

**MANAGING THE CLIMATE CHANGE CRISIS: EXAMINING THE  
FRAMING OF ONLINE ENVIRONMENTAL COMMUNICATION OF  
NONRENEWABLE ENERGY COMPANIES FROM AN ISSUES  
MANAGEMENT PERSPECTIVE**

by

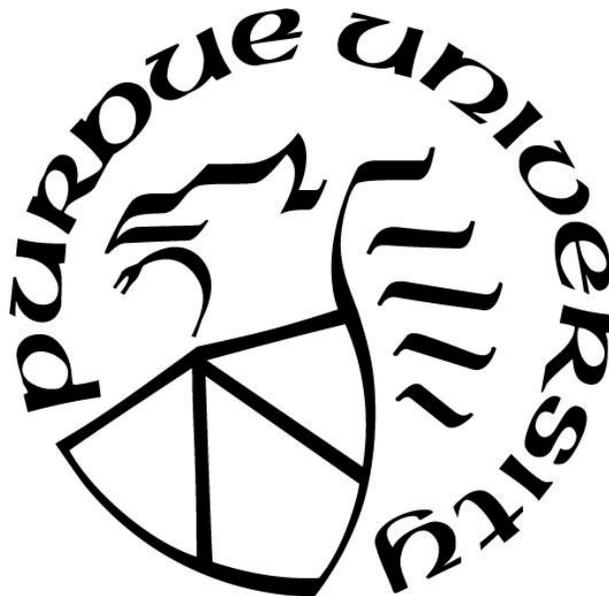
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*To my mom, thank you for giving me the opportunities and encouragement that I needed to succeed. Without your unconditional love, this project would not be possible.*

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## **ABSTRACT**

The purpose of this study was to qualitatively examine how nonrenewable energy companies frame and manage the issue of climate change in their online communication, specifically sustainability reports. The issue cycle framework was applied through a rhetorical analysis to determine where coal and oil/gas companies place climate change in the issue cycle and subsequently manage the issue. Coal companies were determined to place climate change in lower stages of the issue cycle while oil/gas companies placed the issue later in the issue cycle. The issues management strategies of these companies also aligned with where they placed climate change in the issue cycle. This study then sought to understand the differences between the approaches of coal and oil/gas companies by examining factors such as financial standing, business models, and each industry's publics.

## INTRODUCTION

Climate change encompasses a variety of social, political, and economic sub-issues that make it an incredibly complex issue (MacLean, Brown, & MacMillan, 2018). In recent years, the Intergovernmental Panel on Climate Change (IPCC) has indicated increasing evidence for the human contribution to climate change (Solomon, 2008), especially the actions of nonrenewable energy companies (e.g., oil, coal; U.S. Energy Information Administration [EIA], 2019b). According to the IPCC report, “Human activities are estimated to have caused approximately 1.0°C of global warming above pre-industrial levels,” with rising sea levels, intense temperature spikes, and harm to various ecosystems (Masson-Delmotte et al., 2018, p. 4). While the reports from the IPCC acknowledge counterarguments, such as global warming due to natural cycles in the earth’s climate, it stands firm by the conclusion that human activities have influenced the rate and growth of climate change (Solomon, 2008).

Not surprisingly, the issue of climate change has spurred large scale advocacy movements, drawing greater attention to the issue in both media and politics. In 2017, researchers issued warnings about the current state of the climate and now 11,000 scientists have come together to declare a climate emergency (Freedman, 2019). During September 2019, “more than 45,000 strikes were planned worldwide in over 120 countries, and more than 500 strikes [were] registered in the U.S. alone” (Carlisle, 2019, p.1). These strikes were due, in part, to activists such as Greta Thunberg who drew international attention for speaking to the United Nations condemning the inaction of world leaders (Carlisle, 2019). Even CNN recently hosted an unprecedented climate change town hall forum, where ten of the leading Democratic presidential candidates discussed environmental issues for over seven hours (Wagner et al., 2019). One central demand of these strikes and political platforms is limiting the use of fossil fuels and the power of large nonrenewable energy companies that actively contribute to the climate change crisis (Carlisle, 2019).

Nonrenewable energy companies within the oil/gas and coal energy industries face unique challenges within the current social and political unrest.<sup>1</sup> They are required to balance

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<sup>1</sup> Oil and natural gas are grouped together for this project because large companies that utilize one of these energy sources typically utilizes the other as well (e.g. British Petroleum, Royal Dutch Shell)

global energy demands and their own financial concerns with growing environmental pressures from a variety of publics. As these pressures related to climate change increase, nonrenewable energy companies face more controversy for their actions and are continually required to adapt their messaging approaches (Levy, 1997). Nonrenewable energy companies have acknowledged the issues of climate change in their corporate reporting since the 1990s in an effort to keep their publics content with their level of environmental impact (Jaworska, 2018). While there are limited public reporting requirements, many companies still choose to share information through environmental corporate social responsibility reports (hereafter referred to as ECSR). ECSR reports, which are broadly defined as communication that addresses the environmental impacts and efforts of corporations (Rahman & Post, 2011), are informational in nature but they, importantly, allow companies to frame their environmental activities within their preferred narratives (Pollach, 2018). Because corporate social responsibility messages are not always mandatory or regulated, they allow companies to present information on their environmental activities as they see fit (Cutler & Muehling, 1989; Dahl, 2010).

Scholarly research on the climate change crisis and environmental communication is abundant. Current literature in this area focuses on public responses to ECSR (Gaither & Sinclair, 2018; Miller, 2010; Miller & Lellis, 2016), the extent to which a company's actions align with their ECSR communication (Kolk, 2004; Mahon & Waddock, 1992; Slack, 2012), and the impact of ECSR on the companies themselves (Chuang & Huang, 2016; Flammer, 2013; Lioui & Sharma, 2012). Additionally, much of the literature focuses on a single industry or company within nonrenewable energy (for example, just the oil industry or one company within the oil industry) or provides longitudinal data to assess how much emphasis large corporations place on their environmental activities in relation to climate change over time (Pollach, 2018; Miller & Lellis, 2016; Miller, 2010). While these studies provide great detail on the specific companies or industries implicated in the climate crisis, there needs to be more comparative work examining different industries within the nonrenewable energy sector as a whole (e.g., comparing oil to coal) and at a fixed point in time to provide a greater understanding of climate change as an issue.

This thesis will thus address this gap in the literature by rhetorically analyzing the online sustainability reports of two major nonrenewable energy industries—oil/gas and coal—to further scholarly understanding of how corporations both conceptualize and manage their contribution to

and responsibility for the issue of climate change. As a means of facilitating this comparative rhetorical analysis, I turn to issues management and issue cycles and apply these frameworks to individual nonrenewable energy companies. Issues management is a useful framework for understanding how nonrenewable energy companies 1) understand the issues facing their industry, 2) perceive their role in the climate crisis, and 3) utilize environmental corporate social responsibility as a part of their public relations approach. Thought of as a strategic function of public relations, or what Hallahan (2001) refers to as “specialization” of public relations (p. 27), issues management emphasizes the process of identifying and responding to a variety of issues while considering an organization’s many goals and publics (Jones & Chase, 1979). For nonrenewable energy companies, climate change is an issue that they uniquely contribute to. Depending on how they perceive the issue, or how they frame the issue within its “cycle,” their responses will vary (Jaworska, 2018). Therefore, this study also utilizes the framework of issue cycles to better understand how nonrenewable energy companies conceptualize the threat of climate change within their ECSR reports.

To begin this thesis, I first review the literature on nonrenewable energy companies, environmental corporate social responsibility, and the frameworks of issues management and issue cycles. I then explain the methodological approach of rhetorical analysis that was used in this study. I then apply the issue cycles framework to the sustainability reports, rhetorically analyzing how climate change is framed and how nonrenewable energy companies attempt to manage this issue. Finally, I conclude this thesis with a discussion about the rhetorical situation and the various exigent factors that help explain the findings of this study, offering future directions for research that continues to assess the issues management process for nonrenewable energy companies.

## **LITERATURE REVIEW**

In order to examine how nonrenewable energy companies present and manage the issue of climate change within their corporate communications, it is important to distinguish between key industries within nonrenewable energy, define environmental corporate social responsibility, and examine the frameworks of issues management and issue cycles.

### **Nonrenewable Energy Companies**

The National Geographic Society defines nonrenewable energy sources as those that will diminish over time and/or are not able to replenish in a timely fashion (“non-renewable energy,” 2013). From this definition, nonrenewable energy companies include those within the oil/gas and coal industries. To begin, oil and natural gas companies ranging from conglomerates such as ExxonMobil down to more mid-size companies such as Chevron serve as a formidable force within the nonrenewable energy sector. Oil and natural gas companies satisfy huge global energy demands, but they also contributed to approximately 75% of CO<sub>2</sub> emissions from major fuel types (i.e., coal, oil, and natural gas) in 2018 (EIA, 2019b). Not surprisingly, oil and natural gas companies often take some of the harshest criticism within the nonrenewable energy sector. The oil division of British Petroleum (BP) serves as a prime example of these criticisms. Nongovernmental organizations (NGOs), such as Greenpeace, often focus on the “basic unsustainability of the oil industry, the negligible amounts spent on solar energy compared to other expenses, and BP’s continued investment plans in oil, especially in Alaska and Tibet.” (Kolk & Levy, 2001, p. 507). After BP’s infamous Deepwater Horizon oil spill in 2010, many groups criticized the company for their inadequate and slow response to the major environmental harm done by the spill as well as their poor regulatory measures that could have helped prevent the spill had they been improved (“BP at fault,” 2011). Although BP is currently considered a more environmentally conscious nonrenewable energy company (compared to other companies like Exxon; see Strange, 2018; Rowlands, 2000), Aaron (2012) points out that with the business model and general nature of the oil and natural gas industry, these companies can only do so much in terms of corporate social responsibility and sustainability initiatives. As such a large

player in the energy sector, oil and natural gas companies are key contributors to climate change and the first nonrenewable energy industry that will be explored in this analysis.

Within the realm of nonrenewable energy, the coal industry also contributes to climate change. Coal is found worldwide, is abundantly available, and is considered one of the most stable energy sources (The U.S. Coal Industry, 2017). However, major coal corporations face difficulty in balancing increased energy demand with concerns about environmental sustainability and energy efficiency from both the government and the public. These companies have responded by introducing more “clean” coal technologies that produce lower levels of emissions through alternative methods of extraction, transportation, and burning of the coal itself. This focus on “clean” technologies varies and is given different levels of priority depending on the company (IEA, 2000).

Despite efforts to incorporate more sustainable practices, the coal industry is struggling in comparison to oil and natural gas. Coal production peaked in 2008 with production at over one billion tons but has steadily decreased since then due to concerns over the impacts of its usage (e.g. high levels of pollution). This peak and subsequent decrease in production may explain the widespread bankruptcies the coal industry has recently experienced (The U.S. Coal Industry, 2017). The environmental and financial struggles of the coal industry highlight the decreasing preference for coal in the face of more affordable alternatives like natural gas and environmentally friendly alternatives like wind and solar energy (Kolstad, 2017). Because the coal industry is struggling, coal companies may find it even more advantageous to demonstrate corporate social responsibility to regain favorable public opinion. Accordingly, coal companies are the second nonrenewable energy industry I examine as a part of this study.

Despite being the “norm” in terms of energy sources, nonrenewable energy companies must take into account several essential realities within their industry. At the current consumption rate, demand will soon outpace production levels (Brown, 2003). The World Bank estimated that if resource consumption levels continue at their current pace, there will be a 400% increase in consumption in the first half of the 21st century as compared to the 20th century (“World Bank urges,” 2002). Worldwide energy demand increased by over two percent in 2018 alone, the fastest rate in the last ten years (“Global energy demand,” 2019). The public and governmental agencies are calling for a balance between meeting energy needs and utilizing cost-effective methods that limit harm to the environment (Doman, 2017; IEA, 2000). Different

companies within these industries also vary in their stance on climate change and their involvement with programs like the Kyoto protocol. For example, BP was one of the first nonrenewable energy companies to recognize the Kyoto Protocol while Exxon still does not acknowledge its objectives. Kolk and Levy (2001) point out that, in general, “challenging the science and the IPCC (Intergovernmental Panel on Climate Change) without a willingness to cooperate and work on alternatives is not considered socially acceptable” (p. 503). The social and political consequences of challenging science and continuing non-environmentally friendly energy practices continue in the present day (Ellfeldt, 2019). In the next section, I explore environmental corporate social responsibility as a method of responding to these criticisms and challenges.

### **ECSR as a Corporate Response Strategy**

Nonrenewable energy companies face major criticism for their role in contributing to climate change through emissions, the depletion of fossil fuels, and the emphasis of profit over environmental wellbeing (Ellfeldt, 2019). The general public, government, and advocacy groups criticize and apply pressure in different ways, but ultimately, they all call for corporations to respond and take responsibility for their business practices. Depending on how nonrenewable energy companies view the issue of climate change, their approaches to managing these criticisms often vary.

There are a variety of terms used to explain how corporations attempt to mitigate or appear to mitigate the harmful effects of their practices and obtain a more favorable image.<sup>2</sup> Corporate social responsibility (hereafter referred to as CSR) is a fitting term that refers to a host of economic, social, and political communications and/or actions that aim to portray an organization in a positive light (Ellen, Webb, & Mohr, 2006). The pressure from publics to

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<sup>2</sup> Issue advocacy is one such term that refers to communicative efforts geared toward “influencing public opinion, policy debates, and/or legislative outcomes” (Gaither & Sinclair, 2018, p. 169). Marketplace advocacy (a sub-concept within issue advocacy) is another term that focuses more firmly on improving public opinion of an industry/product and protecting a particular market (Arens, Weigold, & Arens, 2008). This study focuses on environmental corporate social responsibility because it encompasses communications that are considered marketplace advocacy (generally well-defined campaigns such as GE’s Ecomagination) as well as more general CSR communications relating to environmental concerns.

engage in environmental reporting has resulted in widespread CSR (Hunter & Bansal, 2007), with chemical companies being the first major industry with required environmental disclosure (Konar & Cohen, 1977). Even without mandatory reporting requirements, many industries find it necessary to make statements that maintain or improve their image through CSR.

Environmental protection has become a major emphasis of CSR reports based on the international pressure to address climate change, resulting in the emergence of Environmental CSR (ECSR) as a distinct term (Chuang & Huang, 2016). Mazurkiewicz (2004) states that ECSR emphasizes “the duty to cover the environmental implications of the company’s operations, products, and facilities; eliminate waste and emissions; maximize the efficiency and productivity of its resources, and minimize practices that might adversely affect the enjoyment of the country’s resources for future generations” (p. 2). Rahman and Post (2011) simplify this definition stating that ECSR “focuses on firm-specific activities, both compliant and preventative, that limit the adverse environmental impact of these firms” (p. 307). Scholarly research on ECSR mainly focuses on a few key areas including the motivations for using ECSR and the extent to which ECSR communication aligns with company actions, public responses to ECSR, the unethical use of ECSR (e.g., greenwashing), and the impact of ECSR efforts on the companies themselves.

### **Motivations for Utilizing ECSR and Alignment with Company Actions**

First, scholars have been interested in the motivations for ECSR and the extent to which ECSR communication aligns with company actions (Bansal & Roth, 2000; Christensen, Morsing, & Thyssen, 2013; Kolk, 2004; Mahon & Waddock, 1992; Slack, 2012). In an early examination of ECSR, Bansal and Roth (2000) suggested that companies utilized ECSR reports in an effort to obtain legitimacy, improve their competitive status, and emphasize environmental commitments for the sake of behaving responsibly. Looking beyond these motivations, Kolk (2004) and Slack (2012) both found that nonmandatory reports often reflected *ideal* future actions rather than currently implemented strategies, highlighting the perhaps superficial nature of these reports for some companies. Similarly, Christensen et al. (2013) found that corporations often speak aspirationally about ECSR, talking about what they might do in an ideal world rather than what they are currently doing, again emphasizing a disparity between ECSR communication and actions. Scholars pursuing this line of work conclude that inconsistency in ECSR

implementation contributes to corporate criticism with publics increasingly demanding that these companies follow through with their environmental initiatives (Christensen et al., 2013; Kolk, 2004; Slack, 2012).

### **Public Responses to ECSR**

The next track of ECSR research focuses on public responses to this communication. Using survey methods to measure participant attitudes, Gaither and Sinclair (2018) found that individuals who expressed environmental concern were more susceptible to being persuaded by environmental communications compared to individuals who expressed lower levels of environmental concern. In a similar study conducted in response to coal campaigns, Miller (2010) found that ECSR messages influenced publics to recognize the favorable aspects of the industry (e.g., contributions to the economy) and essentially served to improve a company's image. Finally, Miller and Lellis (2016) examined focus group discussions to assess which "values" in General Electric's ECSR communications resonated with the public. Ultimately, Miller and Lellis found that publics are more receptive to ECSR communications when they included innovative strategies, an emphasis on community, discussions about the resilience of the company, and calls to patriotism. Despite the discrepancies in how ECSR initiatives are implemented, the above studies suggest that ECSR is a worthwhile endeavor, especially when companies consider both the environmental and non-environmental values of publics (e.g., community, patriotism).

### **Ethical Violations of ECSR**

ECSR research also focuses on its ethical violations, such as "greenwashing." Greenwashing is defined as a "practice of making unwarranted or overblown claims of sustainability or environmental friendliness in an attempt to gain market share," and often refers to "advertisements and labels that promise more environmental benefit than they deliver" (Dahl, 2010, p. A247). Because companies recognize the value of "going green," it is somewhat common for them to exaggerate their sustainability efforts. For example, in Dahl's (2010) examination of the Shell Canadian Oil Sands project, he found that the company frequently used the term "sustainability" without demonstrating how their actions were truly sustainable. Dong,

Chang, and Wang (2016) also examined the “halo effects” related to ECSR, researching how ECSR activities primed publics in their reactions to targeted advertisements (p. 213). They found that participants viewed companies more positively and were less likely to avoid their advertisements after being made aware of their ECSR efforts, regardless of whether or not those reports lined up with company actions. The ethical concerns related to greenwashing and halo effects ultimately contribute to the criticism that nonrenewable energy companies face in the public sphere.

### **Impact of ECSR on Company Wellbeing**

Finally, scholars have focused on the financial and organizational impacts of ECSR efforts (Chuang & Huang, 2016; Flammer, 2013; Xu, Zeng, & Chen, 2018). Flammer (2013) explored how ECSR affects stock market fluctuation, finding increases in stock value that aligned with companies reporting environmental responsibility. At the same time, Flammer points out that being environmentally responsible has become a standard expectation, so corporations receive proportionately less praise for their environmental efforts and increased criticism for any perceived lack of action. Xu et al. (2018) focused on how ECSR efforts, such as emission reduction and energy conservation, could make firms more likely to achieve the level of business success needed to expand internationally. They emphasized that good ECSR led to better overall relationships with external publics for companies in various industries including food and drink, textiles, plastic, etc. These studies highlight the additional, financial considerations for why companies would choose to engage in ECSR.

Collectively, the above literature indicates that 1) there are a variety of motivations to utilize ECSR as well as a potential disconnect between ECSR statements and corporate action, 2) there are ethical concerns associated with ECSR, and 3) ECSR can have strong impacts on business performance. While this literature provides a strong basis for understanding ECSR, less is known about how ECSR initiatives are constructed in relation to the issue of climate change. That is, if ECSR is a response to a particular issue, then more work needs to be done to understand how a complex issue like climate change is conceptualized by those who have a vested interest in maintaining their current, albeit harmful, production practices. Given this need, I now turn to issues management as a strategic function of public relations and a useful

framework for thinking about how nonrenewable energy companies might begin to craft ECSR messages.

