CORPORATE FRAMING OF FOSSIL FUELS AND SOLUTIONS TO CLIMATE CHANGE IN OREGON: A DISCOURSE ANALYSIS OF PUBLIC RELATIONS AND NETWORKS OF ACTIVIST RESISTANCE

by

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This thesis examines the ways in which the fossil fuel industry attempts to manage conflict by projecting an image of corporate responsibility to gain access to resources for expansion. Examining the discourse of corporate public relations messaging for proposed liquefied natural gas (LNG) infrastructure and state government responses, this research analyzes the local impacts of this discourse which draws on the rhetoric of globalization and market-based solutions to climate change. In addition, this research displays the ways in which communities and activists are working to re-frame the discussion of climate change solutions, re-framing fossil fuels within a life-cycle global context. This takes into account not only use but production, extraction and distribution, which supports organizing for community-based solutions.

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CHAPTER I

INTRODUCTION

Setting the Scene

The journey from Portland, Oregon to Astoria is beautiful. The two-lane highway is lined with trees and dotted with patches of houses and small, local businesses. Running adjacent to the Columbia River, small breaks in the trees offer views of the roaring waters and of Washington State.

At mile market 38, turning right down a narrow road leads to a quaint creek, which runs into a waterfall feeding into the river. Before the waterfall, Clifton Road offers two choices. To the left a single-lane road leads to a row of less than a dozen buildings, some abandoned. The town is called Clifton and it's an old gillnetters fishing community, some of whose residents and sportsmen still remain. To the right, down Bradwood Road, is a stretch of beach with a trail back to the waterfall. Next to the beach is a protected salmon habitat, the Columbia River Estuary. Small pieces of rusted industrial equipment wrapped with vines and other reclamations of nature lay across the beach, reminding visitors of Bradwood's industrial past. Less than half a mile across the river is Puget Island, Washington, occupied by large gardens and a small community.

Continuing west on Highway 30, small signs begin to dot the road, joining the signs for political candidates and local elections. With a red circle and a line slashing through

the letters "LNG", the white signs are staked into the dirt. Above them, new green billboards offer another message repeated town after town. These signs read, "Bradwood Landing: Good Jobs, Clean Energy".

Continuing down the highway into the heart of downtown Astoria, an office-front for NorthernStar Natural Gas provides t-shirts, buttons, fleeces and hats with the same message as the green billboards.

Literature offered in the sitting area of the NorthernStar office explains that they are proposing a small project on that old industrial site in Bradwood, Oregon. The project is to build an importation facility for "liquefied natural gas," or LNG.

The glossy pamphlets explain that LNG is a clean-burning fuel and the project will bring money and jobs to the local area and that the importation terminal will be safe for surrounding communities. Fact sheets promote a Salmon Enhancement Initiative and the argument that the region needs more natural gas in order to move towards a renewable energy future. The terminal will be built on the beach in Bradwood, Oregon and will introduce new fuel into the market from other countries with extra natural gas reserves that they aren't using. Over the last few years, NorthernStar has promoted these benefits through advertisements and in public hearings with the Clatsop County Commissioners, the local government body charged with making land use zoning decisions.

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A few years ago community members in Northwestern Oregon began receiving letters and mailings from the company about the project. Curious, and then engaged, some did research and participated in the hearings. Learning more and more about the projects and

its operations, many local people began to be critical of the idea. Concerns about the impacts to the estuary and the salmon were raised. Public safety issues related to what would be explosive tankers traveling past their towns began to become more serious with residents the more research they conducted. Over the months they formed groups to talk about these concerns and to learn the process of voicing them, seeking to participate in the decisions about their communities' future.

In their investigation to find out about the impacts of LNG, the community began realizing larger implications of the project. They learned that dozens of communities around the country had fought similar proposals. They found that companies had proposed terminals in California, which were never built, due to community opposition. And some of these residents turned activists came to consider the project within a context that reached beyond their own community.

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To site the terminal in Bradwood, Oregon, Clatsop County needed to permit a zone change which would allow a protected estuary to be zoned as industrial use. This process involves public hearings and time in which the public can send in testimony in support or opposition to the zone change.

For instance, in the public testimony submitted November 26, 2008, over 550 pages of written testimony were offered to the county, most of the documents were reports, personal letters, e-mails, and legal testimony *against* the zoning change. The content of this testimony refers to impacts to salmon, to the quality of life in the area, to tourism, to community safety and to a growing range of other local community concerns. However,

within the testimony numerous issues arose beyond the local impacts of the importation facility. The testimony also included concerns about the international and global impacts of the LNG process.

Deep within the public testimony is a scanned article about the impacts of the LNG industry on Bonny Island in Nigeria. The article, titled, "Curse of the Black Gold: Hope and Betrayal in the Niger Delta" speaks to the history of violent oppression and environmental destruction of the oil industry on the Ogoni people, and the ways in which the LNG industry is expanding with the exportation of natural gas in liquefied form. The article, by Tom O'Neill, had first appeared in the National Geographic in February 2007, and had now made its way to Clatsop County Oregon.

The county resident, Don Frank, who submitted the article as testimony had highlighted particular sections in the article, including,

> Their fishing community once stood on the other side of a small inlet where fuel storage tanks the size of cathedral domes now loom, and where the superstructure of a liquefied natural gas plant juts higher than any tree in the forest (O'Neill, 2007).

Perhaps Frank submitted this testimony because he empathized with the plight of Nigerians- or because he identified the similarities between impacts to their community and possible impacts to his own. For whatever reason, Frank submitted testimony regarding the impacts of extracting LNG operations in Nigeria as a reason to deny a county level land use permit for an LNG importation center in a rural ocean front community in the United States.

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The energy industry is a transnational venture, moving raw natural resources into rich markets for cheap energy. Throughout the process communities are impacted and dislocated, and at each step the companies involved have worked to minimize conflict to maintain consistent production, continue expansion, and keep profits up.

Given that the industry is transnational, with international impacts, as well as signigicant global impacts such as greenhouse gas emissions, how do companies reach out and persuade local communities to accept the expansion of infrastructure onto their land and into their lives? How visible are all of the aspects of the process to the communities under consideration? How does the company gain access to the critical resources they require, while maintaining a good reputation locally and internationally? In addition, how do governments negotiate these "beyond boarder" issues when governing? And finally, how do local communities, respond to these corporate initiatives?

Using a frame analysis to examine the messaging provided by industry players, the state governor, and Oregon's No LNG movement, this thesis examines the ways in which these crucial players use a global frame to consider the issue and impacts of a proposed importation terminal and related pipelines. By examining the frameworks provided by various multi-media resources procuced by these groups, this thesis investigates the question: How do the institutions that provide a framework with which to view a Liquefied Natural Gas proposal in Oregon relate to the global and the local in their frameworks of climate change and LNG? In addition, this thesis approaches the topic of climate change as it relates to LNG development by analyzing the opportunity for

political and social engagement in the climate change solutions proposed by the institutions considered in this research.

In an effort to position this research into a larger political and social framework, this thesis is structured to provide a brief overview of the LNG industry and climate change policy, situating the research in the broader context. After the context has been established, the literature review will briefly provide a summary of critical themes, which have been explored by various scholars, which have led to the development of this thesis. The literature review will explore theories and ideas relating to globalization, corporate responsibility, and the issue of framing in social movements. Finally a review of the methodological approach, including particular decisions, will be provided.

Context

Liquefied Natural Gas (LNG)

> Just as the 19th century was shaped by coal and the 20th century by oil, people in the energy industry say, this century will belong to natural gas.
>
> - Simon Romero, *New York Times* (2005)

> A new global energy business--natural gas--is emerging. It will have a far-reaching impact on the world economy, bringing new opportunities and risks, new interdependencies and geopolitical alignments.
>
> - Pulitzer Prize winning energy reporter Daniel Yergin & Michael Stoppard (2003)

Global Scene

Yergin & Stoppard (2003) project that within ten years the United States will overtake Japan as the world's largest natural gas importer. The natural gas industry, which until now has been a local, national, or continental business, is transforming to become "truly global in their operations and perspectives" due to the ability to now transport the gas in a

liquefied state in large tankers across the world (2003). Touted as an alternative to oil, the energy source brings new political dynamics and dependencies.

Liquefied natural gas (LNG) is a methane gas similar to natural gas that is burned in stoves. LNG is different than natural gas because of the process it undergoes between extraction and consumption. While natural gas currently supplied to the United States is domestically extracted, or transported through pipelines from Canada, LNG is mostly extracted from Indonesia, Russia, Nigeria, Algeria, Qatar, and Iran (Romero, 2003). Because of the distance the gas travels, in order for it to be transported, it goes through a liquefaction process. In this process the gas is frozen to -260 degrees Fahrenheit, condensing it to $1/600^{th}$ of its original size. It is then shipped on large tankers across the globe to industrial ports where it is re-gasified, then piped to power plants and other consumers.

Because of the fuel consumed and burned in this process, including the energy used to freeze the gas and the fuels consumed by the huge takers traveling far distances, the greenhouse gas emissions of LNG result in increased emissions over current US natural gas supplies. The amount of increased emissions due to the process depends on various factors such as distance between source and importation, but various studies including the Heede Climate Change Report (Heede, 2007) and a Carnegie Mellon Study (Jaramillo, Griffin, Matthews, 2007) find that greenhouse gas emissions are increased somewhere between 25% and 40%.

There are currently over forty proposals in the U.S. to build new import terminals. Most of these proposals are attached to other proposals for new pipelines to transfer the

gas to power plants and other points of consumption (Federal Energy Regulatory Committee, 2008). There are currently five proposals, three of which are actively seeking permits, for importation terminal ports in Oregon. The three active proposals include one in Coos Bay, and two on the Columbia River. There are more proposals for export terminals as well as import terminals, pipelines, and new extraction equipment all over the world. LNG is a booming industry, which has been in the works for well over ten years, as can be seen by energy industry projections.

All of the major fossil fuel industry leaders, including Shell, Chevron, Beyond Petroleum, and Exxon are involved in the LNG industry. However, the companies that are filing proposals within the U.S. are usually new investment companies, such as NorthernStar Natural Gas, or Jordan Cove Energy Project L.P. They are seeking out potential infrastructural projects, applying for permits, and then hoping to sell the plans to larger corporations.

Local

In 2005, NorthernStar Natural Gas, a newly formed energy company consisting of executives with experience in the idustry, began the process of proposing a Liquefied Natural Gas (LNG) importation facility, named Bradwood Landing-on the Columbia River in Bradwood, Oregon, up the river from Astoria, Oregon. The proposed project includes an industrial facility to be located on a currently protected estuary and critical salmon habitat, and a 36-mile pipeline to be drilled under the Columbia River with dredging of the Columbia River basin to make way for football-stadium-sized tankers to dock and unload their cargo. The Bradwood pipeline, if built, is positioned to meet with

the Palomar Pipeline, a 220-mile pipeline proposed by NW Natural Gas and TransCanada. This pipeline requires a 120 ft clear-cut construction corridor and is planned to go through 150 rivers, streams and wetlands, through Mt. Hood National Forest, and across private property. The research of this paper focuses on the importation terminal and attached distribution pipelines. While these two infrastructure developments are proposed by separate companies, this research considers them part of the same project.

Government site approval and public recourse

The process to acquire the land and permits includes receiving zone changes at the county level to transform a protected estuary and critical salmon habitat to an industrial zone, permits from state agencies, a land lease from the state, as well as approval at the federal government level by the Federal Energy Regulatory Committee (FERC, 2006) .

The general public has limited venues to implement direct power over the siting or approval of an LNG project through legal venues of official process, but general support for the project is important. There are various activities the public can commit to, to create conflict for the companies, both through legal venues, and otherwise. The endeavors of the processes of permitting and obtaining siting by FERC, requires Environmental Impact Statements (EIS) and public hearings, during which the public may submit testimony to the appropriate governmental body, lengthening the EIS and permitting process. The longer the permitting process takes, and more rebuttals the company has to make in from of any board, the more money it will cost them. Similarly, although the public has no official vote, they can apply political pressure to their elected

officials who submit the permits and lease the state land. And, the more issues that impacted communities bring up to the public, the more money that has to spent on public relations materials or mitigation plans to appease public concern, regain control, and minimize conflict enough to gain access to the permits and resources needed.

The Global Issue of Climate Change and Solutions

The popular issue of climate change has been theorized as a global issue, in cause and effect and in various proposed solutions. The consideration of the global nature of the issue of climate change is articulated by Lovbrand & Stripple (2006),

> The globality is usually established with reference to both the origin and the consequences of the climate issue, that is, greenhouse gas emissions emitted anywhere on the globe will have consequences everywhere on the globe. Climate change emerges as an issue 'beyond borders' in need of global accords.

In considering the "beyond boarders" issue of climate change, attention has been drawn to the "beyond boarders" industry, the transnational fossil fuel industry. Climate change has been directly linked to greenhouse gas emissions related to fossil fuel extraction and use, as Larry Lohmann (2006) states, "Like many other social problems, climate change is closely tied to the burning of oil, coal and gas. According to Muller (2002), "The biggest anthropogenic cause of climate change by a long way is…the use of fossil carbon – coal, oil and gas – as combustion fuels in all economic sectors: transport, domestic heating, industrial production, electricity generation, and so on. " And further, Lackner (2002) states, "Carbon dioxide is the natural result of fossil fuel use and unlike conventional pollutants it cannot be eliminated by improving the cleanliness or efficiency of the energy extraction process". Specifically it has been outlined that carbon released

due to the operations of the fossil fuel industry introduces new carbon into the global carbon-cycle, creating an abundance of carbon, beyond that of what our current natural carbon "sinks", such as oceanic algae and forests, can absorb (Lohmann, 2006).

