment of the environment, citizens, and species triggering a response in renewable energy development (Legorburu, I., Johnson,

K. R. & Kerr, S., (2017). The Gulf of Maine is now facing a new kind of political era where the development of offshore wind requires collective action. The collective action problem emerges where there is a divergence between what is rational for individuals and what is optimal for society (Ostrom, 2000). The stakeholders on the Maine coast understand that society as a whole will benefit from utilizing alternative energy resources, but as individual stakeholder hold a unique opposition to the greater use of the state and federal waters that is not necessarily NIMBYism (Sokoloski et al 2018). Exploring the perspectives and interests of fishermen and coastal stake holders who may remain in opposition is important for moving forward in a way that honors the resource within the public trust (Acheson, 2012).

This thesis will inform the effectiveness of state legislation from the Maine public's position. Within this research I will use media analysis to inform the dominant sentiment of the public media and state government to discuss offshore wind development in the Maine coast.

Purpose and Significance

This thesis will draw on legal frameworks, public policy outcomes and social and systems thinking. Further, a systematic content analysis through text and narrative analysis will examine the discretionary language within the publications discussing offshore wind infrastructure in the Gulf of Maine.

Research Objectives

- Assessing the extent of discretionary language within the Maine Wind Energy Act to determine its relationship with the offshore wind industry.
- Analyze the state leadership's public-facing narrative using governmental releases to better understand the dominant narrative towards offshore wind development.
- Analyze public media using news media to better understand the dominant public narratives towards offshore wind development and what accountability measures have been presented by the public.
- Compare the dominant sentiments between public media and governmental stakeholders to explore the catalysts of floating offshore wind development.

Chapter 2: Literature Review

This study provides insight into offshore wind development in Maine.Governmental releases and media articles offer an extensive review of the present state of offshore wind development in Maine. Rather than relying on the narratives of state government and the public media this study explores the extent of offshore wind development in Maine. Within this study, the rational for offshore wind development in the Gulf of Maine is presented. Next, the attitudes and rational for opposition are explored. Next, the underpinning policy behind the progress of offshore wind is discussed. Then, the position of the government's narrative to the public is discussed. Lastly, the potential causes for narrative gaps within the public is analyzed.

Carbon Emissions

The cumulative, and consistent reports from the IPCC are certain that anthropogenic Carbon Dioxide (CO_2) emissions are the clear drivers of increased global temperatures (Core Writing team et al., 2007). The release of Greenhouse gases, like Carbon Dioxide or Methane (CH_4), cause an imbalance in the atmospheric ability to regulate solar radiation entering and leaving the atmosphere. As anthropogenic emissions from the combustion of fossil fuels for energy generation increase as does the concentration of CO_2 and the atmospheres ability to retain heat (Jones 2016). The use of fossil fuels for energy generation is unequivocally one the main drivers of GHG emissions as electricity has become inseparable from modern society (Ferreira 2023). The United States Energy Information Administration (USEIA) projects global energy production will increase by 30% - 76% from

2022 to 2050 and within that period 81% - 95% of the new energy development projects will be carbon neutral (EIA 2023). The USEIA range is wide and spread over the course of thirty years, to reduce the uncertainty and ambiguity of this period, my study focuses on floating offshore wind in the Maine Coast.

Wind Energy

It is well understood that wind, ultimately derived from the sun, can be utilized for energy generation. As the sun regionally heats the earth, warm air will rise leaving behind a low-pressure area that pulls in cooler air to replace the rising warm air (Jones 2016). In the context of this thesis, I am focusing on the exploitation of coastal and oceanic wind currents to power floating wind turbines. On the global scale, this process can be seen everywhere as an example, consider the tropics. The tropic region is closest to the equator and the most exposed to the sun. The constant solar radiation warms the land, causing evaporation, which results in warm and moist tropical air. This air rises in the atmosphere near the equator called the intertropical convergence zone. As a result, the warm is replaced by cool air close to the earth's surface, the subtropical air drops below the tropical warm air to create the Easterlies or Trade winds (Jones 2016). This process occurs at much smaller scales along ocean front climates like the Gulf of Maine (Townsend 2012). During the day, the land warms fasters than the ocean and the cool air flows in, creating an Seabreeze. In the United States wind turbines were used to provide rural farms with electricity. In 200 BC, windmills with woven reed blades were grinding grain throughout Persia (EIA 2023). Today, wind power has become an industrialized resource that is essential for energy generation (Jones 2016). Turbines today have a blade diameter of 98 to 558 feet (30 to 170 meters). Wind turns the blades which in turn spins a rotor within the turbine which generates energy for the grid.

In the context of this study, wind blows more regularly on the ocean's surface, providing a more consistent supply of energy than land. Small increases in windspeed can correspond to large increases in power generation, for example increasing from 14 to 16 mph will causes a 50% increase in electrical output (WHOI 2023). Large turbines

generate much more energy than smaller turbines and there are fewer spatial limitations offshore than on. The offshore wind industry is growing as fossil fuel prices have risen and energy supply uncertainty has spread in the wake of the war in Ukraine (DOE 2023). Within this review I will discuss the local implications of offshore wind along the in the Gulf of Maine.

Building the Public and Government narrative

A goal of this study is to explore the relationship between the political party of public and the government's public facing narratives surrounding renewable energy policy standards. Due to the scope of this study period, there were no polls collected from the public to gauge opinion but within this literature review we can discuss public opinion to contextualize the choice of media analysis to represent public discourse in response to international, federal and state policy.

Guiding the decision for this study's media analysis, Dorrell and Lee, assessed the extent to which wind energy development as a function of political party, energy policy, natural resource potential, geographical characteristics, and socio-economic factors. Their empirical results did not indicate a significant relationship between political party in state legislature and the development of wind energy however the authors quantifiably established a positive and significant relationship between democratic control of the executive branch and democratic governors in office on the development of wind energy (Dorrell and Lee 2020). Although, with more time, the current study would have benefited from a holistic perspective that surveyed public respondents through

community consultation. Due to the subject areas distance from Halifax, Nova Scotia and the constrained timeline of this study I chose the media analysis methodology.

A study by Bush and Hoagland, on the *Cape Wind* Project conducted in person interviews in Cape Cod Massachusetts. They hypothesized, and concluded, that the most significant public driver of support would improve with the basic understanding of the scientific issues (2016). Their study discussed how public concerns that were ignored would likely build into opposition quickly and those interested in educated debate would move beyond aesthetic concerns to fully understand impacts on the climate, local economy, viewshed, and environment (Bush and Hoagland 2016). At the onset of the Offshore discussion in Maine Bell et al., concluded "the low success rate achieved in planning applications for wind power development… [is due to]… the social gap that is between the high public support for wind energy… and wind energy developers (2005) where the wind energy developer should work to educate the relevant public about their project.

For Maine, Dwyer and Bidwell (2017) agreed that opposition can be solved by creating informal settings where trust can be developed between the stakeholders and those facilitating public discussion. The authors define an equally critical component as identifying and providing benefits [to regional stakeholders] that are deemed fair and appropriate from a community perspective; this step is agreed to be essential throughout the greater literature explored (Klain et al., 2017; Smythe and McCann, 2018; Teils et al., 2015). The public narratives will be shaped by the availability of current and accurate information.

Maine's Not in My Back Yard Attitude

To gain a more rigorous understanding of the literature surrounding nimbyism and floating offshore wind, a Boolean search of Nova Net (n.d.) was conducted in October of 2023. In Scopus, there were 15 results for the search terms were *"offshore wind"* and *"renewable energy"* and "*Gulf of Maine*". While adjusting search terms to contain *"Public engagement*" or *"Public opinion"* there was abundant literature that addressed the political complexity of offshore wind coming to Maine (Sokoloski, R., Markowitz, E. M., Bidwell, D. 2017).

