Environmental Destruction versus Responsible Trade versus Domestic Bliss:

Assessing the Representation of Risk in Civil Society, Aboriginal, Industry and Government Bitumen Sands Advertising

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Abstract

Alberta's bitumen sands have become a flash point for political action and campaigning in the debate around Canada's energy future. The stakes are high and contested, yet the public has been witness to an increasing prevalence of promotional and marketing-oriented information on the issue. This study utilizes risk society theory, social constructionism and agnotology theory to explore the representation of risk in paid bitumen sands advertisements collected online between January 01, 2014 and August 31, 2015. Utilizing a mixed method approach of content and discourse analysis, the study assesses illustrative examples of the most frequently referenced risk topic in civil society, Aboriginal, industry and government ads. The results show that the top bitumen sand mythologies present a conflict over risks to the environment and local communities, versus risks to responsible trade and domestic bliss. These mythologies perpetuate opposing ideologies about the human-nature relationship – a view of nature as a resource for commodification; versus a view of nature as a divine resource requiring protection.

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Section 1: Introduction

An Introduction to Canada's Bitumen Sands

> "America is now a global leader when it comes to taking serious action to fight climate change. And frankly, approving this project (Keystone XL) would have undercut that global leadership. And that's the biggest risk we face -- not acting. Today, we're continuing to lead by example. Because ultimately, if we're going to prevent large parts of this Earth from becoming not only inhospitable but uninhabitable in our lifetimes, we're going to have to keep some fossil fuels in the ground rather than burn them and release more dangerous pollution into the sky." (The White House, Office of the Press Secretary, 2015)

Alberta's bitumen sands[1,2] have become a flashpoint for political action and campaigning in the debate around Canada's energy future. Given its enormity as a resource, its future has important policy implications for its impact on water, land, air, climate, the economy, First Nations rights, and energy supply. Stretching 140,200 square kilometres across "three major areas in northeast Alberta" (Government of Alberta, 2015), the Alberta bitumen sands are the third "largest proven reserves of oil in the world", with "170 billion barrels" of "proven" reserves (2015). Bitumen sands production currently produces about 1.9 million barrels of oil per day", making up about "Fifty-five per cent of all Canadian crude production" (Government of Alberta, 2015). Under both the recently elected provincial NDP government in Alberta, and federal Liberal government, intensified bitumen sands extraction is expected into the future[3]. Yet, there remains ongoing polarized debate about the size, pace

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[1] In avoiding the recent politically-charged association of the terminology "oil sands" (associated with bitumen sands proponents) versus "tar sands" (associated with bitumen sands critics), this paper uses the terminology "bitumen sands" (Paskey, Steward & Williams, 2013, p. vi), which reflects the scientific terminology of bitumen oil.

[2] Bitumen oil is made up of a mix of "sand, clay or other minerals, water(,) and bitumen" (Government of Alberta, 2016c). Eighty percent of bitumen sands oil is recoverable using in-situ methods such as Steam Assisted Gravity Drainage, which involve deep drilling and steam injections "to recover bitumen that lies" 75 metres or more "underground" – a distance "too deep beneath the surface for mining". The other 20 percent of bitumen is recoverable through open pit mining methods (Natural Resources Canada, 2016b). Once extracted, bitumen must be further "upgraded or diluted in order to be pipelined and used as" fuel (ibid).

[3] The Government of Alberta's website projects that: bitumen sands "production is expected to increase (…) to 4 million barrels per day in 2024" (2016b), and Natural Resources Canada's website highlights International Energy Agency" forecasts "that in the next 25 years" oil "production in Canada will increase by approximately 2.5 million barrels per day", with Alberta's bitumen sands accounting for "the majority of this growth" (2016a).

and end goal for future development. This has included debate around major proposals for oil transportation infrastructure, including the Keystone XL, Energy East, and Northern Gateway pipeline proposals. The political conflict is playing out through political systems at the municipal, provincial, and international levels; through Canada's judicial systems (via individual, civil society, Aboriginal, and provincial legal actions); and through the media arena via multiple platforms. The media arena of political conflict is the focus of this paper.