### **Frameworks for Analysis: Issues Management and Issue Cycles**

Issues management is a useful framework for understanding how nonrenewable energy companies manage climate change as a central issue affecting their businesses and reputations. Several researchers have offered definitions of issues management, with one of the first introduced in the 1970s. The Public Affairs Council (1978) defined issues management as “a program which a company uses to increase its knowledge of the public policy process and enhance the sophistication and effectiveness of its involvement in that process” (p. 1). Issues management can also be defined as a strategic function of public relations that includes identifying, addressing, communicating, and managing issues that might uniquely affect an organization (Jones & Chase, 1979; Heath & Cousino, 1990). Jones and Chase (1979) took the idea of issues management a step further through the creation of their Issue Management Process Model. This model focuses on five main stages to managing issues including identifying the issue, analyzing the issue, developing strategies to address the issue, choosing an action program, and evaluating the results of the chosen approach (Jones & Chase, 1979). In essence, issues management involves anticipating what issues could possibly lead to crises, analyzing and defining those issues, and then creating a strategic plan for managing those issues so that an organization can maintain positive relationships with their publics.<sup>3</sup>

In the 1970s, issues management became a prominent tool for corporations to defend against the criticisms of advocacy groups, such as Greenpeace. Greenpeace regularly criticized the behaviors of a variety of companies that harmed environmental interests (e.g., whaling organizations, energy companies). Companies were forced to act to protect their businesses by managing these criticisms and their public image through the issues management process (Gaunt

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<sup>3</sup> It is important to note that issues management is distinct from crisis and risk communication. While there is some overlap in communicating with the public about topics of varying importance, issues management is considered to be more proactive and less high-pressure than crisis communication. On the other hand, risk communication is concerned specifically with communicating about topics related to public safety (Gaunt & Ollenburger, 1995). The distinct framework of issues management provides a valuable context for a better understanding of climate change as an issue affecting companies over extended periods of time.

& Ollenburger, 1995). Shortly after its introduction, many companies like Shell, General Electric, and Allstate recognized the value of the issues management process for assessing and responding to specific concerns that could potentially impact their business performance (Ehling & Hesse, 1983).<sup>4</sup>

One of the key concepts within issues management is the issue itself. Jones and Chase (1979) define issues as an “unsettled matter which is ready for decision” (p. 11) and Crable and Vibbert (1985) suggest that issues are different than problems because even when an issue has been “resolved,” they still persist. Dutton and Ottensmeyer (1987) also argue that issues may be internal (e.g., employee concerns) or external (e.g., governmental regulations) with external issues being more prevalent and consequential for companies. Climate change fits nicely within these definitions as it is an external and ongoing concern that significantly affects energy companies. Companies may fix one element of their energy production practices, but climate change is still an issue that persists.

An important consideration of issues management and how a company addresses a pressing concern is where that issue is in its “cycle.” Put another way, before a company can respond to an issue, it must first analyze and “frame” the issue.<sup>5</sup> The issue cycle framework describes how major issues like climate change are framed in news discourse, but the framework has been adapted to examine issue treatment in corporate communications as well. Downs (1972) was one of the first scholars to suggest that all issues have a life cycle, breaking them down into

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<sup>4</sup> Some scholars consider issues management to be distinct from public relations but with overlap (e.g. Heath & Palenchar, 2008) while others consider it a “specialization” of public relations (Hallahan, 2001, p. 27). In terms of overlap with public relations, issues management is now prominently used as a public relations tool (Heath & Cousino, 1990). Bowen (2005) points out that proactive issues management fits theoretically with the idea of symmetrical communication in that both concepts consider the concerns of publics and treat issues as a dialogic exchange (Grunig & Hunt, 1984). Lauzen (1997) similarly emphasizes that the “environmental scanning and active sense-making strategies” of issues management aligns with the two-way public relations approach (p. 68).

<sup>5</sup> Framing is utilized to “define problems—determine what a causal agent is doing with what costs and benefits...diagnose causes—identifying the forces causing the problem; make moral judgments—evaluate causal agents and their effects; and suggest remedies—offer and justify treatments for the problems” (Entman, 1993, p. 52). Framing can also be defined as a “schemata of interpretation” that emphasizes how individuals “locate, perceive, identify, and label” things that happen (Snow et al., 1986, p. 464). Framing is a key part of the Issues Management Process model and a useful framework for thinking about the connection between issue cycles and ECSR messages.

five stages: pre-problem, alarmed discovery/enthusiasm, realization of costs for resolving, interest decline, and post-problem. Crable and Vibbert (1985) adapted this cycle to suggest that issue stages include an initial interest in the issue, the imminent/important stage, the current stage (widespread coverage), the critical stage (important publics choosing sides on the issue), and the dormant stage once the issue has been sufficiently addressed. Because issue cycles describe how key actors frame and make sense of an issue, this framework serves as a useful tool for understanding how companies perceive their contribution to and responsibility for an issue. In the context of climate change, for example, where a company places an issue like carbon emissions within the cycle can explain their communication to the public about the issue. A company's discussion of carbon emissions as "dormant" will be vastly different than their discussion of carbon emissions as "current" (i.e., a dormant issue would be barely present or not present at all and a current issue would be discussed somewhat prominently) (Crable & Vibbert, 1985). This framework also applies to climate change as an overarching issue in addition to specific topics like carbon emissions that fall within the issue of climate change.

### **Issues Management as a Strategic Function of Public Relations**

Many scholars have been interested in both issues management as a strategic function of public relations and the framing of issue cycles (e.g., Barbour, Doshi, & Hernández, 2016; Darmon, Fitzpatrick, & Bronstein 2008; Veil & Kent, 2008). In a study examining obesity messaging from Kraft Foods in the face of growing health concerns related to snack and fast foods, Darmon et al. (2008) demonstrated how early responses and appropriate framing resulted in effective issues management. Not only was Kraft one of the first companies to respond to the issue of obesity, but it successfully employed a variety of frames related to serving sizes and nutrition goals that mitigated the backlash these companies were facing for their hand in obesity. Kraft's use of issues management demonstrates its utility in combating issues that not only affect a company but an entire industry as well.

In another study, Barbour et al. (2016) further examined issues management and the narrative strategies companies can employ to effectively manage an issue. The authors focused on audience responses to the use of narrative versus non-narrative messages disseminated by a global health organization and found that while narratives did not significantly impact perceptions of the organizations, they did positively impact message shareability. That is, readers

who encountered a narrative message about public health missions were more likely to spread it among their acquaintances than a non-narrative message. Together, these studies demonstrate how the issues management process can function as a strategic tool for corporations and that there are many different approaches to this process, including how an issue is framed (e.g., issue cycles) and communicated to the public (e.g., narrative vs. non-narrative messages).

### **Issues Management and Activism**

Not only do corporations use issues management to address issues that may affect their reputation or industry standing, but advocacy-based organizations also use issues management as a tool for targeting large corporations and strengthening their organizational missions (e.g., Sommerfeldt & Yang, 2017; Taylor, Vasquez, & Doorley, 2003; Woods, 2019). Taylor et al., (2003) examined AIDS activists' use of issues management as they targeted the pharmaceutical company, Merck, for limiting access to medication. The authors suggested that the issues management process is useful for building better rapport with large corporations when attempting to gain traction for organizational goals, such as lowering the price of AIDS medication; just as corporations frame issues in their preferred narrative, so too can activists frame issues in a way that necessitates perhaps a different response (e.g., if prescription costs are lowered, public support will increase). Sommerfeldt and Yang (2017) focused on how issues management and issue cycles influence advocacy-based organizations and their strategies in building support networks. They suggested that different stages in the issue cycle (potential, imminent, current, critical, and dormant) call for either high or low network diversity (i.e., many ties or few ties to entities outside of the organization) and those ties being strong or weak for social movement organizations. For example, critical issues (e.g., a bill limiting access to affordable medication that is about to become law) call for strong ties and low network diversity. Strong ties are more difficult to maintain, but they often lend greater trust and more specialized resources. In the case of a critical issue, it is better to have fewer ties (low network diversity) that offer those specialized resources.

## **Issues Management in an Environmental Context**

Recent scholarship also points to the use of both issues management and issues cycle in the environmental context. Pollach (2018) employed a longitudinal design to examine environmental reports from companies with varying environmental impact. Contrary to traditional media issue cycles that can be fast-paced and volatile, issues within corporate environmental reports appeared to remain steady or at the same place within the issue cycle over time, despite the increased concern over the climate change crisis. This difference may be attributed to the limited richness of traditional media channels in conveying environmental information. Corporate reports have the needed space to fully address a variety of issues without limitations, while traditional media audiences only have so much time and attention to devote to a particular issue. Corporations are able to spend far more time addressing issues that their publics find concerning through the use of these reports, especially in online forums (Pollach, 2018; Coombs, 1998).

Brossard, Shanahan, and McComas (2004) examined issue cycles in the media, comparing French and American representations of climate change. The authors suggested that the traditional media issue cycles presented by Downs (1972)—pre-problem, alarm/enthusiasm, recognition of costs associated, decline in interest, and post-problem—are more prevalent in American media than in French media. Their research suggested that the spikes in French media coverage of climate change were connected to political events like debates while U.S. media was more constant (in accordance with the continuous cycle that Downs suggests) and focused on issues like disagreements between scientists and politicians on the importance and existence of climate change. Brossard et al. (2004) conclude that more work should be done in comparing issue cycles across cultures.

Jaworska (2018) further delved into corporate social responsibility reporting for the oil industry and while she did not explicitly reference the issue cycle framework, she did identify general issue phases in the data. The three phases she identified included low attention to climate change from 2000 to 2004, increased attention from 2005 to 2008, and reduced attention from 2009-2013. While the last phase of reduced attention suggests an issue headed for the dormant category of the issue cycle (see Crable & Vibbert, 1985), recent developments in the climate change debate would suggest that this is not the case (see Freedman, 2019). The results of this

study thus suggest a disconnect from the realities of climate change and how the oil industry positions and manages their responsibility to the changing climate.

More specifically, because issues management is about how corporations analyze and address particular issues that affect their reputations, scholars have been interested in isolating key concerns for companies, such as fracking. Smith and Ferguson (2013) examined the environmental aspects of fracking from the perspective of large corporations versus advocates for preventing climate change, noting that both sought legitimation for their stances on the issue. The authors noted that while both corporations and advocates for mitigating the effects of climate change sought to manage the same issue, they used different targeting strategies. Activists were more likely to target the federal government while corporations targeted the weaker, local governments to prevent them from banning fracking. Issue management strategies also varied depending on whether the corporation or activist group wanted the issue to stay in one stage of the issue cycle or move to another stage (e.g., staying in a dormant stage or moving into a critical stage). This study demonstrates how single issues can be approached with varying strategies depending on the goals of the organization. This study also illustrates how even issues with scientific backing have varying conceptualizations.

### **Gaps in Issues Management and Issue Cycle Literature**

Despite the extensive research done on issues management and issue cycles, there are still some gaps that the current study seeks to address. First, many of the studies on the issues management process focus on one particular issue (e.g., fracking, forest management policies) and take the issue as a “given” rather than a point of discussion in and of itself (Smith & Ferguson, 2013; Bengston et al., 2009; Darmon et al. 2008). That is, this scholarship introduces an issue like fracking without examining how the issue is conceptualized, jumping straight to management strategies. This limited understanding of the issue itself makes it more challenging to see the connection between issue framing and issues management, which is an essential step in practicing effective public relations (see Darmon et al., 2008).

Second, many of these studies also apply the issue cycle framework in a way that positions an issue as in the same stage for all companies or news organizations (e.g., Jaworska, 2018; Sommerfeldt & Yang, 2017; Brossard et al., 2004). That is, an issue like climate change is discussed as being similarly conceptualized across companies or in mediated discourse, when in

reality, it is likely that a single issue is positioned very differently depending on the goals of the individual organization or media source (e.g., Taylor et al., 2003). This study addresses this gap by applying the issue cycle framework to individual companies that contribute to the same issue to better understand how each one frames and attempts to manage the issue (climate change in this case). This approach recognizes that issues are nuanced and that companies affect and are affected by issues in different ways.

Another trend in the extant literature is that the majority of studies take a quantitative approach and therefore do not provide much depth or nuance into the issue cycles framework or the issues management process (e.g., Bengston et al., 2009; McComas & Shanahan, 1999; Pollach, 2018). Because issues are conceptualizations that can vary depending on the goals of an organization, depth and nuance is needed to better understand how individual companies frame climate change as a complex and broad issue, which cannot be fully achieved from utilizing only quantitative approaches (e.g., looking only at term frequency). Accordingly, the current study focuses on how the climate change issue is qualitatively framed and conceptualized to better understand the central relationship between issue cycles and the resulting ECSR. This qualitative approach is important and worthwhile because although many scientists point to the existential threat of climate change (Freedman, 2019), there are still those that debate its severity and the degree to which humans play a role in its development (Leiserowitz et al., 2013). A qualitative approach can better take these nuances and differences of opinion into account with its emphasis on depth and context. A better understanding of climate change as a “debatable” issue is a critical first step in identifying how organizations can better satisfy public demands about said issues, a key aspect of issues management and public relations as a field.

Finally, this study examines the issue of climate change from the perspective of multiple nonrenewable energy industries to explicitly compare the different strategies employed by these companies that all contribute to climate change. Extant research typically focuses on examining these different industries without explicitly comparing them in depth, instead focusing on how their collective communication reflects the status of an issue (e.g., Jaworska, 2018; Pollach, 2018). This comparison is important from a public relations perspective to understand the nuanced strategies of direct competitors. The goal of this study is to better understand how corporations define, analyze, and present specific elements of the climate change issue upon which their ECSR is based.

## METHOD

I have argued thus far that ECSR is a common strategy for nonrenewable companies that face intense socio-political criticism for contributing to the climate change crisis. In order to better understand these messages within the broad range of nonrenewable energy companies, this study utilized the issue cycle framework and issues management process. Building from the above research, this thesis centered around two questions:

**RQ1:** How do nonrenewable energy companies present and frame the issue of climate change within the issue cycle?

**RQ2:** Based on the framing of these issues, how do nonrenewable energy companies manage the issue of climate change?

### **A Rhetorical Approach to Studying ECSR Messages**

To conduct this study, I utilized a rhetorical analytical approach. The proposed approach is largely inductive, with expected categories for the data analysis derived from the issues management and issue cycles frameworks. These frameworks provide a general approach to examining the environmental corporate social responsibility communications of nonrenewable energy companies. However, the rhetorical analysis approach allows for flexibility in terms of *how* nonrenewable energy companies frame and manage their respective contribution to and responsibility for the climate change crisis. I now discuss the characteristics of rhetorical analyses, the data used in this study, and the analysis procedure that I followed.

### **Qualitative Research and the Rhetorical Approach**

Rhetorical analysis is a form of qualitative research. Qualitative research is broadly defined as an approach that uses words (rather than numbers) as data (Braun & Clarke, 2013). Similarly, VanderStoep and Johnston (2009) define qualitative research as that which “produces narrative or textual descriptions of the phenomena under study” (p. 7). Qualitative approaches emphasize the subjective interpretation of the data (an often celebrated feature of qualitative research) (Braun & Clarke, 2013), the importance of the context in which the data is collected (Daymon & Holloway, 2010), and ultimately, depth over breadth when examining data

(VanderStoep & Johnston, 2009). Qualitative approaches are more inductive in nature, allowing for theoretical findings to arise from the data rather than approaching the data with strict expectations (Braun & Clarke, 2013). Accordingly, VanderStoep and Johnston (2009) suggest that qualitative research “provides a richer and more in-depth understanding of the population [or, in this case, phenomenon] under study” (p. 8).

As a means of defining qualitative research, it is useful to compare this analytical approach to quantitative research. In particular, qualitative and quantitative research differ in three main areas: their epistemological foundations, the privileging of depth over breadth, and their research design. First, quantitative research is grounded in the positivist tradition that privileges systematic methods, quantifiable results, and objective “Truths” (Daymon & Holloway, 2010). From this perspective, quantitative analysis is more concerned with outcomes that “*prove* a theory or determine a relationship between factors” (Braun & Clarke, 2013, p. 35). Qualitative research, on the other hand, is interpretive and suggests that there are many different “truths” that can be determined from a text (Daymon & Holloway, 2010). That is, depending on the research approach (e.g., grounded theory, interviews, rhetorical analysis), critical perspective guiding the study (e.g., feminist critique, Marxist critique), and researcher (e.g., subjectivity, bias), the interpretation of data will differ. Second, qualitative research privileges depth over breadth. Because the aim of quantitative research is determining objective truth and material reality, sample sizes are often large to achieve generalizability. The interpretivist nature of qualitative research emphasizes the deep meanings of a text and how those meanings are created (Braun & Clarke, 2013; VanderStoep & Johnson, 2009). In this way, qualitative research is not typically generalizable but instead provides much more depth to understand a phenomenon or concept. Finally, research design varies between quantitative and qualitative research. Quantitative methods privilege hypotheses and the use of statistics while qualitative methods privilege research questions and category identification within data sets (VanderStoep & Johnston, 2009). Thus, qualitative techniques allow for greater flexibility in both the data and interpretation and deeper understandings of the phenomenon in question.

There are several methods that fall under the category of qualitative research (e.g., ethnography, grounded theory), one of which is rhetorical analysis. The concept of rhetoric dates back to the ancient Greeks, and generally refers to discourse with a set purpose (Allen, 2007). More broadly, rhetoric refers to a variety of symbols and signs that are used to construct and

spread meaning (Campbell & Burkholder, 1997). As such, rhetorical analysis is aimed at analyzing the texts or artifacts that contain the symbols that construct and create meaning/reality (Campbell & Burkholder, 1997; Kuypers & King, 2009). Zachary (2009) adds to this definition, suggesting that rhetorical analysis takes a method like textual analysis a step further by anticipating not just what meanings can be determined from a text, but also how an audience will interpret that text.

Accordingly, rhetorical analysis involves deconstructing the text, determining categories for analysis, and then reconstructing the text in a way that suggests new meaning based both on what is present and absent in the text (Curtin, 1995). Similarly, rhetorical analysis emphasizes the “cultural assumptions of the text,” which are reflected in the textual deconstruction and reconstruction process (Fürsich, 2009, p. 240). Rhetorical analysis is also an interpretive approach emphasizing that a text does not have a singular interpretation (Fürsich, 2009). This method seeks to uncover one version or interpretation of the “truth” based on the text’s current state, the framework through which a text is being viewed (e.g., theoretical framework), as well as a variety of contextual conditions that may affect the interpretation of the text (e.g., current political discourse on a topic, public opinion, media attention; Scott, 1999). This interpretation of the text is dependent on the researcher and therefore may vary (Hart & Daughton, 2005), but qualitative research accepts this variation (often referred to as polysemy) as a necessary and even desired outcome to gain the depth and contextual understanding that quantitative research often lacks (Braun & Clarke, 2013; VanderStoep & Johnson, 2009; Condit, 1989).

Rhetorical analysis is appropriate for this study for several key reasons. First, the comparative nature of this research necessitates analytical flexibility, which rhetorical analysis facilitates. The approach each company takes to their sustainability report varies and rhetorical analysis is well equipped to manage this variation as it emphasizes the many different discursive formations that contribute to knowledge and meaning (compared to data that is relatively similar and therefore can be quantified) (Braun & Clarke, 2013). Similarly, due to the comparative gaps in the research mentioned above (e.g., scholars have given limited attention to issues management and comparing ECSR strategies across multiple industries with similar business practices), this study is necessarily inductive. This study also aims to understand how these corporations conceptualize the climate change issue and indicate where they perceive the issue to be in its cycle. This emphasis on issue conceptualization fits well with the goal of rhetorical

analysis in deciphering the use of symbols to convey manifest or latent meaning. With the use of issues management as a framework, this study is also concerned with how publics could interpret these sustainability reports, a question that rhetorical analysis is well positioned to address. Finally, rhetorical analysis emphasizes context as an important consideration in data interpretation (Fürsich, 2009; VanderStoep & Johnson, 2009). Because this study interrogates the ECSR messages of multiple nonrenewable energy sectors (i.e. coal, oil/gas), the larger socio-political and environmental contexts that uniquely affect each industry must be taken into account (i.e., climate change will be framed differently depending on the industry).

