

Discourses of Climate Delay in the Campaign Against Offshore Wind: A Case Study from Rhode Island

Brown Climate and Development Lab Institute at Brown for Environment and Society







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About the Climate and Development Lab: Brown University's Climate and Development Lab (CDL) is a student-faculty think tank based at the Institute at Brown for Environment and Society, and was founded in 2010 as an experiment in engaged learning and scholarship. The CDL seeks to produce timely, accessible, and impactful research that informs more just and effective climate change policies. We work with leading actors in government, civil society, and the media around the world in the attempt to bring about change by identifying and filling important research gaps and generating ideas for action on climate change. The CDL fosters transformational learning experiences by equipping Brown students with the tools to effectively shape policy and explore the intersections between climate change, public policy, and global governance.

About Climate Jobs RI: Climate Jobs Rhode Island is a broad and growing coalition of labor, environmental, and community partners committed to a just transition towards an equitable, pro-worker, pro-climate green economy. The members of Climate Jobs Rhode Island agree to join forces to work toward a Just Transition to a Green Economy in Rhode Island. We commit to work together to make Rhode Island a national leader in the development of a 21st Century economy grounded in the principles of economic, environmental, racial, and social justice.

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Disclaimer: This report represents an initial phase of research about climate misinformation networks and off-shore wind opposition, led by a team of undergraduate students in Brown's Climate and Development Lab. The statements, views, opinions, and information contained in the report are personal to the authors and the students, and do not necessarily reflect those of Brown University. The report views renewable energy as a crucial element of mitigating the severity of climate change on natural and human ecosystems. The authors recognize that renewable energy development requires local engagement, as communities and economies take part in a just transition; this work reflects the concerns about how the evidence is being characterized. Feedback, questions, and recommendations for how to productively advance this conversation are welcomed.

Executive Summary

Climate change threatens our oceans, coastlines, and vulnerable communities here in New England and across the world. In Rhode Island over the next several decades, flooding will become more common and rainstorms will increase in intensity. Temperatures will rise, putting children, the elderly, laborers and disabled people at risk of heat-related illness and death. Coastal towns and neighborhoods will be subject to rising sea levels, which threaten homes, businesses, and schools. To mitigate the effects of climate change, especially those that impact our neighbors, Rhode Island needs to rapidly transition to renewable energy and eliminate its dependency on fossil fuels. Offshore wind turbines have been proven to be the most viable renewable technology to meet our state's energy demands, but anti-offshore wind groups are seeking to block their siting.

In this briefing, we examine Green Oceans, an anti-offshore wind group in Little Compton, Rhode Island, to highlight how community groups may borrow arguments from national climate disinformation organizations and use them in local anti-offshore wind campaigns. Fossil fuel funded think tanks, such as the Texas Public Policy Foundation (TPPF) and the Caesar Rodney Institute (CRI), are some of the major groups creating anti-wind rhetoric, which often disguises itself as pro-environmental. As we will demonstrate, many of the arguments that Green Oceans advances echo TPPF and CRI's anti-wind campaigns and similarly rely on the strategies of climate delay and misinformation. To combat misinformation and advance the renewable energy transition, it is imperative to understand the coordinated networks of obstruction that seek to block climate action and maintain fossil fuels as a dominant energy (and profit) source.

To assess Green Oceans' publications, we draw from two academic frameworks that outline the communications strategies used in climate misinformation campaigns. Our goal for this report is twofold: first, to combat the spread of climate misinformation in Rhode Island, and second, to demonstrate how Green Oceans' claims replicate those advanced by anti-renewable organizations with ties to fossil fuel interests. Through this report, we hope to provide community members, journalists, and advocates here and elsewhere with the tools to identify climate misinformation and prevent the obstruction of necessary climate action.

This report is organized into four sections. The Introduction communicates the scientific realities of climate change and emphasizes the urgent need to transition to locally-produced energy from renewable sources. The second section provides an overview of the two peer-reviewed frameworks we use to analyze Green Oceans' discourses and rhetoric: "Discourses of Climate Delay" (Lamb et al. 2020) and "FLICC" (Cook 2020) [See page 5 for definitions]. The third section highlights the main categories of arguments used by Green Oceans, citing examples from their materials, and demonstrates how these align with the strategies employed by climate obstructionists. In the final section, we contextualize Green Oceans' arguments within larger national misinformation campaigns against offshore wind.

We find that Green Oceans' arguments fall within the climate delay categories *Emphasize the Downsides*, *Redirect Responsibility*, and *Push Non-Transformative Solutions* outlined by Lamb et al. (2020). Drawing from Cook (2020), we identify repeated *Cherry-Picking* of data from articles that do not corroborate Green Oceans' claims and observe a significant reliance on *Fake Experts*, spokespeople that convey the impression of expertise on a topic while possessing little to no relevant expertise. We also find that Green Oceans' frequently incorporates *Logical Fallacies* and *Conspiracy Theories* in their arguments.

- Over the next decade, we must rapidly transition from fossil fuels to renewable energy, to avoid the worst impacts of climate change. Offshore wind has stood out as the most viable renewable technology to meet Rhode Island's energy needs.
- We examine arguments of a new anti-offshore wind group named Green Oceans, using two peer-reviewed frameworks that outline common climate misinformation discourses and tactics.
- We find that the arguments made by local anti-offshore wind groups' reflect those advanced in national climate misinformation campaigns.
- This report aims to combat the spread of climate misinformation in Rhode Island and more broadly in response to renewable energy projects.

Introduction

Climate change is happening more quickly than most scientists predicted.

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On March 20, 2023, the Intergovernmental Panel on Climate Change (IPCC) announced that global average temperatures are expected to reach 1.5 degrees Celsius warming above pre-industrial levels by the 2030s (IPCC 2023). Climate change has already had devastating impacts on natural and human systems, disproportionately impacting the populations who are least responsible. Ecosystems will continue to experience increasingly severe threats due to climate change (Plumer 2023). With 1.5 degrees Celsius of global warming, more than 350 million people worldwide are expected to be exposed to severe drought and food insecurity. With 2.0 degrees Celsius of warming, summers without sea ice become 10 times more likely than in a world just a half-degree colder (Madge 2022). Two times more people will be exposed to heat waves at least every five years and two times more plants will see their habitat range cut in half (IPCC 2018).