Understanding the need for a renewable energy in the State of Maine during the Anthropocene era requires an understanding of Maine's sense of identity defined by generations of regionalism that underpin environmental conservation and opposition to industrialization (Judd, R. 2023) (Zakasiewicz J., Williams, M., et al. 2008). Within this study, authors like Sokoloski et al, insist that the case of Maine is more complex than the 'not in my back yard' (NIMBY (ism)) sentiment, which is feigned to protect a region from a development without regard to rational but due to the disinterest of a development in the proximity of a home (Sokoloski et al. 2018). The literature pertaining to NIMBY in this region implies that the Maine case is far too complicated. Acheson found that not only are the attitudes of a single community highly differential but within those communities are contradictory, in some cases wanting renewable energy in the state but objecting to wind turbines near their homes (2012).

The literature shows the need to revise the typology of 'NIMBY' ('Not in my Backyard') within this study, as it is used extensively while discussing the opinions of offshore wind but should be further contextualized. Authors, including Bell at al., 2013, propose that the term 'nimby' requires nuanced understanding of engaged democratic participants, regardless of positionality. Moreover, a Mainer may be a place-protector (conservationist) or qualified supporter (fisherman) who has rational reasoning for their opposition. Others describe stakeholders in the public political field as opponents or that they are absorbed in a false consensus about the greater opinions of the population (Bell, D. et al. 2013) (Alego, B. 2023) (Bidwell, D. 2022). Thus, within the body recent literature NIMBY does not accurately describe the relevant stakeholders.

The more human focused studies by Sokoloski et al. outline the relationships between personal values, distance from the project, place attachment, fairness of process, incorrect estimation of others opinions, pluralistic ignorance, and false consensus each factor can influence the potential normative opinions of a group (what the majority of the population believes) from what others perceive the norm to be (what the individual believes others think) (Sokoloski et al 2018). The Maine Policy review sought to address the various attitudes at a smaller scope in the region of Mid-Coast Maine where, potentially because of the nascency of the industry, single community's attitudes and opinions about the floating offshore turbines are not only highly differential but simply contradictory (Acheson, 2012).

The Maine Wind Energy Act

The Maine Wind Energy Act (*MWEA*), hereby referred to as the 'Act', implemented in 2003, determines the public policy for the State of Maine's wind energy generation goals (ORS 2023). The Act works in tandem with the Renewable Portfolio Standards (RPS), policies that require electricity providers to source a set percentage from renewable energy sources such as wind, solar, and hydroelectric power. Maine's RPS have been instrumental to influence investment in renewable energy projects. The primary goals of the *MWEA* are two encourage wind energy related development, create wind energy generation goals, and assess wind energy development's impact on Maine fisheries (MPUC 2023). Since the Act's conception in 2003 there have been multiple amendments to reflect the changing capacity of energy generation, transmission, and storage (Maine Legislature 2023). In the scope of this study the *MWEA* has shaped policy that is building momentum for offshore wind, where by 2030, 40% of Maine's load must be satisfied by class renewable resources (PMUC 2023). The policies have an impact on the constituent citizens and this thesis explores the relationship between policy and public response. The nascency of this offshore industry involves both novel technology and uncharted political territory.

The nascency of industry does not imply the nascency of an idea. According to the authors Weber and Weber, Act's such as the *MWEA* are localized actualizations of the United Nation's Sustainable Development Goals (SDGs) wherein they combine environmental and developmental objectives that are the basis of Ecological Modernization Theory (EMT) (2020). Further, Webber and Webber describe how the advancement of environmental-and-development objectives within the act, which are

contingent on realization of economic growth objectives, sanction a logic of 'catch-up' that justifies further ecological degradation as necessary to realizing the progress of economic growth (2020). Turning back to Maine, at the *MWEA's* conception, Toke and Strachan offered a similar critique describing the ecological modernization 'greened variant' of modernization theory (2006). The authors highlighted that even among the environmentalists, there existed controversy of wind farms (Webber and Webber 2020) (Toke and Strachan 2006). The opposition to the offshore wind industry, and by extension the perception of the Maine Wind Energy Act as a global agenda exists and an unnecessary ecological threat persists through the available literature.

To contextualize this opposition discussed within this study and an example of resistance towards federal agendas is heighted from a study done by Alego in 2023. On March 29th, 2021, sitting US President Biden's announced offshore wind research and development funding through the National Offshore Wind Research and Development Consortium amassing a total investment of $47 million dollars for offshore support structure innovation, supply chain development, electrical systems innovation, and mitigation of use conflicts to reduce barriers for offshore wind deployment (The White House 2021). On Sunday, March 21, 2021, in response to the Federal interest in developing Maine's state waters "more than eighty fishing boats paraded out of their docks and into the Gulf of Maine, waving flags in protest. They formed a flotilla about a dozen miles off the coast and invited in local media to cover the event." (Algeo 2023). A month later, in response to the outcry, Governor Mills recognized the potential for deep water floating offshore wind within Legislative Document 1619, Maine's renewable, natural resource based commercial fishing industry directly contributed $517 million

dollars to the State economy in 2020 and is a vital part of Maine's heritage and identity (2021).

Fishing, specifically, the American Lobster represented $405 million dollars in landing revenue with an additional $1 billion impact across the state (Mills 2021). The lobster industry anchors Maine fishermen in their way of life and well-being (Howe 2023). The act would establish a moratorium on offshore wind power projects in the state of Maine's territorial waters which extend twelve miles off the coast to protect the lobster industry (2021). The bill, "will allow the State to undergo a review of applicable state laws and rules to determine whether the existing offshore wind power regulatory framework adequately protects Maine's coastal resources in a manner that avoids or minimizes adverse effects on coastal resources" (Mills 2021).

The scenario between fishermen and the quick response from Governor Mills underpins the relationship between policy and public response.

State Government Planning and Rational

Understanding the differentiation between state planning goals and state procurement mandates informs the positions and proposed actions of the state of Maine and contextualizes public response. Hagget, discussed that moving the wind generating capacity offshore, does not just remove the problem from the public eye but into the coastal and marine common pool resources (2010). Common-pool resources, as defined by Ostrom, are naturally or humanly created systems that generate a finite flow of benefits where costly to exclude beneficiaries and one person's consumption subtracts

from the amount of benefits available to others (1994). In the case of Maine, the coastal waters are the most valuable common pool resource, utilized by commercial fishermen, the transportation industry, the Department of Defense, and recreators who will seek to determine their own system of resource management (Ostrom 2000) (Hall and Lazarus 2015).

Considering the purpose of this study is to determine effectiveness of policy, the literature from Hagget et al, determined that planning goals are aspirational and not upheld by any legal action (2016). On the other hand, procurement mandates require state agencies to take legal action (Department of Energy 2023). Within this portion of the literature review it is important to address the body of grey literature that exists on this topic.

The body of literature produced by the US Department of Energy reports that Maine has only a single 12 megawatt planning target sponsored by the University of Maine and Diamond Offshore that is set for 2030 (2023). The planning target for the offshore wind projects are not subject to legally binding actions by the Maine government. The descriptive language within their planning documents is key to differentiating what projects are underway. In 2023, the Maine government developed their position on offshore wind through a comprehensive roadmap with 80 stake holders and a 24-person advisory committee that is underpinned by unanimously supportive language that addresses the economic, energy, and climate benefits for Maine (Maine Offshore Wind 2023). The State's public facing objectives unanimously support offshore wind, but the status of their exact deliverables is beyond the scope of this study.