As the problem and global issue of climate change has increasingly become a popular social and political issue, various solutions have entered the public discourse. Some groups and individuals propose a system and societal-wide approach to confronting climate change (Carbon Trade Watch, 2008; Lohmann, 2006) seeking to protect forests as "sinks" and immediately begin phasing out the use of fossil fuels. Some have called for the de-carbonizing of development to foster communities independent from fossil fuels, while others call for solutions based on livable and healthy communities that are both independent from fossil fuels and structured in a way to prepare for climate chaos related disasters (Beder, 2007).

Recently solutions focusing on decreasing total greenhouse gas emissions through the use of a market that places a value on pollution have become very popular, for transnational, national, regional, local and individual solutions to climate change. Market-based solutions to climate change, such as carbon offsets and carbon trading have gained mass support and have become a dominant framework for policy (Smith, 2007). The Kyoto Protocol, for example, is almost exclusively a carbon trading document.

Over the last few years phrases such as carbon neutrality and carbon footprint have become increasingly popular (carbon neutral was Oxford English Dictionary's word of the year in 2006). Based on the notion that one can measure the greenhouse gases an individual produces, a common phrase in the advancement of individual sustainable

practices is the goal of reducing one's carbon footprint. If decreasing plane flights (greenhouse gas emissions) is too difficult, the sustainably-minded consumer can opt to be carbon neutral.

Carbon neutrality relies on the basic assumption of placing a value on carbon emissions, and requires the purchasing of carbon offsets to mitigate emissions. An offset is issued when there has been some activity which decreases carbon emissions, or increases the amount of carbon the world can absorb (planting a tree is the most common example). This is based on the notion that pollution in one place is the same as pollution in another, and that individuals can purchase their way out of polluting.

The commodification of carbon for the purpose of selling individual carbon neutrality also exists on larger scale in a much larger market than individual carbon neutrality. Businesses, corporations, industries and entire countries are striving to be carbon neutral.

A cap and trade scenario, or carbon trading, for regulating greenhouse gas emissions involves a regulatory body placing a cap on the total allotted amount of emitted pollutants from an industry, state, region, or nation. All the institutions within the jurisdiction are allotted rights to pollute, or "carbon rights". If an institution being regulated has excess pollution amounts or pollutes less than it is allotted, the rights to pollute are traded, essentially creating a market-value for pollution. The idea is that the price of decreasing pollution will be cheaper than the cost of pollution rights.

There are two structures for cap and trade currently utilized: The first is described above. While another approach involves the generation of surplus carbon credits from projects that claim to reduce or avoid emissions in other locations, usually in Southern

countries. These credits may be purchased and transferred as pollution rights or carbon credits (Lohmann, 2006).

Market-based solutions to climate change have increased in popularity since they were introduced at the 1992 Earth Summit. Since then the Kyoto Protocol assumed a cap and trade scheme as the predominant policy to try and decrease global greenhouse gas emissions. Since then various governments and regions have begun implementing the policy, such as the European Union. The 2008 legislative session in the U.S. put various things in place to begin to introduce carbon trading as pollution control.

The policy of cap and trade proposes the market as the pollution regulator, and according to Lovbrand & Stripple (2006), "the underlying logic of international carbon trade is that emissions should be reduced where the costs are low in order to increase the cost-efficiency of the Kyoto Protocol".

Modern economic theory of pollution management has been greatly shaped and molded by the economist Ronald Coase (1998). Coase insisted that a polluter "should not be seen as doing something bad" but rather simply partaking in the market. According to Coase,

> Pollution is doing something bad and good. People don't pollute because they like polluting. They do it because it's a cheaper way of producing something else. The cheaper way of producing something else is the good; the loss in value that you get from the pollution is the bad. You've got to compare the two. That's the way to look at it. (Coase, 1998)

According to carbon trading proponents, entering pollution into a market will create the perfect balance of pollution, where affordable goods are still produced, without

causing an unmanageable loss in value, such as devalued labor power due to pollution-induced illness.

Carbon trading has become international policy confronting the global issue of climate change, and its success depends on the merits of the free market. Lohmann (2006) explains, "Acceptance of [the carbon trading provisions of the Kyoto Protocol] represents an article of faith, faith in the free market and faith in the process of globalization. It rests on an ideological stance."

Literature Review

Globalization

Although the strength and relevancy of the nation-state has been reaffirmed the last few years, the era of accelerated globalization continues. Ripe with the ever-expanding and absorbing world capitalist economic system, powerful transnational corporations spread the word of the free market across the globe, interlinking notions of capital and democracy (Kellner, 2000).

While proponents of globalization see the impacts as beneficial, bringing economic opportunity, freedom, and democracy, others see it as an accelerated push to divide even more between the haves and the have-nots, while eroding democracy through the homogenization of cultural imperialism.

Notably, from the critical perspective, globalization has been seen as linked with neoliberalism, driving the implementation of international policy while overpowering local-law, and producing an increased global flow of goods for industry and trade. Neoliberalism International trade policy serves to facilitate transnational corporate

capitalism, by over-riding government regulations and opening the gateways of trade in the name of the free market.

Pre-accelerated globalization, was the creation of a distinct paradigm of "developmentalism", introduced in the stages of decolonialism, in which nation-states were responsible for managing national economic growth, with trade as a stimulus (McMichael, 1996). This relied on the commodification of natural resources and pollutant producing industrialization. International financers, such as the World Bank, gave loans to countries winning their independence to encourage developmentalism and create new markets (McMichael, 1996). Confronted with maintained disparities between "third world" nations and "first world" wealth, the banks and other international institutions began the globalization project with a goal of transnational economic integration and sustaining transnational corporate capitalism.

The expansion of industrial infrastructure in the name of development served to expand and support the global economic system, with increased industrialization, mining, and fossil fuel extraction-which led to increased pollution, toxins and environmental destruction including deforestation. Transnational corporations' operations of resource extraction and opportunistic cheap labor exploitation in the Global South are facilitated by international lenders such as the World Bank (Sutcliffe, 1995). These dynamics continue, and have been exacerbated by globalization of transnational corporate power and operations, fostering the exchange of cheap raw materials imported to the Global North for environmental destruction, cultural imperialism, and increased militarization in the Global South.

In the global market flow of energy and fuel capital, Vallette & Kretzmann (2004) argue there is a distinct trajectory of resources extracted in the Global South to markets in the Global North. For example, a study by the Institute of Policy Studies (2004) about the winners and losers of World Bank financing found that more than 82 percent of World Bank financing for oil extraction has gone to projects that export oil back to wealthy Northern countries, and often the funding goes directly to a transnational corporation.

Corporate Responsibility

According to Beder (2002), creating an image of corporate responsibility has emerged from the need for corporate reputation management to minimize conflict in business operations or in the proposal of a new project. Corporate reputation management "is the evaluation or esteem in which the organization's image is held" (Markwick & Fill, 1997). Corporate reputation management is important for a company seeking to minimize conflict and gain access to resources for development and expansion.

Corporate communications campaigns to enhance a corporation's image are created, in part, to build public trust, as developing a good reputation can be exceedingly valuable. In the case of a new company proposing a development project, the company not only needs to build its image, but also needs to present the project as beneficial to the stakeholders. In the case of reputation management, the stakeholders taken into account include potential customers, investors, suppliers, governments, neighbors, and employees. Beder (2002) provides a useful table to understand the benefits and values of a good reputation, in relation to specific stakeholders and the publics that are prioritized as target markets.

Stakeholders	Impact
Customers	Sales, prices that can be charged, loyalty
Suppliers, clients	Business, loyalty, prices
Investors	Shareholder value higher, more stable
Government	Regulation, license to operate
Neighbors	Support, avoids protests and complaints
Employees, current and potential	Attract talented staff, morale, loyalty

While this list represents the stakeholders taken into account by the industry, it does not include stakeholders that may be impacted by the company. Stakeholders such as those who experience down-stream impacts or communities at the point of extraction from the source are not addressed because they do not directly have an impact the ability on the corporation to conduct business. This issue of a hierarchy of stakeholders is addressed in detail by Munshi and Kurian (2005).

A corporation's effectiveness in building a positive reputation, and creating a positive image of the proposed project, depends on their ability to convincingly convey their framework, as the public will act based on their perception of reality (Reimer, 2003). Corporations utilize public relations tactics to produce a frame and represent a reality that enhances the corporation's reputation. Beder (2002) writes, "[corporate] reputation incorporates elements of trust, credibility, responsibility and accountability. But it is essentially about perceptions, just as image is."

Approaching popular issues and public concerns allows the corporation to manage its reputation in two ways: first, by constructing an image of corporate responsibility; second, by framing the issue in a beneficial way to the corporation. The production of framing through public relations often emphases corporate benefits and promotes corporate responsibility via encoding messaging with signs of environmentalism and

community involvement. For this reason corporation must approach social and environmental issues that are of concern to the corporation's strategic stakeholders, as well as the broader public.

Recent tactics in corporate communication strategy

In 1991 Beers & Capellaro popularized the term, "greenwashing" to address the corporate framing of industrial processes and corporate image as environmentally-friendly, while continuing to pollute and cause other environmental destruction. Greenwashing has been described as the manipulation of a corporate image to portray environmental, social, and cultural responsibility (Althanasiou, 1996; Beder, 2000; Munshi & Kurian, 2005). This tactic of constructing the social reputation of a company, brand or industry as environmentally friendly and socially just through communication strategies, rarely involves any actual change in the process of product development, company procedures, or renegotiation of power relations.

Various tactics have been labeled as "greenwashing", such as the promotion of corporate activities that are actually required law, corporate associations and partnerships with environmental groups, or simple imagery or the change of a corporate logo to integrate images of nature (Beder, 2000). Often when a company claims to be going above and beyond in providing an additional project benefiting the environment to mitigate any negative impacts, the mitigation project is actually required by law. In an article subtitled, "Changing Perceptions not Behaviour", Beder (2002) points out that a company needs to demonstrate their good intentions by joining in coalitions with NGOs,

and environmental and labor rights groups. By building these coalitions, the people that may be negatively impacted by a project that is represented as good, are misrepresented.

Andersen (2000) writes, "[greenwashing] is creating a symbolic culture that seemingly reveres the environment as it helps destroy it". Similarly, corporate use of the term sustainable development has been used to facilitate a particular association with environmental justice for the receivers of the messaging. The discourse of sustainable development and greenwashing deliberately suppresses resistance to corporate pressures by promoting the corporate reputation to be associated with environmental justice. In the case of development projects, a positive reputation or image can aid in limiting the amount of resistance the building company may endure, allowing the company to expand its corporate empire. Beder (2002) argues, "A good reputation…means that a company can more easily set up hazardous facilities in new communities."

Framing

Schultz (1972) explained the notion of social construction by suggesting that "structures, forces and ideas of society are created by human beings, continually recreated or reproduced and also open to challenge and change" (McQuail, 2005). One way that a social construction of a particular view or angle of objects, processes or actions can be built or perceived through the use of a frame. Entman (1993) describes framing as involving selection and salience. Frames define problems, diagnose causes, make moral judgments, and suggest remedies.

Reimer (2003) highlights the importance of communication and framing in an ideological-based movement, such as one for human rights, which can be understood in

the context of a social construction. During social events or developments, different groups compete over interpretations of an issue, offering a social construction of various stances and solutions. "Groups often vie for control of the definition of a problem. When one group wins its vocabulary may be adopted" (Spector and Kitsuse, 1987). The players provide the public with frames with which to view or perceive information of the physical conditions of the problem.

The frames are constantly being transformed in reaction to new events or experiences, and groups compete for their frame to be a dominant position. "When new terms are invented, or existing terms are given new meanings, these actions signal that something important has happened to the career or history of a social problem" (Spector and Kitsuse 1987). The group's effectiveness depends to their ability to convincingly convey their point of view, as the public will act based on their perception of reality (Reimer 2003).

In the use of frames in social movements, the essential features of a framework can include major players, characters or subjects, power relations, events, and historical context. A framework provides a lens with which one can view the social phenomenon and negotiate its relative meaning. We understand events based on our knowledge and ability to decode their meaning in a specific way. If a goal is to obtain support or even understanding, it is in a group's best interest to influence as many potential allies as possible to adopt a specific framework.

Essary (2007) considers framing in the contemporary context of an increased globalization discourse within the world society. She suggests that "a global frame establishes the world as the point of orientation by incorporation supranational discourse

into the interpretation of an event or issue". A global frame broadens the significance of an issue beyond original local context, thereby increasing the likelihood of engaging and convincing others to adopt the same frame.