### **Data Selection**

The sectors of nonrenewable energy that were studied in this analysis include oil/natural gas and coal. Examining these specific sectors within nonrenewable energy is both appropriate and beneficial as they reflect the most widely used energy sources and provide a multifaceted look at the industry as a whole (EIA, n.d.). Oil and natural gas are included in the same category because many companies focus on both as energy sources (e.g., BP, Chevron, Royal Dutch Shell). Within each sector, two companies that include environmental corporate social responsibility communications were chosen. These companies include Peabody Energy (coal), Consol Energy (coal), Royal Dutch Shell (oil/natural gas), and British Petroleum (BP) (oil/natural gas).<sup>6</sup>

These companies were selected based on either their energy production, stock market performance, or a combination of the two as an indicator of their prevalence in the industry (LeBlanc, 2019; Kuykendall & Cotting, 2019; U.S. Stock, 2019; Vara, 2019). These companies also reflect those that have clear and distinct sustainability reports to provide a level of consistency that facilitates more straightforward comparisons. A few considerations were taken into account when determining the nonrenewable energy companies included in this analysis. First, many highly ranked coal companies, such as Armstrong Energy Inc. and Mission Coal,

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<sup>6</sup> This analysis did not include renewable energy companies in order to prioritize comparing industries with similar challenges and expectations (e.g., public criticism). However, comparing nonrenewable and renewable energy companies would certainly be a worthwhile pursuit for future research and is a logical next step in understanding the issues management strategies in the energy sector.

have experienced bankruptcy or are going through restructuring and therefore do not have active websites (Moritz-Rabson, 2019). Other companies such as Arch Coal do have sustainability reports but they have not been recently updated (in Arch Coal's case, dating back to 2006). Many of the coal company websites also do not mention sustainability or environmental concerns at all, which was a selection criterion.

The data used for this study were derived from the sustainability reports featured on the websites of nonrenewable energy companies. Websites are an ideal artifact for this study from a public relations perspective because they offer control over messaging, direct contact with publics, and are cost-effective for the organization (Coombs, 1998). Website pages and their content are also publicly available and therefore are easily accessible. In the context of nonrenewable energy companies, websites allow for extensive messaging related to issues that might affect an organization, such as climate change and environmental impact. This extensive messaging is often not possible in traditional media like news articles or broadcast segments that prioritize topics of the most urgent interest to news audiences (Pollach, 2018).

Sustainability reports (sometimes referred to by other names such as environmental, social and corporate governance reports, like in the case of Peabody Coal) found on the websites of nonrenewable energy companies are the focus of this study. These reports offer a comparable expression of how nonrenewable energy companies frame and attempt to manage the issue of climate change. While these companies feature climate change and sustainability messages on other parts of their websites, preliminary data collection suggested a large amount of overlap between the sustainability reports and this additional content. It is also important to note that these reports often include topics such as community involvement or employee safety. Because this thesis centers on ECSR messages, only the sections that explicitly discussed climate change were included in the analysis.<sup>7</sup>

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<sup>7</sup> It was possible for the nonrenewable energy companies to discuss other topics in sections of their sustainability reports that were focused on climate change. In those situations, the additional topics were taken into consideration as they indicated the importance (or lack thereof) of climate change. However, they were not a primary focus of this analysis.

## Rhetorical Analysis Procedure

The data for this study was collected by manually inspecting each website for sustainability reports, specifically the sections that pertained to climate change. The sustainability reports were presented in PDF form and were downloaded for each company. The identified environmental sections for each company were then compiled to rhetorically analyze. While there are options for web scraping and gathering online data with coding, the relatively small sample for this study and the use of only sections of reports that related to climate change made web scraping less ideal as it is more difficult to signal those separate sections that are focused on ECSR.

The frameworks of issues cycles and issues management served as a general guide for examining the data. The issue cycles framework includes five stages: an expressed interest in the issue, the perception of the imminence/importance of the issue, current and widespread coverage of the issue, a critical phase of the issue (publics making decisions on the issue), and the perception that the issue is dormant or no longer relevant (Cralle & Vibbert, 1985). These phases provided a useful starting point for identifying how nonrenewable energy companies situated the issue of climate change within its cycle, which was then used to assess their management strategies. This study focused on the climate change issue as either potential, imminent, current, or critical within sustainability reports as these stages in the issue cycle are often identifiable within a text. The dormant stage was eliminated as this phase was not easily reflected in sustainability reports. Dormant issues, by nature, are either resolved or unimportant and thus would not receive much attention from nonrenewable energy companies. Additionally, due to the vague nature of Cralle and Vibbert's (1985) issue cycle framework related to framing and expected issues management approaches, the assigned issue stage categories for the companies in this analysis were approached as *relative* rather than absolute. That is, where each company placed climate change in the issue cycle was influenced by the other companies that were included in this analysis and would likely be altered if additional companies (e.g., a renewable energy company) were included in this analysis. This point is discussed further in the limitation section of this thesis.

Similarly, the Issue Management Process Model suggests five major steps that organizations can take to prevent crises and improve public perception. These steps include identifying the issue, analyzing the issue, developing strategies to address the issue, choosing an

action program, and evaluating the results of the chosen approach (Jones & Chase, 1979). In order to justify ECSR efforts, nonrenewable energy companies likely engage in several of the issues management steps, such as identifying and analyzing the issue. For example, a company may identify the issues of carbon emissions, explain their proposed approach for reducing emissions, and then potentially offer an evaluation for how their approach effectively lessens emissions. This model thus served as a basis for analyzing issue management strategies and helped set expectations of these strategies related to where an issue fell in the issue cycle for a company. Companies that clearly identify an issue, offer an analysis, set clear actions to address the issue, and offer evaluations of those measures may be indicative of a company that places the issue further along in its cycle. Similarly, it might be expected that a company that places an issue within the current or critical stage would have more advanced issues management programs. The Issues Management Process Model therefore aids in identifying and analyzing issue cycles within the selected sustainability reports.

Using the issue cycle framework and issues management process as general guides to examine ECSR was both appropriate for the rhetorical analysis method and consistent with the extant literature. Using a framework to help determine general categories in data has been referred to as *directed* textual analysis, one that aims “to validate or extend conceptually a theoretical framework or theory” (Hsieh & Shannon, 2005, p. 1281). With this directed method, the researcher approaches the analysis with expected categories based on a theory or framework (Potter & Levine-Donnerstein, 1999). However, the approach is still largely inductive in that the data determines *how* the framework or theory is manifest in a text. Once categories have been identified in the initial analysis process, the theory or framework then guides the consolidation of thematic categories. Performing a directed analysis is distinct from a conventional textual analysis that takes a purer inductive approach (Hsieh & Shannon, 2005).

Scholars have also used the issue cycle framework and issues management process as analytical and theoretical tools in extant research. The majority of these studies are quantitative, identifying the frequency of terms to determine where an issue lies in the cycle. For example, Jaworska (2018) examined issue cycles in environmental communications of major oil companies through a quantitative content analysis. She focused primarily on how frequently terminology like “climate change” and “greenhouse effect” were utilized, suggesting that these terms were indicative of the perceived stage of the issue in environmental reports. Shih, Wiyaya,

and Brossard (2008) applied a similar approach to media coverage of health epidemics, searching for the frequency of terms to indicate stages in the issue cycle. While these studies were more quantitative in nature, the base idea of identifying terms or phrases to indicate a stage in the issue cycle remains the same. Using a similar approach with issue cycles and issues management but in a qualitative manner allows for a deeper understanding of the framing strategy utilized by these corporations that is particularly useful for understanding a complex issue like climate change.

Following extant literature (see Schilling, 2006), this rhetorical analysis proceeded in several main steps. After the data was collected, the first step was to examine all of the data to get a general sense of the content. I then read over the data again to identify themes that indicated how a company was framing the issue of climate change. With these themes in mind, I then read over the data to gain a sense of how each company differed in the framing of climate change within these themes. I then used the results from this framing analysis to assess where a company placed climate change within the issue cycle as well as their strategies used to manage the issue. From there I compared the approaches of these companies across industries (i.e., coal to oil and gas). This approach allowed for the data to be examined holistically and largely inductively to create a greater understanding of the issues management process (Braun & Clarke, 2013; Daymon & Holloway, 2010; VanderStoep & Johnston, 2009).

## RESULTS

The goal of this study was to examine how nonrenewable energy companies frame and manage the complex issue of climate change, particularly the nonrenewable energy companies Consol (coal), Peabody (coal), British Petroleum (BP; gas and oil), and Royal Dutch Shell (Shell; gas and oil). This research is especially important given the gaps in the extant literature. In particular, studies interested in the issue cycle framework typically approach cycles as the same for all companies/organizations within an industry instead of considering individual differences (e.g., Jaworska, 2018; Sommerfeldt & Yang, 2017; Brossard et al., 2004). Moreover, studies interested in issues management as a function of public relations do not focus heavily on how an issue is conceptualized and instead go straight to issues management strategies (e.g., Smith & Ferguson, 2013; Bengston et al., 2009; Darmon et al. 2008). In doing so, these studies take the issue as a given instead of a conceptualization in and of itself. Climate change serves as a timely issue to examine due to the increased attention and scrutiny it has received in recent years from a variety of publics (e.g., media, the government, activists; Freedman, 2019; Wagner et al., 2019). Accordingly, this study examined the sustainability reports of nonrenewable energy companies to determine how they individually frame the issue of climate change within its issue cycle and the extent to which this framing coheres with their management strategy.

### Overview of Sustainability Reports

Before considering the research questions of interest, an overview of the sustainability reports is warranted. Each report was found on the sustainability page for each company's respective website. Shell (2019) had the most comprehensive sustainability report at 86 pages and focused on the company's responsibility as a business (e.g., meeting the varied expectations of their publics), their societal contribution (e.g., providing jobs), and their sustainability efforts in relation to the environment. Shell also mentioned other concerns in their sustainability report, such as meeting current energy demand. BP's (2019) sustainability report was 82 pages and focused on issues such as worker safety, human rights, and the environment. Consol's (2019) sustainability report was the shortest at 26 pages and focused primarily on worker safety with a few references to environmental compliance. Lastly, Peabody (2018) referred to their report as

an “ESG” or an environmental, social, and governance report and was 45 pages. Although the title of this report was different, the themes it addressed (e.g., environmental concerns, worker safety) were essentially the same as those reflected in the other sustainability reports. The sustainability reports of these nonrenewable energy companies were also found in similar sections of each company’s website, usually within a sustainability section that was accessed from the home page. However, the oil/gas companies (BP and Shell) dedicated significantly more space to the climate change issue compared to the coal companies (discussed below). These reports serve as the basis for this analysis. I now turn to the research questions of interest.

### **Climate Change Framing and Issue Cycles**

The first research question pertained to how nonrenewable energy companies present and frame the issue of climate change and how that framing connects to the theoretical framework of issue cycles. This question was asked because previous research on issues management tends to focus more on the issues management strategies while taking the issue itself as a given (e.g., Smith & Ferguson, 2013; Bengston et al., 2009; Darmon et al. 2008). The way a company discusses and presents climate change ultimately reflects how serious it consider the issue to be and its willingness to take action (Cralle & Vibbert, 1985). One way to analyze issue framing is through the issue cycle framework. Applying this framework to nonrenewable energy companies demonstrates where they place an issue in its cycle. From there, these companies’ issues management strategies can be better understood. Management strategies directly relate to how well nonrenewable energy companies are able to satisfy the concerns of their publics, which is an essential function of public relations (Heath & Cousino, 1990).

There are four stages within the issue cycle framework that guided this analysis: potential, imminent, current, and critical (Cralle & Vibbert, 1985). The dormant phase, although included in the issue cycle framework, was excluded from this analysis because it assumes the issue has been resolved. If a company placed the issue of climate change within the dormant phase, then it would not be actively addressing the issue. In the potential stage, the issue is presumed to exist, but it receives little attention as it is not perceived to significantly affect the company. In the imminent stage, the issue is not yet crucial to most publics (e.g., financial investors, important clients, general consumers) but is starting to gain more interest. At this stage, the issue is perceived to have a potential effect on the company, but that effect is still

relatively small. The current stage encompasses a period when the issue is widely known and regarded as significant to a variety of publics (e.g., customers, board members, investors). The issue has the potential to make a somewhat significant impact on the company if not addressed. Finally, in the critical stage of an issue cycle, the issue has gained widespread attention and has the potential to substantially affect a company or its key publics (e.g., major investors; Crable & Vibbert, 1985). After examining the data, it became clear that there were several themes that indicated how each nonrenewable energy company framed the climate change issue, which was then used as the basis for the issue cycle assessment. Differences were apparent along the lines of 1) the prevalence of the climate change discussion, 2) the alignment with external regulations that seek to address climate change, and 3) how each company expressed their responsibility for the climate change issue. Table 1 summarizes these themes and I discuss them in turn below.

**Table 1.** Climate Change Framing and as an Indication of Issue Stage

<b>Issue Framing</b>	<b>Consol (Coal)</b>	<b>Peabody (Coal)</b>	<b>BP (Oil/Gas)</b>	<b>Shell (Oil/Gas)</b>
<b>Prevalence of Climate Change Discussion</b>	No mention of climate change in CEO letter, no table of contents, focused primarily on issues like worker safety over climate change (low issue concern)	One vague mention of climate change in CEO letter, table of contents only referenced the general environment, issues like energy demand took precedence over climate change	Direct mention of climate change “ambitions” in CEO letter, table of contents mentioned issues related to climate change, clear mention of other concerns like energy demand, but large focus on climate change	Direct mention of climate change as a moral responsibility in CEO letter, table of contents explicitly mentioned climate change, mentioned other concerns like energy demand, but heavily emphasized reducing climate change
<b>Alignment with External Regulations</b>	No reference to external regulations	Few mentions of UN Sustainability Goals and Paris Agreement, but only in passing	Referenced several regulations, their consistency with the Paris Agreement, briefly mentioned UN Sustainability Goals at end of report	Heavily referenced regulations with explicit support of the Paris Agreement, emphasized how the IPCC's mentions Shell in future calculations
<b>Responsibility for Climate Change</b>	Took no responsibility for climate change	Took no responsibility for climate change	Discussed climate change as societal responsibility	Took clear (moral) responsibility for climate change and expressed a desire to address the issue
<b>Issue Cycle Stage</b>	Potential	Imminent	Current	Critical

## Prevalence of Climate Change Discussion

There were clear differences in how nonrenewable energy companies presented discussions of climate change in their sustainability reports. These differences were apparent in both how quickly the companies referenced climate change and how much attention climate change was given in proportion to the other topics discussed in the report. For example, some nonrenewable energy companies discussed climate change in the CEO letter while others did not. Some companies clearly identified the issue of climate change in the table of contents while others did not. Both of these trends showed varied levels of attention to the climate change issue. Additionally, there were clear differences in the *degree* of concern that each company showed for climate change. These items set the tone for the importance of climate change in each sustainability report, which signals, in part, where the companies placed climate change in the issue cycle.

*CEO letters.* The sustainability reports examined for this analysis all had CEO letters at the beginning to give an overview of the topics discussed in the report. Geppert and Lawrence (2008) have suggested that CEO letters serve as an indication of corporate reputation and are therefore a valuable tool for expressing a company's priorities from a public relations perspective. These letters effectively set the tone for the rest of the report and there were clear variations in how each company addressed and framed the issue of climate change in these letters.

*Coal.* Consol showed little to no concern for climate change in their CEO letter. In fact, it never mentioned the term "climate change." The limited reference to environmental concerns was simply to "environmental compliance," which could encompass a variety of topics unrelated to climate change (Consol, 2019, p. 1). Peabody gave climate change more attention in its CEO letter, and, in doing so, showed somewhat of a greater concern for the issue. In their CEO letter, Peabody (2018) stated that it has "supported the development and deployment of advanced coal technologies to achieve global climate and other environmental objectives" (Peabody, p. 3). While this quote demonstrates some attention to climate change, the emphasis on "support" is vague and does not point to any specific initiatives or technologies that might address climate change. This was also the only mention of climate change within Peabody's CEO letter. Nevertheless, Peabody demonstrated a greater concern for climate change than Consol that had no explicit mention of climate change in their CEO letter.

*Gas and oil.* BP directly mentioned the issue of climate change within their CEO letter. BP (2019) referenced climate change by discussing their “low carbon ambitions” and how their actions were “consistent with the Paris Goals” (p. 2). The use of language like “ambitions” is stronger than general “support” for limiting climate change (which was language used in Peabody’s CEO letter) and the direct reference to the Paris Agreement suggests that BP acknowledges climate change as a pressing issue that requires worldwide regulation. Shell showed a strong focus on climate change in their CEO letter. Early in the letter Shell (2019) stated, “We must do the right thing on climate change, which means helping to reduce the environmental impact that comes with making our energy products” (p. 1). By making this statement, Shell is suggesting that tackling climate change is a moral imperative of the utmost priority. Shell (2019) also positioned itself as leading the industry, saying “We were the first international oil and gas company to set an ambition using a measure which includes our customers’ emissions when they use the energy products we sell” (p. 2). This quote further demonstrates Shell’s desire to position themselves as a proactive and attentive company within the oil and gas industry where climate change is concerned.

***Table of contents.*** Table of contents also serve as an indicator of how nonrenewable energy companies conceptualize the climate change issue. The table of contents effectively gives an overview of how much attention an issue will receive in a sustainability report. Once again, there were clear differences in how the nonrenewable energy companies attended to the issue of climate change in their tables of contents.

*Coal.* Consol did not include a table of contents, which means there is little to infer since it did not demonstrate an emphasis on climate change (or any other issue) in this way. Peabody’s guide to the content in their sustainability report demonstrated a weak focus on climate change as an issue. Peabody did include a general table of contents as well as a guide to how their report addresses the UN Sustainability Goals, but this guide was rather sparse. The guide to their coverage of the UN Sustainability Goals showed that there was only one page dedicated to climate action in the report. The table of contents also did not explicitly mention climate change, but rather their general “environmental approach” (Peabody, 2018, p. 1). Comparatively, Peabody showed a stronger concern for the climate change issue than Consol, but the references were still limited and vague.

*Gas and oil.* BP included several references to issues related to climate change in their table of contents, but not to climate change itself. For example, BP (2019) did not explicitly mention “climate change,” but it did include the heading labeled “The energy transition” (p. 5), which included topics like emissions and renewable energy. Emission reduction and renewable energy have clear connections to climate change, but the lack of reference to climate change specifically suggests that BP perhaps does not want to (or does not feel the need to) fully acknowledge the severity of climate change or their direct contribution to the issue. Shell offered the most climate-focused table of contents as it was the only company that explicitly mentioned climate change. Shell (2019) referenced “climate change and the energy transition,” “managing greenhouse gas emissions” and their future goals under their “Sustainable Energy Future” heading, demonstrating a high priority for addressing climate change (table of contents). Similar to the CEO letter, Shell positioned climate change as an issue requiring detailed explanation and attention in their table of contents.

***Degree of issue concern.*** When analyzing sustainability reports, it became clear that the issue of climate change was not always at the forefront of discussion. In some reports, climate change was offset with discussions of energy source affordability, energy efficiency, energy demand, and other environmental considerations. This section thus discusses nonrenewable energy companies and their presentation of climate change as a main focus or secondary concern within each report as an indication of the issue cycle.

*Coal.* Consol signaled an overall lack of concern for climate change as it barely mentioned “climate change”; the term is never actually used in its sustainability report. Instead, Consol demonstrated a preference for other issues that may affect their company, such as worker safety and community outreach; their first large section in their sustainability report was about their company culture. Environmental issues related to climate change were not even mentioned in detail until well into the report under the heading “Our Present: Stability in a Changing Energy Landscape” (Consol, 2019, p. 13 out of 26), which is vague in its connection to even general environmental concerns. Peabody frequently minimized climate change and instead focused more on the necessity of the energy it provides. Peabody stated that the company “believes the story of global energy is not one of good versus evil. It is a tale of the pursuit of two ‘goods’—affordable, reliable energy and reduced emissions” (Peabody, 2018, p. 12). Peabody (2018) recognized that “climate change is occurring and that human activity, including the use of fossil

fuels, contributes to greenhouse gas emissions,” but also emphasized that “coal is essential to affordable, reliable energy” (Peabody, p.16). Both excerpts demonstrate how energy reliability and affordability is Peabody’s primary focus while limiting emissions is perhaps a secondary concern. Peabody showed a greater focus than Consol that did not explicitly mention climate change, but Peabody minimized the issue suggesting that there were other concerns that took precedence before climate change (i.e., meeting energy demand).