Preceding the 2023 roadmap, in 2021 the state of Maine applied to the Burrow of Energy Management for a 9,700-acre research array on the US Outer Continental Shelf. The lease area is roughly 20 nautical miles off the Maine coast that would be capable of generating 144 megawatts of renewable wind energy (Burrow of Ocean Energy Management 2023). The planning goals within the roadmap are robust in their considerations however the State of Maine's application to BOEM is not immune to opposition from local stakeholders (Hall and Lazarus 2015). The Maine state government appears to have addressed the body of literature that incorporats public opinion of offshore wind projects to create deliverables that address the lessons learned (Hall and Lazarus 2015).

Within Marine Spatial Planning, the authors define this action of furthering their agenda as an assertion of power and labeling their rationalizations as Blue Growth. Blue growth is "a complex governmental project that opens up new governable spaces and rationalizes particular ways of governing" (Choi 2017, p.37). Zarcha and Gee describe how despite claims that it is a sustainable development paradigm, Blue Growth is increasingly grounded in the logics of capitalist growth with little or no attention given to the social inequalities that arise (Silver et al. 2015) (2019, p.207). Within the Blue Growth framework, the state of Maine appears to be asserting governance in terms of its capacity to create ocean and marine areas *for accumulation* and structures the marine governance around issues related to utility (the precedent for floating turbines), efficiency (the identified need for upgrades to transmission lines) and prosperity (the win-win scenario with GHG emissions and cheaper electricity for Maine) (Choi 2017). As Zarcha

and Gee conclude, the marine problem is reduced to enduring there is no spatial conflict amongst marine stake holders and that the most valuable sectors have access to the space they desire (2019, p.207). Throughout the literature on marine planning and rationality, there is a wide acceptance that this process may not be inherently logical, but championing of a neoliberal rationality that views space as merely a site of production.

Within the available literature we can identify how the Maine government recognized the voices of citizens, which may or may not easily translate into political support or opposition. Thus, the planning and efficient utilization of the marine commons will likely determine the policy and public financing.

Chapter 3: Methods

Study Rational

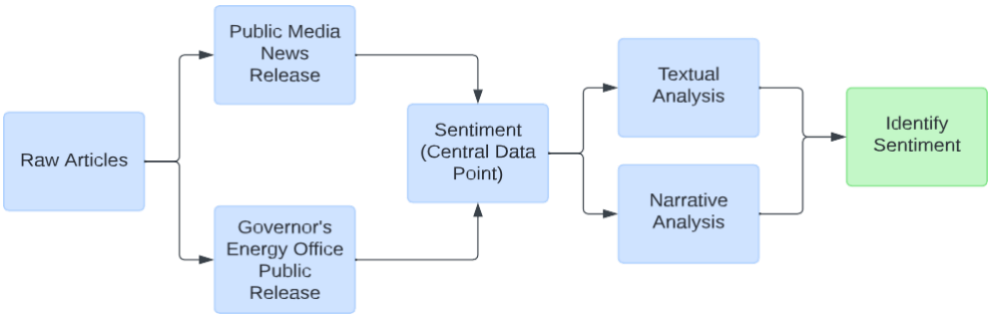
This study is informed by the post positivist paradigm, wherein the object of the study is independent of researchers; knowledge is discovered and verified through direct observations or measurements of phenomena (Krauus 2005). This post positivist research view, also called critical realism, is invaluable to this study as the perception of an individual's perspectives "extends beyond the self of consciousness, [too] which is not wholly discoverable or knowable." (Kraus 2005). The critical realist paradigm further supports this thesis by recognizing that perceptions have a certain plasticity and that there are differences between reality and people's perceptions of reality (Bisman 2002). The following methods are mixed, using both qualitative and quantitative frameworks, mixing the knowledge of the real world, by naming and describing the generative mechanism

that operate in the world and result in events that may be observed (Outhwaite 1983).

Research Design

The structured design of the systematic content analysis makes the methodological approach for post positivistic design that is used generally to produce qualitative and quantitative results that will inform this study while compressing a larger body of text into fewer content categories (Salehijam, 2018). Given the extent of this study period the type of media available has changed since 2003. For example, the inclusion of social media would dramatically change the quantity, quality, and frequency of media available to analyze. In order to create a focused data set that would change minimally over the 20 odd years I will choose only written media sources. Thus, excluding social media, video recordings, audio recordings, and television broadcasts.

Under this framework, as seen in **Path 1**, I will select two avenues to address my research goals: a textual analysis and a sentiment narrative analysis. The textual analysis



Path 1: Data hierarchy and coding process. Figure made with lucid software (Lucid

n.d.)

was chosen due to its suitability to address the first research goal; to analyze the extent of public engagement with offshore wind in Mid-Coast Maine. The narrative analysis was chosen to specifically address research goals two and three which will describe the dominant sentiment held by the two primary actors, the Maine public and the Maine government. The narrative analysis will analyze the discretionary language present in the MWEA and frame the language against a 20-year time frame to discuss the nascency and importance of the offshore wind industry. Assuming a clear answer within the analysis is identified, this work will lay the foundation for the fourth research objective which is to suggest recommendations based on the sentiments and proposed actions by the Maine State government and corresponding public media.

Textual Analysis

A further exploration into the permissive language on the ability for the law to achieve its goals can be enumerated using a systematic content analysis examining the legislation for discretionary language. To do so, the actions language within the *MWEA* were defined using an *a priori* codebook (**Table 1**) as either discretionary, legally obligatory, or ambiguous. This was intended to be a quantitative process, wherein the selected framework allowed for themes and sub themes to emerge that were defined deductively before the research was conducted (Orphanidou, M., & Kadianki, I. 2020). The chosen legislation is now over 20 years old and has been recently subject to revision. I chose to inductively code for intention to inform research goals two and three. To ensure that all areas of interest were covered throughout the coding process I chose to use a combination of inductive and deductive coding approaches.

Table 1: Discretionary language analysis codebook.

Code	Definition
Discretionary Language	Language that is optional or voluntary for the relevant actor.
Legally Obligatory Language	The actor is legally bound to complete the action.
Ambiguous Language	Language that is open to one or more interpretation thus does not bind an actor to take action within the legislation.

In order to develop consistency within the *a priori* codebook, direct actions were counted on the basis of clearly demarcated verbs as opposed to overarching position of a general section within the legislation. The goal for the coding process was to avoid researcher bias and not assume what a passage may be implying which would influence the manual coding.

Once the language was identified, the assigned actor and defined language was assigned within the Microsoft Excel workbook (**Appendix A)**. The language within the act was defined as legally discretionary, legally obligatory, or ambiguous language. These definitions were initially defined with the Oxford English Dictionary but updated constantly to reflect the ways dominant language changed over the 20 years of revisions,

articles, and public language (Oxford English Dictionary 2023). Not all language carries the same weight in legal text thus revisional components were created to accommodate the nuances of revisions and political party dominance. For the development of the codebook, detailed definitions, and explanation of the coding process see the (**Appendix A**).

Narrative Analysis

The second phase of this study considered publicly available news media and media releases from the Governor's Energy Office for the State of Maine. In order to contextualize the significance of offshore wind development and address the research goals the study period included the course of the Act as offshore wind was a consideration. Governmental releases would represent the Maine State Government's public facing opinion while public news media documents represent the general public's opinion at a given time. Systematically and manually coding the written articles to derive dominant themes in public and governmental narratives about offshore wind allowed for a more thorough examination of the Act's effectiveness in a broader social context.