Methodology

Framing Analysis

This thesis examines the frames constructed and employed by various players who invoke the issue of climate change in both the promotion and opposition of a fossil fuel development project during a portion of time of the project's proposal. The breadth of the research includes the frameworks provided by the LNG industry (local and global) the state governor, and local and regional groups who oppose the proposed project. Specifically the institutions taken into account include: the Center for Liquefied Natural Gas (an industry association), NorthernStar Natural Gas (a company proposing an LNG facility), NW Natural (the local gas utility), and Governor Kulongoski, Pacific Environment, and local groups and individuals in the movement against LNG referred to as, "the grassroots". These groups, institutions and individuals have all contributed in the production and distribution a framework for considering and communication about the Bradwood Landing LNG proposal In Oregon. The goal of the research is to examine the local impacts of the frameworks produced and distributed throughout this process.

Throughout the process of NorthernStar Natural Gas proposing the Bradwood Landing terminal various documents were produced. These include advertisements and general information sheets supplied by the various players, as well as newspaper articles with statements by various players. sample of materials used to analyze projected frameworks

include web-pages, billboards, fliers, promotional mailings, public presentations, television and radio advertisements, which were gathered and observed in the time period of February 2007 to April 2008. In addition to these materials, this research draws heavily of the testimony submitted to Clatsop County on November 26, 2007 as part of the public hearing required in the process of a County level zone-change proposal, as proposed by NorthernStar Natural Gas for Bradwood Landing.

The Bradwood Landing proposal was chosen because it is the farthest along in the siting process, providing rich materials to pull from. The proposal is not unlike any of the numerous proposals throughout North America.

The process this research involved scanning the documents collected and identifying main themes. The initial research discovered that the documents for both the pro and anti-LNG players aligned their framework with the broader framework of climate change. I addition, all players related to both global and local contexts. For these reasons, the following categories were identified as main themes:

-climate change solutions
-LNG as a fuel source
-sources of LNG
-local impacts of LNG

Then, the documents were re-read and analyzed to catalogue and note when those themes arose and how the player framed information in these categories. Some messages are not directly labeled as falling into these categories in their original source. For example in some cases the messaging is not, "climate change solutions are…" but rather an analysis of how the message subtly approaches the issue is observed. For example the statement that "a cap and trade policy will regulate and help decrease greenhouse gas

emissions" suggests that the conveyor of the message believes that a cap and trade policy is a solution to climate change.

CHAPTER II

INDUSTRY FRAMING OF CLIMATE CHANGE AND LNG

In the analysis of the industry frames of LNG, three institutions were chosen. The first institution analyzed was the Center for Liquefied Natural Gas (CLNG) because it provides messaging for the entire LNG industry and serves to frame LNG for the public. The second analyzed was the messaging for NorthernStar Natural Gas, the company proposing the Bradwood Landing facility in Oregon, with a pipeline in southern Washington. The third industry institution analyzed is NW Natural Gas, the local utility in Oregon who is positioned to own and operate pipelines carrying LNG sourced natural gas. These intuitions were chosen because of their heavy involvement in providing a framework with which Oregonians can view and consider LNG, as well as the problem of climate change, and its solutions.

While this thesis does analyze issues related to the global cycle of LNG, a transnational corporation engaged in points throughout the process of LNG, is not analyzed in this framing analysis of climate change solutions and LNG importation to Oregon. While Shell, Chevron or BP are likely to be involved in the process of LNG importation to Oregon if a proposal is passed- and a terminal built, they are not directly participating in the constructed framing and are not directly attached or associated to the proposed projects. This disassociation from the proposed importation projects is achieved by newly formed companies, with no history or reputation, serving as the proposing party

for the terminals. The lack of involvement of a transnational corporation in the local framework provided by the industry is meaningful and relevant, because it serves to distance this project from the global impacts and reputations associated with a transnational fossil fuel corporation.

Background: Fossil Fuel Industry Framing of Climate Change

For years the fossil fuel industry spent millions of dollars on associations and reports to discredit climate change as a human-caused phenomenon. Industry front groups included the Global Climate Coalition (GCC), a group of 50 corporations and trade associations that had been claiming global warming was unproven and action to prevent it unwarranted. However, most corporations (all except Chevron) have switched their positions, and acknowledge climate change (Beder, 2002; Rowlands, 1999). Now fossil fuel industry corporations often participate in lobby groups, such as the U.S. Climate Action Partnership and approach issues related to climate change, such as greenhouse gas emissions in their public relations materials.

Center for Liquefied Natural Gas

The Center for Liquefied Natural Gas (CLNG) is a trade association for the LNG industry, which provides information to the public about LNG and works to lobby on behalf of the industry. The CLNG web-page, lngfacts.com, offers an introduction to the fossil fuel, with background information, frequently asked questions, and an introductory video. According to their About CLNG section,

> The Center for Liquefied Natural Gas (CLNG) is a trade association of LNG producers, shippers, terminal operators and developers, energy trade associations and natural gas consumers. CLNG is a clearinghouse of educational and technical information. It also facilitates rational issue

> discussion and the development of public policies that support LNG's increasing contribution toward meeting the nation's energy needs and supporting economic growth.

Local companies link to the CLNG site for more information and CLNG holds a dominant position on any Google search for LNG or related topics. Therefore it is not unlikely that individuals, who are first learning about LNG, will read their messaging when wanting to learn more.

Findings of Frame

Climate change solutions

The prevalence of any direct language regarding climate change on the CLNG site is infrequent; however CLNG promotes LNG as solution to combat climate change, as can be read in an Earth Day press release. "As we celebrate the Earth this week and continue to seek solutions to combat global climate change, one energy source deserves a second look – Liquefied Natural Gas (Fact Sheet, 2008)." Language about the need to switch to cleaner fuels and renewable energy sources implies that the solutions to climate change revolve around fuels that release fewer greenhouse gas emissions.

LNG as a fuel source

CLNG provides two main messages regarding LNG: LNG is clean and "we need more". CLNG works to frame the fossil fuel as being clean by associating it with renewable sources, and contrasting LNG from other fossil fuels. LNG is explained as "a bridge fuel" to sustainability, and is promoted because it "naturally burns cleaner". "By bringing more LNG into the U.S. we can meet America's growing demand for energy in an environmentally sound way" (Energy Outlook, 2007).

On Earth day, CLNG sent out a press release titled, LNG: An essential part of America's clean energy mix. The press release provided a list of facts about clean energy, including facts on wind and solar power, before providing facts on LNG. The release suggested, "Renewable energy is in our future, but we need reliable and clean resources today" (Fact Sheet, 2008).

Advancement of the idea that natural gas burns cleaner than other fuels is promoted both for the use in transportation and energy sectors. Natural gas is also being promoted as a cleaner transportation fuel alternative, and various industries and corporation are switching to burning natural gas, as opposed to oil. This involves busses and taxi services "going green" with natural gas, and entire industries changing their fleets to "green fleets" to have an overall net decrease of total corporate greenhouse gas emissions. Nike and Converse, for example, recently switched to burning natural gas in their fleets, "to reduce the air quality impacts of drayage trucking"(CLNG, April 2008).

CLNG promotes the partnership to promote other uses of the fuel. They released a statement claiming, "If California expects to improve its air quality and meet the state's growing energy demand, bringing more natural gas to the state in the form of LNG is the most environmentally friendly answer, not only for fueling truck fleets, but for generating electricity, heating homes and powering industry" (CLNG, April 2008).

Sources of LNG

When referencing the sources of LNG, using the name of the country or origin was rare, and was often avoided by framing the lifecycle process in industry terms, such as

"LNG comes from liquefaction centers" or "Natural gas is extracted from the ground" (CLNG, 2008).

When sources for LNG were referenced, a dominant framework emphasized the abundance, or excess, of natural gas reserves, which are "stranded". For example, "Many countries with excess natural gas supplies sell it to countries with strong demand." And, "We have to turn to other countries where natural gas is abundant, like Trinidad and Tobago, Australia, Russia and Qatar" (CLNG, 2008). The countries that are mentioned are framed as beneficiaries to the LNG process, and they would benefit from an expanded natural gas market.

This framework of LNG sources was found on the web-site and came from a research report from the Center for Energy Economics. In a section titled LNG Lifecycle Value, it explains that "natural gas is stranded a long way from market, in countries that do not need large quantities of additional energy…Trinidad & Tobago is an example of a small country that has benefited hugely from its LNG export strategy…Countries like Angola and Venezuela are striving to reach their full potential in the global LNG marketplace, and countries like Saudi Arabia and Iran… could also participate as LNG exporters (Foss, 2007).

Local impacts of LNG

In approaching concerns for local impacts, CLNG suggests the selection of sites for LNG facilities, and a rigorous permitting process, involving careful consideration. The messaging continues to assure that "terminals pose little risk to nearby communities' decisions" (LNG Future, 2008).

Analysis

An alternative fuel

By approaching the global issue of climate change, the industry invokes a global frame and responds to popular concerns of the public. In the construction of the image of LNG, the industry has attempted to frame the fuel as an alternative fuel. This is produced in the association and disassociation to other fuels in the public's mind. For example CLNG states, natural gas "is a clean-burning alternative to coal and other petroleum products, such as oil" (CLNG, 2008). Meanwhile, LNG is placed in the same category as renewable fuels, which have been constructed as beneficial and necessary for the environment.

This has not only consequences for consideration of fuels for environmental concerns, but this association also serves to distance LNG as separate from the systems known to be involved in the oil industry.

The framing associates LNG with renewable energy, which as suggested before, is a dominant societal framework as a solution to climate change. However, phrases such as, "Renewable Energy Alone Cannot Guarantee Reliability" (Fact Sheet, 2008), serve to disempower movements to revolutionize our energy infrastructure, and put-off immediate changes that need to happen.

Market-based vacuum

Throughout the framing of natural gas, the local and global impacts, both human and environmental, are denied while focus is placed on the industrial processes of production. In reference to the production of LNG, the messaging frames the sources out of context

and devoid of any social political or environmental context. However, context is implied. The only context that does exist is "the market" which CLNG promotes expanding, in an effort to integrate source countries into. Promoting the facilitation of integrating these countries into the global economic system contributes to a meta-frame of globalization and the idea that countries need and desire to be industrially developed.

Framing the source countries as has having excess natural gas, and reserves that are "stranded", invoke the ideal that they (either the fuels or the countries) need to be saved, positioning the LNG industry as heroic and providing an important moral service to the world.

This framing of the industry continues as CLNG positions the LNG industry as part of the solution to climate change. The dominant framework projected through CLNG in relation to climate change is that LNG is the environmental choice, and part of the solution to climate change. However, creating and promoting the framework that LNG is a clean-burning fuel denies the lifecycle global emissions, which will impact the climate and increase total emissions if used as a replacement for non-liquefied natural gas.

Framing LNG as clean fuel source without negative lifecycle impacts, including local environmental and social impacts and global climate impacts, over-simplifies the fuel, and removes it from a global context. By highlighting LNG's benefit to local air quality, such as with fleets in California, CLNG promotes a framework of considerations for pollution as only a local issue, denying and omitting any language regarding global impacts.

Framing priorities

Messages referencing the need for reliability work to delay a transition to a society independent from fossil fuels and prioritize the value of business-as-usual. Partnered with messages such as, "we need more", the notion of reliability and maintaining a particular comfort level or stability relies on a dominant meta-framework provided, in part, by vice president Dick Cheney that, "our way of life is non-negotiable". This serves to promote prioritizing the continued reliance on dwindling supplies of fossil fuels, over environmental and social consideration and a transition to a society free from fossil fuel use.

Overall, by promoting natural gas fuels as the environmental decision, CLNG contributes to a larger framework, which states that solutions to climate change are as simple as replacing the fuels we consume. In an article titled, "Debating energy as if communities mattered", Brewer (2007) argues that the public discourse is obsessed with fuel. While each fuel has its own frame so the meaning shifts between sources, the discourse limits the consideration of possible structural and systematic shifts. LNG is associated with alternative fuels, which allows it be considered a solution to climate change. This denies and ignores solutions involving infrastructural changes, restructuring of the personal and societal relationship with production and consumption, and overall considerations of altering "our way of life" in an intentional way.

NorthernStar Natural Gas

NorthernStar Natural Gas is a Houston, Texas based company proposing an importation facility in Northern Oregon, Bradwood Landing. The company is also proposing an LNG terminal off the southern California coast.

NorthernStar's messaging is distributed in a variety of ways including, but not limited to: a webpage with natural environment imagery, a storefront in downtown Astoria, multiple mass mailings including single sheet advertisements and intricate booklets and pamphlets, newspaper print ads, and public presentations.

Findings of Frame

Climate change solutions

NorthernStar's web-page states, "Efficiency Reduces Global Warming," and promotes a master-frame that efficient and clean fuels, which reduce greenhouse emissions are the solution to climate change (Clean environment, 2008).

LNG as a fuel source

NorthernStar frames LNG as an environmentally friendly fuel source through main messages, all within the larger context of "clean energy". These messages are that LNG helps achieve: clean air and reduced global warming by using cleaner process and that natural gas is a bridge fuel to sustainable fuels, as well as being a "highly efficient source of energy" (CLNG, 2008).

NorthernStar frames LNG in opposition to dirtier fuels, and as a bridge from dirty energy to renewables. "Using more natural gas to replace dirtier and less environmentally acceptable fuels will help address simultaneously a number of environmental concerns

such as smog, acid rain and greenhouse gas emissions". "Without additional natural gas, Oregon will not be able to meet its renewable portfolio standards and transition from coal-generated power." "Using natural gas to generate heat or electrical power...leads to less global warming than the use of other fuel sources" (Benefits, 2007).