The Bitumen Sands Public Relations Conflict

As a relatively remote region, "the Athabasca tar sands have always been a mediated space that has become known to most of the world through the diaries, reports, photographs, and film images developed by explorers, travelers, government employees, and early industrialists" (Davidson & Gismondi, 2011, p. 39). Stakeholders at the local, national and international level have created, or utilized, various media in their external communications on bitumen sands development, including promotional videos, reports and fact sheets, and advertisements (Mediatoil Database, 2016). The stakeholders involved range from industry, to First Nations, to national and provincial governments, to over 60 civil society organizations including registered charities, international networks, associations, and advocacy-oriented non-governmental organizations (NGOs) (ibid). The stakes for organizations advocating for continued long-term and/or accelerated bitumen sands development, and those advocating for a move to cleaner energy systems, are high – including contested claims concerning the social, environmental and economic value, impacts and risks of bitumen sands and pipeline development. Yet, to the detriment of reasoned and informed public discussion on the issue, different social constructions of the associated issues and policy solutions have led to "spin" (Grant, Huot, & Lemphers, et al., 2013, p. iv) and "often confusing claims" (Paskey, Steward & Williams, 2013, p. 78) on all

sides. Indeed, a key trend identified by Paskey, Steward & Williams' longitudinal study of bitumen sands documents across 40 years was "the replacement of hard evidence and information with promotion and marketing", particularly on the part of government and industry "and to a certain extent environmental NGOs" (2013, p. 78). While many claims put forth by stakeholders on all sides may be "entirely factual (..) often they are only telling part of the story", and "can also be misleading" (Grant, Huot, & Lemphers, et al., 2013, p. v). Of further concern to informed public debate, are stark differences in the resources spent on public relations (2013, p. iv), particularly between "proponents in industry and government", who "spend an order of magnitude more than oil sands critics on public relations efforts" (2013, p. iv-v).

Understanding the Representation of Risk in Bitumen Sands Paid Still Advertising

A key assumption of this study is that media can play a role in audience perceptions of public issues. Further, visual communications can be uniquely powerful for its ability to impact audience emotional response. So in the context of increasingly promotional-focused campaigns on bitumen sands development, how are risk discourses used in bitumen sands advertisements to persuade the public on future bitumen sands policy? This study investigates how risk is represented in paid bitumen sands advertisements collected online from January 01, 2014 to August 31, 2015. The proceeding section will provide a critical review of relevant literature on environmental imagery in bitumen sands communications and environmental discourses in advertising, laying out this study's contribution to this literature. The section then sets out the study's theoretical framework including Ulrich Beck's Risk Society, the social construction of environmental issues, and agnotology. The section concludes by setting out the study's central research question, rationale, and objectives. Section three outlines the research method undertaken and justifies its

appropriateness in addressing the study's central research question. This includes details on the study's method, sample, key terms, and coding framework. Section four presents the study's key content analysis findings by risk topic, identifying key trends across stakeholder groups. This is followed by a discussion of the study's discourse analysis findings from illustrative ad examples of the top represented broad risk categories for each stakeholder group, which focuses on the ad's key bitumen sands mythology and underlying ideology concerning the relationship between humans and nature. The section concludes with a discussion on the study's overall findings and their implications for risk society theory. Section five summarizes the study's key insights and concludes with directions for future research.

Section 2: Background/Theory/Literature Review

RESEARCH RATIONAL

Bitumen sands advertising is of particular interest in understanding the bitumen sands communications struggle between different stakeholders because of the trend towards increasingly promotional type communications on the topic in recent years, as discussed in the previous section, and the particularly prominent role images play – along with their accompanying text – in advertisements, compared to other forms of promotional media like factsheets or brochures. Indeed, in regards to the particular power of images, the normative value of this study recognizes recent neuroscience research and perception theory, which emphasize "the primacy of emotions in processing all communication" (Barry, 2005, p. 45), and particularly visual communication (Ibid, p. 46). This information processing is based on neurological systems that have been "prewired by evolution to detect and respond to danger" (Ibid). Such processing may be: unconscious, preframe "thinking" (Ibid, p. 60), and particularly susceptible to manipulation by particular "interests" (Ibid, p. 61). The primacy of