But it's not too late to mitigate these destabilizing effects. Industrialized nations must act now. To protect vulnerable communities in the United States and around the world from the worst impacts of climate change, we must eliminate our dependency on fossil fuels. Maintaining the status quo is not an option. It is imperative that we make the switch to renewable energy technologies to prevent further harm to ecosystems and social systems both local and global.

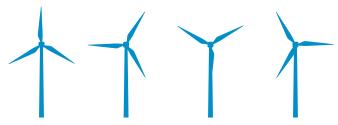
To address emissions reductions regionally, studies have shown that New England needs to electrify building, heating, and transportation systems (Murphy et al. 2020; Veysey et al. 2019). The region is connected through a singular electrical grid, and our best resource, close to our population centers, is offshore wind. Technical studies have shown that we could meet much of the increased need for electricity by decarbonizing our economy with a combination of sources, but offshore wind is needed to meet the steeply increasing electricity demand (Veysey et al. 2019). In particular, the continental shelf off of Rhode Island has significant wind

resources which could reduce wholesale prices of electricity in New England (Akdemir et al. 2022).

Transitioning to locally-produced energy from wind and solar is also a major opportunity to create good, family-sustaining jobs and a more resilient power system. These local renewables will eliminate the health impacts of burning oil, gas and coal, such as asthma and cardiovascular diseases (Buonocore et al. 2016; Vohra et al. 2021). For Rhode Island, the benefits are also economic: we spend over three billion dollars each year on fossil fuels, all of which we have to import from outside the state (U.S. EIA 2020 "Table E15"; U.S. EIA "Table E9"; U.S. EIA "Table E2"; U.S. EIA 2022 "Rhode Island State Energy Profile").

Though the Block Island Wind turbines began operating eight years ago, developing offshore wind in the U.S. has been slow (Schlossberg 2016). Studies, hearings, stakeholder input, and permitting for the larger-scale installations have taken years, but global temperatures continue to rise as global emissions have increased. Several states in New England now have binding targets for steep emissions reductions, and are counting on these major offshore installations to meet their 2030 climate goals.

In December 2022, a nascent organization named Green Oceans, based in the coastal town of Little Compton, Rhode Island arrived onto this critical scene. The organization quickly published a series of pieces condemning offshore wind in The Sakonnet Times, in addition to a PowerPoint, one-pager, and a white paper. Green Oceans' materials include a large number of general arguments against the installation of offshore wind turbines, specifically targeting the proposed Revolution Wind project off the coast of Rhode Island. In Green Oceans' white paper alone, we identified nearly four dozen arguments against offshore wind. This reflects the practice of the "Gish Gallop," a strategy where "a person uses as many arguments as possible against their opponent, without any consideration into the strength of the arguments," (Elsher n.d).





BLOCK ISLAND WIND FARM MAY HAVE KILLED YOUNG HUMPBACK WHALE

Green Oceans Wind Presentation, Slide 28



Save the Right Whales Coalition, via @SaveNARW / Twitter

While Green Oceans is a local group and their concerns should inform improvements in the planning of offshore wind, the organization's arguments are riddled with misinformation and mirror those produced by wind opposition campaigns along the East Coast and by national organizations, some of whom are directly funded by the fossil fuel industry. The negative impacts presented are sensationalized and unsupported by scientific consensus. Green Oceans' arguments repeatedly overemphasize the granular effects of wind turbines while completely obscuring and failing to contextualize the impacts of climate change and continued fossil fuel combustion on human and ecological systems.

Refuting each point made by Green Oceans and like-minded organizations will be the work of scientific experts and dedicated observers, but it is important to identify and examine the sources of anti-wind strategies taking place in Rhode Island. As the Climate and Development Lab – a small student-faculty think tank at Brown University – is focused on organizations ob-

structing action on climate change, a group of us were interested in Green Oceans as a real-time case study of the communication strategies of anti-offshore wind groups, and how the group connects to larger networks of climate obstruction. Our hope is to provide a useful perspective from the social sciences and to document this example to inform relevant literature on coordinated climate obstruction.

This brief represents one case study in a broader collaborative effort between Brown University's Climate and Development Lab and Climate Jobs Rhode Island to address the necessity of a renewable transition and sustainable economic future that provides stability for workers in the face of climate change. Through this collaboration, we aim to communicate the vitality of a renewable future through an economic and environmental justice lene, while also recognizing that obstructors of climate action are operating within a national network of misinformation.

This report is organized into four sections. As conveyed above, the Introduction communicates the scientific realities of climate change and emphasizes the urgent need to transition to locally-produced energy from renewable sources. The next section provides an overview of the two frameworks used to analyze Green Oceans' discourses and rhetoric: "Discourses of Climate Delay" (Lamb et al. 2020) and "FLICC" (Cook 2020). We highlight the main discourses employed by Green Oceans, citing examples from their materials, and demonstrate how these align with the strategies employed by climate denialists, as illustrated by Lamb et al. (2020) and Cook (2020) in their research on climate delay and misinformation. In the final section, we seek to contextualize Green Oceans' arguments within larger national misinformation campaigns against offshore wind. National think tanks and other organizations that are funded by the fossil fuel industry are targeting local organizations to spread disinformation.

It is imperative to understand the coordinated networks of mis/disinformation that are seeking to obstruct the development of renewable energy as a strategy to maintain fossil fuels as a dominant energy (and profit) source. As we begin to transition to renewable energy, it is important to have transparent, engaging conversations at the community level, and those conversations must be rooted in fact-based information. Through this report, we hope to provide community members, journalists, and advocates with the tools to identify climate misinformation and prevent the obstruction of necessary climate action.

"Discourses of Climate Delay" & "FLICC"

This brief examines Green Oceans' arguments using existing peer-reviewed frameworks on climate misinformation. We categorize several example arguments from Green Oceans' materials using Lamb et al.'s (2020) "Discourses of Climate Delay" framework, which outlines four overarching misinformation strategies used to delay climate action. We also apply Cook's (2020) "FLICC" framework to point out additional misinformation strategies in their claims. We use these frameworks to demonstrate (1) how Green Oceans' arguments draw from the well-documented strategies of climate disinformation groups, and (2) to illustrate how their campaign undermines scientific facts, misrepresents sources, and overemphasizes the negative impacts of offshore wind while obscuring the significant ecological, social, and economic costs of failing to transition to renewable energy.