In addition NorthernStar states that the processing involved in LNG, makes LNG cleaner than natural gas. "Liquefied natural gas processing makes natural gas even cleaner...liquefied natural gas that is re-gasified produces a cleaner-burning gas which is better for the environment than unprocessed gas" (BradwoodLanding.com, 2008).

Sources of LNG

NorthernStar has not been clear in naming the source of gas for importation; rather they approach the topic by broadly listing all possible exporters. For example, "BL (Bradwood Landing) expects to source LNG supplies from the entire Pacific Basin area and possibly from the Middle East as well" (Bradwood Landing LCC, 2007). However, their materials highlight the expansion and increased capacity of various regions or countries, stating, for example, that Asia Pacific producers plan to more than double capacity and that export plants are proposed in numerous countries.

Like CLNG, NorthernStar describes natural gas resources as "stranded" because they are located in areas without direct, easy access to markets. The messaging positions NorthernStar as a facilitator of a process that will benefit the U.S. Specifically the company states, "NorthernStar will capitalize on this growing supply of LNG from the Pacific Basin to benefit consumers in the U.S" (Role of LNG, 2008).

Local impacts of LNG

NorthernStar frames the relationship between the local community and the developing project as cooperative and responsive to local concerns, and states that the project will over all have a net benefit to the surrounding community. The main framework provided is of "sustainable development", marrying the beneficial aspects that the project will bring to the economy with the environment. This messaging can be summarized by the message provided by large billboards and signs for the project found throughout the region, "Bradwood: Good Jobs, Clean Energy".

In addition NorthernStar frames their relationship with the surrounding community as collaborative and beneficial by highlighting positive effects to specific sectors of the population, and by addressing local concerns.

This framework is most clearly represented in testimony submitted in a presentation to the Clatsop County Planning commission in July 2007. In a Clatsop rebuttal hearing statement by Dan Evans, a hired consultant, the company presented their framework in contrast to other ways of viewing the project. They claim that there are two approaches to conservation, which the commission must choose between:

> 1. The conventional approach, rooted in the first generation of environmentalism, seeks to protect the environment primarily by stopping economic development; in this case, the rallying cry is "no development in the Lower Columbia estuary."
> 2. The new approach, based on sustainability principles, promotes actions that are simultaneously good for the economy, environment, and community; putting the emphasis on measurable performance, science, and collaboration.

NorthernStar displays their interactive relations with the public as well as the project's potential benefit to the community. They claim, "The project will provide significant and

sustained support for schools, emergency services, community improvement, and family wage jobs" (Evans, 2007).

The messaging of the project having a net benefit is constructed in a manner that is specific to the needs and concerns of the region, including addressing a popular concern that various groups and agencies have regarding development on the Columbia River, the impact on salmon species.

Because there are local concerns regarding salmon populations on the Columbia River, the company by working to be responsible, approaches the issue. The company states that the Bradwood Landing project will have a net-benefit impact on salmon populations. NorthernStar has developed a Salmon Enhancement Initiative (SEI), which goes above and beyond legal requirements, to secure and preserve comparable fish habitat and wetlands elsewhere on the Columbia River. Beyond preserving habitat, the mitigation plan also includes putting "significant funding" into a Salmon Enhancement Initiative that would support recovery efforts beyond federal mandates.

In constructing the framework of the corporation as responsible, NorthernStar highlights aspects of community collaboration and partnerships. "Our pledge is to create a sustainable, beneficial legacy that enhances our community, the local economy and the surrounding environment...we will do this by partnering with salmon restoration agencies and organizations already at work on the Columbia" (Bradwood Landing, 2007).

In addition, when arguing their complete environmental record, the company highlights the environmental review processes the project has undergone. They

emphasize repeated consultation and design revisions due to the input of a variety of state, federal and local agencies, including tribes and tribal representative organizations.

This messaging very clearly represents an image of the company being responsible and beneficial to the surrounding area, by working with surrounding communities, particularly those concerned with salmon populations and habitats on the Columbia River.

Analysis

The community can have it all

While frames provided during development projects have often framed the decision regarding building new industry as economy versus the environment, NorthernStar offers that the county does not have to choose. Rather, they frame a choice in which the county must choose between no development, which is bad for the economy but good for the environment, or sustainable development, in which the environment, the economy and the community win. This sustainable development is achieved through, "measurable performance, science, and collaboration" (Evans, 2007) which allows this new way to be associated with innovation, and breaking old patterns.

By countering this possibility against the conventional approach, "rooted in the first generation of environmentalism", the industry messaging frames the oppositional rally cry as not current, or up-to-date about the possibilities. The opposition is painted as behind the times and a drag on the community's ability to move forward and create jobs, while protecting the environment. In addition, this framework denies the economic harm

of the development project to the community, including potential impacts to the fishing industry, to the surrounding ports and to tourism.

Clean energy

The concepts of "clean" vs. "dirty" energy are social constructions, which are malleable and ever-changing and are therefore available for use in whatever particular means that are required. Because LNG is a relatively new fuel process that is not known to the public, the company has the opportunity to borrow these terms and shape them to their needs. The climate change movement has contributed to the framework of replacing dirty traditional energy with clean, renewable sources, which can be capitalized on by those seeking to appease concerns over climate change.

By framing the project and LNG as clean and as a bridge fuel, the messaging serves to distance a traditional association with dirty industry and dirty fossil fuels, replacing the old consideration for these things with a new brighter vision of improved technology. Interestingly NorthernStar claims that Oregon needs LNG to leave a coal-dependent generation behind. Labeling the fuel as clean refocuses attention onto the fuel source, as opposed to focusing on the system of fuel production. The framing of "clean" diverts attention away from environmental impacts associated with the industry, including local pollution, global greenhouse gas emissions, and the environmental impacts related to the entire lifecycle including extraction, transport, production and consumption.

This, coupled with the lack of information on the source of the natural gas to be imported in the Bradwood Landing project, helps maintain a lack of consideration of where fuels come from and whom that process impacts. By not naming the source of

LNG this facility would import, the company denies the opportunity for consumers, impacted communities, and the government to take issues relating to extraction and production into account in their decision. This also distances the proposed project from association with public knowledge about wars for oil, or human-rights abuses related to resource extraction.

Representation of community interests

In the framing of the corporation and its workings as responsible, NorthernStar continuously addresses social concerns of the community, including concerns unique to the area such as protection of salmon and the health of the Columbia River. However, the approaching of these concerns involves intricacies of appropriation and misrepresentation.

By highlighting associations with agencies and organizations known for protecting salmon, NorthernStar constructs an image in which they can be associated with those organizations' reputations and concerns. They can also appear to be considering the desires of those organizations and fulfilling their needs and concerns. But, invoking these organizations' names and concerns does not mean that the company necessarily supports the aims of the group. Instead by funding environmental projects and aligning themselves with allies of the environment, the company works to build a reputation of corporate responsibility and gives them the benefit of the doubt. As Beder (2002) and Anderson (2005) have argued, statements of corporate responsibility to the environment rarely involve actual benefits to the environment, and are often only about public perception and image. Often while messaging claims to revere the environment, the impacts of the

company or project are actually destructive, and the power dynamics (such as community collaboration) are rarely altered.

Several aspects of the Bradwood Landing LNG project have been identified as major threats to fish and wildlife listed under the Endangered Species Act, and the named beneficiaries of the project, are negatively impacted. In their own biological assessment report, a legal document required by FERC, NorthernStar admitted that the development projects would have an *adverse* affect on the habitat and population of the endangered species of chinook, chum, and steelhead salmon (Profita, 2006). The National Marine Fishing Service (NMFS) has said that building and operating the terminal, as well as dredging to make way for tankers, would harm valuable salmon habitat.

The marketing attempts, such as the SEI mitigation plan and partnership, cannot negate or erase the detrimental impacts to salmon populations. While the company claims to benefit salmon, they are actively glossing over the negative impacts expected. According to Brent Foster, director of Columbia Riverkeeper in reference to the Bradwood Landing plans, "It says they're going to minimize the impacts, but from a legal or biological perspective, it's somewhat laughable how it completely glosses over the seriousness of the impacts" (Profita, 2006).

This has implications not only for the salmon, but for surrounding communities as well, particularly surrounding Native American tribes. Salmon play an integral part of tribal religion, culture, and physical sustenance, for the various tribes in the region, including: Yakama Indian Nation in Washington, the Confederated Tribes of the Warm

Springs Reservation, the Confederated Tribes of the Umatilla Indian Reservation in Oregon, and the Nez Perce Tribe in Idaho.

Their focused work and history in the issue of salmon protection speaks to their investment in any project on the Columbia River. In response to decreasing salmon populations due to the installation of large dams and heavy ocean and in-river industrialized fishing, four tribes of the Columbia River created the Columbia River Inter-Tribal Fish Commission (CRITFC), carrying out the tradition of tribal governing fishing authorities. CRTIFC is a coalition of the tribes in the Columbia River Basin who have reserved rights to anadromous fish in 1855 treaties with the United States. The CRITFC web-page offers a list of all the ways and reasons Pacific Northwest Salmon is sacred. The following are a selected few:

- Salmon are part of our spiritual and cultural identity.
- Over a dozen longhouses and churches on the reservations and in ceded areas rely on salmon for their religious services.
- The annual salmon return and its celebration by our peoples assures the renewal and continuation of human and all other life.
- Historically, we were wealthy peoples because of a flourishing trade economy based on salmon.
- For many tribal members, fishing is still the preferred livelihood.
- As primary food source for thousands of years, salmon continue to be an essential aspect of our nutritional health.
- The annual return of the salmon allows the transfer of traditional values from generation to generation.
- Without salmon returning to our rivers and streams, we would cease to be Indian people.

Just as the SEI is a misrepresentation of the impacts on salmon, the company's messaging also misrepresents the relationship to the tribes, who are a major stakeholder in the future of the Bradwood Landing project, due to the projects' impacts on the Columbia River. NorthernStar lists the tribes as potential partners and allies for the SEI

project because of their known relation to salmon. By aligning the tribes with the SEI, the company is aligning the tribes with the entire Bradwood Landing project. Furthermore, as the company claims to benefit the salmon and correlated communities, and they state their promises to put money towards partner projects with communities, such as the tribes, the framework presented by the company presents the tribes as benefitting from the project.

While NorthernStar represents the relationship with the tribes as collaborative, the perspectives and opinions offered by the tribes are oppositional to the project. According to Julie Carter, a lawyer for CRITFC states, the tribes would rather the terminal not be built, "if we had our druthers it would be keeping it the way it is right now" (Profita, 2006).

The position of the tribes is not wavering. In 2006, the Affiliated Tribes of the Northwest Indians (ATNI) and the National Congress of American Indians (NCAI) passed resolutions opposing the Bradwood Landing project in order to preserve and protect the Lower Columbia River Estuary as an essential refuge for aquatic life. The ATNI resolution (2006), which is very similar to the NCAI resolution, states, among other things,

> Since time immemorial, our economy, culture, religion and way of life have centered around our fishing…our natural and cultural resources have nevertheless suffered greatly, from damage and diminishment to outright loss, as a result of many harmful non-Indian activities and actions, causing harm to tribal people and communities… The proposal for an LNG terminal at Bradwood Landing…would create unnecessary and unacceptable risks to salmonoids and other aquatic species; Be it further resolved, that ATNI opposes development of liquefied natural gas terminals in the Lower Columbia River Estuary.

This language speaks to the history of oppression the Indian culture has endured, and the important ties between the fish, rivers and tribal communities. Very distinctly these documents speak to the direct opposition of the projects due to impacts on the salmon. In addition, CRITFC and the Nez Perce Tribe directly intervened in the FERC process, actively seeking to stop the project, and have been participants in the related processes since 2005.

When the company puts forth a framework outlining benefits to the salmon, they are essentially appropriating the concerns of the Columbia River basin tribes. By appropriating these concerns and re-writing the dynamics of the situation by framing the project as beneficial, as opposed to harmful, they perform a two-fold power play on the marginalized group: first, by denying their truth, and second by perpetuating the misconception that the issue is not a problem. Then, by suggesting collaboration and partnerships with tribes, the company frames the tribes as contributors to the design of the project, thereby misrepresenting the tribal position and marginalizing their concerns.

NW Natural Gas

NW Natural is the local gas utility in Oregon, owning and operating existing infrastructure in the region and providing gas to about 641,000 residents and business customers in Oregon and southwest Washington. Because of their relationship to consumers throughout Oregon, NW Natural's public image and reputation is an important asset. NW Natural is currently proposing a 220-mile pipeline through Northern and Central Oregon called the Palomar Pipeline. This proposal has stirred a lot of public

concern due to the pipeline's potential impact to forests, rivers and streams, farmlands and homeowners.

The framework of natural gas and climate change presented by NW Natural is constructed through a website, television ads, print ads and radio advertisements created by Magneto Brand Advertising. Their messaging is found through these media, as well as through the partnerships and projects promoted by the utility.