emotional response is particularly relevant for issues of risk. At its heart, the rhetorical power of risk perception as a driver of public action is its ability to stimulate fear, or in its absence, calm. The link between political action and fear has been made in "affective intelligence theory", which suggests that the "emotions that are particularly relevant for political behaviour are *enthusiasm* (and its opposite, depression) and *fear* (with its counterpart calm) (Castells, 2009, p. 146). For this reason, advertisements are perhaps one of the most insidious public relations tools in terms of the potential for public manipulation, which depend on the use of images, and aim to evoke emotional reactions. As noted by DiFrancesco and Young, "The power of imagery to persuade has long been recognized by advertisers and marketers. According to Ungar, much of the persuasive power of imagery comes from the ease with which visuals communicate metaphor and analogy" (2010, p. 520). Images utilize rhetorical devices such as "visual cues, norms, traditions, cultural references and icons" to produce particular meanings (Rose, 2010, p. 153)". As a communication tool, images "are frequently informed by special interests and used as powerful means to persuade or seduce citizens" (Parak, 2013, p. 5). This rhetorical power of imagery must also be placed in the context of North America's "increasingly 'promotional culture', highlighted by the rapid rise of the public relations industry in recent years and claims-makers who employ increasingly sophisticated media strategies" (Anderson, 2015, p. 2).

Normatively, this study advocates a decentred media approach (Couldry, 2006) to the potential impact of advertisements on public actions concerning bitumen sands development policy. Recognizing the "complex interplay of actors and issues competing across a range of arenas including: the media, parliament, regulatory institutions, interest and pressure groups, scientific communities, and industry" and the shifting "influence of actors and arenas (…) over time" (Anderson, 2015, p. 8), the study of advertisements is but one part of the media

arena that may or nor may not have significant impacts on public opinion. Yet to study media as a practice (what do we *do* with media) (Couldry, 2006) - understanding the representation of risk in visual advertisements is particularly important for future research to understand their potential impacts (or non-impact) on public perceptions and action.

LITERATURE REVIEW

Ideology in Bitumen Sands Imagery

This study builds on under-researched literature on environmental imagery related to the specific issue of Canada's bitumen sands development, and critical discourse analysis research on environmental advertising. First, while recent studies have focused on environmental images, many authors have noted that this remains an understudied and important area of environmental communications (Parak, 2013; Hansen, 2014, p. 545; Hansen and Machin, 2008, pg. 777; citing Kress and Van Leeuwen, 2001, 2007, and Iedema, 2003; DiFrancesco & Young, 2010). For instance, Remillard notes that, "Existing studies often "tend to consider images (at best) as supplements to textual analysis (Antilla, 2005; Boykoff, 2008; Carvalho and Burgess, 2005; Macnaghten and Urry, 1998; as cited in Remillard, 2011, p. 129). In addition, recent studies on "visual representations of the environment" (Doyle, 2007; Linder, 2006; Nicholson-Cole, 2005; as cited in Remillard, 2011, p. 129) have tended to focus on "wide surveys of environmental imagery (Hansen and Machin, 2008), or the repetition of specific icons and categorical generalities of environmental images within the media (Cottle, 2000)" (Remillard, 2011, p. 129), as opposed to visual representations of particular environmental issues like Alberta's bitumen sands development. Gismondi and Davidson note that: "The Athabasca tar sands has received a significant amount of attention by journalists, politicians, and social movement activists, but relatively little from the social sciences" (2011, p. xi).

Past communications research on Alberta's bitumen sands has included a study of audience perceptions of legitimacy (Finch, Deephouse, & Varella, 2014), and discourse studies of media including research documents (Paskey, Steward & Williams, 2013) and news media articles (Krogman, Johnston, and Claire, 2015; Murphy, 2015; Paskey, Steward & Williams, 2013). Studies of Alberta's bitumen sands images have focused on photographs. Using a historical perspective, Gismondi and Davidson (2012) identified patterns of key tropes present in bitumen sands photos spanning from 1880 until 1967 (p. 68), along with their accompanying textual narratives. They identify two key storylines: "(1) the application of human ingenuity, science, and technology" to obtain oil from bitumen, and (2) the value of "public investment" for bitumen sands revenues (p. 70). The authors suggest that these narratives have become "internalized and normalized" as "representations" (p, 70), arguing that "many elements" of these narratives are still used to "legitimate" the development of bitumen oil as an "acceptable energy future" (p. 70). Gismondi and Davidson (2011) also use a historical perspective, assessing selections of bitumen sand images over time. In their assessment, the authors review archival photographs and more recent examples of images across various media types (Gismondi & Davidson, 2011, p. 30). The authors note that the earliest photographs originated from a small group of individuals (ibid, p. 29). It is not until the 1960s that the number of "corporate sponsored" images expanded significantly, and not until much more recently that new discourses have entered the public sphere through new images "produced by sources of resistance", which are "increasingly available globally through websites" (ibid).