Discourses of Climate Delay. (Lamb et al. 2020)



Image: Discourses of Climate Delay (Lamb et al. 2020)

This "Discourses of Climate Delay" framework organizes discourses of climate delay into four overarching categories: Emphasize the Downsides, Redirect Responsibility, Push Non-Transformative Solutions, and Surrender to Climate Change. In our analysis of Green Oceans' arguments, we find the group deploys all of the major discourse categories except Surrender to Climate Change. The discourses Green Oceans most frequently uses are defined below and italicized throughout the brief:

Emphasize the Downsides

This discourse emphasizes the downsides of climate action, presenting the costs of mitigating climate change as greater than the costs of inaction.

Redirect Responsibility

This discourse redirects responsibility from the actors who have historically been the biggest polluters to "purposefully evade responsibility for mitigating climate change." They often imply that others should take the lead before we consider action ourselves.

Push Non-Transformative Solutions

This discourse pushes for the use of energy sources that fail to effectively mitigate climate change, such as technologies that are not yet viable on a large-scale (hydrogen, fusion), or still require the combustion of fossil fuels (natural gas).



Image: FLICC Taxonomy (Cook 2020)

The "FLICC" framework outlines five overarching techniques of science misinformation: Fake Experts, Logical Fallacies, Impossible Expectations, Cherry-Picking, and Conspiracy Theories. In our analysis of Green Oceans' publications, we observed repeated use of these techniques across various claims. The five techniques of FLICC are defined below and bolded throughout the brief:



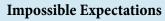
Fake Experts

Fake experts are spokespeople that convey the impression of expertise on a topic while possessing little to no relevant expertise.



Logical Fallacies

Logical fallacies occur in arguments where the premises or starting assumptions do not logically lead to the conclusion.





Impossible expectations demand unrealistic or unattainable standards of scientific proof. This technique, alternatively described as the "Scientific Certainty Argumentation Method," exploits the probabilistic nature of the scientific method.



Cherry-Picking

Cherry-picking involves selectively focusing data that leads to a conclusion different from the conclusion arising from all available data.



Conspiracy Theories

Conspiracy theories involve the suggestion of secret plans to implement nefarious schemes, and are a common theme in climate misinformation.

Discourses of Delay "Emphasize the Downsides"







Appeal to Social Justice

Appeal to Well-Bein

Green Oceans' handouts, white paper, and PowerPoint presentation, which have been circulated to public officials and community members, include many discourses of climate delay. The white paper and PowerPoint presentation include references, which we investigated. Across their arguments against offshore wind development, Green Oceans characterizes offshore wind as an existential threat to environmental, economic, and social systems. Many of their arguments fall within the delay discourse *Emphasize the Downsides*. Drawing from the *Emphasize the Downsides* toolkit, Green Oceans often misrepresents and sensationalizes changes that will result from the Revolution Wind offshore wind project, and completely ignores the costs of failing to adopt new forms of renewable energy. While there is still uncertainty about the impacts of offshore wind that will require intense scientific monitoring to fully understand (Hogan et al. 2023), failing to make this transition will lead to ongoing dependence on fossil fuels. There is certainty that the exploration, extraction, processing, transport, combustion and disposal of fossil fuels is devastating for local and global social- and eco-systems, including our oceans and coastal waters (e.g. IPCC 2023).



"Policy Perfectionism"

In numerous arguments, Green Oceans invokes *policy perfectionism*, a rhetorical strategy within the *Emphasize the Downsides* discourse of delay category. This strategy portrays a climate policy or technology as an imperfect solution, thereby encouraging disproportionate caution and discouraging necessary action.

Example 1: Indirect CO₂ Emissions.

Green Oceans argues that offshore wind turbines will cause indirect carbon dioxide emissions because their underwater infrastructure provides habitat for invasive filter feeders that "eat phytoplankton and release carbon dioxide" (Green Oceans Wind Presentation, Slide 37). The group also points out that while the offshore wind development will "provide a savings of between 70 to 80 million metric tons of CO₂ with regard to decreasing our dependence on fossil fuels," this "does NOT take into consideration of unknowns, such as a small percentage change in phytoplankton abundance" (Green Oceans Wind Presentation, Slide 39). This argument is an example of policy perfectionism because it portrays offshore wind as an imperfect technology with hidden, anti-green downsides. This depiction not only manufactures doubt and encourages inaction, but also distracts from the larger negative environmental impacts of continued fossil fuel extraction, processing, transport, combustion, and hazardous waste disposal.

Green Oceans spotlights the impact of the "un-

knowns," relying on **blowfishing** to manufacture doubt about the efficacy of renewable energy technologies and distract from the direct ecological impacts of fossil fuel combustion. The group uses **blowfishing** to overemphasize the scale and impact of filter feeder emissions. A number of studies estimate the lifecycle emissions of offshore wind facilities as roughly 6-13 pounds of CO2 per kilowatt hour (kWh). Natural gas-fueled electricity generation emits roughly 500 pounds per kWh, making wind nearly 50 times better for the climate (Thomson and Harrison 2015; NREL 2021). Making the transition would therefore lead to a 98 percent emissions reduction. Additionally, the indirect CO2 emissions from mining are significantly less for renewable energy technologies than for fossil fuel extraction. As journalist Michael Thomas (2023) highlights: "Every year about 15 billion tons of fossil fuels are mined and extracted. That's about 535 times more mining than a clean energy economy would require in 2040." While it is important to acknowledge that even low-to-no-carbon energy solutions will have human and environmental impacts, transitioning away from fossil fuels is one of the most effective ways to protect people and the environment.



Logical Fallacies

Arguments where the conclusion doesn't logically follow from the premises. Also known as a non sequitur.



Blowfish

Focusing on an inconsequential aspect of scientific research, blowing it out of proportion in order to distract from or cast doubt on the main conclusions of the research.

Example 2: Endangered Species

While there is still uncertainty about offshore wind's impacts on marine life, more research is required to fully understand its effects (Hogan et al. 2023). National Oceanic and Atmospheric Administration (NOAA) commits to addressing potential impacts through data collection and recommendations as offshore wind develops (Northeast Fisheries Science Center 2022). The Audubon Society has emphasized their commitment to supporting offshore wind development, while continuing to monitor the impacts on seabirds (Haney 2023). Additionally, NOAA recently issued a final opinion regarding a similar wind project sited in New Jersey, stating that it "is likely to adversely affect, but is not likely to jeopardize" threatened and endangered sea life, including North Atlantic right whales (Moore 2023 "New Jersey"). These adverse effects include increased levels of sound leading to temporary behavioral disturbance, but the agency notes: "we do not expect any right whales to be exposed to increased sound levels that would result in injury; all effects to right whales will be limited to temporary behavioral disturbance" (Moore 2023 "New Jersey").