Findings of Frame

Climate change solutions

The utility promotes itself as a responsible corporation, acknowledging climate change and the important steps that are needed to take to confront the issue. Beyond continuing to distribute the same messaging as the natural gas industry, NW Natural goes beyond calling natural gas a "green" fuel, and promotes individual and consumer action in response to climate change.

NW Natural publicly acknowledges climate change as real and a cause for change. According to their webpage, "A majority of climate scientists around the globe believe greenhouse gases contribute to global warming. They believe we must start reducing greenhouse gas emissions immediately – before climate change causes irreversible harm to the environment and our economy" (NW Natural, 2008). They have multiple billboards around Portland asking consumers to "reduce your carbon footprint" and "fight global warming" (Magnetoworks.com, 2008). This fits within their company's promoted image as environmentally friendly and interested in sustainability.

NW Natural directs the framework of solutions to climate change as personal and individual choices that people can make in their appliance purchasing and fuel choice, as well as through the purchase of carbon offsets. As NW Natural states on their webpage, "We have to act together now to limit our effect on the world's climate" (NW Natural, 2008) The various actions that NW Natural suggest we take are to increase efficiency of consumer use, through such measures as weatherization of homes, for consumers to switch to natural gas as a clean-burning fuel, and to off-set individual carbon emissions.

In addition to using efficient appliances and switching to natural gas as opposed to electric appliances, NW Natural promotes individual use of carbon-offsets through their Smart Energy program. Through this program they have partnered with Climate Trust, a Portland-based offset company that invests in projects that reduce the amount of greenhouse gases emitted, such as through car-pooling programs. NW Natural and Climate Trust claim that purchasing offsets will make up for the inability of consumers to stop using fossil fuels. A description of offsets on the NW Natural web page says,

> While it's essential that we all reduce our energy use to protect the atmosphere from greenhouse gases, it's almost impossible for most of us to keep from causing some emissions that affect climate. So, over the years, a system of carbon offsets has emerged to help us reduce our overall impact on climate (2008).

NW Natural provides the information that NW Natural customer's gas use generates about 4 tons of CO2 per year, and that purchasing of carbon offsets "balances out greenhouse gases released by the buyer's activities". Carbon offsets are a great solution because, they argue, consumers can cut back on greenhouse gas emissions and still continue to consumer natural gas.

LNG as a fuel source

This messaging seeks to distance the projects from concerns related to LNG. So, in a frequently asked questions section of the web site, NW Natural states that they are not the responsible party for the proposed LNG project, and therefore questions and concerns to NW Natural regarding LNG, are misdirected. The web page claims, "NW Natural is not proposing to build or operate any LNG terminal, so we are not in a position to speak for any of the parties whose terminal plans are under consideration" (Proposed infrastructure, 2008).

NW Natural promotes gas as a clean-burning fuel and an important part of the climate change solution by focusing on at-site emissions and by associating the fuel with other "green" things. In a recent television advertisement that can be viewed on the Magneto Brand Advertising web site, images of the natural environment are in the background of different choices people can make. These choices include driving or bicycling, recycling or throwing things in the trash, composting or not, and then choosing electric or natural gas. A voiceover suggests that choosing natural gas is just like choosing these other environmentally friendly actions, and by purchasing natural gas, consumers can contribute to confronting the climate change problem.

> There are choices we make in our daily lives that impact the health of our planet. Something most people don't realize is that natural gas is one of them. By using high efficiency natural gas appliance instead of electric, Oregonians are reducing their homes' greenhouse gas emissions by up to 20%. So now that you have a choice, what will you do? (magnetoworks.com, 2008)

In response to the question, "Won't greater use of natural gas just increase our greenhouse gas emissions and make the climate change situation worse?" NW Natural

responds, "Natural gas is a critical bridge fuel to help reduce greenhouse gas emissions that contribute to climate change" (NW Natural, 2008).

Sources of LNG

NW Natural does not approach this topic.

Local impacts of LNG

NW Natural has partnered with TransCanada Corporation's Gas Transmission Northwest (GTN) to propose a new 220-mile pipeline across northern and central Oregon. Messaging about the project provided by NW Natural states that the pipeline could be extended to serve an LNG terminal if one is approved. However, they say the pipeline is not directly related to LNG. NW Natural also assures that the pipeline will have some impact to the environment, "but the impact is typically localized and temporary." Any unavoidable environmental impacts will be mitigated, so that "the net environmental impact of a gas pipeline is intended to be zero" (NW Natural, 2008).

NW Natural states, "Pipeline construction has a very small impact on farm and forest land, and Palomar has already gone to great lengths to propose a route that avoids densely populated areas and high-value crops" (2008). In addition NW Natural promotes the past work done with other pipelines that have been constructed, including highlighting partnerships with soil scientists and agricultural experts, claiming that the projects were successful in protecting sensitive ecosystems.

NW Natural promotes images and examples in which pipelines cannot be seen when looking at a restored farm through which a pipeline has been laid. In addition NW Natural frames the relationship with impacted community members as cooperative and in

some cases beneficial. According to their web site, "NW Natural has a good track record of negotiating with property owners to compensate them for the use of their property during construction and for any land taken out of production" (2008).

Analysis

To frame itself as environmentally-friendly, NW Natural promotes the participation in carbon off-sets by their consumers, advertises the environmental benefits of using natural gas, and has worked to distance itself from LNG. All of these frameworks portray natural gas as part of the solution, and diverts attention away from criticism of natural gas and LNG in reference to climate change.

Through the construction of the messaging of natural gas as clean and an important bridge fuel, the materials rely on association to other constructed images of good environmental practices. In the framing of this, NW Natural employs ideals of composting and other "back to nature" attitudes of minimal impact and environmental stewardship. This promotes the continued focus on fuel as a solution and frames attention and action around issues that do not threaten industry systems and structures.

Offsetting the drive for change

Throughout the language of consumer-based solutions such as the increased use of natural gas, increased efficiency in individual's homes and offsets as a solution to climate change, NW Natural frames the responsibility of climate change solution on the individual. This works to divert attention away from change in industry or systems of production. By promoting offsets, NW Natural facilitates a framework of climate change solutions that allow the consumer to continue business-as-usual activities of consuming

gas, while responding to desires or concerns about doing something about climate change with monetary purchases.

Outside of the international ramifications, opportunity for scams and systematic problems with the carbon offsetting industry, the localized impact of consumers of carbon offsets its simple to understand. Offsetting is the modern equivalent of Catholic indulgences, sold to an increasingly carbon conscious public to absolve their climate sins (Smith, 2006). Dangerously this system of offsetting takes the motivation of individuals desiring to take action about climate change and commodifies it, turning it into a consumer good. This maintains the framing that changes in habits or societal change aren't necessary because one's actions and decisions can simply be mitigated through a monetary exchange for someone else's project or action. The fundamental problem with this structure is that emitting greenhouse gasses into the atmosphere is not "taken away" or "undone" with any action. Taking a 10-mile bicycle ride does not somehow erase the greenhouse gas emissions created by driving 10-miles.

This reductionist approach to a necessarily social and political issue allows people to believe that continuing to extract gas, facilitating the establishment of more industrial polluting infrastructure, and fostering the expansion of transferring new carbon into the active carbon cycle, can all be valued by a monetary sum and offset by activity somewhere else.

Finally, offsetting legitimizes unsustainable practices and systems. NW Natural can construct the image of environmentally considerate while not altering the fossil fuel consumption rate or pattern at all, and in the case of LNG, actually increasing the amount

of greenhouse gas emissions involved in the production of the consumer product of natural gas. Consumers who pay for carbon offsets through NW Natural's Smart Energy program are paying for NW Natural to have a "green" image.

Minimizing land impacts

In highlighting associations with scientists and specialists in regards to local farm impacts, local knowledge and concerns based on experience are undermined by NW Natural reliance on professionals to assure minimal impact.

By stating that the pipelines avoid high-value crops, the utility determines what is valuable and what is not. This priorities monetarily valued crops over any other kind of value a location may have, including cultural, historic or in terms of use to the community or ecological system. By prioritizing land in anyway the impacted land is devalued and the message is that important land is spared, while impacted land has no or little value.

In addition, by promoting the compensation landowners receive and highlights negotiations, NW Natural misrepresents impacted community members who do not want the pipeline through their land. The pipelines will in fact use eminent domain if necessary, taking land and whatever is in the right-of-way against the will of the landowners.

While many landowners, farmers, loggers and forest protection organizations, such as BARK, are opposed to the project and have organized against the proposal, due to long-term harm to the land, NW Natural minimizes their plight by referring the impacts as "localized and temporary". In addition, by presenting an image of collaboration and

partnership, the impacted communities' concerns are presented as mitigated and addressed. This represents another example in which the false alliance presented through misrepresented community collaboration, marginalizes and distorts the individuals' and organizations' position as opposing the project.

CHAPTER III

GOVERNMENT FRAMING OF CLIMATE CHANGE AND LNG

Throughout the LNG industry's messaging, concerns regarding impacts to local communities are addressed by highlighting the government's role in assuring that LNG infrastructural proposals are environmentally sound. "Construction of an LNG terminal in the United States involves a rigorous permitting process involving federal, state and local agencies" (CLNG, 2008). The Center for Liquefied Natural Gas highlights the fact that a typical facility requires over 40 permits.

This chapter examines the frameworks provided by Oregon's Governor Kulongoski regarding liquefied natural gas (LNG) and its relation to climate change as a global issue. While other governmental bodies such as the Federal Energy Regulatory Committee and Clatsop County have authority in approving or denying permits and land-use changes, Gov. Kulongoski has been chosen as a source for this research due to his position in passing state-wide climate change policy.

Examining the state of Oregon's framework in response to LNG proposals provides insight to the rhetoric of environmental solutions related to climate change, as the governor of Oregon has worked to position Oregon as a leader in climate change policy.

Government Siting Authority

The Energy Policy Act of 2005 granted by the Congress gives exclusive jurisdiction over the siting, construction, and operation of LNG terminals to the Federal Energy Regulatory Commission (FERC), taking away what was formerly state authority. While FERC does have siting authority that state government held prior to the Energy Policy Act, the state government and county boards have the opportunity to block a proposed project through a variety of tactics.

Often, infrastructure requires the use of state land and the state Land Use Board can deny the lease of the land to the proposing company, thereby halting the development. In addition, state agencies need to issue permits, such as a clean air permit and a clean water permit, which can be denied. Over the last few years (between 2004-2008) many ballots have been proposed by Senators across the U.S. seeking to give all siting back to the state and relinquish federal authority. Most recently this move has been supported by Democratic candidates Hillary Clinton and Barack Obama, specifically in relation to the case of LNG proposals in Oregon .

Since it was granted authority, FERC has approved all twenty-two LNG projects proposed as of March 2008, except for one. In a letter Oregon congressmen received regarding their concerns of FERC's Lazier-faire attitude to siting, FERC stated, that "they intend to let the market decide whether any of the five pending LNG projects in the state go forward" (Defazio, 2008). For this reason, local communities seeking to stop LNG development often look beyond the federal process to state and local authorities to halt projects.

Governor Kulongoski

Gov. Kulongoski has taken numerous steps to frame Oregon as a leader in climate change policy. In 2006 he established the Governor's Climate Change Integration Group to prepare strategies to reduce greenhouse gas emissions, he passed a Renewable Portfolio Standard to increase the percentage of energy in the state coming from renewable sources, and in 2007 he announced a regional strategy to fight climate change, partnering with Arizona, California, New Mexico and Washington in Western Climate Initiative. Kulongoski has promoted the West as "leading the way" and creating a "model and example for the rest of the nation" in reducing greenhouse emissions (WCI, 2008).

The research presented here draws from a variety of materials and resources, including memos from Kulongoski, newspaper articles, speeches, press releases, public presentations, and the state web-site. In addition, in an effort to catch the breadth of Kulongoski's framework, I will rely on messaging communicated to me from the governor's office staff while I participated in lobbying.

Findings of Frame

Climate change solutions

The language and policies produced by Gov. Kulongoski and the state of Oregon, frame climate change solutions as an economic and technological problem, which can be solved with the "free market". Governor Kulongoski has said climate change is "the most pressing environmental challenge of our time" and he pronounces "a transition to new sources of energy, new technologies and cutting-edge policies that significantly reduce

our greenhouse gas emissions, grow our economies, and protect our environment for future generations" as the solution to climate change (WCI, 2008). In addition, his staff states, "it is unrealistic to propose that modern industrial societies will be able or willing to end fossil fuel consumption abruptly and live with the ensuing social and economic disruptions" (The Governor's Advisory Group on Global Warming, 2004). Specifically, through the Western Regional Climate Action Initiative, Kulongoski will implement "market-based" solutions including a cap and trade program.

LNG as a fuel source

Kulongoski reiterates the framing of LNG as a bridge fuel that is essential to an energy portfolio dependent on renewables. He presents LNG as necessary to increase the West's supply of natural gas, in an effort to reduce over-reliance on coal and hydropower, "which have other environmental impacts" (AP, 2007). This messaging sets LNG aside from other "dirty" fuels and is framed as part of a solution to climate change, through association to renewable energy sources.

Kulongoski also states that he is looking into how LNG could work in his plan to make the state climate neutral. While in a meeting with his staff in the capital, I reiterated the lifecycle emissions of LNG. His response was, "we'd like to know how LNG can work with carbon trading" (April, 2008).