Interestingly, while the presence or absence of social, environmental and economic risks are central to the discourses utilized and drawn upon to advance various positions on bitumen sands development, *there is a lack of studies on the representation of risk in*

particular, and how this is utilized in public relations concerning the bitumen sands. Remillard assesses the visual representation of risk, but applied to the context of the March 2009 National Geographic Magazine photographic essay on the Canadian bitumen sands (2011, p. 140). The study's results show that the magazine images portray environmental risk as both "massive" and "removed from everyday life", which may impact issue salience, "but perhaps not elevated levels of engagement" among individuals (p. 141). *In contrast to the assessment of as single National Geographic bitumen sands photo spread, this study assesses broad trends in the representation of risk across various stakeholder advertisement campaigns in the bitumen sands debate,* an important medium of study given advertising's aim to persuade the public.

Ideology in Environmental Advertising

Environmental images, and bitumen sands images specifically, are particularly understudied area in regards to the advertisement genre format. The most researched area of environmental communications has focused on news media coverage (Hansen, 2011, p. 13). While important, media genres such as advertisements are also significant, containing "messages, images and ideologies about the environment that dominate and resonate in the wider cultural and symbolic environment" (Ibid). First, part of the unique power of ads stems from their "repetitive", "ubiquitous" (Shudson, 1989; as cited in Corbett, 2014, p. 558) and "invasive" (Corbett, 2014, p. 556) nature within society. Second, Hansen (2014) suggests that "advertising is particularly interesting to look at in terms of constructions of nature" because their "'natural' qualities" are "more seamless, effortless, and taken-for granted" compared to other genre formats (Hansen, 2014, p. 545), suggesting a unique persuasive power. The power of advertisements goes further than an image alone. This is because advertisements contain both "visual signals and language fragments (…) that work together

to create messages that go beyond the ability of either individually" (Corbett, 2014, p. 558), with the ability to target specific messaging through text, while utilizing image power. Third, as persuasive rhetorical tools, visual ads are also inherently political. Parak (2013) introduces the term "eco-images", defined as "images informed by a decisively environmental agenda." (2013, p. 5). This conception highlights the "explicit political intention" behind image construction and/or use, particularly relevant for advertisement images, which are "meant to alter environmental convictions" (2013, p. 6) for particular political purposes. As such, the use of environmental images evolves along with political conflicts. In the case of the bitumen sands debate, this could include amplifying or de-amplifying particular bitumen sands-related risks through particular environmental representations or absences.

Critical discourse analysis is particularly useful in understanding risk portrayals in bitumen sands advertisements because of its ability to strike analytically to the heart of power relations and ideology underlying various representations. Cantrill argues that the facts about environmental issues "do not stand alone in the minds of most people; rather, 'facts' are interpreted in light of preexisting notions about the world and are modified by all manner of information-processing biases" (2014, p. 187), which may be intentionally drawn upon by ad creators. Dryzek identifies some of the key general environmental discourses as: "environmental problem solving" ("status quo" with adjustments to address environmental concerns); "survivalism" ("redistribution of power within the industrial political economy"); "sustainability" ("economic growth and environmental protection" are "complimentary"); and "green radicalism" ("rejects the basic structure of industrial society (…) in favour" of alternatives) (2005, pp. 15-6). Past CDA research focusing specifically on the use of images in promotional media on environmental issues have focused variously on TV advertisements (Corbett, 2014; Hansen, 2014) and print advertisements in magazines and/or newspapers

(Corbett, 2014; Howlett & Raglon, 2014), identifying a variety of themes including: the commodification/control of nature (Corbett, 2014; Howlett & Raglon, 2014; Remillard, 2011; Hansen, 2014; Hansen, 2010); sustainability (Corbett, 2014; Howlett & Raglon, 2014); nature as wild/pure/authentic/sublime (Hansen, 2014; Hansen & Machin, 2008; Kyley, 2013; Hansen, 2010; Remillard, 2011); nature as recreation/anthropocentric (Hansen, 2014); and nature as simplified and decontextualized (Corbett, 2014 & Hansen & Machin, 2008).