Selecting articles for Governmental Narrative Analysis

To initially gauge the Maine State Government's public facing opinion on offshore wind development on the Coast of Maine, governmental news releases were utilized. The specific terms that were necessary to extract data that pertained to offshore wind development changed over the course of the 20-year study period. The terms "renewable energy", "wind energy", "wind", "offshore wind" and "offshore" were used to code sentences that

specifically pertained to perceptions or actions about offshore wind. Over the 20-year timeframe there were 704 completed reports documents from the that specifically address renewable energy and eventually offshore wind (Digital Maine 2023). A searched was conducted through the Governor's energy office instead of the Maine government's official website after the 2003 *MWEA* was released. Out of the 704 state documents found in the digital Maine repository only 23 directly pertained to offshore wind from the State of Maine's Governor's Energy Office. Of the 23 documents only ten were suitable to code due to their relevance to the topic. A goal of the study was to analyze a randomized and relatively proportioned body of work similar to the available public media. Due to a limited sample size I chose to analyze at least two documents from each defined political era.

Selecting Articles for Public Narrative Analysis

To explore the narratives from public media on offshore wind in Maine, articles were collected from Eureka, a news data base available through the Dalhousie University Library (Eureka, n.d.). The search string "Maine offshore wind" yielded 2238 results published between January 1st, 2003 (the year the act was first introduced) and January 25th, 2024 (the date the search was made for this study). I then excluded duplicate articles, chose articles that were only written in the United States, and chose those that explicitly included the search terms "Maine offshore wind' in their text body. This systematic manual vetting produced 102 results. Due to the methodological precedent set by Mines in 2023, I chose to systematically chose a sample size that would be as close to the governmental media as possible.

Political Era Map Coding

In order to develop a complete sample size that would reflect the entire body of written media produced by the Maine State Government and written public media sources a political era map was created to visualize the temporal context and emergence of the offshore wind energy in the Maine Coast. The map initially encompassed a time period from 1995 to 2024. Although the parties and stakeholders in question existed during the initial eight-year 'era' period, there was no evidence of offshore wind in the Maine Coast. To create a study period that would have a sample set that stayed consistent from the early 2000's to 2024 I selected only written works to be used within the 20-year timeframe. The political era map would then encompass only written media between

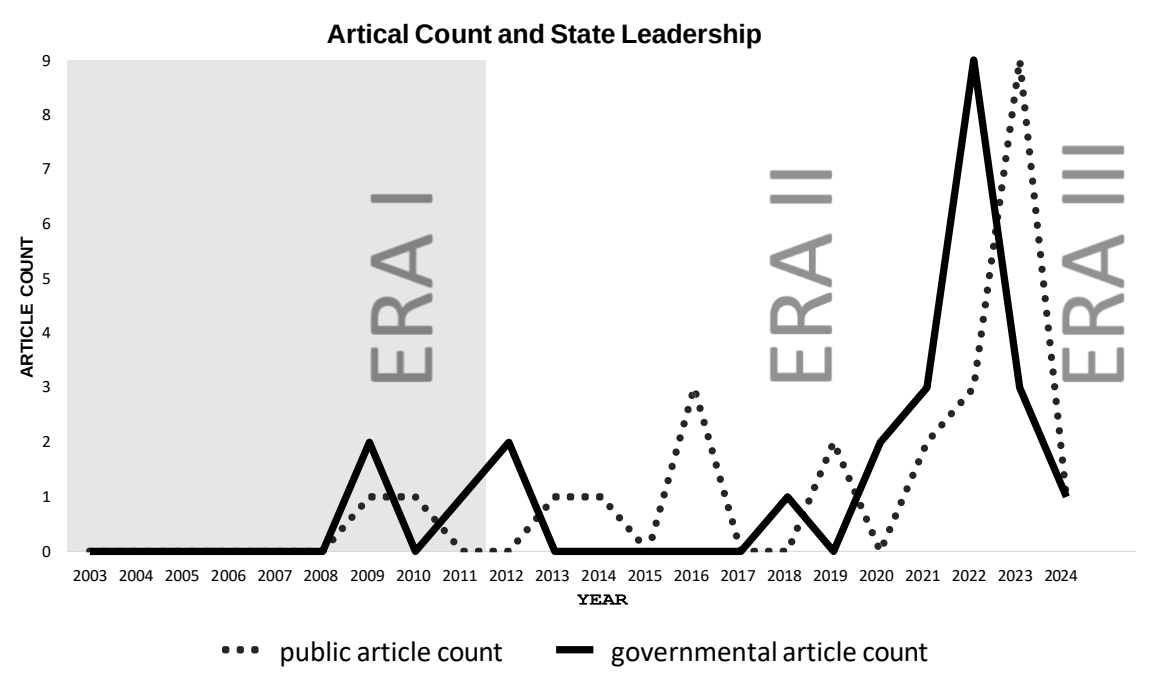


Figure 1: Articles assigned to Maine government and US public media narrative by article count and publication year.

2003 to 2024, allowing for a smaller temporal window and consistently available media types. The Political Eras are shown **Figure 1** below and further defined as follows.

I created the political eras to reflect the terms of sitting Maine state Governor's to ground the study to a local timeline. The First Era, from 2003 to 2011, was defined by the sitting term of Governor John Baldacci from the Democratic party. The Second Era, from 2011 to 2019, was defined by Governor Paul LePage, from the Republican party. The Third Era, from 2019 to 2024, is defined by the current sitting Governor Janet Mills, a registered Democrat (Maine 2023).

Because of the length of this study period, the ways in which we consume media and receive news has changed dramatically in both pace in quantity. For example, social media has experienced explosive growth (e.g., forum discussions, blogs, X (formally Twitter), comments), all of which have helped sway public sentiments and emotions, which have profoundly impacted social and political systems (Lui, 2012, pp. 1-8). Should this study choose to incorporate social media or recorded media, the quantity of available media on the *MWEA* and offshore wind, would be inaccurately skewed thus further amplifying the proportionally greater recent industry. If we included social media responses, data from the early political eras would not be as robust. The study period coincides with a dramatic change in the way news and information is shared, and so the comprehensive revision of all media platforms is far beyond the scope of this study. To maintain a manageable sample size this thesis will only cover written media and government documents that are publicly available.

With a complete Political Era map, 35 articles were selected for manual coding with NVivo and a preceding Microsoft form (**Appendix B**). The Microsoft form was

structured to input the year, author, positionality, and description of each individual article, report, or media piece and output a data point. These data points were used to randomly select articles for coding a remove researcher bias. The number of data points for the textual and sentiment analysis, after process in the Microsoft forms, came out to be 493 which is far greater than the 35 chosen for analysis.

Coding Selected Articles

I used the NVivo software to process the raw data articles I collected differentiating them first as either public media news releases or documents from the governor's energy office. Within the NVivo software I used the *a priori* codebook, seen below, to deductively record the sentiment of the text. The data points collected were based off the sentence's language towards offshore wind development. The language varied and was organized using **Table 2**. Based off the total data points collected within an article, the general data points were collected and logged to define sentiment later on.

Code	Definition
Positive	Frames the action positively. Indicator words could include words of affirmation, support, regard, or respect.
Negative	Frames the action negatively. Indicator words could include the term such as 'rejection', 'opposition', 'failure', or 'insufficient'.
Neutral	Frames the action without clear position. Neither for nor against and without specificity. The position is stated factually with little to no emotion.
Mixed	Frames the action in a transitive manner. Combining or associating two different perspectives, qualities, or positions. A caveat may exist.

Table 2: The *a-priori* Sentiment analysis codebook.

It is important to note that the language used to describe offshore wind changed over the course of the 20-year period. Where in the mid 2000's the term 'offshore wind' was not frequent but the terms 'renewable energy' and 'wind resources' were used with more frequency. The names of the Governor's changed over time as well, as the political party shifted as did the language around renewable energy resources. The process of data collection was relatively straightforward as seen in **Path 1** above. The sentiment analysis codes are presented in **Table 2** above.