Sources of LNG

The state has not addressed natural gas sources for LNG.

Local impacts

While initially the Governor has supported the LNG proposals, expressing confidence in the FERC process to determine appropriate environmental and community practices, the framework of local impacts has shifted since February 2008. Kulongoski's change in the framing of local impacts came in the form of a letter written to FERC.

The message is of concern for Oregon citizens regarding FERC's approach to the licensing of plants and pipelines, which he states that it"has created a crisis of confidence with Oregonians". He continues by raising concerns about "lack of information on the need for LNG in the Pacific Northwest" and "localized impact on air and water quality" as well as the lack of analysis of "greenhouse gases that may be released by specific sites in Oregon" (Schrag, 2008).

The letter demands that FERC halt the siting process until they perform a needs analysis of natural gas in the Pacific Northwest, and until they perform a lifecycle analysis of carbon emissions. This framework of concern for local issues increased in April, when Kulongoski stated he would sue FERC to ensure LNG safety and that he was willing to go to court to protect Oregon citizens.

Analysis

Economic and technological solutions

Framing climate change as an economic problem creates a situation which aids in steering focus away from deconstructing a systematic problem, and towards a model of economic growth. Investment in low-carbon and renewable energy sources and technological innovation does not address emissions from pre-existing inefficient energy

systems. Nor, does it fundamentally question constant growth and increased energy consumption. In addition, by framing climate change solutions as market and technologically-based, participation by communities in solutions to climate change are limited and left to the technological experts, or simply the market.

In the framework of market-based solutions, an individual's or community's opportunity to participate is limited to consumer based practices in which the public creates a market with purchasing power. This framework denies any potential for political or social action and organizing outside of the development of a consumer market. By seeking out economic-based solutions, a monetary value is placed on the problem, which cannot approach all the impacts and intricacies of climate change.

By framing "carbon neutrality" as the solution to climate change, Kulongoski promotes the continued use and expansion of fossil fuel consumption and greenhouse gas emissions by detracting attention away from these pollutants, claiming that these pollutions can be "negated" and "offset". This reaffirms the notion that pollution in one place can be mitigated by conservation in another. Whether or not traditional mitigation practices are adequate for other environmental issues, there is the fundamental problem that emissions anywhere are still emissions, and decreasing emissions somewhere across the globe, will not take away the fact that the emissions were released in another location. By framing LNG and aims for carbon neutrality as partnered plans, Kulongoski can appear to be taking action for the climate, while continuing to facilitate business-as-usual, greenhouse gas emitting, fossil fuel expansion.

Political geography of the carbon cycle

By the industry's own acknowledgement the process of LNG is a global system. This global system involves industry throughout the process of production, which also leads to greenhouse gas emissions along the whole process of production, or lifecycle. In current policies for greenhouse gas emission regulation, these lifecycle processes are not taken into account due to emissions happening in unregulated territory. In an article seeking to consider the climate as political space in response to contemporary climate change policy, Lovbrand & Stripple (2006) argue that the space that these policies propose to regulate is the atmosphere and other earth systems of the carbon cycle. The globe's atmosphere is not territorialized by any institution or nation-state. Therefore policies such as cap and trade, prose to regulate depoliticized space. As the authors state, "the Earth system[s] do not easily lend themselves to the spatiality of the state system" (2006).

For example, in the policies that Governor Kulongoski has already passed, or plans to pass, to regulate or cap greenhouse gas emissions, the emissions measured are those that happen on-site. In Kulongoski's quest for a carbon-neutral state of Oregon while importing LNG, he would only need to be accountable for the emissions that happen from the industry process within Oregon, not those that happen in preparation of the fuel to be imported to Oregon. By the Governor's own admission the Western Region Climate Action Initiative is leading the way for climate policy. This means that while the western region may in the future be accounting for emissions that occur in the U.S. West, the emissions that occur in the nation or region without a regulatory policy are not accounted for. Therefore, lifecycle emissions are not taken into account.

Furthermore, even if every continent implemented a regulatory body, who would oversee or claim the emissions from the ships crossing the oceans? The importing country? The exporting country? Or some, global regulatory body of emissions trading? The regulatory "policing" of greenhouse gas emissions on this global scale, existing with global energy sources, would require intricate governing bodies and complicated systems of accounting, which are not likely to exist anytime soon. And, as Larry Lohmann, a leading critic of carbon trading states, "Establishing a rebust global regime for addressing climate change is...comparable to the creation of the international trade regime under the World Trade Organization" (Lohmann, 2006).

What this means for LNG is that in the cap and trade system the only measured emissions would be those that happen at a gas-fired power plant, or at an industrial terminal. A cap and trade system requires governmentality, and in LNG there are portions of the process in which greenhouse gas emissions happen outside of a regulated boundary, such as at sea, at the extraction site, or the liquefaction site in a nation with no regulatory committee.

When LNG is promoted as a "clean-burning" fuel, lifecycle emissions are not taken into account. Similarly a cap and trade policy does not tackle lifecycle emissions. Global emissions, even if caused by U.S. based companies, will continue to be unaddressed under a cap and trade-focused policy. This policy is not an appropriate solution to climate change in the global context, because in the global atmosphere hot-house unregulated emissions still count.

Shift in messaging

While Kulongoski has been able to silently approve of LNG for years without intervening, or stating an opinion, the change in messaging in which the governor is critical of the FERC process allows Kulongoski to frame himself as a hero for Oregonian's rights. Pitting FERC as the corrupt agency that has "caused a crisis for Oregonians", the governor can frame discontent towards FERC, and away from himself. However, Kulongoski's threat of suing FERC if they do not take into account the best interest of Oregonians due to their market-based siting strategy, is an example of state authority challenging neoliberal policies.

This change in messaging in late February came directly after strong public pressure questioned his lack of LNG criticism. This pressure came in a series of events. First, on January 31 he was publically booed on live radio and in front of an audience of thirty-two hundred people at a climate change event for his support of LNG. Then on February 6th four-hundred impacted community members and concerned individuals held a rally on the steps of the capital building followed by multiple groups lobbying. Lastly, student climate change activists held a lobby-day in the governor's office on February 11th. During the lobby days the messaging to the state authorities was clear and pointed: first, there needs to be a needs analysis of an increased natural gas supply and second, lifecycle carbon emissions of LNG need to be taken into account.

These two main concerns were approached in Kulongoski's letter to FERC, which allowed him to frame himself as responsive to communities' needs and concerns.

However, by criticizing the process he passed on the responsibility, opportunity or obligation to halt the projects, which he does have the authority to do.

Conclusion

By engaging in cap and trade policies to confront public concern for climate change, the state can continue to support a system of pollution and facilitate the expansion of the fossil fuel infrastructure by displacing responsibility of minimizing greenhouse gasses. This system of addressing climate change delays the necessary transition of switching to low-carbon systems and minimizing dependency on gas and other fossil fuels. A cap and trade policy takes the political and social will to confront climate change, and transforms it into an economic system that places a market value on the abstract idea of a measurable amount of a chemical released into the air. Placing the global ecological crisis of climate change into the grid of economic values, over simplifies the political and social relationships with the fossil fuel industry as well as the complicated ecological systems involved in the world's climate and all living things.

Overall, by positioning himself as a climate leader by promoting a climate change policy and vocalizing criticism of the process by invoking the concerns of the impacted communities, Kulongoski is able to seemingly approach public concern of climate change, while continuing to facilitate the development of new fossil fuel infrastructure and increase greenhouse gas emissions. With public pressure, however, he has confronted neoliberal policy and worked to reinstate state power in the decisions of the operations of the fossil fuel industry within the state.

CHAPTER IV

"NO LNG" MOVEMENT FRAMING OF CLIMATE CHANGE AND LNG

Because LNG is not well known and is a new fuel, impacted community members receiving legal letters in the mail warning them of the project and then opening mailings from the companies advertising the company, start from square-one learning about the process and fuel that would soon be impacting their lives. After three years of pouring over internet-based research, including safety reports, news stories, and technical data, many community members have become experts in the field. While no large non-profit organization opposes LNG, outside of Pacific Environment (who started LNGpollutes.org in the beginning of 2008), the data collection and knowledge production for local activists has been completely grassroots, much of it coming from a Google group called LNG Safety. Most information available online about LNG is shared between communities on small websites created by local community members fighting LNG in their own region.

This grassroots organization and production of knowledge has been produced through access to resources through the internet, as well as in-person meetings facilitated by conferences and other events. During the 2007 Environment Law Conference in Eugene, Oregon, a panel was held that involved participants fighting LNG in Russia, California

and Oregon. Participants shared stories, strategies, tactics, power point slide shows and pictures. Those involved came away with a sense of a larger struggle.

The groups chosen for research in this section include Pacific Environment, one of the only non-profits focusing on opposing more than one LNG proposal, and "the grassroots". Grassroots messaging encompasses the small community groups that have developed to oppose the projects, individuals who have offered public testimony at county-level land use hearings, and the like.

Pacific Environment

Pacific Environment is a non-profit organization based in San Francisco, California that creates partnerships with local groups through-out the Pacific Rim in an effort to protect ecosystems and influence international policies. Pacific Environment began working on the LNG issue when proposals first appeared on the West Coast, in California. The organization currently influences the discourse of LNG and climate in Oregon by providing resources, such as informational materials, support for organizing and a webpage with a clearinghouse of information about LNG.

Pacific Environment frames their role through four categories of tactics: supporting local environmental struggles, holding banks and corporations accountable, promoting best practices and building a global movement.

This analysis draws from informational "fact sheets", the Pacific Environment website and the anti-LNG website sponsored by Pacific Environment, lngpollutes.org.

Findings of Frame

Climate change solutions

Throughout the language found on websites and the materials, the framing projected by Pacific Environment is that global warming and climate change are caused by burning fossil fuels which release greenhouse gas emissions into the atmosphere. Solutions to this include replacing the grid energy with supplies of renewable and alternative cleaner energy. Pacific Environment claims to be working for a fossil-free future.

LNG as a fuel

The front page of the LNG pollutes webpage offers rotating images of polar bears on small chunks of ice, people waiting through flood waters, soldiers at war in a desert, and a city sky-line filled with smog. Along with these images are the words, "more global warming; more intense storms; more fossil fuel dependence; pore pollution". Then, the question is asked, "haven't we learned our lesson?".

These images and phrases are attached to LNG and create a framework of LNG as dirty and continuing in a path of environmental pollution, related to social problems. By conjuring up familiar images of social concerns, such as war, polluted cities and polar bears, LNG is associated with environmental, humanitarian and social justice issues.

Specifically, Pacific Environment works to re-frame LNG as not clean, or a bridge fuel. This is done by associating LNG with other fossil fuels, such as coal, distancing LNG from a constructed framework of cleaner, renewable energy and focusing on the idea that LNG would lock us into 40 more years of fossil fuel dependency.

In a "myths and facts" sheet titled, "LNG: The wrong choice for the west coast", the myths are: LNG is a clean energy source; LNG has a minimal impact on global warming; LNG is a "bridge fuel" to renewable energy. In replacement of these myths are "facts" regarding the environmental impacts of LNG throughout its lifecycle. In addition the sheet claims that the infrastructure requires billions of dollars and undercuts the renewable energy future promised by political leaders.

Sources of LNG

Pacific Environment materials approach environmental impacts of named LNG sources, and names the companies responsible for the "environmental devastation" in "pristine" environments. The messaging also frames the fuel process of extraction as responsible for threatening the livelihood of indigenous communities and the physical survival of isolated indigenous populations.

LNG is framed as linked to global warming, more war and human rights abuses. According to the site, "like oil, LNG dependence will lead to greater military misadventures…in places like Iran, Iraq, Central Asia, and other locales the U.S. has attached in order to secure fossil fuel resources" (LNGpollutes.org, 2008). LNG is linked to "the spread of disease in the Amazon, abuses by the Indonesian military against the West Papuan people, and the erosion of the indigenous way of life on Sakhalin Island, Russia".

Local impacts of LNG

Pacific Environment offers a list of many possible impacts of LNG to local communities, including health risks, economic impacts, forest impacts, endangered

species impacts, impacts of eminent domain, impacts to farms and landowners. In one section on the webpage titled, "LNG and Your Health" (Pacific Environment, 2008) it states, children are vulnerable to asthma caused by air pollution and impacts down the pipeline are mentioned, in portraying the message that gas-fired power plants are located in poor and working class communities, creating an environmental justice issue. Specifically the LNG impacts in Oregon are framed as: negative economic impacts, environmental threats including impacts to critical salmon habitat, clear cuts endangering the spotted owl, and pipelines disrupting land causing long-term problems such as erosion.

In addition local communities are portrayed in opposition to the projects. This framing of the situation highlights individuals through quotes and images of individuals, and portrays political action such as rallies, marches and other protest style opposition. These are portrayed through images and stories, and are framed as communities taking action for a clean energy future.