THEORETICAL FRAMEWORK

Media & Risk Society

The representation of risk is particularly relevant to understanding rhetorical strategies and ideologies employed in bitumen sands advertising, which often focus on explicit environmental risks, or absences. Indeed, it has been suggested that overall, "More and more campaigns revolve around issues of risk, particularly the types of hard-to-define risks" (Rose, 2010, p. 174). Yet scholars in risk and media studies have noted that there are a lack of studies assessing both "visual representation of risk" (Remillard, 2013, p. 129) and a lack of empirical media studies linking to larger social theories of risk such as Ulrich Beck's Risk Society (Bakir, 2010, p. 5; Cottle, 1998, p. 5; Beck, 2000, p. xiii). This study addresses both of these literature gaps, drawing on Ulrich Beck's "risk society thesis" as the theoretical starting point for assessing risk framing and underlying ideology in bitumen sands advertisements, which include heavy visual components.

Beck's conception of risk and "risk society" provide the broad theoretical context for this study, in which risks are made visible, socially constructed, and a site of political conflict through media. The "risk society", as defined by Beck in his 1995 work *Ecological Enlightenment*, "means an epoch in which the dark sides of progress increasingly come to dominate social debate (…) self-endangerment and the devastation of nature – is becoming

the motive force of history" (p. 2). Beck's broad theoretical conceptualization of the risk society suggests that environmental problems are increasingly the product of industrial society. As such, they are social problems, both "'in their origins and through their consequences'" (Irwin, 2001, p. 59; as cited in Beck, 1992, p. 81). This paper focuses specifically on the role of media in the risk society. Beck's conceptualization of media's role in the risk society is undertheorized, as noted by Beck himself in later publications (Beck, 2000, p. xiv). Although Beck fails to detail the media's functioning in the risk society "in any developed way" (Eldridge, 1999, p. 111), lacks empirical evidence (Cottle, 1998, p. 10), and generalizes across time, issue, and geographic location, he emphasizes the importance of media in understanding "risks" and "risk society" (Cottle, 1998, p. 7) in three key ways at the level of broad theoretical conceptualization: making risks visible; defining risks, and as a site of social contestation. These broad conceptualizations can be furthered developed and empirically tested in various contexts, including the context of paid bitumen sand advertisements collected online. As a geographically remote place in Canada, the media is particularly important in making Canada's bitumen sands visible and constructing their representation to the public.

Risk Visibility

First, since many risks are invisible to the senses, Beck identifies "the mass media and the scientific and legal professions" as important in their capacity to define and *provide visibility to public risks* (Beck, 1992, pp. 22-23). This does not discount the criticism that "There are other kinds of risk (… that) are not invisible" (Eldridge, 1999, p. 111), but recognizes the potential key role of media in providing knowledge of risk issues, including the longer-term, "continuous, complex, multi-causal or hypothetical" risks, such as climate change, which are not immediately apparent to the senses (Bakir, 2010, p. 6). While

criticisms have been leveled at Beck's tendency to "treat the media as a monolithic" (Anderson, 2015, p. 15), Beck does state that various media may have influence in providing risk knowledge (Beck, 1992, p. 197). Beck also cautions that the "defining power of media publicity (…)" may be constrained by "economic, legal and political" biases and inequities (Ibid, p. 198). These constraints on the potential power of media publicity should also be placed in the context of constraints in the network society, including "multiple digital divides (influenced by age, ethnicity, gender and socio-economic factors)" (Anderson, 2015, p. 6), and digital media concentration (ibid, p. 27).

Defining Risks

Second, risks are not only made visible through media, but they are *socially constructed through the media*. In this way, "The risk society is (…) also the science, media and information society" (Beck, 1992, p. 46). At a broad level, the "information society" should be considered in the context of both "an increasingly 'promotional culture'" (Anderson, 2015, p. 2), and the "Network Society" (ibid). Manuel Castell's account of media power in the Network Society takes into consideration the current media revolution, characterized by phenomena including rapid media change, convergence, and global connectivity (Taras, 2015, p. 3-4), powered by digital "communication systems" that are "diverse, flexible" and "continually in flux" (Anderson, 2015, p. 18). In the Network Society, power operates through "subtle" processes of social construction like "framing" (Anderson, 2015, p. 18; Franco and Meyer, 2011, pp. 99-100) and "agenda setting" (Anderson, 2015, p. 18), which can increase "the salience of an issue" or "particular aspects" of an issue (ibid, p. 41). Various media may 'amplify", "de-amplify", or "simply ignore" the existence and scale of particular risks, though more research has focused on amplification, as opposed to the latter scenarios (Arnoldi, 2009, p. 125).