Chapter 4: Results

This study was spread out over three political eras, the first from 2003 to 2011, the second from 2011 to 2019, and the third from 2019 to 2024. After analysis there were 5 documents from political era 1, 10 documents from political era 2, and 33 documents from political era 3 (**Appendix A**). The documents within the political eras were further defined as either governmental media or public media (**Appendix B).** The article counts were plotted over the 20-year temporal window of the Act as seen in Figure 1 above.

The textual analysis was performed on the Act, from which the raw data is available in **Appendix A**. In **Figure 2**, which encompasses both media types, Positive, then Neutral, attitudes reigned highest in Era 3. In Eras 2 and 1, Positive and Mixed narratives dominated over Negative and Neutral attitudes.

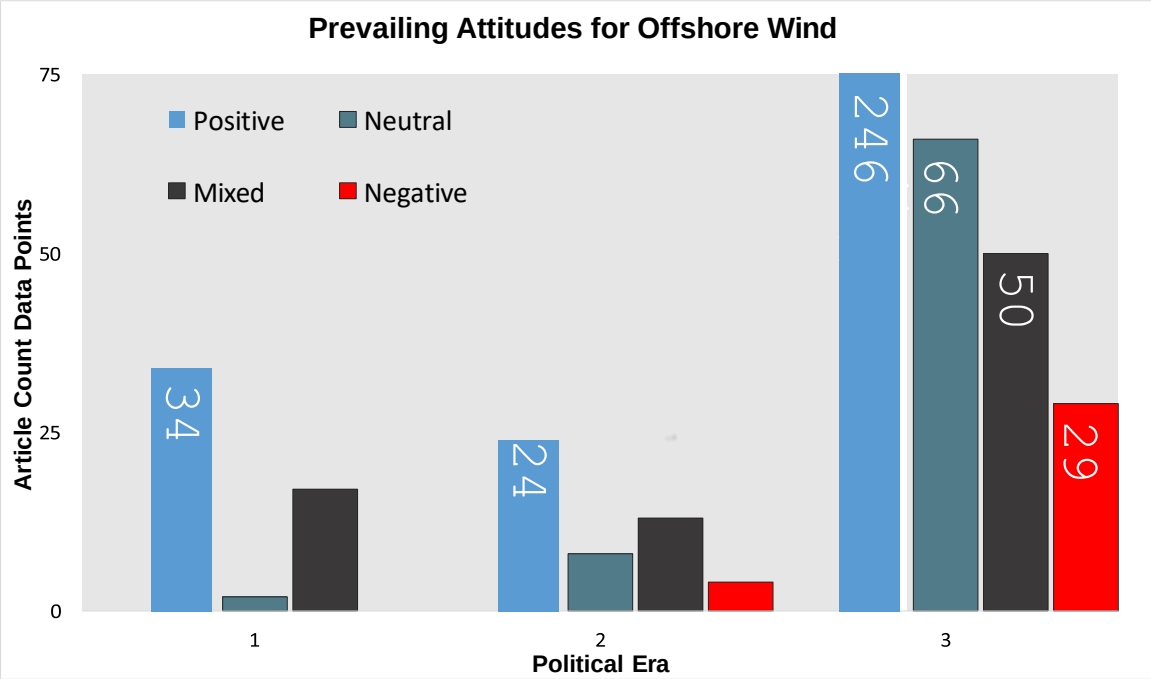


Figure 2: Prevailing attitudes described through text analysis of article data collected over the 20-year study period.

Within the *MWEA* there were 94 instances of legally permissive language (n=94) of those 18 were ambiguous (n=18), 29 were discretionary (n=29), and 47 were obligatory (n=47). Then a narrative analysis of the government news media (n = 10) and public changing in response to the Act. It is important to note that within the era's the data was significantly skewed due to the nascency of the language there were more data points in the recent eras. In era 3 there were 391 data points, in Era 2 there were 49 data points, and in Era 3 there were 53 data points **(Figure 2).**

Results of the MWEA Textual Analysis

Within the Maine Wind Energy Act, 50% of the language was legally obligatory (n=49.8%) as seen in figure 3. Of the action items described using mandatory language, "shall" (n=22) and "may not" (n = 10) were the most frequently used. The most frequently used discretionary term was "may" (n=34). Additional terms to encompass ambiguous language were "encourage" (n=2) and "support" (n=13), both were consistently employed throughout the act in addition other non-committing, yet positive, language. The calculated 50% of obligatory language is half of the sum of percent coverage within the MWEA in figure 3 below.

The text analysis also highlighted the significant actors mentioned repeatedly throughout the act and additional media documents. The most frequently referenced actor

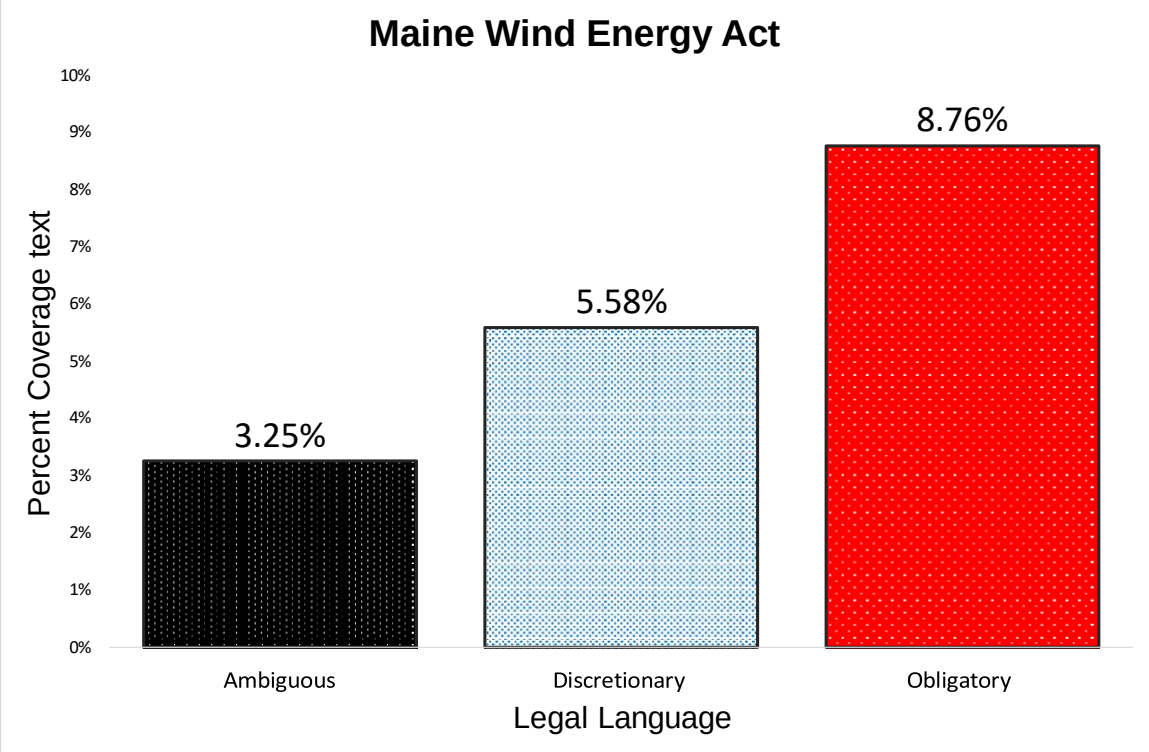


Figure 3: Percent coverage of legal language within the Maine Wind Energy Act. Percent coverage is used to gauge a dominant trend of the law.

was the “Maine Leadership” which included Maine’s Senator, Governor, and state representatives, they were referenced 20 times. The Maine Leaders were responsible for 37% of the direct actions within the Act, this was the largest proportion of actors.