Like other groups along the East Coast, Green Oceans argues that offshore wind farms threaten the wellbeing of marine wildlife and harm endangered species, specifically whales, including North Atlantic Right Whales (Green Oceans 2023, 24).

Green Oceans rely on **fake experts** and **conspiracy theory** techniques by citing two non-empirical, highly speculative newspaper articles to emphasize the downsides of offshore wind (Green Oceans Wind Presentation 2022, Slides 27-28). Notably, the article the group cites from Driessen (2016) was published by the Committee for a Constructive Tomorrow (CFACT), an organization that explicitly denied the existence of anthropogenic climate change until at least 2016 (DeSmog n.d. "CFACT"). CFACT has received substantial funding from fossil fuel corporations and counter climate groups over the years, including ExxonMobil, Peabody Energy, and the Charles Koch Foundation to name a few (DeSmog n.d. "CFACT"; Gibson 2016; Brulle et. al 2021; Farrell 2016; Gibson, n.d.).

Additionally, the second article that Green Oceans cites, written by Christian Winthrop of *The Newport Buzz*, includes numerous unsupported claims about offshore wind's impact on marine mammals that have been debunked by scientists from the Bureau of Ocean Management (BOEM) and the University of Rhode Island (Kenney and Miller 2017). In referencing both of these articles, Green Oceans relies on **fake experts** to support their claims against offshore wind (Cook 2020; DeSmog n.d. "CFACT"; Winthrop 2019).

Furthermore, neither of the academic articles that

Green Oceans cites to substantiate the claim that wind turbines harm whales reference offshore wind as the cause of marine mammal auditory impairment (Green Oceans Wind Presentation 2022, Slides 27). On the contrary, Mann et al. (2010) suggest that exposure to chronic noise from boating and shipping activities, PCB contamination, or congenital factors caused the impairments they observed. Similarly, Wang et al. (2021) suggest that auditory impairment in a stranded whale was "probably caused by acute noise exposures, such as anthropogenic sonar and chronic shipping noise." By failing to incorporate relevant research concluding that there is still uncertainty on offshore wind impacts on whales, Green Oceans appears to engage in the cherry-picking tactic of slothful induction (Marine Mammal Commission 2023; Tully and Choi-Schagrin 2023; Cook 2020). The group also invokes the **logical fallacies** of misrepresentation and assuming a single cause to reinter**pret randomness** in the whale deaths (Cook 2020).



Fake Experts

Presenting an unqualified person or institution as a source of credible information.



Conspiracy Theory

Proposing that a secret plan exists to implement a nefarious scheme such as hiding a truth.



Reinterpreting Randomness

Believing that nothing occurs by accident, so that random events are re-interpreted as being caused by the conspiracy.



Cherry-Picking

Carefully selecting data that appear to confirm one position while ignoring other data that contradicts that position.



Slothful Induction

Ignoring relevant evidence when coming to a conclusion.



Logical Fallacies

Arguments where the conclusion doesn't logically follow from the premises. Also known as a non sequitur.



Blowfish

Focusing on an inconsequential aspect of scientific research, blowing it out of proportion in order to distract from or cast doubt on the main conclusions of the research.



Misrepresentation

Misrepresenting a situation or an opponent's position in such a way as to distort understanding.



Single Cause

Assuming a single cause or reason when there might be multiple causes or reasons.

"Appeal to Social Justice"

In their publications, Green Oceans deploys a subcategory of Emphasize the Downsides, appeal to social justice, which moves "social impacts to the forefront of policy discussions, framing a transition to renewable energy as burdensome and costly to society" (Lamb et al. 2020). A just transition to renewable energy must consider environmental and economic impacts, however, appeals to social justice can become discourses of climate delay when they (1) obscure other aspects of injustice, such as failing to act on climate change, and (2) disregard the social and economic benefits of transitioning to renewables. These benefits include improved public health, regional economic development and employment opportunities, or greater community resilience. Transitioning to renewables also reduces dependency on imported fossil fuels with volatile prices, as utilities sign long-term Power Purchase Agreements with wind developers (Beiter et al. 2020). By focusing attention only on speculative social downsides, Green Oceans' appeal to social justice inaccurately portrays the social and economic impacts of adopting offshore wind and obscures the benefits of these projects, including local job creation.

Example 1: Jobs and Economic Development.

In their PowerPoint (2023), Green Oceans states that the project will create "800-1200 direct jobs for two years" and "50 permanent jobs for maintenance and operations." But in their white paper, the group omits any reference to the 800 to 1200 direct jobs that Revolution Wind will create. Instead, they only reference the "50 permanent jobs," stating: "The press inflates the number of jobs that the OWF will generate. The governor's office stated the project will create 50 permanent jobs [131]" (Green Oceans 2023, 8). This argument is an example of the delay discourse appeal to social justice as it understates the employment opportunities of Revolution Wind, while overemphasizing the purported social and economic downsides of the project. It is also an example of the climate misinformation tactic slothful induction, as it misrepresents the project's job opportunities by ignoring relevant evidence.

A statement in a state press release asserts that Revolution Wind will create 800 "direct construction" jobs and hundreds more indirect jobs (Office of the Governor 2018). Ørsted estimates Revolution Wind will produce 460 construction jobs for the State Pier redevelopment, 1,200 direct construction jobs in Connecticut and Rhode Island, and thousands of other "indirect or induced jobs" (Revolution Wind n.d. "About Revolution Wind"). Construction jobs in this industry could last for years, as different wind companies ramp up and down their deployment. Revolution Wind has already committed \$4.5 million for "training programs, workforce development, and supply chain expansion in Rhode Island," (Revolution Wind n.d. "Hometown Revolution"). Ørsted and Eversource are working "directly with local suppliers, including Blount Boats, Senesco Marine, and Dimeo Construction, among others." They go on to state, "this means that the jobs we create and the investments we make stay in Rhode Island." (Revolution Wind n.d. "Hometown Revolution"). Additionally, they are collaborating with the Rhode Island Building and Construction Trades, the Connecticut State Building Trades Council, the Eastern CT Workforce Investment Board and other organizations to address workforce development (Revolution Wind n.d. "Resources & FAQs").