A Site of Social Contestation

Third, *the media is a site of "social contestation"* and "criticism of risks and 'risk society'" (Cottle, 1998, p. 7). As the economic and social significance of risk knowledge grows, so too does the power of both "structuring" and "disseminating" knowledge as political conflict develops "between those afflicted by risks and those who profit from them" (Beck, 1992, p. 46). For Beck, political action is dependent on public perception of risks, which is socially constructed and mediated (Beck, 1992, p. 55), and particularly important in the context of "reflexive modernization", whereby the "'self-confrontation with the consequences of risk society (…) cannot (adequately) be addressed and overcome in the system of industrial society'" (Beck, 1996, p. 28; as cited in: Cottle, 1998, p. 12). This is why risks are often identified "*outside* the institutions that bear responsibility in the economy, science and politics" (Beck, 2000, p. xiii). To empirically study these concepts, Bakir suggests that "greater attention should be paid" to "how different media forms", besides news media, illuminate "risk debates between stakeholders" (2010, p. 7), and Cottle emphasizes the need to further understand how various discourse are "played out in and across media representations" of risk (1998, p. 19), as well as "the balance of power" between competing claims" (ibid, p. 9). This includes the absence of particular discourses, which is the "less visible side to power" (Anderson, 2015, p. 3).

Social Construction of the Environment

As discussed above, a key assumption of this research is the significance of the social construction of the environment by various claims-makers, which warrants a brief discussion of its own. While recognizing that the environment is composed of scientifically measurable phenomena, social constructionism argues that our conception of nature and the environment is continually constructed and contested (Hannigan, 2014, p. 165). The lens of social

constructionism recognizes the importance of "'different actors, claims, types of knowledge, communication and cultural contexts in which these problems are articulated, contested, presented and re-presented'" (Barry, 1999; as cited in Irwin, 2001, p. 165). Hansen suggests that

> "It is the polysemy or semantic richness of 'nature'; i.e. the ability of the word and the concept to accommodate a multitude of contradictory meanings (…) that makes construction of nature so important, because herein lies the power of nature as a rhetorical device or a frame for investing partisan arguments and interests with moral or universal authority or legitimacy" (2014, p. 545).

From this perspective, researchers contend that there is no single conception of nature, but multiple conceptions dependant on cultural context (Adams, 2005, p. 235; Cantrill, 2014, p. 251) and successful "claims-making" (Hannigan, 2014, p. 165). Additionally, ideologies or internal beliefs about "the relationship between humans and the natural world" have a significant "influence on how people position themselves vis-à-vis environmental discourse" (Cantrill, 2014, p. 197). These internal beliefs are the result of an array of factors including life experiences and media (Adams, 2005, p. 233).

The social construction of environmental issues includes the absence of particular risk discourses, as discussed briefly above. The study of agnotogology is the formal study of the social construction of ignorance (Procter & Schiebinger, 2008, p. vii), and is a particularly useful lens for studying risk absences and de-amplifications. The production of ignorance could be "conscious" or "unconscious", but "The point is to question the *naturalness* of ignorance, its causes and distribution" (Procter, 2008, p. 3). In assessing risk absences or de-amplification in advertisements, "ignorance as deliberately engineered and *strategic ploy* (or active construct)" (ibid) is of particular relevance. According to Procter, "The focus here is on ignorance – or doubt or uncertainty – as something that is made, maintained, and manipulated by means of certain arts and sciences" (ibid, p. 9). Indeed,

Tuana argues that "The persistence of controversy is often not a natural consequence of imperfect knowledge but a political consequence of conflicting interests and structural apathies" (2008, p. 109). Thus, of particular interest for this study are the absences in government, industry, and civil society advertisements. Indeed, Tuana notes that "because ignorance is frequently constructed and actively preserved, and is linked to issues of cognitive authority, doubt, trust, silencing, and uncertainty, it often (…) intersects with systems of oppression" (2008, p. 109), and we should ask "who is privileged and disadvantaged by such knowledge/ignorance" (ibid, p. 111). Thus, "What we do not know, as much as what we do know, tracks power as it operates in social contexts both past and present" (Wylie, 2008, pp. 187-8), including through the media arena of print and digital advertising.