Analysis

Contextualizing impacts along the way

As an international organization participating in local struggles around the Pacific Rim, Pacific Environment is able to produce resources and materials that provide insight to localized impacts across seas. Stretching beyond tradition environmental rhetoric of localized endangerments to plants and animals, Pacific Environment structures a larger framework of the environmental impacts of LNG highlighting the local impacts, regionally and globally, as well as approaching the global issue of climate change and

environmental justice. By invoking the quotes and stories of individuals impacted by the projects, the story is given a human face, moving the impacts beyond an abstraction to a portrayal of real community situations. Highlighting impacts around the world goes beyond environmental impacts and begins to approach social issues such as environmental injustice and war, which Pacific Environment implies is a continuation of problems associated with a current dependency on fossil fuels.

Linking to broader social issues

By using focused examples of impacts around the world, Pacific Environment constructs LNG as being bad for everyone everywhere. And, by associating LNG to popular public concerns, such as war, Pacific Environment can invoke the public's concern and opposition to broader global social politics and harness the attention onto localized or regional problems to be fought. Overall, Pacific Environment highlights many problems that have been associated with the fossil fuel industry and associates them with LNG development. Particularly in the question "haven't we learned our lesson?" the organization frames LNG as a continuation of old, outdated patters, in contrast to the change to a cleaner, fossil-fuel independent world, as promised by political leaders.

Social and political action

On both the website and in printed materials, Pacific Environment offers stories and photos of communities and individuals "taking action" for clean energy, or against LNG. The goal of this may be to highlight the strength of the opposition and drill in the idea that communities do not want LNG, but there is also another impact of portraying

these actions and highlighting social and political participation. By portraying social action, Pacific Environment is framing this as a good form of engagement by individuals and communities, and perhaps even necessary. This broadens the dialogue of what should and could be considered as contributions to solutions to climate change.

Through the framing of the situation Pacific Environment places a large emphasis on the role of government to transform the power grid to renewable energy, by holding them accountable to promises of this cleaner energy future. When political leaders oppose LNG, they highlighted and their statements promoted as taking leadership on climate change. For example, when Secretary of State Bill Bradbury opposed LNG, his statements were added to outreach and informational materials, "LNG is a dirty fuel that adds to the greenhouse gases we're putting into the environment," Secretary of State Bill Bradbury. This not only legitimizes the argument of the organizations position against LNG, but works to apply political pressure to other politicians.

The Grassroots "No LNG" Movement

The grassroots includes small local groups created to oppose LNG, individuals, and messaging portrayed at public events by people not associated with any organization. In an effort to catch the diverse messages and frameworks provided by the impacted community members and oppositional actors, this section analyzes and examines the voices of the grassroots movement against LNG, which is not necessarily represented in the frameworks provided by institutional players.

The coalition of the grassroots movement includes a diverse political spectrums and backgrounds, and therefore the quotes and messages are not meant to represent the

framework provided by "the grassroots" as one unified voice, but rather outline prominent messaging and include a few unique messages. Although there are impacted community members working to opposed LNG that do not believe in climate change, many of the materials and messaging cite climate change as a main reason to opposed LNG. These findings focus on predominant messaging and unique messages offered in relation to the categories studies; but again, they do not necessarily represent all opposed to LNG. The grassroots movement against LNG in Oregon and southern Washington includes fishermen, farmers, businessmen, loggers, students, teachers, property-rights proponents, environmentalists and more, and the movement often self-identifies and is promoted as being a diverse alliance.

Some grassroots groups that are involved and caught in the phrase the grassroots, include: Oregon Citizens Against Pipelines (OCAP) chapters, Citizens Against LNG (CAL), Wahkiakum Friends of the River, No California Pipeline, Oregon First, Columbia River Business Alliance, Landowners and Citizens for a Safe Community, Friends of Living Oregon Waters (FLOW), Northwest Property Rights Coalition, Umpqua Watersheds, Students Against LNG, Cascade Climate Network (CCN), Jordan Cove Retort, River Vision and Clatsop County Citizens for Common Sense.

The messages represented here are pulled from a variety of sources, including local groups' websites, testimony given at public hearings, speeches given at rallies, signs and banners portrayed at rallies, and informational handouts. Messaging is pulled from three different events: November 26, 2007 public testimony given regarding a Bradwood Landing Public Hearing to the Clatsop County Board of Commissioners, a December 12,

2007 rally of people opposing LNG at the NW Natural Portland headquarters, and a February 6, 2008 rally on the steps of the capital building in Salem, Oregon.

Findings of Frame

Climate change solutions

In the language about what is needed for Oregon's future, messages regarding renewable energy and decreased greenhouse gas emissions are prevalent, as well as independence from fossil fuels. Beyond this, some groups and individuals have begun representing not only cleaner fuels and energy sources as solutions, but entire structural changes and more efficient systems. During the Salem Feb. 6th rally, Jody McCaffree, and impacted community member and community organizer stated, "We feel that there is a better way, and it's being done in places like Sweden. It's called decentralizing. Two-thirds of our electricity never makes it to our homes. This is an outdated form of energy, the way our energy systems are structured" (McCaffree, 2008). The webpage run by CAL offers multiple links to stories and examples of locally-run, decentralized energy structures.

LNG as a fuel source

One of the main arguments is, "LNG: dirty as coal" as a sign at the December 12th rally proclaimed. Also used was the phrase, "It undermines Oregon's alternative energy initiatives" (Oregonfirst.net). Most materials make some reference to LNG and climate change, or LNG and climate chaos, LNG is as dirty as coal, and lifecycle emissions of LNG. Partnered with these arguments is the consistence messaging that LNG is different

that natural gas, because of its lifecycle emissions from exportation, production, liquefaction, transportation and re-gasification, which is an energy intensive process.

This entire process is highlighted often, including during public testimony to Clatsop County, "Extracting the LNG, transporting LNG from far corners of the globe (sources include Indonesia, Nigeria and Algeria), and the liquefaction [sic] process itself, are highly energy intensive and add 35-50% to greenhouse gas emissions, producing large amounts of carbon that contribute to global warming. With these factored in, LNG is as dirty as oil. Expansion of LNG facilities is part of a 'dinosaur' policy to continue to promote the fossil fuel industry, rather than put serious effort into alternative energy sources, including conservation strategies" (Neuringer, M., Neuringer, A., Thrall, T. Thrall, D., 2007). Messaging often italicizes the long distances and intricate processes involved in importing LNG, "it comes from far away locations", "it is shipped thousands of miles" (oregonfirst.net, 2008).

In addition the fact that LNG is a fossil fuel is highlighted. As noted in public testimony, as well as on groups' websites, "As for the cleanliness of LNG it is still [a] fossil fuel" (Stoller, 2006) and "NG is a major source of greenhouse gasses, and investing in LNG infrastructure increases our dependence on climate destabilizing fossil fuels" (oregonfirst.net, 2008).

In addition, a main concern is the safety of the non-odorized gas well as the dangers posed by the tankers. In the description of the explosion capacity of an LNG tanker, materials compare LNG tankers to having the same energy capacity as 55-hiroshima

bombs, highlighting the risks and dangers including iron-melting temperatures and close distances.

Sources of LNG

Messaging regarding the locations of LNG sources exhibits a bit of the political diversity of people fighting LNG importation in Oregon. Messages range from humanitarian concerns, to fear of terrorism, to problemitizing dependency on corrupt regimes under corrupt leaders, such as Vladimir Putin. For all these reasons, and more, the idea of LNG being a "foreign fossil fuel" is highlighted and a main piece of the grassroots framing of LNG. The following messages are from the same community during the public hearing in Clatsop County:

A citizen of Astoria said, "Your [county commissioners] decision also greatly affects our responsibility to the greater world we are part of. The companies that extract gas resources from one source…do so to the destruction of other countries people. They make their own little world around their extraction source. There are little or no environmental restrictions: the communities surrounding such plants gain little economic/educational/humanitarian benefits. The rich get richer continues. It's a really sad thing to think we would be part of that cycle" (Meyer, 2006).

Residents of Washington County stated, "Some of the main sources of LNG (Algeria and Indonesia) have serious terrorist issues, so one could imagine a tanker becoming a Trojan horse…Our country has a stated goal of reducing our dependence on imported energy. Imported LNG does not reduce this dependence by rather perpetuates it…The major sources of LNG…are not the most stable countries or our best allies…and we

could be at the mercy of numerous political and economic factors" (Neuringer, M., Neuringer, A., Thrall, T. Thrall, D., 2007). This main framework involved some reference to LNG being foreign, emphasizing either, that it is imported or the supply is unstable.

Local impacts of LNG

Grassroots organizers have worked to link the two projects, the importation terminal and distribution pipelines, as parts of the same project. Dan Serres, with Columbia River Clean Energy Coalition often gave testimony pointing out the connection between the Palomar Pipeline and Bradwood Landing, arguing that they are indeed, part of the same project. In public testimony submitted to Clatsop County, although the hearing was only for impacts to the estuary and surrounding land, testimony was given in support and concern of communities impacted by the pipeline. A group identifying itself as Ridge Road/Strassel Road neighbors, submitted testimony with the subheading, "The impact on landowners in the pipeline path and on our neighborhood" (Public Testimony, 2007).

Of course, the main framework provided by the grassroots is that LNG has negative impacts to local interests, including environmental, public safety, fishing, tourism, the local economy, land-rights and more. All messaging is unique from speaker, to community, to town, to sign, proclaiming all the impacts from "Protect my creek in Gaston from LNG" to "Columbia River deserves better". Some messages relate an interpretation of the process, "Energy speculators want to condemn our land for high risk gas pipelines to California…we want to voice our opinion…NO".

Messages from communities along the pipeline route proclaim, "Hundreds of properties will be seized by eminent domain" and that the pipelines threaten, "farms, orchards, vineyards, nurseries, timber growers and rural communities", highlighting impacts to people. While still other messaging highlights impacts to rivers, wildlife, salmon, other endangered species, old-growth forest and the health of the Columbia River. Still another category of messages focuses on economic impacts, such as impacts to the fishing industry, landowners, and tourism along the river. Various stories of personal impacts are represented on different groups' websites, including on Northwest Property Rights Coalition, which quotes an assortment of people representing their own story of negative impacts by the proposed project (NPRC, 2008).

In addition, to communicate local communities' opposition to the projects various cities and affiliations have written resolutions against LNG on the Columbia River, including: Affiliated Tribes of Northwest Indians, Washington State Democratic Central Committee, the city of Forest Grove, the city of Molalla, and more.

Throughout the testimony local people also confront the process and politics of siting, these disgruntled sentiments are prevalent throughout the framework provided by the grassroots. Viviane Tallman of Nehalem, Oregon addressed this issue in her public testimony against Bradwood Landing in a Clatsop County land us hearing, providing a last insight to the political and social relevance of community-based organizing. She wrote,

> Recently I read about an initiative to change the corporate legal coda as follows to say: "The duty of directors henceforth shall be to make money for shareholders, *but not at the expense of the environment, human rights, public health and safety, dignity of employees, and the welfare of the communities in which the company*

> *operates*." Until such a change is made, Corporations are not legally required to consider any other factors besides profits for shareholders. The task of balancing corporate financial goals with the impact of their actions on the health and wellbeing of the humans, plants and animals is left to community groups and elected officials (Public Testimony, 2007).

Similarly, Ellen Borneman's hand written testimony reads, "North Star is not direct and honest in its testimony. North Star has spent untold dollars on questionable information put into slick advertising…North Star should be denied landuse because they are not trustworthy."

In addition, the local framework also offers critique of the system of siting LNG facilities, confronting not only local impacts, but federal policy. The Northwest Property Rights Coalition submitted the following testimony, "FERC's inclination is to approve multiple pipelines and let 'the market' decide which ones get built. This system puts a heavy burden, a sword of Damocles, over those targeted for pipelines. Merely drawing the line on the map has uncompensated, real-world effects" (Public Testimony, 2007).

Analysis

Linking projects

Although there are two projects proposed by different companies, the Palomar Pipeline proposed by NW Natural and TransCananda, and the Bradwood Landing terminal, proposed by NorthernStar Natural Gas, grassroots organizers have worked to link these projects as the importation and distribution points of the same system. These impacted communities now work together, creating a larger framework of local impacts. By connecting the projects, the anti-LNG groups have developed a movement in which

communities are testifying for each other, and siting local impacts of both parts of the project in their unified messaging in opposition.

By portraying a diverse assortment of messages, an overall framework of LNG in Oregon is projected as, a lot of different people, for a lot of different reasons oppose LNG. This serves to help introduce various potential allies and serves to avoid the people being pigeon-holed. While there is a diverse array of messages, which is encouraged for rallies and lobbying, there are a few specific messages that are focused on. These are, LNG is a foreign fossil fuel; LNG required eminent domain and hurts private property; LNG contributes to climate change; and LNG threatens communities' safety.

While communities often represent their own interests and localized impacts, communities and groups reference impacts to another's' community as a reason to oppose LNG and resources are shared. This serves multiple purposes. First, it promotes an understanding of a range of issues related to the project, second, it represents solidarity between communities, and third, it contributes to avoiding being framed as a NIMBY (not in my backyard) activist.

The Grassroots offers various images of the human face of the problem in the portrayal of personal stories, on web-pages, through testimony, and in news interviews, allowing outsiders to identify with individual's concerns. Individual plights however, are strengthened overall by the collaborative coalition of opposition, which is represented through large rallies and numerous resolutions.

All of these things serve to re-frame the industrial process away from something market-driven and abstract, to something that communities are forced to deal with, interact with and be impacted by.