Results of the Narrative Analysis

The total sample count of articles for the public media and governmental media narrative analysis was (n=35). Of the 35 articles there were a total of 493 actions recorded within the study period. Of the language recorded within both media types, and as seen **Table 3**, 61.6% was positive (n=304). Next, 16.2% was negative (n=80). Then, 14.4% was neutral (n=76). Finally, only 6.7% were negative (n=33).

In order to show the breath of data collected in **Table 3**, a special consideration was taken to express the results of the narrative analysis from the perspectives of the public media and governmental media separately. In Figure 4, the Narrative attitudes within Government, the highest response of positive attitudes (n = 176) was in Era three which also contains the highest amount of mixed (n = 49) and negative (n = 50)

Table 3: Total narratives across political eras.

	Narrative			
	Positive	**Neutral**	**Mixed**	**Negative**
Era 1	34	2	17	0
Era 2	24	8	13	4
Era 3	246	66	50	29
Sentiment pt. Total	304	76	80	33

responses. To visualize the relationships between the narratives the results were shown in percentage, as seen in **Table 4 (Appendix A)**, where the Era 3 attitudes were 84% positive and 90% neutral.

In **Figure 6** below, the narrative attitudes within the public media, the highest number of responses was also in era 3. The highest percentage values were at 80%

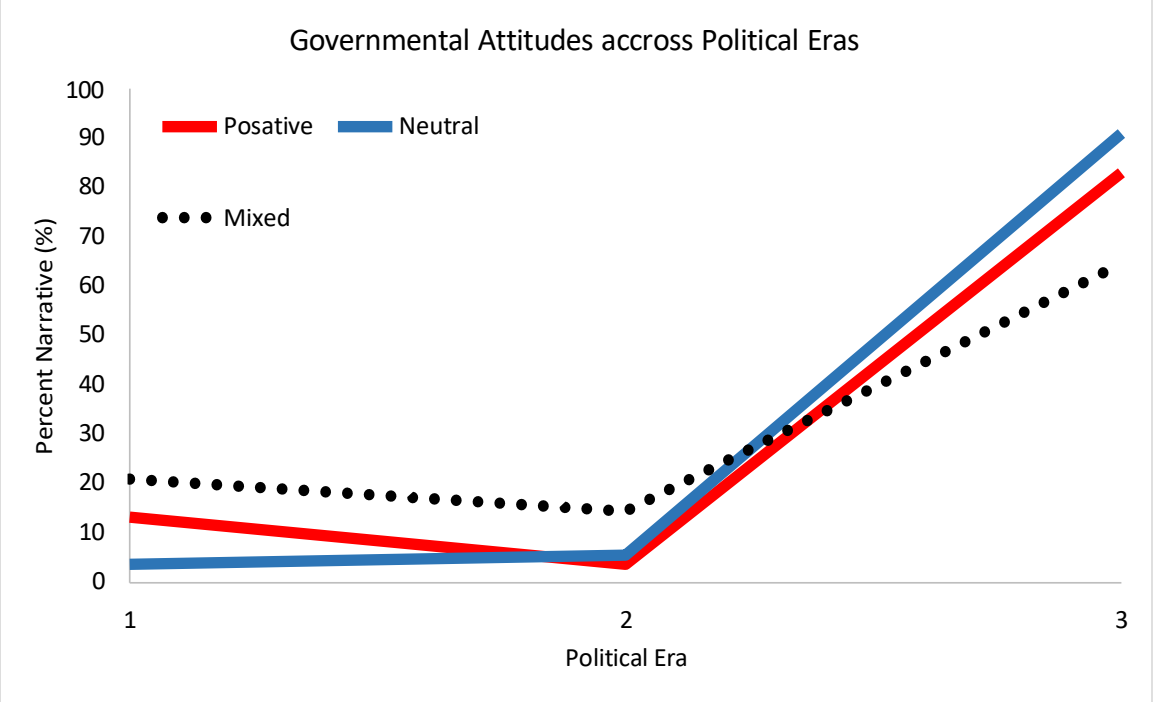


Figure 4: Attitudes within Government over the course of the study period. Positive, Negative, Neutral, and Mixed results are shown.

negative in Era 2, 94 % neutral in Era 3, and 74 % positive in Era 3. It is important to note the significant drop off of mixed narratives with the increase in neutral and positive media types. Also, and perhaps most significantly, the negative narratives peaked in the second political era while disappearing completely from public media in the third era. Isolating the public media, we see the highest proportion of neutral narratives due to the

sheer amount of public facing science communication and broadcasting of political language on public media platforms.

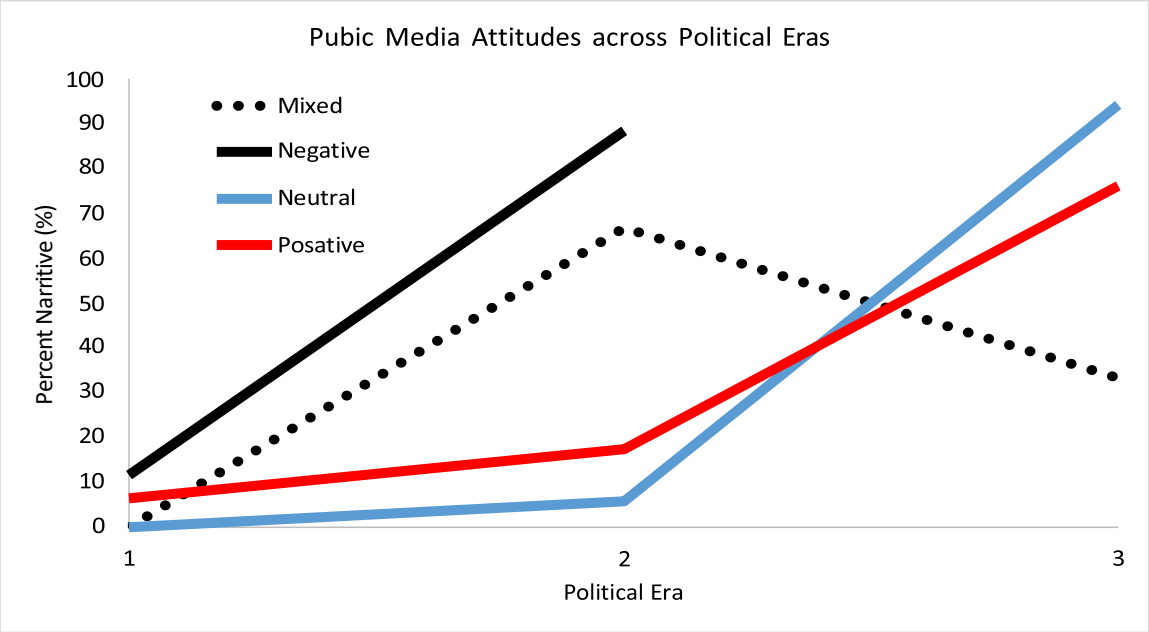


Figure 6: Attitudes within Public Media through the study period. Positive, Negative, Neutral, and Mixed results are shown.

The public attitudes towards offshore wind were overwhelmed, in terms of percentage, by the quantity of government language that was found with media documents. In this case, percentage shows the presence of trends but the individual nuance of data points is lost by this measure.