Climate Jobs Rhode Island and their national organization are actively identifying the employment opportunities that offshore wind and other renewable energy systems will provide. In collaboration with Climate Jobs RI, the Worker Institute at Cornell University estimated that if Rhode Island installs 3000 MW of offshore wind power by 2040, 33,425 direct jobs can be created from development over the next seventeen years (Skinner et al. 2022). This target reduces carbon emissions by more than 6.1 million metric tons of carbon dioxide annually (Skinner et al. 2022). In the process of reaching 3000 MW by 2040, the report states that it is necessary to work with BOEM to reach a clean energy future and ensure that wildlife and fishing communities are supported (Skinner et al. 2022). Climate Jobs RI is focused on training programs to equip local workers with new skills applicable to new renewable technologies, aligning with Revolution Wind's planned roll-out. Climate Jobs RI recognizes the interconnected needs of transitioning to renewables and building a sustainable economic future by including Rhode Island's workforce in a future grounded in environmental, economic, social, and racial justice.

Cherry-Picking

Carefully selecting data that appear to confirm one position while ignoring other data that contradicts that position.



Slothful Induction

Ignoring relevant evidence when coming to a conclusion.

Example 2: Fishing



Image Source: Green Oceans Revolution Wind Presentation, Slide 15

Offshore wind development requires thorough investigation of impacts on fisheries and fishing communities, and informed efforts to protect livelihoods. Although research is still ongoing, NOAA and the Bureau of Ocean Energy Management (BOEM) are actively studying the impacts of offshore wind on ecosystems and are engaged in collaboration with industry members and advocates. In their publications, Green Oceans fails to mention that research into the impact of offshore wind on fisheries is still ongoing, often **misrepresenting** the status of current research. Throughout their materials, the group focuses on specific studies without contextualizing larger efforts to understand the issue, and also fails to mention how the impacts of climate change might also adversely impact fish populations.

A failure to adopt available renewable energy projects means that the effects of global climate change on fishing populations will only worsen. Climate change has already resulted in 2.5 to 3 degrees Fahrenheit of warming in the Narragansett Bay estuary within the past five decades (Skinner et al. 2022), and precipitation has increased substantially (Smith et al. 2010). Fish populations are changing rapidly as a result (Drummond 2020; Smith et al. 2010). By 2100, climate scientists predict that warming will increase water temperatures by 5 to 6 degrees Fahrenheit. Cod, bass, clams, lobsters and other fish populations will be harmed (Skinner et al. 2022). High water temperatures and ocean acidification will damage fish populations and force them to migrate, shifting the native ecosystems of the region and introducing the potential for more invasive species (Skinner et al. 2022). As renewable energy development occurs, responsible data collection and monitoring is required.

It is important to note that other existing threats to marine life are evident in the status quo – such as existing fishing infrastructure and vessel usage – and offshore wind provides a strategy to mitigate the effects of global climate change on local ecosystems (Marine Mammal Commission 2023; Moore 2023).

Green Oceans uses the misinformation tactic cher**ry-picking** by carefully selecting data that appear to confirm one position on offshore wind's impacts on North American fisheries, while ignoring the fact that there is a lack of research on the topic. As identified by NOAA, there is a need for more concrete data collection and monitoring as offshore wind projects develop (Northeast Fisheries Science Center 2022; NOAA 2023). In Green Oceans' argument on fishing, the group describes how sediment plumes, EMFs, and ocean floor temperature elevations will harm squid populations and negatively impact the fishing industry (Green Oceans 2023, 8). The study the group cites references the impacts of construction noise on squid, but does not address sediment plumes, EMFs, or ocean floor temperatures (Jones et al. 2020). This **misrepresents** conclusions about short-term and long-term impacts on marine populations. Green Oceans also claims, "wind farms can increase water and air temperatures... raising ambient temperatures can affect fish larvae" (Green Oceans 2023, 4). Yet, the article the group cites to support this argument makes no reference to offshore wind development (Moyano et al. 2017). By citing a source that does not link the effects on fish larvae to offshore wind development, Green Oceans engages in the cherry-picking technique slothful induction. Furthermore, the group fails to contextualize offshore wind's effects on ocean temperatures with those caused by global climate change.



Logical Fallacies

Arguments where the conclusion doesn't logically follow from the premises. Also known as a non sequitur.



Misrepresentation

Misrepresenting a situation or an opponent's position in such a way as to distort understanding.



Cherry-Picking

Carefully selecting data that appear to confirm one position while ignoring other data that contradicts that position.



Slothful Induction

Ignoring relevant evidence when coming to a conclusion. eans also deploys **cherry-picking** when

citing an article that claims offshore wind can impact ecosystems in the North Sea. The article presents a specific case demonstrating adverse effects on primary production, but it also acknowledges that more research is needed in this area and that their research "can serve to support the inevitable development of co-use management strategies under the given conditions" (Daewel et al. 2022). Daewel et al. (2022) present scientific evidence depicting adverse effects and simultaneously discuss how this research can prompt more research around this topic to conduct responsible co-use in marine development. Here, Green Oceans presents threats to marine life from one case study without acknowledging the need for more conclusive research and accepted co-use monitoring.

The current status of information about the impacts of offshore wind development on fishing is still being investigated by scientists. NOAA addresses this uncertainty by committing to assessing and mitigating effects on marine life to protect biodiversity and promote "ocean co-use" as offshore wind is developed (Northeast Fisheries Science Center 2022). To this end, meaningful engagement with fishing communities is required to allow for a just transition rooted in cohabitation (Haggett 2020).

Green Oceans also argues that toxic heavy metal coating of turbine towers will contaminate the ocean, impacting marine life and fisheries (Green Oceans 2023, 4). In the Revolution Wind Construction and Operation Plan, Ørsted does not reference toxic heavy metals in coatings (Lhowe 2023). In its plans, Ørsted actively addresses many environmental concerns, focused on mitigating potential harms with bubble curtains, noise mitigation screens, hydro sound dampers, and suction bucket jackets during construction. The company is funding the New England Aquarium and Inspire Environmental to carry out research on environmental impacts and mitigation best practices (DeCelles et al. 2022). Additionally, BOEM compares existing thermal power plants with offshore wind infrastructure, stating that less cooling water needs to be withdrawn, there is less thermal discharge, and consequently there will be a decrease in adverse effects on marine ecosystems (AECOM 2017). In this case as well, Green Oceans **misrepresents** the impacts of offshore wind and fails to acknowledge information published by developers and regulators that describes their efforts to minimize infrastructure impacts on marine ecosystems.



Responsible development of offshore wind energy is critical to U.S. efforts to mitigate climate change, grow the clean energy sector and benefit from a thriving New Blue Economy.