*Gas and oil.* BP’s sustainability report clearly suggests that climate change must be balanced with other pressing concerns for their company. For example, BP (2019) stated in their sustainability report that their “strategy is designed to grow shareholder value while also helping to meet the dual challenge,” referring to the challenge of meeting the energy demand and combating climate change (p. 7). BP (2019) had several references to this “dual challenge,” mentioning it on its title page with the heading “Responding to the Dual Challenge” and in the CEO letter saying the company has “a role to play in the dual challenge” (p. 1). BP (2019) also mentioned the dual challenge under the company’s energy transition heading, stating that “the world needs more energy but with fewer emissions. BP is playing an active role in meeting this dual challenge” (p. 6). These references demonstrate that while climate change is an important issue to BP, it has to be balanced with other important priorities such as energy demand. This approach was similar to Peabody’s, but BP did not minimize climate change to the extent that Peabody did. BP did mention climate change but also stressed the necessity for oil and natural gas. For example, BP (2019) stated that the world wants “more energy to fuel increasing prosperity,” but also “demands energy delivered in new ways, with fewer emissions” (p. 1). This desire for balance between the two competing goals was a common feature of BP’s sustainability report.

Shell also suggested that addressing climate change was not their company’s sole focus, emphasizing how other issues warranted action. Shell (2019) acknowledged this “both/and” approach saying, “there is a lot of work to do to cut global greenhouse gas emissions while meeting rising demand for energy” (p. 2). In doing so, Shell presents reducing emissions as a goal in itself but also makes it clear that energy demand is still an important concern; the company cannot fully reduce emissions when there is such a need to provide energy. Shell (2019) also suggested that climate change ranks highly for them as an issue, stating, “this report lists the topics that were a priority to Shell in 2018. The topics that consistently ranked of higher

importance were energy transition and climate change” (p. 4). Both BP and Shell recognized that energy demand is essential to balance amongst climate change concerns, which is understandable as their industry revolves around energy production. However, Shell emphasized how it is working to reduce climate change more thoroughly than BP that simply reinforced the dual challenge of balancing energy production with climate change efforts.

*Comparison of climate change prevalence.* CEO letters and table of contents are an important part of sustainability reports because they are the companies’ first opportunity to present and frame the issue of climate change for their publics. The degree of concern a company expresses for the issue of climate change is also important as it sets the tone for how seriously a company views the issue in relation to other key concerns. It is clear that the coal companies gave the least attention to the issue of climate change compared to the oil and gas companies in these respective ways. These results could be due to the high level of unavoidable emissions that coal companies produce and the limited technology available to them to decrease emissions compared to oil and gas companies (see Kolstad, 2017). Due to their inherent environmental harm with limited corrective opportunities, it would be reasonable for coal to simply accept their status as a company that contributes to climate change rather than present themselves as trying to actively combat the issue. Given the coal industry’s limited resources for making such a change, discussing climate change in great length could potentially seem inauthentic compared to their current approach of minimizing the issue. Regardless of the reason why there was variance, it is valuable to understand how prominently these companies featured climate change in their sustainability reports. In this case, the prominence of climate change serves as an indicator of where the nonrenewable energy companies placed the issue in its cycle (discussed below).

### **Alignment with External Regulations**

Another prominent way that nonrenewable energy companies can frame the issue of climate change in its cycle is through the acknowledgment of external regulations, such as The Paris Agreement or the UN Sustainability Goals. These regulations, by the mere fact that they exist, suggest that climate change is a major issue facing society (see “What is the Paris Agreement,” 2020). Repeated references to these agreements/regulations in a sustainability report would likely coincide with placing climate change later in the issue cycle. The following

section thus focuses on the amount and nature of these references as an indication of how serious of an issue each nonrenewable energy company considered climate change to be.

**Coal.** Consol demonstrated a lack of concern for regulatory measures related to climate change in their sustainability report. In fact, Consol did not make any reference to outside agreements or initiatives. Peabody, on the other hand, included limited references to the regulations designed to manage climate change. For example, Peabody briefly mentioned the UN Sustainability Goals in their report overview, but spent little time providing detailed explanations of the goals, such as what the company seeks to accomplish or how Peabody initiatives align with the UN Goals. Peabody's (2018) discussion of the Paris Agreement was also limited as it was only referenced when the company talked about its commitment to technology, saying that many countries with high coal usage include "advanced coal technologies in their nationally determined contributions under the Paris Agreement" (p. 14). This reference does not present the Paris Agreement as a substantial influence in their business practices, but rather an agreement that simply serves to motivate the technological investments of various countries. Peabody (2018) additionally pointed out that "Many of the largest coal-consuming countries in the world continue to see a role for coal in the carbon-constrained world" (p. 14). This quote indicates that Peabody is perhaps more focused on using coal *despite* the concerns of the Paris Agreement. Both coal companies had limited references to regulatory measures, but Consol showed the least amount of climate change concern without a single reference in their report.

**Gas and oil.** BP included a variety of references to regulatory measures in its sustainability report, suggesting that the company considers climate change to be a somewhat significant issue. The company mentioned the Paris Agreement in the report, stating, "We firmly believe our strategy is consistent with the climate goals of the Paris Agreement" (BP, 2019, p. 2). BP also discussed how its initiatives such as carbon capture, use, and storage fit within the guidelines of the Paris Agreement. While the Paris Agreement was referenced multiple times in BP's sustainability report, the company simply emphasized that its strategy was "compatible" with the agreement rather than offering their explicit support for it. BP (2019) also had limited references to its specific role in meeting the Paris Agreement, instead choosing to say, "To meet the Paris goals, we believe the world must take strong action on a range of fronts" (p. 7). By making this statement, BP acknowledged the Paris Agreement but also placed the responsibility for upholding the agreement on the global energy community.

BP did mention the UN Sustainability Goals, but these references were located at the very end of the report and were only briefly addressed. For example, BP (2019) stated that it has “set out our low carbon ambitions to reduce emissions in our operations, improve our products and create low carbon businesses” in relation to UN Sustainability Goal 13, climate action (p. 70). This mention of climate action was alongside several other general goals that were not related to climate change (e.g., the UN Sustainability goal of good health and well-being). By placing the sustainability goals at the very end of the report with only a brief mention of climate action among other sustainability goals, BP’s alignment with the UN’s Sustainability Goal of climate action seems rather perfunctory.

Shell provided the greatest amount and variety of references to regulatory measures related to climate change, centering climate change as a definitive issue that needs to be addressed. Not only did Shell regularly mention these regulatory measures, with 19 references to the Paris Agreement alone, but the company also explicitly stated its support of these measures. As Shell (2019) clearly stated, “We support the UN Paris Agreement on climate change” (p. 10) and “We fully support the Paris Agreement and we are driving our business strategy in the context of the energy transition” (p. 44). Shell (2019) also mentioned the Intergovernmental Panel on Climate Change and emphasized how the panel actually referenced one of Shell’s “future scenarios” about mitigating the effects of climate change, saying “the Intergovernmental Panel on Climate Change (IPCC) released its report on the impact of 1.5 degrees Celsius warming and referenced Sky [a Shell future energy scenario]” (p. 45). Shell emphasized that their efforts to predict future energy scenarios were reported by a respected authority on climate change, lending further legitimacy to their actions combating climate change. Other initiatives and groups that Shell mentioned included the UN Sustainability Goals (specifically goal 13, climate action) and the World Bank that has an initiative on reducing flaring, a method of releasing excess gasses into the atmosphere during energy production. These references all lend further credibility to Shell’s proactive business practices to combat climate change.

**Comparisons.** Shell demonstrated the most extensive and varied references to regulatory measures compared to BP and the coal companies included in this analysis. Consistent with the above findings, the coal industry showed little regard for aligning with external regulatory bodies, either not mentioning them at all or only in passing. This finding is particularly important when considering that even with entire countries committing to the goals of the Paris Agreement,

current ambitions will still result in a global temperature increase of three degrees Celsius (Mulvaney, 2019). Therefore, it is especially concerning that an industry like coal that makes a clear contribution to climate change (see Kolstad, 2017) barely recognizes these outside regulations. In contrast, the oil and gas companies included in this analysis made clear references to these outside agreements, outlining goals that work towards reducing their climate impact.

### **Perception of Issue Responsibility**

A variety of industries contribute to climate change (e.g., energy producers, textile manufacturers, logging corporations, electronics companies). However, each company contributes to climate change in different ways. For example, logging companies remove trees that help reduce the impacts of carbon emissions while energy producers contribute directly to those emissions. Accordingly, individual companies likely present different views of their responsibility based on the nature of their business. Some companies may perceive limited responsibility, suggesting that they are not responsible for climate change and therefore do not need to take action. Some companies may attribute climate change to an industry as a whole, suggesting that solving the issue is bigger than what one company can manage. Or, some companies may take responsibility and accept their individual role in contributing to climate change. This next section thus explores this attribution of responsibility and the language each nonrenewable energy company used to frame their contributions to climate change. Companies that take greater responsibility for an issue are likely also giving the issue more credence. This level of responsibility also likely indicates, to some extent, where a company places an issue within its cycle. As a note, the coal companies included in this analysis did not have any strong indicators of how they were assessing their responsibility for the issue of climate change (which is compelling in and of itself), so only the oil and gas companies are included in this section.

***Gas and oil.*** BP made it clear in their sustainability report that addressing climate change was not *primarily* their responsibility, but instead the responsibility of society in general. In fact, BP (2019) explicitly stated that climate change was “A shared challenge” (p. 7). The company established this limited responsibility further by saying, “We have a role to play in solving the dual challenge but can’t do it alone. Everyone, from consumers to corporations to governments, needs to take responsibility” (BP, 2019, p. 2). Not only did BP (2019) suggest that other groups need to take action, but also criticized the government for preventing the technological

innovation needed to solve climate change by saying, “Collaboration is needed to make CCUS [carbon capture, use, and storage] a reality. The technology has been in use for more than 20 years, but needs governmental support” (p. 23). BP admitted that there were avenues to improve their performance, but also noted that the company was not the only one determining access to those technologies. Instead, BP argued that there were barriers to combating climate change outside of their control and that actors like the government held the most responsibility for providing these resources. In doing so, BP established that its responsibility for climate change was shared with many other groups and certainly not the company’s alone.

In contrast, Shell indicated in their sustainability report that their company has a strong responsibility for managing its products and emissions as they both contribute to climate change. Shell (2019) stated in the CEO letter that their company needed to continue improving and “do the right thing on climate change” (p. 1) saying “We must be responsible stewards for these energy products. This means taking action on the greenhouse gas emissions associated with our energy products” (p. 1). With these quotes, Shell is suggesting that their company is taking responsibility by managing how their products affect climate change. Later in the report when referencing their 2050 carbon footprint goal, Shell (2019) also stated that “We need to go faster than society to achieve this ambition” (p. 46), indicating that the company was willing to lead the charge in accomplishing net zero emissions. Through this language, Shell demonstrated that it took responsibility for their specific role in climate change and indicated that the company needed to work harder than other industries.

**Comparisons.** Overall, Shell emphasized their responsibility to address climate change the most in their sustainability report. BP took some responsibility, but specifically noted that climate change was a shared issue that the company alone could not and should not fix. The coal companies included in this analysis communicated zero responsibility for climate change, which is alarming given how their activities greatly contribute to carbon emissions (EIA, 2019b). From a public relations perspective, Consol and Peabody’s lack of responsibility perhaps indicates an error in strategy that contributes to their public backlash; coal production undoubtedly contributes to climate change and taking even some responsibility seems appropriate. However, these collective results indicate that coal companies are not willing to fully acknowledge climate change as an issue, or at least one that they contribute to, which speaks to where they place climate change within the issue cycle.

## Issue Framing as Indication of Issue Cycle

The themes presented in the above section encompass the different ways that nonrenewable energy companies frame the issue of climate change in their sustainability reports. Collectively, this framing indicates where these companies place climate change in the issue cycle. Based on the data, Consol likely places climate change in the *potential* stage. This stage suggests that a company acknowledges the existence of the issue but does not perceive it to be as important to their business or publics and therefore does not thoroughly address the issue (Crabbe & Vibbert, 1985). Consol clearly had the fewest mentions of climate change and only tangentially addressed the issue with terms like “environmental compliance.” Similarly, Consol did not reference any external agreements or initiatives related to climate change, such as the Paris Agreement or the UN Sustainability Goals. Based on this limited discussion, it is clear that the issue of climate change may be on Consol’s radar, but it is not considered a high priority issue or one that requires explicit discussion in their sustainability report. This framing aligns with what might be expected from the potential issue stage.

Peabody was the second coal company included in this analysis and their discussion of climate change indicates that the company likely places the issue in the *imminent* stage. The imminent category suggests that publics have started to take notice of an issue and a response may be warranted. The company is expected to acknowledge the issue and its effect, but action may still be limited (Crabbe & Vibbert, 1985). Peabody did have some mention of climate change with references in their CEO letter, but it was far from the primary focus. Instead, Peabody focused largely on other issues like energy demand that justified coal’s place in the energy sector despite climate change concerns. Peabody had limited reference to external organizations like the Paris Agreement and mostly discussed these initiatives to indicate how coal can remain a part of the energy industry and not violate the agreement. Peabody showed enough attention to the issue to signal that it is at a later cycle stage than potential, but that attention was still limited and not as extensive as the oil and gas companies included in this analysis.

Of the oil and gas companies, the data suggest that BP likely places climate change within the *current* stage. The current stage suggests that the issue has gained the attention of most (if not all) publics and calls for a strong response from the company in terms of acknowledging how the issue affects the company, how it impacts the issue, and how it will

address the issue (Cralle & Vibbert, 1985). BP demonstrated this current stage by frequently mentioning climate change with stronger language than Peabody. Use of words like “ambition” and “active” demonstrate that BP is continually addressing climate change rather than just recognizing its existence. BP also included a variety of references to external regulations. The company did not go as far as to say that it supports the Paris Agreement, which might indicate that it perceives the issue to be “critical,” but BP did acknowledge the agreement several times. BP also emphasized climate change as an issue that affects society rather than just the company itself, indicating a shared responsibility for addressing the issue. BP additionally emphasized energy demand as an issue with equal or greater importance compared to climate change. Climate change clearly affects different aspects of BP’s business operations and they discussed these effects frequently in their report, but there is still room for stronger attention to the issue, which fits with the current stage.

Finally, the data suggest that Shell likely places climate change into the *critical* stage with the greatest attention to the climate change crisis. The critical stage encompasses decisive and targeted action as the issue has attracted the attention of all key publics. In this stage, extensive acknowledgement of the issue is necessary to maintain a positive relationship with these publics (Cralle & Vibbert, 1985). Shell presented climate change as a primary focus in their CEO letter. Moreover, their table of contents was the only one out of the four to explicitly reference “climate change” along with the sub-issues that contribute to climate change, such as emissions. Shell mentioned a wide variety of climate initiatives and notably expressed explicit support for the Paris Agreement (rather than just compliance with the agreement). Shell also took responsibility for their role in climate change and emphasized a desire to tackle the issue. Shell highlighted that it leads the oil and gas industry in addressing climate change. The company even suggested that while society has to work together to tackle climate change, Shell must work even harder to lead the charge in reducing environmental harm. In doing so, Shell took on a greater responsibility for combating climate change than any other company in this analysis. The company demonstrated the strongest and most explicit discussion of climate change, likely placing the issue in the critical category that requires definitive action.

## **Issue Cycle and Issues Management Strategies**

The second research question in this analysis built directly on the first research question and sought to understand how issue framing relates to issue management strategies. In the current context, the second question pertained to how the nonrenewable energy companies attempt to manage climate change (an issue that they contribute to) based on where they place climate change within the issue cycle. This question essentially connects the framing of climate change with management strategies, a connection that is often overlooked in extant research (e.g., Smith & Ferguson, 2013; Bengston et al., 2009; Darmon et al., 2008). Because issues management is an important function of public relations (see Hallahan, 2001; Heath & Cousino, 1990; Jones & Chase, 1979), this research question is useful for understanding whether issues management strategies align with how companies conceptualize issues like climate change, which is a concern for many publics (see Freedman, 2019). Whereas the previous section was solely focused on issue framing as an indication of the issue cycle, the current section extends this research by focusing on the issues management strategies of Consol, Peabody, BP, and Shell. The issues management strategies that consistently emerged from the data, but that were deployed differently by each company, include the following: 1) focusing on reducing impact and/or increasing efficiency in relation to climate change, 2) emphasizing the technology that can help combat climate change, 3) working with industry organizations or councils that seek to manage the effects of climate change, and 4) making performance comparisons within and outside of their respective industry in terms of responding to climate change. Before discussing how each company differed in these management strategies, I provide a brief description of these categories below.

### **Issues Management Strategies**

The data revealed four main ways that nonrenewable energy companies manage the issue of climate change. The first was reducing the negative impacts and increasing the efficiency of energy practices. Impact reduction refers to the end product of a company's business practices (e.g., decreasing the amount of carbon released into the atmosphere) while increases in efficiency refers to optimizing the stages or processes of a company's business practices (e.g., consolidating the number of trucks needed to transport materials). Both management strategies ultimately lead

to a decrease in a company's contributions to climate change. Theoretically, the farther a nonrenewable energy company places climate change in its life cycle, the more urgency these companies should feel to reduce the negative impacts and increase the efficiency of their business practices (i.e., the current and critical stages), especially given the intense socio-political criticism the nonrenewable energy industry is facing due to their environmental harm (see Kolstad, 2017).

Similarly, emphasizing the technology used to minimize the effects of climate change may be a greater focus for nonrenewable energy companies that perceive the issue to be farther along in the issue cycle. Greater use of technology suggests that a company is willing to evolve to address an issue like climate change, but this approach is undoubtedly costly. Only companies that perceive their contributions to climate change to pose a serious threat to their reputations will likely find the costs for new technology warranted.

Companies that place climate change in the categories of current or critical might also be expected to have multiple references to their work with climate-focused industry groups. These industry groups often oversee corporate actions and make suggestions on how to reduce environmental impacts within the nonrenewable energy sector. Finally, companies that place climate change later in the issue cycle are likely to emphasize their progressive stance on climate change as a method of appearing superior to other companies within or outside their industry. Using these general management categories that emerged from the data, the following section connects issue cycles with issues management, indicating a strong theoretical connection between how a company perceives climate change and how it attempts to address the issue. Table 2 summarizes the management strategies for each company and I discuss each point in turn below:

**Table 2.** Climate Change Framing and Issues Management

<b>Issues Management Strategies</b>	<b>Consol (Potential)</b>	<b>Peabody (Imminent)</b>	<b>BP (Current)</b>	<b>Shell (Critical)</b>
<b>Focus on Impact Reduction and Efficiency Increase</b>	Focused on monitoring emissions and meeting mandatory regulations	Demonstrated concern for reducing impact and increasing efficiency, but for the coal industry as a whole	Emphasized their reduce, improve, create framework and successes in limiting emission growth, not reducing	Positioned emission reduction as essential and emphasized corporate incentives tied to reductions
<b>Emphasis on Technology</b>	Limited focus on their own use of technology	Mentioned investments in technology, but not their implementation	Mentioned their multiple uses of and long-term commitment to advanced technology	Emphasized developing and using technology in multiple ways
<b>Membership in Climate-Focused Industry Groups</b>	Only one reference to a climate-focused industry group	Few references made to climate-focused industry groups at the end of their report	Multiple references to climate-focused groups	Multiple and varied references to climate-focused groups with emphasis on input from external regulations (e.g., the U.N.)
<b>Performance Comparison Within and Outside of Industry</b>	No comparisons present	No comparisons present	Focused mostly on comparisons between the entire oil and gas industry	Presented themselves as a leader in the gas and oil industry
<b>Alignment with Issue Cycle Framing</b>	Aligns with potential stage	Mostly aligns with imminent stage (except comparisons)	Aligns with current stage	Aligns with critical stage

## Potential Stage

Based on this analysis, Consol likely places climate change in the potential stage of the issue cycle. This stage suggests that the issue exists and perhaps should be addressed in the future, but that there is no concrete plan or course of action. Therefore, this stage would naturally coincide with limited management of the climate change issue (Cralle & Vibbert, 1985).