Chapter 5: Discussion

Overall, the results of this research contextualize the Maine Wind Energy Act in a broad social context and provide valuable insight into the Act's development. The first research objective is to assess the extent of discretionary language within the Act and determine its effectiveness in actualizing the offshore wind industry. The results show that most of the legal language was obligatory for the relevant actors. That being said, the extent of obligatory language was increased and amended in the most recent political Era in a State Government led by democratic, liberal Governor Janet Mills. Therefore, I conclude that the efficacy of the Act is a determinant of the ability of state leadership to prioritize the Act's relevance to emerging offshore wind industries.

Particularly beneficial here are the results from the second and third research objectives, which were scoped within the lifetime of the *MWEA,* aimed at determining the dominant narratives from the Maine public and state government towards offshore wind. What my findings also make clear is the extent to which public and governmental response can affect the Act and relevant legislation surrounding successful offshore wind development. These findings inform the fourth and final research objective in this study – to identify the catalysts that drive Maine's floating offshore wind industry.

Implications of discretionary language

Firstly, the discretionary language within the Maine Wind Energy Act has influence over how the offshore wind industry is able to measure its success, take determinant legal action, and, importantly, designate responsible actors and the degree to

which they are legally obliged to comply. In terms of the percentage of legally binding language, the majority of the legal language within the *MWEA* was legally obligatory. Meaning that most of the language within the Act holds the relevant actors accountable for accomplishing and upholding the Act's priorities. For example, in 2021, in response to the lobster fisherman protest, section 3405 reads, the State may not license, permit or otherwise approve or authorize the siting, construction or operation of …a windmill or wind turbine … for an offshore wind power project in state-owned submerged lands or territorial waters (Office of the Revisor of Statutes, 2021). Similarly, the Act states that an offshore wind terminal project must minimize the adverse effect on scenic character … to the maximum extent… (Office of the Revisor of Statutes, 2023). So, while the Act contained ambiguous and discretionary avenues to avoid accountability, the majority of the Act is legally obligatory for State leadership.

The real-world impact of the Act, that is, how these changes to discretionary language are determinant in the effectiveness of the Act, was made clear in the case of Fishing Against the Wind (2023), where more than eighty fishing vessels… formed a flotilla about a dozen miles off the coast and invited local media to cover the event, and in response Governor Janet Mills passed legislation prohibiting new offshore wind projects in the State waters (Office of Janet Mills 2021). Prohibiting any future developments within the State waters was legally binding and a clear move in support of the fisheries.

The legal language within the MWEA served as an effective tool for tracking the political compromise between the opponents and proponents of offshore wind, edits were made over

time to adapt to public opinion on offshore wind.

Creating a legally definitive law against development in state waters protected the rights of the fishermen and placed wild development under the jurisdiction of the federal government. For the benefit of the fishermen, Acheson (2012) highlighted the case of the public trust doctrine, where public trust lands, waters and living resources in a State are held by the State in trust for the benefit of all of the people… (Slade et al. 1997: 1), the fishermen, having fished the waters for generations have some legal claim to the ocean waters. At the same time, the addition of legally binding language and relevant actors within the Act has avoided a "hodgepodge of legislation and jurisdiction" along with bureaucratic competition and conflict Firestone et al. (2005). The Act, while underutilized through two State Governor's offices, effectively supported the offshore wind industry.

Contextualizing the media coverage

Unpacking the results from the narrative analysis draws a clear relationship between the support from a Maine State Governor and the quantity and quality of public media responses. The relationship between government news media and public news media was connected. The Governor's Energy Office announced progress, for instance, "The Offshore Wind Roadmap; A federally funded effort to balance the state's energy and climate goals with the protection of fisheries and Coastal Environments," in Era 3, eighteen such primary government documents were publicized. In the same Era, fifteen coded public media sources, like the Portland Press Herald, would, in turn, broadcast the voices of those for and opposed.

The results show that there was a relationship between the political party of the Governor in office and the quantity of media published by both the government and the public media. Thus, this research describes that there is a relationship between the Governor in office and the momentum of the offshore wind industry. To further describe this relationship, as the government actions would be released the public media would lag by months or years.

In Era 1, Maine state Governor John Baldacci held a democratic office and signed the Ocean Energy Act (OEA) into law in 2010. In response to the 2008 Great Recession, when crude oil prices rose to 147 dollars per barrel, the state of Maine's Governor's energy office sought energy independence from foreign fossil fuels (Ferland, 2020). The increase in positive and mixed narratives from public and government media reflects Baldacci's actions and opens the door for Maine's coasts to have a future in energy generation. The Act simplified submerged land leasing requirements and paired well with the Maine Wind Energy Act (Dorrell & Lee, 2020).

In Era 2, in 2011, with the election of Republican governor Paul LePage, renewable energy priorities began to disappear from the state agenda. Within the second Era the results display an emergence of negative narratives towards offshore wind, renewable energy, and an overarching disregard of climate change as fact. The drop in public and governmental media coverage, along with a peak in negative narratives towards offshore wind enforce Dorrell & Lee's clear connection that, by way of

Renewable Portfolio Standards, the Governor has the most direct effect on the outcome of any renewable energy progress (2020).

In Era 3, has been shaped by Governor Janet Mill's aggressive expansion of renewable energy policy and laws. Mill's measures are guided by a global energy market evolution, reshaping how electricity is generated and consumed (Ferland, 2020). The drivers for Maine's energy market changes began as renewable energy functioning as a tool for energy independence yet has evolved into a solution to reduce environmental risks of energy production and eliminating greenhouse gas emissions. Recent bills have redetermined renewable portfolio standards, increased electrification, and energy storage system improvements favoring an electrical Maine (Ferland, 2020). The result of the systematic content analysis shows the convergence of energy reliant legislature and renewable portfolio standards have catalyzed offshore wind energy development.

Recommendations

In the context of this study, I recommend that the Maine Wind Energy Act to remove the discretionary language to increase the lifetime of enforceable regulations. This echoes Alego's 2023 recommendations for the Burrow of Ocean Energy Management (BOEM) to reduce its discretionary ability to determine the 'reasonable use' of marine resources (Alego, 2023). Moreover, the Act must consider how the objectives of the wind development involve the weighing of the Fishing or navigational use of the proposed lease area. At a federal level, BOEM determines if there is a reasonable use for Fishing or navigation in the area. Thus, the *MWEA* has the federal precedent to reduce the

discretionary nature of ‘determined reasonable use’ to prevent interference with Fishing or navigation (Alego, 2023). Commercial fishermen may be able to delay or altogether prevent a project from moving forward, as they have a legal precedent to do so; thus, implementing this recommendation has the likelihood of minimizing conflict and improving collaboration (Acheson, 2012). Understanding the ramifications of legal language within federal and State-produced media is therefore essential.

This is because the public – especially in prospective developments like offshore wind in the Gulf of Maine – has a limited opportunity to interpret and then advocate on behalf of their potential losses. I recommend further that the Maine State leadership take every step necessary to prioritize the inclusion of potential oppositional stakeholders like those from the commercial lobster harvesting fishery. This recommendation is based on unanimous conclusions and recommendations from past studies (Bush & Hoagland, 2016) (Teisl M. et al., 2015) (Haggett & van Veelan, 2017). The affected commercial fishermen alone may be able to delay or altogether prevent a project from moving forward through a lawsuit (Alego, 2023).

Given the relative invisibility of offshore wind development from the public eye, the media is best poised to broadcast support or opposition from stakeholders to each level of government. Thus, I recommend that media coverage from both publication types augment their coverage of the other, sharing the other's positions when creating determinant narratives. This is reiterated by Sokoloski et al.; both media release and policy development participation from local partners with state leaders will reduce

misinterpretation of potential or actual impacts (Bush & Hoagland, 2016) (Sokoloski et al., 2018). This study has shown that with increased political support, the media has the pertinent function of advocating for the proponents and opponents of the offshore wind industry. Broadcasting the positions of the public and the shortcomings of the state leaders creates an honest and transparent tool for political advocacy. The public, to whom the government is responsible, can be accurately informed as to how the boundaries for offshore wind and future developments are executed.