Defining Risk

Risk research underscores that "risk remains" a "disputed concept, both in theory and in practice (Mythen & Walklate, 2006, p. 1). Risk research tends to define risk in the context of explicit "dangers or hazards" that are perceived (Lupton, 2006, p. 14) or measured as risks. Such threats "can involve both risk and uncertainty", which are "constantly conflated" (Arnoldi, 2009, p. 183). This means that "understandings of risk can be conceptual rather than mathematical", and many issues involve both uncertainty and risk defined in the mathematical sense of probabilities (ibid)[4]. For example, Arnoldi emphasizes: the "conflation" of different risks, whereby, for example, "environmental risks can become security issues" (2009, p. 183); as well as differences in "conceptualization of risks" such as "between danger and opportunity", or between "'bads'" and "'goods'" (ibid, p. 182, p. 182).

[4] In the Risk Society, Ulrich Beck's focus is on environmental uncertainties with "unforeseeable consequences" (Beck, 2000, p. xii).

To capture the complexity of various conceptualizations of risk presented to the public by different stakeholders, this study utilizes Arnoldi's conceptualization of risks as "associations, couplings of material problems and human understandings", which "extend into an unknown future" (ibid, pp. 188-9). To capture the various associations of *explicit risk* (see figure 1) in bitumen sands advertisements, this study defines explicit risk as an explicitly presented threat that could impact your life, society, culture, or environment. Yet, to operationalize the representation of risk absence and de-amplification, additional terms are required. To address this conceptual gap, this study also assesses risk de-amplification through the presentation of *implicit risks* in combination with *risk mitigation strategies* (defined in Figure 1), as well as risk absence through representations of *no risk* (also defined in Figure 1).

Figure 1: Risk Type Definitions

Risk Type Definitions	
Risk Term	**Definition**
Explicit Risk	A threat that could impact your life, society, culture, or environment and is explicitly represented through visuals or identified through text, or through a combination of both visuals and textual references.
Implicit Risk	A threat that could impact your life, society, culture, or environment, that is implied through a mitigation strategy, or through the imagined loss of something valued, that is represented through visuals, text, or a combination of both visual and textual references.
Risk Mitigation Strategy	A strategy, policy, or action to address, limit, or remove a threat that could impact your life, society, culture, or environment, which is explicitly or implicitly represented through visuals, accompanying text, or a combination of visual and textual references.
No Risk	A potential risk that is represented as presenting no threat to your life, society, culture, or environment through visuals, text, or a combination of both visual and textual references.

RESEARCH QUESTION

In the context of increasingly promotional-focused, polarized campaigns regarding the risks or absence of risks resulting from bitumen sands development, and unequal public

relations expenditures between stakeholders, this paper aims to shed light on how discourses of risk are used as rhetorical devices in public campaigns about the bitumen sands.

Figure 2: Central and Sub Research Questions

Central and Sub Research Questions	
Central research question: How is risk represented in paid bitumen sands advertisements created by civil society, Aboriginal, industry and government stakeholders, collected online between January 01, 2014 and August 31, 2015?	
Sub-Research Question	**Method**
Sub-question 1: What are the most frequent risk types and risk subjects depicted in bitumen sands related still advertisements, by Aboriginal Peoples, government, industry, and civil society stakeholders?	Content analysis
Sub-question 2: How are the top risk types in each stakeholder group represented across stakeholder groups? Are there any absences or de-amplifications?	Content analysis
Sub-question 3: What types of bitumen sands mythologies and underlying ideologies about the relationship between humans and nature are perpetuated by illustrative examples of the top most frequently depicted risk types by each stakeholder group?	Discourse analysis
Sub-question 4: What do the results of sub-questions one to three illustrate about the conflict over bitumen sand risks through paid advertisements available online between January 01, 2015 and August 31, 2015, in the context of the role of the media in Beck's risk society?	Discourse analysis

Section 3: Research Design and Methodology

To explore how risk is represented in bitumen sands-related still advertisements created by bitumen sands proponents and critics, this study will use two methods: content analysis and critical discourse analysis (see Figure 2). The method follows DiFrancesco and Young's mixed method approach in assessing the visualization of climate change issues in Canadian print media (2010, p. 517). The use of both content analysis and discourse analysis