Image Source: "NOAA: A Key Partner in Advancing Offshore Wind Energy Development," n.d.

Discourses of Delay "Redirect Responsibility"







Whataboutism

Individualisn

The 'Free Rider' Excus

In their presentation on the Revolution Wind project, Green Oceans deploys the delay discourse *Redirect Responsibility* for reducing greenhouse gas emissions. This discourse becomes a delay tactic when it is purposefully used to evade responsibility for mitigating climate change (Lamb et al. 2020). Green Oceans' argument that Rhode Island does not have a responsibility to mitigate greenhouse gas emissions because it is smaller and emits less than other states is a clear example of this discourse of delay. Not only does this claim ignore relevant evidence – for instance, that Rhode Island emits more metric tonnes of carbon dioxide per capita annually than most countries (we are double the global average per person) – it also downplays the advantages of adopting renewable energy and responding to climate change, such as the creation of green jobs and the ability to share clean energy among neighboring states (U.S. EIA 2020 "Table E15"; Climate Watch 2020).



"Whataboutism"

Green Oceans' attempt to *Redirect Responsibility* includes the discourse of *whataboutism*, a tactic which argues that "other countries or states produce more greenhouse gas emissions and thus bear a greater responsibility for taking action." As Lamb et al. (2020) note, "actors advancing this discourse often deploy statistics demonstrating their own small contribution to global emissions" and point to larger emitters as the culprits that must take action first.

Example 1: Offsetting Carbon Emissions.

In their presentation, Green Oceans asserts that "[Revolution Wind] can only offset the amount of CO2 that RI emits. RI emits the second least amount of CO2 of any other state," (Green Oceans Wind Presentation, Slide 7). This argument is based on fallacies and it is also an explicit appeal to whataboutism. For one, the foremost assertion that "[Revolution Wind] can only offset the amount of CO2 that RI emits" is false. Rhode Island is part of a regional grid, the ISO-New England transmission system, which connects it to neighboring states (Rhode Island Division of Planning 2015; RI EC4 2016). Revolution Wind alone will provide 304 Megawatts (MW) to Connecticut's grid and 400 MW to Rhode Island (Revolution Wind n.d. "Revolution Wind"). 400 MW will create 3,060 GWh of renewable energy generation on the state's grid, which accounts for 40% of the state's 2030 anticipated electricity demand (Murphy et al. 2020).

Furthermore, the implicit suggestion that Rhode Island does not need to transition to renewable energy because it produces less greenhouse gas emissions than other states is an explicit use of the delay discourse *whataboutism*. This discourse argues that other "countries or states produce more greenhouse gas emissions and thus

bear a greater responsibility for taking action" (Lamb et al., 2020). Rhode Island is complicit in the climate crisis and its size comparable to other U.S. states is not an excuse for inaction. For context, between 2009 and 2019, Rhode Island was responsible for producing an average of roughly 10 tons of energy-related CO2 emissions per capita, double the global average over the same period (U.S. EIA 2022 "Per capita energy-related carbon dioxide emissions by state"; Climate Watch 2020). By comparing Rhode Island only to other U.S. states and removing it from a global context, Green Oceans attempts to portray the state's emissions as insignificant and cast its efforts to reduce emissions as irrelevant. This argument is therefore a red herring, a logical fallacy which overemphasizes one point (ex: Rhode Island's size and comparably "low" total emissions) to distract from a larger, more important issue (ex: climate change is a global issue and we need coordinated climate action at the state, regional, and national-levels to combat it) (Cook 2020).

The Revolution Wind project will enhance Rhode Island's ability to meet its emissions reductions goals and help neighboring states do the same. Rising to the challenge of climate change and transitioning to renewables is also an opportunity for Rhode Island to gain financially from tax and energy export revenues, and to reduce the billions of dollars the state spends each year on imported natural gas, gasoline, and other fossil fuels (U.S. EIA 2020 "Table E15"; U.S. EIA "Table E9"; U.S. EIA "Table E2"; U.S. EIA 2022 "Rhode Island State Energy Profile").



Logical Fallacies

Arguments where the conclusion doesn't logically follow from the premises. Also known as a non sequitur.



Red Herring

Deliberately diverting attention to an irrelevant point to distract from a more important point.

Discourses of Delay "Push Non-Transformative Solutions"









In Green Oceans' white paper and presentation, the group suggests several alternatives to offshore wind development, including natural gas, solar, nuclear, fusion, geothermal, and taking no action (Green Oceans 2023, 9-10; Green Oceans Wind Presentation, Slides 59-62). Although the group positions renewable energy sources like solar and geothermal as viable alternatives, recent models have demonstrated that offshore wind energy generation is essential for meeting Rhode Island's electricity demands (Veysey et al. 2019; Roberts et al. 2021). Furthermore, by presenting alternatives like, natural gas, nuclear fusion, and taking no action at all, Green Oceans deploys the delay discourse Push Non-Transformative Solutions, including technological optimism and fossil fuel solutionism. Lamb et al. (2020) define non-transformative solutions as those that promote only incremental change and avoid altering existing power structures and practices. Arguments that push for non-transformative solutions thereby "draw attention away from more substantial and effective measures." The non-transformative solutions that Green Oceans propose, including those mentioned above, are either infeasible at scale in the medium term or require Rhode Island to remain reliant on fossil fuel combustion. As such, Green Oceans diverts attention from effective solutions that can

help reduce emissions immediately and efficiently.



"Technological Optimism"

To support their push for non-transformative solutions, Green Oceans deploys the delay discourse technological optimism, a strategy which maintains that "technological progress will rapidly bring about emissions reductions in the future," (Lamb et al. 2020). As Lamb et al. (2020) point out, there are variations in how the discourse takes form, including "promoting technological 'myths' that fail to manifest in the promised timeframe and tend to be substituted by new ones (e.g., zero-carbon planes, fusion power and direct air capture of greenhouse gases)."

Example 1: Fusion

In their white paper, Green Oceans (2023) states: "New nuclear fusion technology is developing quickly and may soon make OWF obsolete [46]. This might take a decade or more, but RW will not offset CO2 until 2030 or later. Pausing to evaluate the environmental impact of offshore wind farms would prevent us from making a grave, irremediable error and allow us to then take advantage of fusion when it becomes commercially viable" (Green Oceans 2023, 10).