***Impact reduction and efficiency increase.*** Consol did not stress any efforts to reduce its impact or increase energy efficiency. Consol (2019) merely stated that “In addition to maintaining compliance with our air quality operating permits, CONSOL has made it a top environmental priority to achieve the most accurate and complete representation of our Greenhouse Gas (GHG) emissions” (p. 15). This quote demonstrates that Consol’s focus is on *monitoring* emissions rather than attempting to reduce them. Additionally, this quote indicates that Consol is more concerned with having the company’s emissions perceived “fairly” by the public, suggesting that the company perhaps believes the negative criticisms are overblown or not a correct indication of the environmental harm Consol is causing. Consol (2019) also emphasized that “understanding our footprint is a first step in identifying opportunities for improvement” (p. 15). This quote similarly illustrates how the company is focused more on successfully monitoring their impact before making any significant plans or changes to combat the environmental impacts of their company. Consol (2019) did mention that “Since [a mandatory regulation] was implemented in 2011, scope 1 emissions related to our current and our former parent company’s coal assets have decreased by approximately 50%” (p. 15), indicating some openness to change. However, Consol was reporting on a time period of almost ten years whereas the other companies included in this analysis focused on improvements from year to year (further discussed below). These improvements were also due to mandatory regulations rather than voluntary ones. Finally, Consol did not focus on impact reduction in relation to its activities that produce the most carbon emissions, such as mining. This limited focus on substantial impact reduction or efficiency increase is expected from a company that frames climate change as merely a potential problem.

***Emphasis on technology.*** Consol’s emphasis on innovative technology was limited in the company’s sustainability report. Consol (2019) stated that, “In the spirit of continuous improvement and in alignment with our overall goal of reducing our environmental footprint, we’ve voluntarily initiated an evaluation of innovative technologies that may reduce our

operational emissions” (p. 21). Although this quote seems progressive at first, the language used is clearly conditional. First, Consol is agreeing to only “evaluate” potential technologies, rather than actively employing them. Second, Consol emphasized that these technologies *may* reduce emissions, suggesting that the company may think new technology might not be effective and therefore not worth the costs. At the very least, this passage indicates that Consol is still skeptical of the value of advanced technology, which is understandable given the company’s issue positioning.

Consol (2019) did mention that it was choosing power plants that utilized air emissions technology, stating that the company attempted to sell its products “to power plants that are equipped with state-of-the-art air emissions control equipment, enabling this trend of decreasing emissions to continue” (p. 19). However, Consol did not explicitly state the extent to which it *was* utilizing these clean plants, just that this is something the company attempted to do in general. In this case, Consol is not actively involved in the technology usage, but rather choosing companies that have emissions reducing technology. By not individually utilizing or investing in technology that would help improve the company’s environmental performance, Consol is indicating a level of inaction. This approach to managing climate change aligns with the potential stage of the issue cycle.

***Work with climate-focused industry groups.*** Consol had very few mentions of their work with industry groups that are addressing the issue of climate change. Consol (2019) did discuss its “partnership with Environmental Commodities Corporation (ECC) to develop and deploy mine methane abatement technology on degasification extraction systems” to properly vent methane emissions (p. 21). This quote is one of the only references to a partnership that could help the company manage its contributions to climate change. Consol’s limited references to working with external climate groups potentially indicates that the company is not looking for guidance, which is appropriate for a company that considers climate change to be only a potential issue.

***Performance comparison within and outside of industry.*** Consol did not demonstrate clear comparisons to other companies related to climate change in its sustainability report. The company also did not attempt to make larger industry comparisons. Again, this lack of performance comparison seems to cohere with Consol’s issue framing; the issue exists but does not warrant great attention or action.

**Consol assessment.** Overall, the issues management strategies that emerged from the data seem appropriate given that Consol places climate change in the *potential* stage of the issue cycle. Consol's focus on impact reduction and efficiency increase is extremely limited and the company's emphasis is primarily on regulatory compliance. Consol did emphasize technology but only its usage by partnering companies. Consol's work with industry groups was limited and the company expressed a complete lack of concern for how its performance compares to companies within and outside the coal industry. These combined management strategies fit well with the potential stage of the issue cycle that features little action. Although Consol's issue framing and issues management strategies align, its lack of overall concern for climate change could contribute to the negative public opinion surrounding the coal industry. With such limited issues management of climate change despite businesses practices that directly contribute to the issue, it is understandable that the coal industry is often the target of environmental advocacy groups and public criticisms (see McCarthy, 2019). From a public relations perspective, then, Consol is essentially overlooking publics who have a growing concern for climate change, which could lead to even further trouble for companies like Consol in an already declining coal industry.

### **Imminent Stage**

Based on the above framing analysis, Peabody likely places climate change in the imminent category of the issue cycle. In this stage, publics are starting to pay more attention to the issue as it gains legitimacy, but the most crucial publics for a company (e.g., board members, key buyers) may still be hesitant to acknowledge the issue. Accordingly, a company that perceives an issue as imminent may give the issue some attention, but the management strategies are not expected to be particularly ambitious (Cralle & Vibbert, 1985).

**Impact reduction and efficiency increase.** Peabody offered some focus on addressing impact reduction and efficiency increases, but these approaches were not particularly ambitious. One of Peabody's (2018) ESG (environmental social governance) goals was to "Conserve energy and reduce greenhouse gas intensity at operations where possible through energy efficiency and other leading practices" (p. 9). In this excerpt, Peabody provides a general goal related to both reducing emissions and increasing efficiency but did not tie these goals to any tangible or measurable initiatives. Additionally, many of Peabody's references to reducing emissions and

increasing efficiency were related to the coal industry as a whole rather than the company specifically. For example, the company stated, “Since 1970, U.S. regulated emissions from coal have been reduced 93 percent per megawatt hour” and that worldwide, “the average efficiency of coal-fueled power plants today is 35 percent. Raising that average by 5 points, to 40 percent, would reduce global emissions by 2 gigatonnes (Peabody, 2018, p. 14). These references do not demonstrate substantial progress for Peabody, just the coal industry as a whole. Peabody also did not elaborate on the plans and procedures that led to these successes. Overall, Peabody demonstrated concern for both reducing emissions and increasing efficiency, but many of the company’s statements in its sustainability report implicate the entire coal industry rather than highlighting the company’s own strategies and successes. These references are present, but not particularly strong, which fits with the imminent stage of the issue cycle.

***Emphasis on technology.*** Peabody made several references to how technology can reduce its contribution to climate change; however, these initiatives were not particularly ambitious. Peabody (2018) discusses technology development as a worthwhile pursuit in its sustainability report, saying that the company views “technology as vital to advancing global climate change solutions, and the company supports advanced coal technologies to drive continuous improvement toward the ultimate goal of near-zero emissions from coal” (p. 16). Peabody (2018) then emphasized that “Since early 2000, we have invested more than \$300 million in global partnerships and projects to advance high-efficiency, low-emissions (HELE) and carbon capture, use and storage (CCUS) technologies” (p. 22). By emphasizing this history, Peabody demonstrates that technological innovation is on its agenda. However, the company does not explicitly discuss how it is actively deploying this technology or the projects in which it has invested. When discussing specific technologies that could limit climate change impacts, Peabody (2018) states that “Over 300 GW [gigawatts] of the existing coal-fueled power capacity in China alone already meets substantial criteria for being suitable for CCUS [carbon capture, use, and storage] retrofit” (p. 14). In doing so, Peabody emphasizes that these coal fleets already meet the criteria for carbon use, capture, and storage technology to be implemented, yet show no action toward that implementation. Peabody highlights that technology is important in tackling climate change and even emphasizes its investments to improve technology, yet the company lacks examples of how its direct technology use has resulted in clear improvements. This measured approach fits with the imminent stage.

***Work with climate-focused industry groups.*** Peabody made several mentions to its work with industry groups, but the company did not include extensive detail. One of Peabody's (2018) ESG goals was to "Continue support for low-emissions projects and partnerships" (p. 9), indicating support for industry groups, but not necessarily active participation with these groups. Peabody did list some of the organizations the company works with including the Carbon Capture Leadership Council, Consortium for Clean Coal Utilization, and Carbon Utilization Research Council. Despite these references, the specific work of these groups or how Peabody was interacting with them were not significantly discussed. The passing references to external organizations align with the imminent stage of the issue cycle that gives some attention to an issue but does not include widespread detail.

***Performance comparison within and outside of industry.*** Peabody offered no comparisons to other companies or industries in terms of climate change performance. This lack of comparison would seem more fitting for the potential stage (i.e., Consol also does not demonstrate these comparisons), but nevertheless indicates a lack of concern for climate change. This lack of concern is still fitting for a lower stage of the issue cycle.

***Peabody assessment.*** The issues management strategies expressed in Peabody's sustainability report ultimately fit with the imminent stage of the issue cycle, with some overlap with the potential stage. Peabody did mention impact reduction and efficiency increases, but the company focused more on the successes of the coal industry in general rather than Peabody itself. There were references to technological innovation throughout Peabody's sustainability report, but there was limited specificity and discussion about actively deploying that technology. Peabody made a few references to its work with climate-focused industry groups in its sustainability report but did not provide great detail about what those partnerships entail. Lastly, Peabody did not compare itself to any other companies or industries, which seems more appropriate for the potential stage. This lack of comparison may be a reflection of the coal industry's overall standing as a less environmentally focused industry (see Kolstad, 2017). From a traditional public relations perspective, it would make sense for Peabody to highlight where its company or industry excels, and, because it does not excel at managing climate change, weaker references are understandable. Overall, Peabody's issue management strategies correspond with the company's framing of climate change as an imminent issue.

## Current Stage

Based on the above analysis, BP likely places climate change in the current category of the issue cycle. In this stage, the issue has been accepted as important to the organization and its publics. Issues in the current stage “can be spent or purchased readily as part of the social agenda” (Cralle & Vibbert, 1985, p. 6). Simply put, the company knows the issue is of high importance to many of its publics and so it would logically emphasize its actions that mitigate the negative effects of the issue. A company that places climate change in the current stage will likely feature an active issues management approach, but still not have the issue fully dominate its management agenda.

***Impact reduction and efficiency increase.*** BP demonstrated clear and assertive references to both impact reduction and efficiency increases. The company had several explicit references to its impact reduction and efficiency increase efforts in its sustainability report. BP (2019) mentioned its “‘reduce, improve, create’ framework, which focuses on reducing greenhouse gas emissions in our own operations, improving our products to help our customers and consumers lower their emissions, and creating low carbon businesses” (p. 7). Having a named framework that focuses on both reducing emissions and improving products demonstrates a strong dedication to decreasing the company’s contribution to climate change. BP also offered several concrete ways that the company is implementing this strategy, such as the Target Neutral program that helps its customers become carbon neutral through a range of new products and services that minimize carbon output. Not only did BP (2019) discuss the details of this initiative, but the company also highlighted its successes related to reduced emissions, stating “In 2018 across BP we achieved zero net growth in operational emissions” (p. 12). While this quote demonstrates how BP is attempting to mitigate its contribution to climate change, the company frames this success as a “lack of increasing” something negative (i.e. emissions) rather than an outright reduction. The company still emphasized its success related to climate change, but the framing of emission reduction could be stronger and more ambitious. Thus, BP’s forward-looking strategy paired with direct and clear results as an issues management approach is appropriate for the current stage in the issue cycle.

***Emphasis on technology.*** BP demonstrated clear and varied references to its use of technology, emphasizing both its investment in technology and how it is utilizing those investments in its business practices. For example, BP (2019) stated that it “invest[s] in small

high-tech companies to help accelerate and commercialize new technologies” and highlighted the company’s five areas of focus within technological development, which included “advanced mobility, bio and low carbon products, carbon management, digital transformation and power and storage” (p. 3). This specificity demonstrates that BP’s investment in technology is diverse and far-reaching, compared to just generally mentioning that the company supports innovation. BP also included a timeline of its technological advancements, clearly indicating that the company’s commitment to technology was not a new pursuit. For example, BP (2019) stated that it “Pioneered a technique known as green completions that captures gas that would otherwise be [released]” in 2000 (p. 17). By including this information, BP showed how its commitment to technology has been an important part of the company’s business practices for a long time.

Importantly, BP (2019) tied technology to specific actions, stating that it utilized “infrared cameras to detect small [gas] leaks before they become larger ones for several years. Improvements in technology now make it possible to quantify the emissions that these infrared cameras detect, helping us to better target and prioritize our responses” (p. 15). This quote demonstrates not only the use of technology but how this use is tied to clear outcomes. BP’s level of specificity about technology indicates that the company considers climate change to be an important issue and one that influences its investment and decision-making processes. This emphasis on technology is appropriate for the current stage in the issue cycle that demands clear and widespread attention to an issue.

***Work with climate-focused industry groups.*** BP mentioned working with/forming groups outside of their organization several times in their sustainability report. The company stated that it was “working with our peers and other companies, governments and civil society to help support the expansion of carbon pricing through the Carbon Pricing Leadership Coalition” (BP, 2019, p. 9), which shows that BP values both specific coalitions and external publics in general. BP (2019) also mentioned its work with outside groups as an active pursuit, stating “We convened stakeholder roundtables in London, Washington and Beijing in 2018 to discuss actions to tackle methane emissions. More than 100 people participated from industry, universities and NGOs” (p. 16). BP did not just list these coalitions in its sustainability report, but also indicated how the company was specifically working with them to understand the concerns of these industry groups. Moreover, throughout BP’s sustainability report there were multiple small references to other external organizations (e.g., the Oil and Gas Methane Partnership, the Oil and

Gas Climate Initiative) that demonstrated a focus on climate change action. These excerpts illustrate BP's active and external approach to managing climate change, which is appropriate given the company's conceptualization of the issue as current.

***Performance comparison within and outside of industry.*** BP did emphasize how the oil and gas industry's climate change approach compares to other industries in its sustainability report. BP (2019) stated that the company has been "in the renewable energy business for more than 20 years," and that it "remain[s] one of the largest operators among our peers and we're expanding in areas where we see opportunities for growth" (p. 26). This quote illustrates how energy efficiency is not a new pursuit for BP, but one the company has been committed to for decades. BP (2019) also compared its industry to coal, stating that "Gas offers a cleaner alternative to coal for power generation and can lower emissions at scale" (p. 8). BP (2019) further emphasized how "Natural gas produces about half as much carbon dioxide (CO<sub>2</sub>) emissions as coal when burned for power, which is why expanding its use globally is critical to reducing CO<sub>2</sub> emissions" (p. 22). Although BP clearly contributes to climate change, the company attempted to establish coal as far more environmentally harmful in its sustainability report. These clear comparisons show how BP attempted to frame its company and the oil and gas industry as a superior choice to other industries like coal, which fits with the current issue stage.

***BP assessment.*** BP's issues management strategies align with its framing of climate change in the current stage of the issue cycle. BP had several clear mentions of its impact reduction and efficiency increase efforts. Mentions of both technology and climate-focused industry groups were widespread with clear and varied examples throughout the sustainability report. Comparisons within and outside of the oil and gas industry were present and showed a commitment to aspects of BP's business that seek to limit climate change (i.e. renewable energy). This alignment with the current stage of the issue cycle is noteworthy given that the oil and gas industry is set to surpass coal as the world's primary energy source but is facing increased competition from renewable energy (EIA, 2020b). This focus on climate change management is understandable and needed if BP wants to present itself as strong competition for renewable energy, which is far less harmful to climate change. While BP does emphasize climate change, the company balanced this issue with other major concerns as well (e.g., energy demand). This approach may serve to please a larger group of publics with diverse concerns.

From a public relations perspective, BP's measured approach to managing climate change could be seen as placating those concerned with climate change while still providing assurance for those that are more concerned with BP's profits or ability to meet energy demand.

### **Critical Stage**

Based on the above analysis, Shell likely places climate change in the critical category of the issue cycle. In this stage, companies take a clear and explicit stance on an issue as key publics do the same. Strong and targeted action is called for to address the issue with evaluations of the company's performance.

*Impact reduction and efficiency increase.* Shell strongly emphasized its actions related to impact reduction and efficiency increases in its sustainability report. Shell (2019) stated that the company is "working hard to reduce flaring [a process that produces emissions] associated with oil and gas production" (p. 34). Shell (2019) also explained emission reduction as having transformative ability, stating "We believe that the need to reduce greenhouse gas (GHG) emissions, which are largely caused by burning fossil fuels, will transform the energy system in this century" (p. 46). Shell (2019) additionally gave clear reasoning for why emission reduction is an important goal and emphasized that it drives the company's business practices, saying "Greenhouse gas (GHG) and energy management plans for facilities and projects help drive our emissions performance through a range of actions" with these actions being "energy-efficient equipment and installing power from renewable sources, and considering the potential for carbon capture and storage" (p. 47). In this example, Shell not only commits to reducing emissions and improving efficiency, but the company provides clear examples of how it is doing so. Shell (2019) also mentioned that "In 2018, we committed to operationalise our ambition of around 50% Net Carbon Footprint reduction by 2050, through the setting of short-term targets linked to executive remuneration" (p. 9). In this quote, Shell demonstrates that it is actively working towards meeting a long-term goal and connects the initiative's success to remuneration, which can be financial or non-financial incentives (e.g., more paid time off, flexible hours). These quotes demonstrate that Shell clearly emphasizes how it plans to reduce the company's environmental impacts, which is fitting given Shell's framing of climate change as a critical issue that needs immediate and widespread attention.

***Emphasis on technology.*** Shell included varied and explicit references to technology in its sustainability report. The company mentions its technology center’s “vital research” and commitment to “developing and deploying technologies like IH2, which converts biomass – wood, agricultural residues or algae, for example – into fuel that significantly reduces greenhouse gas emissions” (Shell, 2019, p. 16). Language like “vital” demonstrates the importance of research and technology to Shell. The company also detailed a multitude of its research areas designed to mitigate climate change (e.g., biofuels, carbon capture and storage, hydrogen). Shell (2019) further explained how it “invest[s] in research and development (R&D) to improve the quality of our products and efficiency of our projects, processes and operations – and to commercialise new technologies for the transition to a low-carbon energy future” (p. 62). This quote illustrates that Shell considers technology to be at the center of addressing climate change and that the company plans to move to a system that limits carbon emissions. Through these excerpts, Shell expresses the importance of technology, the variety of ways it is employing these tools, and how the company is prioritizing continued advancement in relation to climate change. These references align well with the critical stage of the issue cycle that would call for a strong dedication to technological development.

***Work with climate-focused industry groups.*** Shell emphasized many partnerships with climate-focused industry groups that inform its business practices. Shell (2019) mentioned that it has “numerous energy-related collaborations all over the world, such as the Oil and Gas Climate Initiative” and that it “collaborate[s] with governments, national oil and gas companies and many other businesses,” defining collaboration as “all forms of working with organisations outside Shell” (p. 71). These references show that Shell takes the opinions of outside publics seriously when it comes to climate change. Shell (2019) also expressed how it is building energy-related coalitions, saying the company has “formed an industry coalition, supported by organisations like the Environmental Defense Fund, UN Environment, leading universities and the World Bank, to develop a set of methane guiding principles” (p. 48). Shell referenced regulatory bodies like the UN in addition to the coalitions it seeks to form, which demonstrates a well-informed issues management approach to climate change. These references to external organizations align with a company that perceives climate change to be a critical issue.

***Performance comparison within and outside of industry.*** Finally, Shell made several explicit comparisons between its performance and the performance of other companies within

and outside of the oil and gas industry, presenting the company as a leader in combatting climate change. Shell (2019) referenced being “the first international oil and gas company to set an ambition using a measure which includes our customers’ emissions when they use the energy products we sell” (p. 2). By focusing on being the first in the oil and gas industry to take such a complete approach to emissions, Shell demonstrates its long-term ambition of tackling climate change. Shell (2019) also suggested that the company is “a leader among peers in the transition to a lower-carbon future” (p. 9), directly juxtaposing Shell with other nonrenewable energy companies. The company’s desire to lead the way in reducing carbon emissions demonstrates its targeted and direct approach to issues management. Shell’s focus was firmly on being the leader within the oil and gas industry, which coincides with the critical stage that calls for strong action on an issue.