Limitations and Opportunities

Systematic content analysis, especially with a body of literature like media, compresses an analysis through the coding of large volumes of data to derive meaning (Salehijam, 2018). Thus, my study attempted to take a post positivist paradigm. That is, separating myself, the researcher, from the world I study. This search for knowledge attempted to use the direct measurement and observation of data to derive meaning about the assumed world I described. This paradigm I created guided my initial research questions (Krauss, 2005). In this way, comparing the sentiments of the public and government through media analysis to assume an overarching public narrative might be beneficial to guide the next Era of policy and legal framework. Given this post-positivist reality, the results of this study might have been strengthened by the use of direct respondents, which collects responses directly from the subject population (Sokoloski et al., 2018). Having direct data points from respondents might strengthen the truth of the public media as a tool to represent public opinion. This would have been especially useful in the context of the narrative coding, where direct responses might have enforced or

corrected any researcher biases that emerged while I applied *a priori,* and *a posteriori.* codes. This addition was outside the scope of this study period.

Similarly, this study withheld any consideration of Indigenous knowledge systems or ontologies. The more accurate representation of public perception would have made an effort to pair indigenous knowledge data with socioeconomic and non-indigenous stakeholders (i.e. commercial fishing) (Aporta et al., 2020). This study touched on the importance of cultural value through the conservation of Maine's natural resources yet should have included any discrete information about the cultural resources of the Maine coast to the Wabanakis (Aporta et al., 2020) (Judd, 2023). Assigning Indigenous cultural values and timelines to the study period would have further contextualized the industrialization of the Gulf of Maine and the relationships, or lack thereof, between my described political eras and the timeline of the local Indigenous tribes.

Finally, this thesis could have been more extensive in its use of written media to derive conclusions about sentiment and narrative, excluding other types such as video, audio records, and social media. As mentioned in my methods other media platforms would were simply beyond the scope of this thesis. Yet, including social media and other non-written platforms would have provided an interesting nuance that would build upon this study. However, during the process of systematic content analysis and media analysis, excluding non-written media types simplified the large body of media and strengthened this study's findings (Salehijam, 2018).

Chapter 6: Conclusion

This study was the first known systematic content analysis of the Maine Wind Energy Act and presents original implications for the offshore wind energy industry in the Gulf of Maine. Addressing the first research objective, to assess the extent of discretionary language within Wind Energy Act and determine the Act's relationship within the offshore wind industry, this study found the majority of the Act's language is legally obligatory (n=50%). Thus, mandating that it is within the public interest to encourage the procurement, research, and development of offshore wind energy production. The second and third research objectives of this study aimed to analyze the federal government and public media's written narratives towards offshore wind development with respect to the *MWEA*.

This research found, when a democratic Governor held office, the dominant governmental and public written narratives towards offshore wind in the Gulf of Maine were positive. Moreso, to address the fourth and final research objective, the role of Governor was the most effective in enabling or disabling any media coverage surrounding renewable energy, let alone the offshore wind agenda. These four research objectives helped shape recommendations for the offshore wind industry and future studies.

These findings aside, the other half of the language within the *MWEA* is either ambiguous or legally discretionary holding no standing for legal accountability within the court of law. Looking back, the polar nature of political agendas in the United States has

a dramatic effect, as seen, on halting or enabling the effectiveness of the *MWEA.* Effective media coverage is essential for public stakeholders to bear witness to the state's progress, or lack-there-of, towards high level global goals (e.g. the UN Sustainable Development Goals). This study's analysis of public and government media is the best tool for understanding how and when Maine is to reach its climate action goals by 2030 (Maine Won't Wait, 2020).

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Appendix A

Table 4: Governmental Attitudes across political eras with respective percent total data points.

Governmental Attitudes		Percentage (%)
Positive	ERA 1	13.2075472
Positive	ERA 2	3.77358491
Positive	ERA 3	83.0188679
Neutral	ERA 1	3.63636364
Neutral	ERA 2	5.45454545
Neutral	ERA 3	90.9090909
Mixed	ERA 1	21.0526316
Mixed	ERA 2	14.4736842
Mixed	ERA 3	64.4736842

Appendix A

Table 5: Narratives within coded files on Nvivo software. Data cleaned for graphic use.

File name	Attitude	Political Era	Number of coding references	SUM
14 OEIS-Comp-Energy-Plan	Posative	1	22	34
20 CHP_Report_Appendices_Only	Posative	1	6	
First Era~ 2003-2011	Posative	1	6	
14 OEIS-Comp-Energy-Plan	Neutral	1	2	2
14 OEIS-Comp-Energy-Plan	Mixed	1	9	17
20 CHP_Report_Appendices_Only	Mixed	1	7	
First Era~ 2003-2011	Mixed	1	1	
Second Era~ 2011-2019	Posative	2	16	24
2 FINAL-Wind-Tangilble-Benefits-and-Noise-Regulation-Report-4-11	Posative	2	7	
23 Maine-Wind-Commission-Report_final	Posative	2	1	
23 Maine-Wind-Commission-Report_final	Negative	2	3	4
Second Era~ 2011-2019	Negative	2	1	
Second Era~ 2011-2019	Neutral	2	5	8
2 FINAL-Wind-Tangilble-Benefits-and-Noise-Regulation-Report-4-11	Neutral	2	3	
23 Maine-Wind-Commission-Report_final	Mixed	2	6	13
2 FINAL-Wind-Tangilble-Benefits-and-Noise-Regulation-Report-4-11	Mixed	2	5	
Second Era~ 2011-2019	Mixed	2	2	
3 Maine_Offshore_Wind_Roadmap_February_2023	Posative	3	72	246
Third Era~ 2019-2024	Posative	3	69	
15 Maine OSW DNV Task				

Appendix A

Table 6: Depicting the attitudes of public media in percent over the course of the study period.

Public Media Attitudes			
Political Era	Attitude	%	
Era 1	Mixed		0
Era 2	Mixed		66.66666667
Era 3	Mixed		33.33333333
Era 2	Negative		11.53846154
Era 3	Negative		88.46153846
Era 1	Neutral		0
Era 2	Neutral		5.882352941
Era 3	Neutral		94.11764706
Era 1	Positive		6.52173913
Era 2	Positive		17.39130435
Era 3	Positive		76.08695652

Appendix B

HONS: Gov and Media OffShoreWind Analysis

Form to triage and define government documents and media.

1. Document identification where data point (action) appears.

2. Title of document where data point, narrative indicator, appears.

3. Year of publication of document in which data point (action) appears.

4. Document type of data point (action)

Q Government News Release

Q Popular news media - News Article

Q Popular news media - organizational report

5. Data point (sentence with action verb)

6. Action Type

Q Moratorium

Q Protest

Q Community meeting

0 Public consultation

Q Research and development

Q Legislation

7. Which stakeholder does the document address?

_____

8. Who is the actor who performed the action?

- Q Academic
- Q Non-Governmental Organization
- Q Governmental Organization
- Q Industrial Business/ Consultancy

9. **If** a governmental actor, which actor

- Q Governors Energy Office
- Q State Representative
- Q Senator
- Q Other government entity

10. If there is an associated reaction, which actor is it coming from?

- ◯ Non-Governmental
- ◯ Governmental
- ◯ Industrial
- ◯ Community Organization
- ◯ Indigenous Organization
- ◯ Media Group

11. If the document was prepared by an external group, what group?

Enter your answer