This argument includes clear language of delay and relies heavily on the tactics of technological optimism. Although it presents fusion as a viable alternative to offshore wind, it also explicitly acknowledges that fu-

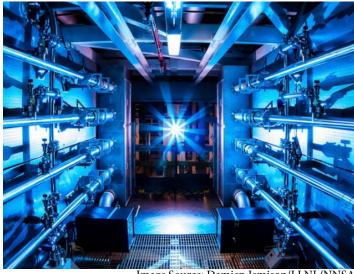


Image Source: Damien Jemison/LLNL/NNSA

sion technologies "might take a decade or more" to develop and are not yet commercially viable. In short, this argument relies on technological optimism to position a technology that does not yet exist as superior to one that has been commercially available for thirty years (Brunt & Spooner 1998). Scientists do not believe fusion will provide a substantial source of energy for several decades (Brumfiel 2022). As recent reports from the IPCC demonstrate, we do not have decades to wait for fusion to become commercially viable. To mitigate the worst impacts of climate change, global carbon emissions must be reduced by 50% before 2030 (Plumer 2023). Doing so will require the swift implementation of currently available renewable energy technologies (Brumfiel 2022). Therefore, presenting fusion as a viable alternative to offshore wind is not only an example of *technological optimism*, but also a deployment of the misinformation tactic, **wishful thinking**.

In addition to wishful thinking, this argument also employs the misinformation tactics of cherry-picking and **slothful induction**. To support the claim that "new nuclear fusion technology is developing quickly and may soon make OWF obsolete," Green Oceans cites an article from the New York Times written by Kenneth Chang (2022) (Green Oceans 2023, 10). However, this article does not corroborate their claim. On the contrary, it explicitly states that despite a "major breakthrough," fusion will not be a viable source of energy in the near future, noting that "even if scientists figure out how to generate bigger bursts of fusion, immense engineering hurdles would remain" (Chang 2022). By citing this source to support their claim that fusion will make offshore wind obsolete, Green Oceans cherry-picks information from this article and ignores relevant evidence to present a false conclusion—a textbook example of slothful induction.



Example 2: Dismissing Current Wind Technologies.

Green Oceans dismisses wind technology when describing how the electrical output of offshore wind projects, specifically Revolution Wind, will not significantly offset greenhouse gas emissions. Green Oceans claims that the Power Purchasing Agreement (PPA) "will not offset the emissions from the construction of the RWF until after 2035" as it has a minimum biennial requirement of 50% energy production (Green Oceans 2023, 7). Here, Green Oceans deploys the discourse of **oversimplification** by drawing conclusions about Revolution Wind's energy output based only on the minimum



Image Source: Green Oceans Wind Presentation, Slide 6

requirements. This also positions offshore wind as a form of renewable energy that cannot be depended on, despite it already being a reliable source of energy and its expected rates of capacity to increase 15-fold by 2040 (Brunt et al. 1998; Cozzi et al. 2019). This discussion should incorporate developments in electricity storage and how wind can be paired with "dispatchable" energy sources, which can be turned on when needed (Katz 2020). The group also cites The Manhattan Institute when discussing technical and economic costs of offshore wind (Green Oceans 2023, 7 & 19-20). The Manhattan Institute is a New York-based think tank that is connected to the fossil fuel industry and that published climate denial as recently as March 30th, 2023 (DeSmog n.d. "Manhattan Institute"). Green Oceans exemplifies the misinformation strategy of fake experts by citing a climate denial think tank, in addition to other unqualified sources as described in the Emphasize the Downsides section of this brief.



Logical Fallacies

Arguments where the conclusion doesn't logically follow from the premises. Also known as a non sequitur.



Oversimplification

Simplifying a situation in such a way as to distort understanding, leading to erroneous conclusions.



Fake Experts

Presenting an unqualified person or institution as a source of credible information.

6

"Fossil Fuel Solutionism"

Another strategy of pushing non-transformative solutions is fossil fuel solutionism, which claims that fossil fuels can be part of the solution to climate change. Discourses of fossil fuel solutionism are pervasive within fossil fuel industry arguments against regulation. For example, the American Petroleum Institute has funneled tens of millions of dollars into advertisements that "promote 'cleaner' fossil fuels" as a solution to curbing rising greenhouse gas emissions (Lamb et al. 2020). An abundance of scientific evidence has shown that anthropogenic climate change is caused by the combustion of fossil fuels. Even comparatively "cleaner" fossil fuels like natural gas produce significant amounts of carbon dioxide and methane. The latter has accounted for roughly 30 percent of global warming since pre-industrial times (U.S. EIA 2022 "Natural Gas Explained"; UNEP 2021). If we are to prevent the worst impacts of climate change, we must decarbonize our energy system and transition to renewable energy sources. Moving forward requires us to recognize that fossil fuels are the problem, not the solution.

Example: Natural Gas.

In their white paper, Green Oceans (2023) presents transitioning from coal to natural gas as an alternative to offshore wind, stating: "Immediately converting coal plants in the US to natural gas would save 500,000,000 metric tons of CO₂ every year, 100 times the amount of CO₂ that Revolution Wind will save during its entire projected 20-year lifespan [133, Figure 1]... Coal-generated electricity emits 100% more CO₂ per MW than natural gas. Although NG presents another set of environmental concerns [134], an immediate transition to NG would significantly reduce CO₂ and, unlike offshore wind, would combat climate change during this critical decade," (Green Oceans 2023, 9).

Contrary to this claim, transitioning from coal to natural gas would not provide any greenhouse gas savings for Rhode Island, as it is one of the only U.S. states that does not burn coal (U.S. EIA 2022 "Rhode Island State Energy Profile"). In 2021, Rhode Island's electricity net generation from natural gas reached the largest share of any state, making up 87% of total electric generation (U.S. EIA 2022 "Rhode Island State Energy Profile"). In 2020, natural gas created 5.3 million metric tons of carbon dioxide emissions in Rhode Island,

54.2% of the state's total carbon dioxide emissions (U.S. EIA 2022 "State Energy-Related Carbon Dioxide Emissions by Fuel"). Pushing for natural gas as an alternative to offshore wind by presenting it as a "cleaner" fossil fuel is a clear example of *fossil fuel solutionism*, a discourse used to delay climate action (Lamb et al. 2020). Further, introducing coal into the discussion of emissions reductions in Rhode Island is a **red herring**, deployed to distract from the issue at hand: that natural gas is not a "clean" fuel (Cook 2020).