***Shell assessment.*** Shell’s issue management strategies clearly align with its framing of climate change in the critical stage of the issue cycle. Shell demonstrated a major focus on impact reduction, especially how this goal drives its business plan. Shell expressed a strong and consistent technology-focused approach and demonstrated considerable work with climate-focused groups that are informed by regulatory bodies that offer insight on climate change, like the United Nations and World Bank. And, Shell attempted to present itself as a leader within their industry in its sustainability report. Shell’s framing of climate change in the critical stage and subsequent issues management strategies likely depicts a company that is more progressive and driven to satisfy its publics despite contributing to climate change. Accordingly, Shell’s aggressive management strategies may serve as a competitive edge over others in the oil and gas industry. From a public relations perspective, it appears that Shell may be the most attuned to the growing number of publics that are concerned with the state of climate change.

## **Conclusion**

The goal of this analysis was to interrogate the connection between how an issue is framed, indicating where a company places the issue in its cycle, and the corresponding management strategies. The coal companies, Consol and Peabody, ultimately occupied the earlier stages of the issue cycle framework (i.e., potential and imminent) with limited references to climate change, few mentions of regulatory measures, low perception of issue responsibility, and limited degree of issue concern. Consol, in particular, barely mentioned items related to

climate change and only had few references to the issue in general. The gas and oil companies, BP and Shell, demonstrated greater concern for climate change, framing it as a current and critical issue, respectively. Both referenced climate change and a variety of regulatory measures, took some degree of responsibility for climate change, and expressed concern for their role in the issue. Shell ultimately expressed stronger sentiments in each of these categories, placing climate change in the critical stage.

The issues management strategies ultimately aligned with each issue cycle, demonstrating a strong theoretical connection between framing and issues management (see Vasquez, 1996). Given that Consol framed climate change as only a potential issue, it makes sense that the company's management strategies were quite limited. Consol hardly discussed impact reduction and efficiency increase, had few references to technology or outside groups, had limited tangible or future-oriented goals, focusing more on compliance, and did not try to position itself as a climate change leader in the coal industry. Peabody showed some inconsistencies in how it framed climate change and how the company attempted to manage the issue, but ultimately its issues management did align with the potential issue stage. Peabody had a few references to impact reduction (with an ultimate failure in reducing emissions) and technological pursuits. The company listed a few external partnerships but did not offer detail on this work. And, Peabody did not try to position itself as an industry leader.

In accordance with the current stage, BP had multiple references to both impact reduction and efficiency increases, several references to how the company uses and develops technology, varied references to its work with outside groups, but somewhat limited comparisons with the industry as a whole. Finally, Shell's management strategy aligned with the critical stage with many references to reducing impact and increasing efficiency and multiple examples of how the company carries out these goals. Shell included several examples of how it is investing in and utilizing technology, made widespread and detailed references to the company's work with external groups, and emphasized that the company is a climate change leader in the oil and gas industry. The results of this analysis thus illustrate the strong connection between issue framing and issues management. The implications of this analysis and additional context to consider are discussed in the next section.

## **DISCUSSION**

This thesis sought to better understand the connection between issue framing and issues management in the environmental context. Nonrenewable energy companies have received an extensive amount of public and political backlash for their contributions to climate change, and therefore have a large incentive for managing the climate change issue. Given this tension surrounding climate change (see Freedman, 2019), this thesis sought to better understand how nonrenewable energy companies position the issue of climate change within the issue cycle as a first step in the management process. The issue cycle framework suggests that the farther an issue is in its cycle, the more important the issue is perceived to be and the more attention the issue receives until it is resolved (Cralle & Vibbert, 1985). To understand this connection between issue cycles and issues management, I analyzed the sustainability reports of four nonrenewable energy companies using a rhetorical approach: Consol, Peabody, BP, and Shell. In this section, I conclude this thesis by summarizing the key findings and discussing how various contexts (e.g., environmental government regulations, financial standing) help explain these results. I then prescribe a public relations strategy for these companies in light of the findings. I conclude by discussing the theoretical contributions of this study related to issue cycles and issues management, addressing limitations of this study, and offering future directions for research.

### **Summary of Findings**

This analysis illustrated how issue framing is associated with the issues management process. Driving this analysis was the issue cycle framework. The stages in the cycle included potential (little attention), imminent (some attention), current (substantial attention), and critical (widespread and high levels of attention). The dormant stage was excluded from this analysis because it assumes the issue has been resolved (Cralle and Vibbert, 1985). From this analysis, it is apparent that Consol, a coal company, placed climate change in the potential stage of the issue cycle. They did so by not explicitly mentioning the term “climate change” throughout their sustainability report, making no reference to outside regulations related to climate change, and taking no clear responsibility for the issue. Consol’s issues management approach aligned with

the potential stage through their focus on simply monitoring emissions, compared to reducing emissions. Consol paid little attention to technological innovation, had only a single reference to a climate-focused industry group, and made no comparisons to companies within or outside of their industry related to their performance on climate change.

Peabody, the second a coal company included in this analysis, placed climate change in the imminent stage of the issue cycle. They did so by only vaguely mentioning climate change in their CEO letter, suggesting that climate change was not a pressing issue. Peabody only had a few mentions of external regulations in their sustainability report and discussed them only in passing. They also did not take clear responsibility for their part in climate change. Peabody's issues management aligned with this imminent stage by focusing on how the entire industry could reduce their environmental impact and increase their efficiency rather than their specific company. Peabody offered general support for technology but provided little detail about how they were actually utilizing this technology. Peabody also made few references to climate-focused industry groups and made no performance comparisons within and outside of their industry. Peabody's lack of comparisons to other companies would perhaps be more expected for the potential stage in the issue cycle, but their issues management strategies in the other categories fit with the imminent stage.

BP, a gas and oil company, placed climate change in the current stage. They did so by explicitly mentioning their climate change ambitions in their CEO letter, making multiple references to external regulations, and taking some responsibility for climate change. BP did discuss other, conflicting issues like energy demand in their sustainability report, but climate change still received a large amount of attention. BP's issues management approach aligned with the current stage of the issue cycle as they emphasized their "reduce, improve, create" framework throughout the sustainability report. This initiative served as the basis for improving BP's efficiency and reducing their impact on climate change and was tied to several tangible goals related to environmental performance. BP also discussed the various ways that technological innovation was being implemented by their organization, referenced multiple climate-focused industry groups, and made several performance comparisons between the whole oil and gas industry and other industries. BP did not directly compare the performance of their company to others in or outside the industry, which might indicate that they are not placing climate change in the most advanced issue stage.

Finally, Shell, the second gas and oil company, was the last company examined for this analysis and placed climate change in the critical stage. They did so by mentioning climate change as a moral responsibility in their CEO letter (the only company that did so) and emphasizing the need to reduce climate change despite their competing interests (e.g., meeting energy demand). Shell made multiple and varied references to outside regulations, expressing their explicit support. Finally, Shell emphasized that they had a unique responsibility to address climate change more aggressively than other companies or industries. Shell's issues management aligned with the critical stage by strongly connecting corporate incentives to reducing emissions and improving efficiency and by emphasizing improving and developing technology. Shell also mentioned their many partnerships with climate-focused energy groups that were informed by organizations like the United Nations. And, Shell positioned themselves as leaders of the industry in terms of combating climate change. These collective results demonstrate the strong theoretical connection between issue framing and the issues management process.

### **The Rhetorical Situation and Climate Change Framing**

There were clear differences in how each nonrenewable energy company framed the issue of climate change, which was then connected to their management strategies. However, framing does not exist in isolation. Rather, there are contextual factors that likely affect how and why the nonrenewable energy companies framed climate change in the way they did. Given the rhetorical nature of this analysis, Bitzer's (1968) rhetorical situation is useful for explaining and providing nuance to Consol, Peabody, BP, and Shell's issue framing and corresponding management strategies. The rhetorical situation suggests that all communication can be understood based on the audience, issue, constraints for conveying information, and "exigency," or the call for the communication to take place (Bitzer, 1968). Although the framing of climate change was the main artifact under investigation, the audience, communicative constraints, and the exigency of the situation lend needed insight into the results of the study.

**Audience/publics.** The audience is an essential component of the rhetorical situation. The audience includes those who can be influenced by the person or organization that is communicating about an issue (Bitzer, 1968). From a public relations perspective, the audience would be the same as a company's publics. A company must take into account the influence of their publics when communicating about an issue as their influence can have a profound effect

on the company (e.g., investors withdrawing or increasing financial support, governments increasing or decreasing regulations) (Grunig & Hunt, 1984). Company's should thus be aware of who their publics are and the general sentiment surrounding their organization.

***Business Models and Geographical Reach.*** Two key differences in the audiences of oil/gas versus coal companies that add nuance to the results of this study are their different business models and their geographical reach. Coal is primarily a business to business industry, with over 90% of coal consumption coming from the electric power sector in 2017 (EIA, 2020a). Oil and gas as an industry has a more diversified customer base with consumers coming from residential, commercial, industrial, and transportation (e.g., for cars, planes, etc.) sectors (EIA, 2020c). This range of consumers includes both individuals and businesses (e.g., agricultural producers, airlines, power companies, vehicle operators) that need to fulfill their energy needs. Moreover, Coal is also a more “local” energy industry, being a main employer in states such as Wyoming, West Virginia, Pennsylvania, Illinois, and Kentucky. For these states, the coal industry is a prominent job source and has thus become part of the “identity” of these communities. Oil and gas, on the other hand, is a more international product (EIA, 2019a) and so their industry is not as tied to an American identity.

There are some important differences between appealing to an audience in a business to business (B2B) market versus a business to consumer (B2C) market. As a primarily B2B market, coal generally has fewer buyers that each take up a larger share of a potential market. The decision-making process for purchasing a product is often lengthy and may involve detailed contracts that state a company will buy from a business for a sustained period of time (Cohn, 2015). Accordingly, B2B companies are driven largely by profit rather than the emotions or values that may impact individual consumers (Lankoski, 2000). Buyers in a B2C market, which is a large share of the oil and gas market, are abundant and varied. Consumers are individuals rather than businesses but can be more temperamental in choosing to buy products because there are often multiple options for consumption (Cohn, 2015). Due to these options, individual consumers may be more influenced by their values or emotions (Miller & Lellis 2016; Turley & Kelley, 1997), are not as committed to continuously buying from specific brands, and engage in a faster decision process when choosing a product (Cohn, 2015).

Given these different business models—coal is almost exclusively B2B and oil/gas has many B2C transactions—it makes sense for the oil/gas industry takes a stronger approach to

climate change and sustainability issues compared to the coal industry. As an industry that operates more in B2C markets, oil and gas companies may need to demonstrate greater sensitivity to issues that directly relate to emotions and values (e.g., climate change) in order to maintain their more temperamental consumer base. The oil and gas industry has been the subject of direct impacts and boycotts from their individual consumers as a result of their environmental performance. For example, consumers boycotted BP after the Deepwater Horizon oil spill and contributed, in part, to the massive stock drop BP experienced after the spill (Wang, Lee, & Polonsky, 2018) For companies like Shell and BP, individual consumers hold more power than they do for the coal industry. Coal companies are situated more firmly in a primarily B2B market and therefore can focus more on issues that relate directly to profitability to appeal more to their business consumers, who are also likely concerned about profitability over environmental harm. They also offer jobs that many American communities rely on so this focus on profitability is especially important. This difference in audiences for the oil/gas and coal industries may serve as an explanatory factor for why coal places climate change in the lower stages of the issue cycle while oil and gas place it further in the cycle.

***Public Opinion.*** Public opinion of nonrenewable energy companies is overall negative. According to the Pew Research Center, over three quarters of Americans list transitioning to renewable energy sources as a high priority and over half believe that President Trump and his administration are not doing enough in terms of environmental protection, which includes the more specific concern of combatting climate change (“Public divides,” 2017). Research conducted by Gallup also finds that while many Americans think the United States needs to continue using nonrenewable energy out of necessity, 60% think the United States should try to decrease how much they are using these energy sources (McCarthy, 2019). Environmental advocacy groups certainly play a role in this negative public opinion as they influence the expectations surrounding these companies. In recent years, environmental advocacy groups have become increasingly outspoken and well-organized in their fight against the fossil fuel industry for contributing to climate change. In 2011, for example, protestors gathered to demand that construction cease on the Keystone XL oil pipeline, suggesting that the pipeline would greatly harm the environment should it malfunction (despite the efforts of these protestors, construction of the pipeline is still planned to take place). Two years later in 2013, one of the largest climate protest events to date took place in Washington, D.C., with an estimated 35,000 people

demanding that the United States adopt more progressive climate change policies (Cheon & Urpelanien, 2018). In September of 2019, climate strikes swept across the entire world, with protestors calling for energy producers to take responsibility for climate change and for governments to enforce new regulations. Young activists like Greta Thunberg led this charge and inspired others to similarly take up the climate change cause (Carlisle, 2019). The climate advocacy movement shows no signs of slowing down and has increasingly demanded that nonrenewable energy companies change their practices (Cheon & Urpelanien, 2018).

Despite the overall negative opinion of nonrenewable energy companies, there does seem to be a slight difference in perceptions between the oil and natural gas industry and the coal industry. The results from the Gallup poll referenced above indicated that 50% of Americans think there should be less emphasis on coal as an energy source as compared to 43% that hold this view in relation to oil and 19% in relation to natural gas (McCarthy, 2019). Although 19% of those surveyed are still dissatisfied with the use of natural gas, this number is significantly lower than the percentage of people that are dissatisfied with the use of coal (50%). These statistics, when considered in light of the results of this study, are quite noteworthy. It is possible that the coal industry is facing more criticism due to the nature of their energy product. Whereas oil and natural gas companies like BP and Shell produce multiple energy sources and can thus emphasize their less controversial products (i.e., natural gas), coal does not have that luxury.

However, it is also possible that the dissatisfaction with coal comes from a legitimacy gap, which is a concept in public relations literature that refers to a discrepancy between what a public expects of a company and the actions that company takes (Sethi, 1977). Ideally, a company would want to fully meet their publics' expectations and avoid having a legitimacy gap. However, this is not always the case, nor is it even possible. In the case of energy, many publics clearly want to transition away from nonrenewable energy to renewable sources that cause less environmental harm. Because nonrenewable energy companies are not able to stop their usage of fossil fuels by the very nature of their industry, the least they could do is become *more* environmentally responsible, taking ownership for their part in climate change. The oil and natural gas companies explored in this analysis, BP and Shell, have done so. The coal companies, Consol and Peabody, have not. Thus, it is possible that coal's lack of response to climate change contributes, to some extent, to a legitimacy gap, which is then reflected in public opinion. Asserting such a connection between issue framing and public opinion would require

further analyses, but given the negative perception of coal and their lack of issues management strategies, it is likely that a legitimacy gap does exist. The coal industry would thus do well to more explicitly acknowledge climate change in their business practices due to this potential legitimacy gap.

**Communication constraints.** A second component of the rhetorical situation that can contextualize the results of this study is the communication constraints. Constraints include the aspects of a communication context that can modify or influence how a person or organization chooses to tackle an issue (e.g., the rhetoric that emerges). These constraints could include the format in which companies can communicate (e.g., online, in person), the resources available to address an issue, or any other considerations that may impact how a company is able to respond to an issue (Bitzer, 1968). Understandably, the communicative constraints, if significant, can affect message reception. Thus, these constraints warrant consideration. In this present study, although the nonrenewable energy companies did not experience many communicative constraints, the financial constraints are certainly worth noting as they likely explain why the coal companies did not have aggressive climate change management strategies.

**Online communicative context.** The nonrenewable energy companies in this analysis all published their sustainability reports on their websites. From a public relations perspective, using websites to communicate to publics is both appropriate and effective (Coombs, 1998). Websites allow companies to discuss their ECSR efforts without physical constraint. By not having any page lengths to consider, companies are able to elaborate on their ECSR plans and offer detailed accounts about their management trajectories and issue successes. However, it is unclear if publics regularly visit nonrenewable energy company websites to learn about their sustainability efforts. Consequently, although these reports may be detailed, they may not receive high levels of visibility compared to other public relations tactics, such as utilizing social media or traditional media contacts. Therefore, placing sustainability reports on company websites might constrain the effectiveness of these messages as they are lacking visibility compared to other public relations tactics. Although BP and Shell had impressive climate change initiatives, publics may be unaware of those efforts, which could contribute to the negative perception of these companies (see McCarthy, 2019).

**Financial instability.** Companies within the nonrenewable energy sector have different levels of financial viability, with the oil and natural gas industry being more financially stable

than the coal industry. The coal industry has experienced widespread bankruptcies in recent years. In fact, several companies that were originally considered for this analysis (e.g., Mission Coal) were not included because they had recently gone bankrupt (Moritz-Rabson, 2019). On the other hand, oil and gas companies, especially large corporations like BP and Shell, have enjoyed relative financial success in recent years. These companies have been able to keep existing oil drilling active and even expand drilling in some cases (Blackmon, 2019). While a transition to cleaner energy sources becomes more feasible every day, the demand for energy from natural gas and oil is still high (EIA, 2019b). Therefore, the financial standing of the oil and gas industry, for the time being, is relatively stable (not taking into account the effects of the COVID-19 pandemic that was beginning as this analysis was close to completion).

This financial context certainly affects the issues management process and was likely reflected in the sustainability reports examined for this analysis. Due to coal's financial hardships, they may lack the resources to manage the issue of climate change in the same ways that oil and gas companies do, despite perhaps wanting to match the more aggressive strategies. For example, one common issues management strategy revealed in this analysis was investment in and the use of innovative technology. Large-scale investments in technology are a costly endeavor and one that would be difficult for companies that are facing bankruptcy. Similarly, the more financially stable companies in this analysis, such as Shell, emphasized how they were tying employee bonuses and incentives to impact reduction and efficiency increase performance, which signals their financial capital to do so. Consol, one of the coal companies, focused only on "monitoring" emissions, which makes sense given their limited financial resources. An approach like increasing efficiency may seem broad, but for the oil and natural gas companies analyzed in this analysis, it involved continuously improving equipment, choosing high efficiency machinery (e.g., transport vehicles), and investing in research to continue improving performance. These pursuits require financial liquidity that many coal companies may be lacking. This financial constraint may explain coal's limited issue management approach compared to oil and gas.

Moreover, effective public relations, if done correctly and intentionally, can be costly for large corporations. After the 2010 BP oil spill, the company announced that they planned to spend \$500 million alone on restoring their reputation with a customer loyalty program ("BP," 2012). In contrast, Peabody mentioned in their sustainability report that they had spent \$300 million on partnerships related to climate change in the last 20 years. These items are obviously

not direct comparisons, but they do demonstrate how the oil and gas industry's ability to invest in public relations far exceeds that of the coal companies. Overall, coal is at a disadvantage in their ability to manage the issue of climate change both through the use of public relations professionals and through investments that will help them to reduce their environmental impact, which is certainly a constraint that likely explains their lack of attention to climate change in their sustainability reports.

**Exigency.** According to Bitzer (1968), communication is always called forth by a particular context or “something waiting to be done” (p. 7). That is, there is always a reason that communication takes place; press conferences are delivered after a crisis, a press release is written to communicate urgent information, etc. The context that calls for communication to take place is referred to as the exigence or exigency. Because nonrenewable energy companies actively contribute to climate change, a global issue, they are called on by different publics to address their actions and demonstrate how they are reducing their harm to the environment. The exigency for the companies included in this analysis varies to a certain degree and there are two exigent factors that might help explain the results of this study: crisis media coverage and environmental government regulations.

**Crisis media coverage.** The first exigent factor that might help explain the differences in the issue framing and management between the nonrenewable energy companies is media coverage. Media coverage is associated with organizational action and negative media coverage can especially influence how a company strategically handles an issue (Bednar, Boivie, & Prince, 2013). For example, scholars have found that organizations on the worst corporate boards list for *Business Week* were more likely to change their business strategy and policies than companies receiving praise, which is understandable (Joe, Louis, & Robinson, 2009). In 2019, there was a noticeable increase in the depth and breadth of climate change media coverage (Cooper & MacDonald, 2020). This increase is not surprising given the recent climate protests (Carlisle, 2019) and how scientists have declared a climate emergency (Freedman, 2019), both of which received widespread media coverage. While both coal and oil/gas companies have received media criticism for their part in climate change, the oil and gas industry has, historically, experienced more media attention for their large-scale environmental crises.