Global perspective

On a black and white copied half-sheet flyer about LNG used as an educational and informational tool by the anti-LNG movement in Oregon the text reads,

> The fossil fuel industry has targeted Oregon as a throughway to hook the West Coast on another generation of foreign climate-changing fuels. In Coos Bay and on the Lower Columbia River, people are learning about the lifecycle damage of LNG [liquefied natural gas] and resisting these projects (2006).

Whether motivated by responding to the popular demand for energy independence, concern about global climate change, fears of terrorism, or testifying for humanitarian issues abroad, the global reference projected as part of the local framing of LNG serves to place LNG back into a global system of production and consumption. Providing a global frame with which to view the issue increases the significance beyond the original local context, thereby increasing the likelihood of engaging and convincing others to adopt the same frame.

By naming local natural gas reserve sources, describing in detail the lifecycle emissions process, and simply by communities on the pipeline working in solidarity with people fighting the importation terminal, the grassroots challenges the dominant industrial framework in which the gas comes from a market, not a social, cultural location. Through the use of fears of terrorism, increased human-rights abuses, poverty and war, the impacted communities work to politicize the process.

Every community that has written a resolution against LNG has invoked global climate change as a lead concern. The use of climate change as a highly referenced message is particularly useful in this endeavor, as promoting global frames broadens the significance of the issue.

In providing a global framework with which to view the climate impacts of the LNG process, the local framework of climate change solutions stretches beyond county, government, and national frameworks of greenhouse gas regulation. Where the government approach to carbon-counting has been territorial responsibility (only considering on-site emissions), the local community framework has offered a global approach in considering energy choices for Oregon's future.

This global approach and entrenched research of the industry led community leaders to lobby and speak on behalf of decentralized, locally created and operated energy sources. Highlighting the benefits possible to the local economy, such as job production, a few community organizers fighting LNG have turned into activists challenging the entire global system of energy production and consumption, including challenging the governmental structures and policies that facilitate it.

By creating the broader framework with which to view the project in a global, social political framework, the No LNG movement broadens the issue beyond a local context, increasing the potential for allies to engage or adopt their framework. In addition, contributing to this frame provides an opportunity and point of locality to direct frustrations others may have with the global energy system. Additionally, by critiquing

the government process of siting, the movement creates the opportunity to approach neoliberal 'let the market' decide policies.

Government lack of authority to address local concerns

As previously stated, the framework provided by the No LNG movement in Oregon considers the proposed importation terminal and pipeline within a broader framework of lifecycle impacts. The framework places their local experience into a global context acknowledging the social, political and environmental impacts of the system of energy production up-stream from the potential imported fuel. These concerns and this global framework are communicated through educational materials, rally messages and in the public testimony submitting in a public hearing for a county land-use decision.

While Clatsop County only has authority to approve or deny permits for Bradwood Landing terminal based on whether or not the project is an appropriate fit with the current zoning law, testimony by the public has been submitted regarding impacts far outside of the authority of the county. Testimony was submitted regarding the impacts of the proposed pipeline over one-hundred miles away on the pipeline. Global climate change was referenced numerous times in the push for the county to deny permits, and localized impacts to communities across the world were submitted as reasons the community members were opposed to the project. The county, only having authority over land-use impacts to the proposed site, does not take this into consideration, nor do they have authority to do so.

CHAPTER V

CONCLUSION

Summary

How do the institutions that provide a framework with which to view a Liquefied Natural Gas proposal in Oregon relate to the global and the local in their framing of climate change and LNG? And, what opportunities are provided in the framework of climate change solutions provided by the institutions?

Industry Framing

Climate change solutions

The fossil fuel industry frames climate change as an issue that can be addressed with the increased use of fossil fuels. Specifically the industry proposes increased consumption of liquefied natural gas, which is framed as a clean alternative to oil and coal, as a way to confront climate change. In addition, on the local level, the utility proposes the opportunity for individuals to contribute to climate change solutions by purchasing carbon offsets and increasing consumption of natural gas, which detracts from engagement in social or political action, or any systematic change.

LNG as a fuel

LNG is framed as a clean energy source, glossing over the local environmental and lifecycle impacts. The development of infrastructure for LNG is framed as necessary in order for the region to have fuel that can power a renewable future.

Sources of LNG

There is no mention of unique communities or country situations where the fuel for LNG may come from. Any mention of regions that may supply LNG is framed as benefitting from their fuel being able to enter the market. This framework denies the social, political context involved in the global energy system.

Local impacts

In messaging constructed for the general public and strategic stakeholders, the industry constructs a framework of community collaboration and partnerships, which works to deny the actual negative impacts of the projects. Local concerns are appropriated, and economic benefits are promoted.

Conclusion of Industry Framing

The liquefied natural gas industry frames itself in a way that serves to minimize conflict and gain access to resources, such as land, permits, and access to a market. The industry works to minimize conflict in at least two ways. First, the industry segments a transnational energy project, limiting the scope of the proposal and interacting with a smaller population. Second, the industry creates an image of corporate responsibility. Third, the industry creates an image of the process of LNG as beneficial and necessary for the public to reach its goals.

The industry fragments the energy process, with one company proposing an exportation site in one community, another company proposing an importation site in another community and yet another company proposes the distribution infrastructure. In Oregon, none of these companies are directly associated with a large, publically know transnational corporation. These individual companies' merits are evaluated only by their interactions with the local communities. This minimizes not only the impacts of the project that is analyzed, but also creates a more manageable public, because the only people informed or immediately impacted are localized and contained. This socially constructed framework, along with other messaging offered, removes the fuel system from a social political context, denying any impacts to communities along the lifecycle process.

Diverting attention away from local and international environmental and social impacts of the liquefied natural gas process of production, distribution and consumption, the LNG industry creates a frame of a global process dislocated from local communities and global context.

To manage the broader general public the industry produces an image of corporate responsibility and an image that the energy system of liquefied natural gas is appropriate and beneficial. The industry creates this frame by integrating issues of public concern, such as global climate change and local issues, such as the health of salmon on the Columbia River.

First, the industry calls the project and process as beneficial to the environment. The industry promotes LNG as an environmentally-friendly system and fuel. Meanwhile the

lifecycle process of LNG emits greenhouse gasses into the atmosphere, greatly contributing to the problem of climate change, the very problem the industry proposes to solve. Second, local impacted communities' concerns are appropriated and communicated as being addressed. Just as NorthernStar promotes its false alliance with tribes (while the area tribes actually oppose the project), NorthernStar promotes their project as benefiting the broader community. While the industry promotes itself as socially responsible by touting community collaboration, much of the community has clearly stated their opposition to the project.

These strategies incorporate elements of greenwashing. While the process of liquefied natural gas continues and even expands the same power structures, environmental impacts and social unrest as other fossil fuels, the industry promotes LNG as improved, environmentally friendly, new and different.

The industry proposes and suggests solutions to climate change to gain public trust, but also to contribute to the framing of solutions in an effort to minimize conflict to the transnational fossil fuel industry. The solutions proposed work to maintain or expand extraction of fossil fuels, while focusing on localized approaches that segment the analysis of greenhouse gases, which supports the industry's definition of LNG as clean. The industry diverts attention away from regulations on the fossil fuel industry, suggesting technological fixes, such as efficiency. This framework is centered on fuel choice and ignores any systematic change. In addition, the utility suggests individual consumer action that facilitates inaction in societal or systematic change, placing the burden of greenhouse gas emissions on the individual. Promoting the idea of carbon

neutrality and carbon offsets, the utility promotes the continued use of fossil fuels, can incorporate a green image, and dissuades political and social action to confront the fossil fuel industry to adequately address climate change.

Then, the industry assures the public that there are environmental regulations in place, instituted by a government process that will disallow inappropriate projects from being developed.

Government Framing

Climate change solutions

The state government proposes technological and economic solutions to climate change that only take into account partial emissions from any transnational energy process employed in the region. He promotes market-based solutions. Just as siting for LNG process is segmented, so is governmentality of greenhouse gas emissions. There is no accountability for the lifecycle impacts of the fossil fuel industry.

LNG as a fuel

The state government initially promotes the same framework as the industry, until pressured heavily by the public to stand up for Oregon concerns and warnings by state agencies.

Sources of LNG

By only having limited authority over a limited segment of the project, the state does not, or cannot take the source of LNG into account. Kulongoski does not address the issue of the sources of LNG.

Local impacts

Kulongoski has recently addressed the impacts of the federal process on the local communities, responding to public pressure and complaints. He has not, however contributed much to the framework of local environmental and social impacts of the LNG process.

Conclusion of Government Framing

Currently, there is no government system in place with which to analyze the global impact of a fossil fuel project, including the lifecycle greenhouse gas emissions. Social and environmental impacts caused by industry abroad are not taken into account in the permitting or legal process within the United States. Siting liquefied natural gas infrastructure projects in the United States has been absorbed to a federal level with the Federal Energy Regulatory Committee taking a market-based approach, siting almost all facilities proposed and ignoring legal arguments made by local and state agencies in the Environment Impact Assessment.

There is no government oversight of the whole lifecycle of the liquefied natural gas industry and its impacts, including climate change. Neoliberal policies have been put in place, federally and internationally, that facilitate the growth of the liquefied natural gas industry. Local governments only have the authority to make decisions based on immediate local impacts.

The state framework of solutions to climate change evaluates and regulates only a segment of the transnational system's greenhouse gas emissions. The governor has implemented a system which aids the management of his reputation, by appearing to be a

leader of climate change policy and appeasing public concern, whilst continuing business-as-usual models. Kulongoski can both be a leader of climate change policy and facilitate the development of new fossil fuel infrastructure, which is more greenhouse gas intensive (when considering the lifecycle emissions) than the fuels Oregon currently uses. Due to issues of territories and de-territorial places, such as with the carbon cycle, greenhouse gases from a transnational energy system cannot be regulated by market based solutions, such as cap and trade, leaving the global climate issue inadequately addressed.

"No LNG" Movement Framing

Climate change solutions

The "No LNG" movement approaches the issue of global climate change with a lifecycle analysis. Most prominently the communities propose that to confront climate change, the expansion of fossil fuel infrastructure with intensive greenhouse gas emissions should be halted. Beyond this, proposals for solutions have come from systematic analyses and therefore promote systematic change, such as the development of decentralized, community controlled energy systems.

LNG as a fuel

Most prominently the movement re-frames LNG as a fossil fuel and considers the lifecycle emissions. The groups and individuals frame LNG in terms of the social and environmental impacts of the fuel and the required infrastructure. Therefore LNG is framed as dirty.

Sources of LNG

Both the impacted communities and non-profit organizations consider the sources of LNG in their analysis of the local LNG project. The movement considers international politics, social and environmental impacts to the sites of extraction and considers the power involved in foreign fossil fuel dependency.

Local impacts

Confronting the issues related to importation and distribution, the movement provides a broad framework of various social and environmental issues impacting multiple communities. In addition, the process of the company proposing the process has been taken into account when constructing the local impacts.

Conclusion of "No LNG" Movement Framing

Communities impacted at the site of importation are networking and organizing with communities on the distribution site. This grassroots movement pieces together local contexts, which is broadened further by approaching other global impacts and taking into account the lifecycle of the energy process. This framework which takes into account the local impacts of extraction, production and distribution, as well as the lifecycle greenhouse gas emissions, provides a local and global perspective. This places LNG back into a social political context.

This response to climate change stretches beyond industry and state solutions, which focus on segmented responses to a global issue. The framework provided by the grassroots No LNG movement in Oregon includes the global framing of climate change, which serves to broaden the issue beyond a local context to create more allies and reasons

to oppose the project. The anti-LNG movement, suggests attaining greenhouse gas emission reduction through multiple ways, including stopping the expansion of fossil fuel infrastructure and restructuring energy systems to localize production, distribution and consumption.

With a systems analysis in their critique of the fossil fuel energy system, the impacted communities and non-profit organizations provide an opportunity for the public to engage in political and social action that confronts the entire industry, including its operations outside of their local community, and even country. This global systems analysis and critique provides opportunity for social and political engagement at a global and local level, challenges neoliberal policies and fosters community-based organizing for solutions to climate change.

Conclusion

Both the liquefied natural gas industry and Oregon's No LNG movement employ a global frame to view the situation of a proposed importation facility and accompanying pipeline in an effort to broaden the significance of the issue beyond local context. However, all institutions involved in framing LNG in Oregon researched here frame the local and global impacts and climate change solutions in different ways, providing different opportunities for the public to engage in climate change solutions.

The liquefied natural gas industry attempts to manage conflict by projecting an image of corporate responsibility to gain access to resources for expansion. To do this the industry invokes concerns of the public including the global issues of climate change, as well as local environmental and social concerns. With rhetoric of globalization and

market-based solutions, the industry separates and fragments the system of energy production, distribution and consumption process from local community impact, as well as system-wide, lifecycle impacts. In addition the promotion of climate change solutions proposed by the industry, including consumer and fuel-based solutions, limits opportunities for community and system-side solutions to climate change.

By investigating the posed research question, this thesis provides an example of the current social and political situation for communities confronted with fossil fuel infrastructural development. It is my hope that this thesis provides insight to the ways that neoliberal policies and globalization foster the expansion of transnational corporate power, and how these factors have impacted a local community in Oregon.

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