Green Oceans falls into the trap of fossil fuel solutionism by arguing that natural gas is a sustainable alternative solution to wind in tackling climate change (Green Oceans 2023, 9; Green Oceans Wind Presentation 2023, Slide 13). Natural gas burns more efficiently than coal, but science shows that when considering the whole lifecycle of natural gas, it is not much better than coal, largely because of methane leaks (Kusnetz 2020). Natural gas is often branded as the "bridge fuel" between fossil fuels and renewable energy. However, research shows that this argument is deeply flawed because warming from carbon dioxide and methane emissions from natural gas production, transmission, and combustion is comparable to that of other fossil fuels (Borunda 2020). Because our target is net zero, natural gas is a major impediment to achieving that goal (Veysey et al. 2019). Green Oceans appeals to fossil fuel solutions that will merely contribute to climate change, and cannot be seen as valid alternatives to wind energy. The group ignores the abundance of science on the harms of natural gas, and thereby, applies the rhetorical strategy of cherry-picking, specifically slothful induction, to support their claims that natural gas is an effective alternative to offshore wind (Cook 2020).



Logical Fallacies

Arguments where the conclusion doesn't logically follow from the premises. Also known as a non sequitur.



Red Herring

Deliberately diverting attention to an irrelevant point to distract from a more important point.



Cherry-Picking

Carefully selecting data that appear to confirm one position while ignoring other data that contradicts that position.



Slothful Induction

Ignoring relevant evidence when coming to a conclusion.

Networks of Misinformation:

Contextualizing Green Oceans' Campaign

Although this report focuses on Green Oceans, it is important to note that the group's emergence is not an isolated incident. Rather, it is one case in a recent wave of local groups and national think tanks working together to block offshore wind projects and renewables siting more broadly (Peters 2023; Atkin and Thomas 2022; Simon 2022; Fang 2021). While the extent of Green Oceans' connection to other obstructionist organizations is not yet well understood, it is clear that the group is part of a very vocal international network that attacks renewable energy deployment, circulates talking points rooted in misinformation, and sometimes shares lawyers, lobbyists, advisors and donors (Atkin and Thomas 2022). The point is not to cast guilt by association—it is to contextualize Green Oceans in this web of deceit and obstruction of climate action. While direct efforts may be funded by its own members, Green Oceans' advocacy is informed by groups with aligned missions, such as other anti-wind groups in the Northeast and fossil fuel and dark money-funded think tanks in Texas, Delaware and Illinois. That is, Green Oceans is receiving an "information subsidy" from these groups.

Green Oceans' arguments are not made in isolation; the group echos strategies employed by organizations in the anti-renewable policy sphere on the national stage, such as the Texas Public Policy Foundation (TPPF), a Texas-based nonprofit financed in part by the oil and gas industry that spreads tactics and highly negative and distorted information to block wind projects (Gelles 2022).

Green Oceans' focus on the endangered North Atlantic Right Whale is shared by TPPF and the Heartland Institute, an Illinois-based think tank at the center of the U.S. climate denial movement (Henneke 2022; Taylor et al. 2022; DeSmog n.d. "The Heartland Institute"; Worth 2018). Fox News host Tucker Carlson has aired a series of segments that highlight unproven threats to whale populations (MacDonald 2023; Walsh 2023). According to NOAA and the Marine Mammal Commission, there is no evidence that offshore wind construction leads to whale deaths (Tully and Choi-Schagrin 2023). Human-caused incidents related to whale deaths are primarily caused by vessel strikes and fishing entanglements (Marine Mammal Commission 2023; Moore 2023).



Tucker Carlson and Meghan Lapp discuss offshore wind turbines and whale deaths on 'Tucker Carlson Tonight.'



Members of ACKRATS and Caesar Rodney's David Stevenson presenting together against offshore wind in front of the Massachusetts State House in 2021.



The same ACKRATS member attended the most recent educational event on offshore wind in Little Compton, Rhode Island which took place on March 20, 2023.

Many other Green Oceans talking points can be found across the conservative media landscape and other anti-offshore wind groups, especially in arguments about the environmental impact of turbine construction. In 2017, Heartland indicated that there should be great concern about carbon emissions from turbine construction (Burnett 2017). The Washington, D.C.-based Heritage Foundation made the same claim in 2020 (Furchtgott-Roth 2022). That year, Heartland also published a paper claiming that the metals needed for turbines would contribute to "unimaginable" environmental harm- nearly identical rhetoric to testimony in 2021 by Heartland, Heritage, and the Manhattan Institute; the last organization is a New York-based think tank linked to the coal industry that continues to publish climate denial (Driessen 2020; Lewis et al. 2011; Green et al. 2023; Lesser 2023). Interplay between news outlets and think tanks creates a media ecosystem that allows locally-run anti-offshore wind groups to tap into a wide array of alarming articles, papers, and public comments - regardless of whether their claims are rooted in truth.

Green Oceans shares many of the same spaces as national anti-wind groups. Green Oceans' writings have immediately been republished by anti-wind groups far beyond Rhode Island. Wind Watch, an online publication that circulates misinformation and conspiracy theories about wind power, republishes Green Oceans' content (Knight et al. 2023). Green Oceans is a member group of Save Right Whales, a coalition led in part by prominent climate obstructionist Michael Shellenberger and whose membership includes Nantucket Residents Against Turbines (ACKRATS). ACKRATS is a similar anti-offshore wind organization, which held a joint press conference at the Massachusetts statehouse in 2021 with David Stevenson, co-director of the Delaware-based Caesar Rodney Institute (CRI) ("Who We Are"; DeSmog n.d. "Michael Shellenberger"; Mohl 2021). CRI is a fossil fuel-funded libertarian think tank which has seeded offshore wind opposition up and down the East Coast. At the time, Stevenson was coordinating a fundraising effort for anti-offshore wind lawsuits backed by a trio of climate denial think tanks based in North Carolina, Michigan, and Virginia (Mohl 2021; OceanLegalDefense.Org n.d. "American Coalition for Ocean Protection: Background"; Brulle et al. 2021).

Green Oceans is a local organization, but it does not exist in a vacuum. The group's arguments and strategies are informed by a nationwide effort to oppose offshore wind through obstructionist tactics and misinformation. This network of local groups, corporations, think tanks, and media outlets create, diffuse, and amplify anti-wind arguments, many of which are sensationalized or simply untrue. Some core members of this network have received funding from the fossil fuel industry. Understanding this network and what motivates their misinformation is essential to advance the climate initiatives that science tells us are needed now. A revealing part of that effort should be close observation of their tactics and discourses of climate misinformation and delay.

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