The oil and gas industry has received significant backlash and media attention due to their industrial crises, the most prominent being oil spills. In 1989, The Exxon Valdez spill

garnered huge amounts of media attention both directly after the spill and in the years that followed; media outlets repeatedly broadcasted images of affected wildlife and ecosystems after the oil spill (Wiens, 2013). Decades later in 2010, BP experienced the Deepwater Horizon Oil Spill, which was one of the biggest and longest oil spills in history. This oil spill caused massive amounts of environmental damage and resulted in negative media coverage that lasted for weeks following the incident (“Deepwater Horizon,” 2017). Even a high-profile issue like President Obama’s highly debated healthcare bill was unable to compare to the extensive coverage of the Deepwater Horizon oil spill, indicating the sheer magnitude of the crisis. While oil spills are not explicitly related to climate change (see Frost, 2018), they are significant crises that have set up the oil and gas industry to receive harsh criticism related to their environmental efforts, which includes their approach to climate change.

Catastrophic events for the coal industry differ from the oil and natural gas industry, which potentially explains why they have been insulated from such harsh media criticism. Coal industry crises have traditionally been related to worker safety (i.e., mine collapses) versus oil spills that clearly cause environmental harm. The coal industry has faced multiple disasters like the Wilberg Mine fire of 1984 that killed 27 miners and the Upper Big Branch explosion in 2010 that killed 29 miners (“US mine,” 2020). Certainly, these large-scale crises are noteworthy and problematic. However, coal companies have still not received the same intense media scrutiny related to these events compared to the Exxon Valdez or Deepwater Horizon oil spills.

These differences in industry crises, and thus media criticism, potentially explain why Consol, Peabody, BP, and Shell differed in their issue framing and management strategies (see Bednar et al., 2013). The harsh media attention surrounding oil spills would seemingly call for stronger framing and management of general environmental concerns, including climate change, to quell these criticisms. Accordingly, it would make sense for BP and Shell to significantly reform their business practices post-oil spill and take preventive measures to avoid future catastrophes. Considering the nature of coal crises, it was perhaps easier for the coal companies in this analysis to overlook climate change in their sustainability reports because there was less pressure from the media to do so. From a public relations perspective, companies with greater potential for environmental crises must be more diligent at anticipating and addressing issues to avoid future crises, which might include placing the issue later in the issue cycle. Although the coal industry should certainly be mindful of climate change, it is essential for companies like BP

and Shell to take these issues seriously or else the media may continue to criticize their organizational practices.

***Environmental government regulations.*** Climate change is a pressing issue that calls for governments to regulate the energy industry. However, there are clear differences in the challenges that coal and oil/gas companies face related to environmental government regulations, which might explain the discrepancies in management approaches observed in this analysis. Social movements in the United States have called for the divestment of fossil fuels and policies that limit nonrenewable energy companies' contributions to climate change (Ayling & Gunningham, 2015). However, the coal industry's practices are not as "clean" as those utilized by the oil and gas sector ("Fossil fuels," n.d.) and coal contributes more to climate change (Kolstad, 2017). Thus, the coal industry in particular was the target of steep environmental regulations during the Obama presidency (Davenport, 2013). Recently, however, President Trump has worked with the EPA to roll back these Obama-era regulations related to coal production (e.g., limiting regulations on handling ash and wastewater disposal) to revitalize the failing coal industry (Frazier, 2019).

Although rolling back environmental regulations for the coal industry was in service of improving their financial standing, these measures gave coal companies the freedom to continue their production practices, despite their environmental harm. President Trump made it clear that the coal industry has larger issues (e.g., energy production, financial stability) that take precedence over climate change. Considering this context, it perhaps makes sense that the coal industry places climate change lower in the issue cycle as they are no longer required to have such progressive management strategies. The oil and gas industry has not experienced the same financial decline as coal and therefore has not received the same level of regulatory rollbacks. In terms of an exigency that calls forth communication, the oil and gas industry is subject to more environmental regulation, which means they are governmentally required to have more aggressive climate change plans. It is clear that environmental regulations are perceived as actually harming the coal industry, which is why their regulations have been relaxed. Accordingly, the coal industry may not need to respond as aggressively as oil and natural gas, potentially explaining why they place climate change in a lower stage of the issue cycle and do not address the issue much in their sustainability reports.

## **Moving Forward: A Public Relations Prescription**

Nonrenewable energy is a necessary resource and will continue as one for the foreseeable future. At the same time, the energy landscape is changing. There is still demand for nonrenewable energy but also competition between renewable and nonrenewable energy. With this increased competition, companies have to be more vigilant than ever in addressing the concerns of their publics, especially in relation to growing concerns like climate change. Based on the differences in how the oil/gas and coal companies positioned climate change in its cycle and attempted to manage the issue, this study can be used to prescribe future public relations approaches to maintain a competitive edge.

### **Issue Positioning**

The way a company highlights issues that affect their business practices varies based on the theoretical approach they take to issue positioning. Competitive positioning is a traditional approach that involves emphasizing a company's strengths or competitive advantages (Porter, 1985). While it may seem logical to highlight the areas and issues in which a business excels (e.g., natural gas meeting energy demand), companies facing controversy may instead benefit from an inverted positioning approach. Inverted positioning is a counterintuitive strategy that involves highlighting and addressing issues where a company is perceived to be lacking (Hoffmann & Kristensen, 2017). For nonrenewable energy companies that face climate change-related controversy, this method of positioning would mean highlighting their work to address climate change or other environmental issues. For example, Hoffmann and Kristensen (2017) examined how Shell highlighted their sustainability practices as an example of inverted positioning alongside Vestas that emphasized their profitability, which is generally a weakness for renewable energy companies in the same way that sustainability is considered a weakness for nonrenewable energy companies. Shell's sustainable practices are not the strongest element of their business practices. However, highlighting weaknesses demonstrates to publics that companies are willing to work on these weaknesses. Importantly, ECSR efforts have also been shown to coincide with higher stock values (Flammer, 2013) and research shows that individuals with higher concern for the environment are more susceptible to these ECSR communications (Gaither & Sinclair, 2018). With this research in mind, inverted issue positioning could be

beneficial for the financially struggling coal industry as they attempt to target a growing number of publics that are concerned about climate change.

The sustainability reports from the oil and gas companies included in this analysis serve as examples of inverted positioning because they are addressing their business weaknesses. Shell's sustainability report was a clear example of this inverted approach, which coheres with previous research (Hoffmann & Kristensen, 2017). In contrast, the coal industries in this analysis clearly minimized the issue of climate change by barely mentioning climate change in their sustainability reports. Considering that the coal industry is currently struggling in comparison to oil and gas (Kolstad, 2017), they could potentially benefit from adopting a more explicit inverted positioning strategy when addressing their contribution to climate change. Even though Consol and Peabody are likely limited by their financial instability and are not regulated by the government to the extent that BP and Shell are, acknowledging that climate change exists and that they are interested in reevaluating their practices would be a better strategy than the one they have now.

### **Study Contributions**

This study focused on the frameworks of issue cycles and issues management to better understand the public relations approaches of nonrenewable energy companies. In doing so, this study makes two theoretical contributions. First, a review of the extant literature demonstrates how there are limited studies that apply the issue cycle framework to individual companies or connect issue cycles to management strategies. The issue cycle framework was initially created to study the fluctuation of issue attention in media coverage (Downs, 1972). Instead, this study applied the issues cycle framework to individual companies in a corporate context and, in doing so, illustrated how the framing of an issue coheres with the issues management process. Moreover, by combining and connecting issues cycles and issues management, this study provides a more nuanced and holistic understanding of this critical public relations function (Heath & Cousino, 1990).

This study demonstrated a strong theoretical link between issue framing and issues management. The companies analyzed for this analysis all had management approaches that fit with how they framed the climate change crisis. This study thus reveals the potential issues that could arise if there is a discrepancy in how a company frames and attempts to manage critical

issues. Consol and Peabody could easily be criticized for not having aggressive climate change policies. However, their limited management initiatives are understandable given their limited concern for the issue. From a public relations perspective, a company that places climate change in a high stage of the issue cycle but that did little to manage the issue would likely be perceived negatively by its publics. Furthermore, a company that places an issue in a low stage of the issue cycle but has an aggressive issues management strategy might be perceived as wasting resources on an inconsequential problem. Either way, a disconnect between issue framing and issues management might lead to a legitimacy gap (Sethi, 1977). Publics want companies to either meet or exceed their expectations. Having a disparity between issue framing and management might violate those expectations and further result in negative public opinion.

Methodologically, this study offers qualitative insight on issue cycles and issues management. Whereas many past studies have taken a more quantitative approach (e.g., Bengston et al., 2009; McComas & Shanahan, 1999; Pollach, 2018), this rhetorical approach provides a deeper understanding of *how* companies talk about climate change rather than just *if* companies talked about climate change (e.g., counting indicators like term frequency). For example, simply acknowledging the Paris Agreement versus offering explicit support for the Paris Agreement was a subtle difference between the companies in this analysis that indicated whether climate change was in the current or critical stage. This nuance is important as publics will undoubtedly use such nuance to form opinions about an organization. Accordingly, a rhetorical analysis of this nature has undeniable value, especially considering that climate change is a complex and a quickly evolving issue that publics want to see addressed.

### **Limitations**

No study is without limitations. First, this study only examined four nonrenewable energy companies out of many that currently exist. Due to the rhetorical approach of this study, this number of companies was deemed feasible while still allowing for comparisons both within and across industries. The companies included in this analysis were also chosen based on their industry standing, taking such factors as stock market performance and level of energy production into account (LeBlanc, 2019; Kuykendall & Cotting, 2019; U.S. Stock, 2019; Vara, 2019). However, including additional companies would allow for a more widespread application of the issue cycle and issues management frameworks. Second, this study compared only the

sustainability reports of the nonrenewable energy companies because these reports were similar in format. Some companies include other public relations material on their websites that undoubtedly contribute to the framing of climate change. While it would be more challenging to make direct comparisons, including materials such as press releases, social media posts, advertisements, or other corporate communications would provide additional context to understand how nonrenewable energy companies approach the climate change issue.

A third limitation of this study is that the issue cycle framework does not fully encompass how issues progress. Jaques (2006) suggests that issues are far more complex and non-linear than the issue cycle accounts for and perhaps different or additional frameworks could give a better understanding of how seriously a company frames an issue or views its progression. Although the issue cycle framework provides a good starting point, additional frameworks may be needed to account for how climate change evolves. This study also only focused on how the nonrenewable energy companies manage climate change at the current moment, compared to examining management strategies over time. Examining sustainability reports in a longitudinal manner could provide a better idea of how each company conceptualizes/manages climate change over time or how management strategies have evolved.

Additionally, this study is limited by applying the issue cycle framework in a relative rather than absolute manner. Crable and Vibbert's (1985) original conceptualization of the issue cycle is somewhat vague regarding the expected actions of a company based on where an issue falls in the cycle. This study attempted to bridge the gap between the vague nature of this framework and a practical application for how nonrenewable energy companies would frame and manage an issue. In bridging this gap, the distinctions between stages in the issue cycle were in part determined from the data available, making them relative to the other companies in the analysis rather than an absolute categorization. Had this study included more companies in the nonrenewable sector or companies from a different industry (e.g., the renewable energy industry), these categorizations may have been altered. Ultimately, more research with the issue cycle as a comparative tool for individual companies is needed to better define the stages of the issue cycle and create a more absolute framework.

This analysis also did not include renewable energy companies in order to compare companies that are similarly criticized due to their contribution to climate change. The companies included in this analysis all share an incentive to manage the issue of climate change.

Renewable energy companies, by the nature of their industry, already benefit from positive public opinion. Thus, their success is not contingent on addressing climate change. Accordingly, including these companies in a comparative analysis would be challenging as they do not share the same goals. However, limiting this analysis to nonrenewable energy companies is a limitation that future research might seek to address. Finally, this analysis did not analyze the tables and figures included in the sustainability reports because there was much variation in how each company utilized these visual representations, prohibiting a clean comparison. These visual representations certainly add to how companies frame climate change and would provide additional information about how companies manage the issue. Thus, future research would benefit from including graphs, charts, and figures in analyses.

### **Future Directions**

There are several future directions that could meaningfully add to the understanding of issue cycles and the issues management process of nonrenewable energy companies. First, and as mentioned above, this study does not compare how renewable and nonrenewable energy companies frame climate change, where they place the issue in its cycle, or the management strategies used to address the issue. Given the increasing competition between these industries, it would be interesting to compare nonrenewable and renewable energy companies to determine how they differ in framing and addressing climate change. Second, future studies should examine Consol, Peabody, BP, and Shell's overall environmental approaches instead of just focusing on their management of climate change. Many nonrenewable energy companies are also criticized for topics like water management, protection of biodiversity, or pollution. Examining these topics would give a more well-rounded understanding of how these companies approach their general environmental impact and their ECSR efforts. Additionally, future studies should examine industries that are outside of energy production and do not have a strong or clear connection to the issue of climate change. It would be interesting to examine the sustainability report or ECSR communication of companies that create textiles, food products, or industrial materials to see how strongly they frame climate change and attempt to manage the issue. Finally, this study was completed as the COVID-19 pandemic was beginning so the implications of the pandemic, specifically the new instability of the oil and gas industry and the unintended climate benefits of the pandemic, would serve as a strong basis for future studies. Because issue

cycles are fluid, the sustainability priorities of these nonrenewable energy companies have likely shifted as new concerns take precedence, such as public safety and job security. All of these future directions would add to the results of the current study. For now, this study provides a strong foundation for understanding the issue cycle framework and issues management process from a rhetorical perspective. In doing so, this study usefully demonstrates how the issue cycle framework can serve as a tool for comparison when examining how companies manage the same issue.

## REFERENCES

- Aaron, K. K. (2012). New corporate social responsibility models for oil companies in Nigeria's delta region: What challenges for sustainability? *Progress in Development Studies*, 12, 259–273. doi: 10.1177/146499341201200401
- Allen, J. (2007). Aristotle on the disciplines of argument: *Rhetoric, dialectic, analytic*. *Rhetorica: A Journal of the History of Rhetoric*, 25, 87-108. doi: 10.1525/rh.2007.25.1.87
- Arens, C., Weigold, M. F., & Arens, W. F. (2008). *Contemporary advertising* (11th ed.). Boston, MA: McGraw-Hill.
- Ayling, J. M., & Gunningham, N. (2015). Non-state governance and climate policy: The fossil fuel divestment movement. *SSRN Electronic Journal*, 17(2), 131-149. doi: 10.2139/ssrn.2601176
- Bansal, P., & Roth, K. (2000). Why companies go green: A model of ecological responsiveness. *Academy of Management Journal*, 43, 717–736. doi: 10.5465/1556363
- Barbour, J. B., Doshi, M. J., & Hernández, L. H. (2016). Telling global public health stories. *Communication Research*, 43, 810–843. doi: 10.1177/0093650215579224
- Bednar, M. K., Boivie, S., & Prince, N. R. (2013). Burr under the saddle: How media coverage influences strategic change. *Organization Science*, 24, 910–925. doi: 10.1287/orsc.1120.0770
- Bengston, D. N., Fan, D. P., Reed, P., & Goldhor-Wilcock, A. (2009). Rapid issue tracking: A method for taking the pulse of the public discussion of environmental policy. *Environmental Communication*, 3, 367–385. doi: 10.1080/17524030903230165
- Bitzer, L. (1968). The rhetorical situation. *Philosophy and Rhetoric*, 1, 1-14.
- Blackmon, D. (2019, December 2). The U.S. oil and gas industry: A look back at 2019. *Forbes*. <https://www.forbes.com/sites/davidblackmon/2019/12/02/the-us-oil-and-gas-industry-a-look-back-at-2019/#545c806b47db>
- BP at fault for 21 of 35 factors in Gulf spill, panel finds. (2011, September 14). *NBC News*. Retrieved from [http://www.nbcnews.com/id/44514842/ns/us\\_news-environment/t/bp-fault-factors-gulf-spill-panel-finds/#.XhdcOhKg2w](http://www.nbcnews.com/id/44514842/ns/us_news-environment/t/bp-fault-factors-gulf-spill-panel-finds/#.XhdcOhKg2w)

- BP goes for public relations makeover to get beyond gulf spill. (2012, July 6). *Forbes*. Retrieved from <https://www.forbes.com/sites/greatspeculations/2012/02/07/bp-goes-for-public-relations-makeover-to-get-beyond-gulf-spill/#6cf5a20913fa>
- Braun, V., & Clarke, V. (2013). *Successful qualitative research: A practical guide for beginners*. Los Angeles, CA: Sage
- British Petroleum (2019). *Sustainability*. Retrieved November 1, 2019 from <https://www.bp.com/en/global/corporate/sustainability.html>
- Brossard, D., Shanahan, J., & McComas, K. (2004). Are issue-cycles culturally constructed? A comparison of French and American coverage of global climate change. *Mass Communication and Society*, 7, 359–377. doi: 10.1207/s15327825mcs0703\_6
- Brown, L. R. (2003). *Plan B: rescuing a planet under stress and a civilization in trouble*. New York: Norton.
- Campbell, K. K., & Burkholder, T. (1997). *Critiques of contemporary rhetoric*. Belmont, CA: Wadsworth Publishing Company.
- Carlisle, M. (2019, September 25). Everything you need to know about today's global climate strike. *Time Magazine*. Retrieved from <https://time.com/5682318/nyc-global-climate-strike/>
- Cheon, A., & Urpelainen, J. (2018). *Activism and the fossil fuel industry*. Abingdon, Oxon: Routledge.
- Christensen, L. T., Morsing, M., & Thyssen, O. (2013). CSR as aspirational talk. *Organization*, 20, 372–393. doi: 10.1177/1350508413478310
- Chuang, S. P., & Huang, S. J. (2016). The effect of environmental corporate social responsibility on environmental performance and business competitiveness: The mediation of green information technology capital. *Journal of Business Ethics*, 150, 991–1009. doi: 10.1007/s10551-016-3167-x
- Cohn, C. (2015, June 16). Differences in selling B2B vs. B2C. *Forbes*. Retrieved from <https://www.forbes.com/sites/chuckcohn/2015/06/16/differences-in-selling-b2b-vs-b2c/#52aa00814fb2>
- Condit, C. M. (1989). The rhetorical limits of polysemy. *Critical Studies in Mass Communication*, 6, 103–122. doi: 10.1080/15295038909366739

- Consol Energy (2019). *2019 corporate sustainability report*. Retrieved November 1, 2019 from <http://www.consolenergy.com/ConsolEnergy/consol-CSR2019/index.html>
- Coombs, W.T. (1998). The internet as potential equalizer: New leverage for confronting social irresponsibility. *Public Relations Review*, 24, 289–304. doi: 10.1016/S0363-8111(99)80141-6
- Cooper, E., & MacDonald, T. (2020, January 1). Climate journalism had a breakout year in 2019. What will 2020 bring? *Media Matters for America*.  
<https://www.mediamatters.org/broadcast-networks/climate-journalism-had-breakout-year-2019-what-will-2020-bring>
- Crable, R. E., & Vibbert, S. L. (1985). Managing issues and influencing public policy. *Public Relations Review*, 11, 3–16. doi: 10.1016/S0363-8111(82)80114-8
- Curtin, P. A. (1995). *Textual analysis in mass communication studies: Theory and methodology*.
- Cutler, B. D., & Muehling, D. D. (1989). Advocacy advertising and the boundaries of commercial speech. *Journal of Advertising*, 18, 40-50. doi: 10.1080/00913367.1989.10673160
- Dahl, R. (2010). Greenwashing: Do you know what you're buying? *Environmental Health Perspectives*, 118, A246-A252. doi:10.1289/ehp.118-a246
- Darmon, K., Fitzpatrick, K. & Bronstein, C. (2008). Krafting the obesity message: A case study in framing and issues management. *Public Relations Review*, 34, 373-379. doi: 10.1016/j.pubrev.2008.07.002
- Davenport, C. (2013, October 29). Obama takes 'War on Coal' global. *National Journal*.  
<https://www.nationaljournal.com/s/67616/obama-takes-war-coal-global>
- Daymon, C., & Holloway, I. (2010). *Qualitative research methods in public relations and marketing communications*. Abingdon (Gran Bretaña): Routledge.
- Deepwater Horizon – BP Gulf of Mexico oil spill*. (2017, April 19). Environmental Protection Agency. Retrieved from <https://www.epa.gov/enforcement/deepwater-horizon-bp-gulf-mexico-oil-spill>
- Doman, L. (2017, September 14). *EIA predicts 28% energy increase in world energy use by 2040*. U.S. Energy Information Administration (EIA).  
<https://www.eia.gov/todayinenergy/detail.php?id=32912>

- Dong, D., Chang, H. C., & Wang, T. (2016). The CSR green halo effect on the corporate–public communication: an experimental study. *Asian Journal of Communication*, 27, 213–230. doi: 10.1080/01292986.2016.1257034
- Downs, A. (1972). Up and down with ecology – The “issue-attention cycle”. *The Public Interest*, 28, 38–51.
- Dutton, J. E., & Ottensmeyer, E. (1987). Strategic issue management systems: Forms, functions, and contexts. *The Academy of Management Review*, 12, 355–365. doi: 10.2307/258541
- Ehling, W. & Hesse, M. B. (1983). Use of 'issue management' in public relations. *Public Relations Review*, 9(2), 18-35. doi: 10.1016/S0363-8111(83)80003-4
- Ellen, P. S., Webb, D. J., & Mohr, L. A. (2006). Building corporate associations: Consumer attributions for corporate socially responsible programs. *Journal of the Academy of Marketing Science*, 34, 147-157. doi:10.1177/0092070305284976
- Ellfeldt, A. (2019, December 2). As climate warnings grow dire, energy companies face a 'new frontier of threats'. *NPR*. Retrieved from <https://www.npr.org/2019/12/02/775439649/as-climate-warnings-grow-dire-energy-companies-face-a-new-frontier-of-threats>.
- Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication*, 43, 51–58. doi: 10.1111/j.1460-2466.1993.tb01304.x
- Flammer, C. (2013). Corporate social responsibility and shareholder reaction: The environmental awareness of investors. *Academy of Management Journal*, 56, 758–781. doi: 10.5465/amj.2011.0744.
- Fossil fuels* (n.d.) Environmental and Energy Study Institute. Retrieved from <https://www.eesi.org/topics/fossil-fuels/description>
- Frazier, R. (2019, November 4). Trump administration proposes relaxing rules on waste from coal plants. *NPR*. Retrieved from <https://www.npr.org/2019/11/04/776174139/trump-administration-proposes-relaxing-rules-on-waste-from-coal-plants>
- Freedman, A. (2019, November 5). More than 11,000 scientists from around the world declare a ‘climate emergency’. *The Washington Post*. Retrieved from <https://www.washingtonpost.com/science/2019/11/05/more-than-scientists-around-world-declare-climate-emergency/>
- Frost, E. (2018, May 9). *Five questions with Uta Passow, how an oil spill affects the movement of carbon in the ocean*. Smithsonian Institution. Retrieved from

<https://ocean.si.edu/planet-ocean/temperature-chemistry/five-questions-uta-passow-how-oil-spill-affects-movement-carbon>

- Fürsich, E. (2009). In defense of textual analysis. *Journalism Studies*, *10*, 238-252, doi: 10.1080/14616700802374050
- Gaither, B. M., & Sinclair, J. (2018). Environmental marketplace advocacy: Influences and implications of U.S. public response. *Journalism & Mass Communication Quarterly*, *95*, 169–191. doi: 10.1177/1077699017710452
- Gaunt, P., & Ollenburger, J. (1995). Issues management revisited: A tool that deserves another look. *Public Relations Review*, *21*, 199–210. doi: 10.1016/0363-8111(95)90021-7
- Geppert, J., Lawrence, J. (2008) Predicting firm reputation through content analysis of shareholders' letter. *Corporate Reputation Review*, *11*, 285–307. doi: 10.1057/crr.2008.32
- Global energy demand rose by 2.3% in 2018, its fastest pace in the last decade.* (2019, March 26). IEA. Retrieved from <https://www.iea.org/news/global-energy-demand-rose-by-23-in-2018-its-fastest-pace-in-the-last-decade>
- Grunig, J. E. & Hunt, T. (1984). *Managing public relations*. New York: Holt, Rinehart & Winston.
- Hallahan, K. (2001). The dynamics of issues activation and response: An issues processes model. *Journal of Public Relations Research*, *13*, 27–59. doi: 10.1207/s1532754xjpr1301\_3
- Hart, R. P., & Daughton, S. (2005). *Modern rhetorical criticism* (Third Ed.). Boston, MA: Pearson.
- Heath, R. L., & Cousino, K. R. (1990). Issues management: End of first decade progress report. *Public Relations Review*, *16*, 6–18. doi: 10.1016/s0363-8111(05)80032-3
- Heath, R. L., & Palenchar, M. J. (2009). *Strategic issues management: Organizations and public policy challenges*. Sage Publications.
- Hoffmann, J., & Kristensen, M. E. (2017). Sustainable oil and profitable wind. *Nordicom Review*, *38*(2), 79–96. doi: 10.1515/nor-2017-0404
- Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, *15*, 1277–1288. doi: 10.1177/1049732305276687
- Hunter, T., & Bansal, P. (2007). How standard is standardized MNC global environmental communication? *Journal of Business Ethics*, *71*, 135–147. doi: 10.1007/s10551-006-9130-5

- IEA (2000). *The future role of coal: Markets, supply and the environment*. Paris: OECD Publishing. doi:10.1787/9789264180994-en
- Jaques, T. (2006). Activist “rules” and the convergence with issue management. *Journal of Communication Management*, 10, 407–420. doi: 10.1108/13632540610714836
- Jaworska, S. (2018). Change but no climate change: Discourses of climate change in corporate social responsibility reporting in the oil industry. *International Journal of Business Communication*, 55, 194–219. doi: 10.1177/2329488417753951
- Joe, J. R., Louis, H., & Robinson, D. (2009). Managers’ and investors’ responses to media exposure of board ineffectiveness. *Journal of Financial and Quantitative Analysis*, 44, 579–605. doi: 10.1017/s0022109009990044
- Jones, B. L., & Chase, W. H. (1979). Managing public policy issues. *Public Relations Review*, 5, 3–23. doi: 10.1016/s0363-8111(80)80020-8
- Kolk, A. (2004). More than words? An analysis of sustainability reports. *New Academy Review*, 3, 59–75.
- Kolk, A., & Levy, D. (2001). Winds of change: Corporate strategy, climate change and oil multinationals. *European Management Journal*, 19, 501–509. doi: 10.1016/s0263-2373(01)00064-0
- Kolstad, C. D. (2017, March 1). *What Is killing the US coal industry?* Stanford Institute for Economic Policy Research. Retrieved from <https://siepr.stanford.edu/research/publications/what-killing-us-coal-industry>
- Konar, S., & Cohen, M. A. (1997). Information as regulation: The effect of community right to know laws on toxic emissions. *Journal of Environmental Economics and Management*, 32, 109–124. doi: 10.1006/jeem.1996.0955
- Kuykendall, T., & Cotting, A. (2019, March 26). *Top 5 miners produced over half of US coal in 2018; Cloud Peak's ranking slips*. Standard & Poor's Financial Services. Retrieved from <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/50779729>.
- Kuypers, J. A., & King, A. (2009). *What is rhetoric?* In J. A. Kuypers (Ed.), *Rhetorical criticism: Perspectives in action* (pp. 1–12). New York, NY: Lexington Books.

- Lankoski, L. (2000). *Determinants of environmental profit. An analysis of the firm-level relationship between environmental performance and economic performance*. Doctoral dissertation. Helsinki University of Technology, Helsinki.
- Lauzen, M. M. (2009). Understanding the relation between public relations and issues management. *Journal of Public Relations Research*, 9(1), 65-82
- LeBlanc, R. (2019, December 3). *Learn about the world's top renewable energy companies*. The Balance Small Business. Retrieved from <https://www.thebalancesmb.com/top-renewable-energy-companies-4172962>
- Leiserowitz, A., Maibach, E. W., Roser-Renouf, C., Feinberg, G., & Howe, P. (2013). Climate change in the American mind: Americans' global warming beliefs and attitudes in April 2013. *SSRN Electronic Journal*, 1-27. doi: 10.2139/ssrn.2298705
- Levy, D. (1997) Business and international environmental treaties: Ozone depletion and climate change. *California Management Review*, 39, 54–71. doi: 10.2307/41165898
- Liuoi, A. & Sharma, Z. (2012). Environmental corporate social responsibility and financial performance: Disentangling direct and indirect effects. *Ecological Economics*, 78, 100-111. doi: 10.1016/j.ecolecon.2012.04.004
- Mahon, J. F., & Waddock, S. A. (1992). Strategic issues management: An integration of issue life cycle perspectives. *Business & Society*, 31, 19–32. doi: 10.1177/000765039203100103
- MacLean, I., Brown, G. W., & MacMillan, A. (2018). *The concise Oxford dictionary of politics and international relations*. Oxford: Oxford University Press.
- Masson-Delmotte, V., Zhai P., Pörtner, H. O., Roberts, D., Skea, J., Shukla P. R., Pirani, A., Woufouma-Okia, W., Péan, C.... (2018). *Global warming of 1.5°C: an IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty*. Geneva, Switzerland: Intergovernmental Panel on Climate Change.
- McCarthy, J. (2019, March 22). Most Americans support reducing fossil fuel usage. *Gallup*. [https://news.gallup.com/poll/248006/americans-support-reducing-fossil-fuel.aspx%20\(Gallup,%20reducing%20fossil%20fuel%20usage](https://news.gallup.com/poll/248006/americans-support-reducing-fossil-fuel.aspx%20(Gallup,%20reducing%20fossil%20fuel%20usage)

- McComas, K., & Shanahan, J. (1999). Telling stories about global climate change: Measuring the impact of narratives on issue cycles. *Communication Research*, 26, 30–57. doi: 10.1177/009365099026001003
- Mendelevitch, R., Hauenstein, C., & Holz, F. (2019). The death spiral of coal in the U.S.: Will changes in U.S. Policy turn the tide? *Climate Policy*, 19, 1310–1324. doi: 10.1080/14693062.2019.1641462
- Miller, B. M. (2010). Community stakeholders and marketplace advocacy: A model of advocacy, agenda building, and industry approval. *Journal of Public Relations Research*, 22, 85-112. doi: 10.1080/10627260903170993
- Miller, M. & Lellis, J. (2016). Audience response to values-based marketplace advocacy by the fossil fuel industries, *Environmental Communication*, 10, 249-268, doi: 10.1080/17524032.2014.993414
- Moritz-Rabson, D. (2019, October 30). Eleven coal companies have filed for bankruptcy since Trump took office. *Newsweek*. Retrieved from <https://www.newsweek.com/eight-coal-companies-have-filed-bankruptcy-since-trump-took-office-1468734>.
- Mulvaney, K. (2019, September 19). Climate change report card: These countries are reaching targets. *National Geographic*. Retrieved from <https://www.nationalgeographic.com/environment/2019/09/climate-change-report-card-co2-emissions/>
- Mazurkiewicz, P. (2004). *Corporate environmental responsibility: Is a common CSR framework possible? World Bank working paper*. Retrieved from <http://siteresources.worldbank.org/EXTDEVCOMSUSDEVT/Resources/csrframework.pdf>.
- Peabody Energy (2018). *ESG report*. Retrieved November 1, 2019 from <https://www.peabodyenergy.com/Sustainability/ESG-Report>
- Non-renewable energy. (2013, February 14). *National Geographic Society*. Retrieved from <https://www.nationalgeographic.org/encyclopedia/non-renewable-energy/>.
- Pollach, I. (2018). Issue cycles in corporate sustainability reporting: A longitudinal study. *Environmental Communication*, 12, 247-260. doi: 10.1080/17524032.2016.1205645
- Porter, M. E. (1985). *Competitive advantage: creating and sustaining superior performance*. New York: Free Press.

- Potter, W. J., & Levine-Donnerstein, D. (1999). Rethinking validity and reliability in content analysis. *Journal of Applied Communication Research*, 27, 258-284. doi: 10.1080/00909889909365539
- Public divides over environmental regulation and environmental policy. (2017, March 22). *Pew Research Center*. Retrieved from <https://www.pewresearch.org/science/2017/05/16/public-divides-over-environmental-regulation-and-energy-policy/>
- Public Affairs Council (1978). *The fundamentals of issue management*. Washington, DC: Public Affairs Council.
- Rahman, N., & Post, C. (2011). Measurement issues in environmental corporate social responsibility (ECSR): Toward a transparent, reliable, and construct valid instrument. *Journal of Business Ethics*, 105, 307–319. doi: 10.1007/s10551-011-0967-x
- Rowlands, I. H. (2000). Beauty and the beast? BP's and Exxon's positions on global climate change. *Environment and Planning*, 18, 339–354. doi: 10.1068/c9752
- Royal Dutch Shell (2019). *Sustainability reports*. Retrieved November 1, 2019 from <https://www.shell.com/sustainability/sustainability-reporting-and-performance-data/sustainability-reports.html>
- Schilling, J. (2006). On the pragmatics of qualitative assessment. *European Journal of Psychological Assessment*, 22, 28–37. doi: 10.1027/1015-5759.22.1.28
- Scott, R. L. (1999). *On viewing rhetoric as epistemic*. In J. L. Lucaites, C. M. Condit, & Caudill (Eds.), *Contemporary rhetorical theory: A reader* (pp. 131-139). New York, NY: Guilford Press.
- Sethi, P. S. (1977). *Advocacy advertising and large corporations*. Lexington, MA: D.C. Heath.
- Shih, T.-J., Wijaya, R., & Brossard, D. (2008). Media coverage of public health epidemics: Linking framing and issue attention cycle toward an integrated theory of print news coverage of epidemics. *Mass Communication and Society*, 11, 141–160. doi: 10.1080/15205430701668121
- Slack, K. (2012). Mission impossible? Adopting a CSR-based business model for extractive industries in developing countries. *Resources Policy*, 37, 179-184, doi: 10.1016/j.resourpol.2011.02.003

- Smith, M. F. & Ferguson, D. P. (2013). “Fracking democracy”: Issue management and locus of policy decision-making in the Marcellus shale gas drilling debate. *Public Relations Review*, 39, 377-386. doi: 10.1016/j.pubrev.2013.08.003
- Snow, D. A., Rochford Jr, E. B., Worden, S. K., & Benford, R. D. (1986). Frame alignment processes, micromobilization, and movement participation. *American Sociological Review*, 51, 464–481. doi: 10.2307/2095581
- Solomon, S. (2008). *Climate change 2007: The physical science basis: Contribution of working group I to the fourth assessment report of the Intergovernmental Panel on Climate Change*. Cambridge: Cambridge University Press.
- Sommerfeldt, E. J., & Yang, A. (2017). Relationship networks as strategic issues management: An issue-stage framework of social movement organization network strategies. *Public Relations Review*, 43, 829–839. doi: 10.1016/j.pubrev.2017.06.012
- Strange, R. (2018, August). *Petrol & diesel*. Ethical Consumer. Retrieved from <https://www.ethicalconsumer.org/transport-travel/shopping-guide/petrol-diesel>.
- Taylor, M., Vasquez, G. M., & Doorley, J. (2003). Merck and AIDS activists: Engagement as a framework for extending issues management. *Public Relations Review*, 29, 257–270. doi: 10.1016/s0363-8111(03)00046-8
- The U.S. coal industry: Historical trends and recent developments*. (2017, August 18). Congressional Research Service. Retrieved from <https://www.everycrsreport.com/reports/R44922.html>.
- Turley, L. W. & Kelley, S. W. (1997). A comparison of advertising content: Business to business versus consumer services. *Journal of Advertising*, 26(4), 39-48. doi: 10.1080/00913397.1997.10673534
- U.S. Energy Information Administration (EIA). (2020a, April 27). *Monthly energy review: Coal*. Retrieved May 1, 2020 from <https://www.eia.gov/totalenergy/data/monthly/pdf/sec6.pdf>
- U.S. Energy Information Administration (EIA). (2020b, January 30). *EIA expects U.S. electricity generation from renewables to soon surpass nuclear and coal*. Retrieved April 5, 2020 from <https://www.eia.gov/todayinenergy/detail.php?id=42655>
- U.S. Energy Information Administration (EIA). (2020c, April 27). *Monthly energy review: Petroleum*. Retrieved May 1, 2020 from <https://www.eia.gov/totalenergy/data/monthly/pdf/sec3.pdf>

- U.S. Energy Information Administration (EIA). (2019, November 13). *Coal explained: Where our coal comes from*. Retrieved May 1, 2020 from <https://www.eia.gov/energyexplained/coal/where-our-coal-comes-from.php>
- U.S. Energy Information Administration (EIA). (2019b, June 19). *Energy and the environment explained: Where greenhouse gases come from*. Retrieved January 5, 2020 from <https://www.eia.gov/energyexplained/energy-and-the-environment/where-greenhouse-gases-come-from.php>
- U.S. Energy Information Administration (EIA) (n.d.). *Energy explained: Your guide to understanding energy*. Retrieved January 10, 2020 from <https://www.eia.gov/energyexplained/>
- US mine disasters fast facts. (2020, February 27). *CNN*. Retrieved from <https://www.cnn.com/2013/07/13/us/u-s-mine-disasters-fast-facts/index.html>
- U.S. Stock Market Data. (2019). *CNN*. Retrieved from [https://money.cnn.com/data/us\\_markets/](https://money.cnn.com/data/us_markets/)
- VanderStoep, S. W., & Johnston, D. D. (2009). *Research methods for everyday life: blending qualitative and quantitative approaches*. San Francisco, CA: Jossey-Bass.
- Vara, V. (2019, June 13). *Largest oil and gas companies: Ranking the top 10*. Offshore Technology. Retrieved from <https://www.offshore-technology.com/features/largest-oil-and-gas-companies-in-2018/>
- Vasquez, G. M. (1996). Public relations as negotiation: An issue development perspective. *Journal of Public Relations Research*, 8, 57–77. doi: 10.1207/s1532754xjpr0801\_03
- Veil, S. R. & Michael, K. (2008). Issues management and inoculation: Tylenol's responsible dosing advertisement. *Public Relations Review*, 34, 399-402. doi: 10.1016/j.pubrev.2008.08.004
- Wagner, M., Merica, D., Krieg, G., & Bradner, E. (2019, September 5). Climate crisis town hall with the 2020 Democratic candidates. *CNNPolitics*. Retrieved from <https://www.cnn.com/politics/live-news/climate-crisis-town-hall-august-2019/index.html>.
- Wang, Z., Lee, A., Polonsky, M. (2018). Egregiousness and boycott intensity: Evidence from the BP Deepwater Horizon oil spill. *Management Science*, 64, 149-163. doi: 10.1287/mnsc.2016.2577

- What is the Paris Agreement?* (2020). United Nations Framework Convention on Climate Change. Retrieved from <https://unfccc.int/process-and-meetings/the-paris-agreement/what-is-the-paris-agreement>
- Wiens, J. A. (2013). *Oil in the environment: legacies and lessons of the Exxon Valdez oil spill*. Cambridge: Cambridge University Press.
- Woods, C. L. (2019). From an “outside group” to a catalyst for corporate change: Examining activists’ legitimation strategies. *Public Relations Review*, 45, 332–347. doi: 10.1016/j.pubrev.2019.02.001
- World Bank urges more balanced global approach to development. (2002). *Media Asia*, 29, 112–114. doi: 10.1080/01296612.2002.11726673
- Xu, X., Zeng, S., & Chen, H. (2018). Signaling good by doing good: How does environmental corporate social responsibility affect international expansion? *Business Strategy and the Environment*, 27, 946–959. doi: 10.1002/bse.2044
- Zachary, M. (2009). Rhetorical analysis. In Bargiela-Chiappini, F. (Ed.), *The handbook of business discourse* (pp. 68-80). Edinburgh University Press.