of illustrative examples of the top risk types strengthens the validity of each method. Content analysis allows for the identification of top risk types among a larger sample of advertisements across multiple key stakeholders, allowing a more purposeful critical discourse analysis of advertisements illustrative of broader trends. The critical discourse analysis, in turn, allows for a deeper and more insightful assessment of select ads in regards to their underlying ideology concerning humans and nature and dominant bitumen sands mythology presented to audiences. Content analysis is described by Berelson as "a research technique for the objective, systematic, and quantitative description of the manifest content of communication" (1952, p. 147, as cited in Deacon, Pickering & Golding et al., 2006, p. 118). Content analysis utilizes explicit "rules and procedures that must be rigorously followed for the analysis of images or texts to be reliable" (Rose, 2001, p. 54), particularly "the structure of categories used in the coding process", which should "describe only what is 'really' there" (ibid, p. 59). While such analysis is still subject to biases of classification decisions, it strength remains its ability to systematically assess "salient" features of "large numbers of text" (ibid, p. 118-9). So the method is particularly applicable for assessing the frequency of risk subjects and risk types in still advertisements available online and across a wide range of stakeholders and advertisement campaigns, allowing for a more representative sample and the identification of broad trends.

The critical discourse analysis utilizes Roland Barthes's theory of myth (Barthes, 1957), which provides a useful lens for identifying the role of the media in perpetuating particular "myths" around bitumen sands risks and their underlying ideologies through representations or signs. In Barthe's theory, myth is a "second-order of signification" whereby "meanings can develop beyond their linguistic properties" connoting "wider social and cultural meanings" and ideologies (Laughey, 2007, p. 57-8), which act as a form of

persuasion (Moriarty, 1991, p. 22). Thus, mythologies have two parts: the "mythic content" (Wykes, 2000, p. 83), which is "a message that is read into some substance, custom, (or) attitude" that seems "to carry its own justification in terms of purely practical use", and the concealed ideology through which "socio-economic structures" operate (Moriarty, 1991, p. 21). According to Barthes, mythologies function as "an ideological critique" of the "language" of "mass culture", by "semiologically" analyzing "the mechanics of this language" to provide a detailed account of the "mystification" which makes "culture" appear "universal" (Barthes, 1957, p. 9). This links to neuroscience research, which argues that since "images are the basic communication medium of the brain, semiotics and rhetorical criticism come closest to understanding visual communication when they look at relationships and tropes" (Barry, 2005, p. 53). For Barthes, the concept of myth explains the falsely presented "naturalness" of "reality" to uncover its "hidden" ideological underpinnings (ibid, p. 11). Mythologies are continually repeated or reproduced, which for Barthes, illustrates their cultural significance (ibid, p. 12). By linking to broader relations of power, CDA shows how promotional communications are "a means of social construction" and representation, both reflecting and reproducing "social processes and structures" (Hansen and Machin, 2008, p. 780). Uncovering these discourses is important because they can condition "the way we define, interpret and address environmental affairs" (Dryzek, 2005, p. 11). This is particularly relevant for the study of visuals, which can have a unique ability to "naturalize particular societal meanings, actions and power relations" (Remillard, 2011, p. 129-130). The application of risk framing and CDA have been insightfully employed in past research by: Coupland and Coupland (2000); Weaver, Carter and Stanko (2000); Hutson and Liddiard (2000); as well as Wykes (2000), who utilized Barthes' concept of myth in assessing media reporting on environmental protest.

Data Sample & Collection

The study's sample includes all paid still advertisements listed in the MediaToil database (discussed below). Still advertisements are defined as still images with accompanying text, including a stand-alone organizational or campaign logo, name or website.[5] Any files that were slightly ambiguous in terms of their classification as either graphics or advertisements were reviewed by a second researcher for verification and discussion, if required. An advertisement is considered "paid" when payment has been made to feature the promotion on a particular medium/mediums, or if they are self-identified as "ads/advertisements" on a stakeholder's website or social media platform. The definition and inclusion criteria for "paid still ads" recognizes that still advertisement may be primarily viewed in either the digital or physical world, taking into account increasing media convergence (Anderson, 2015, p. 6), which have blurred the "boundaries between online and offline media" (ibid, p. 4).

Data collection for the MediaToil database covered the period from January 01, 2014 to August 31, 2015 and aimed to include all online documents, videos and images available (regardless of publication date) on the web sites of key Canadian bitumen sands stakeholders including Aboriginal Peoples, government, industry, and over 60 civil society organizations[6]. A preliminary list of civil society, industry, government, and Aboriginal stakeholders was developed, and additional stakeholders were identified during the data collection phase utilizing a snowball approach (Babbie, 2008, p. 205)[7]. This was an appropriate method for

[5] The advertisement's accompanying text must contain a message that stands alone (i.e. a map listing location names, or vague banner image text was not considered sufficient for "accompanying text").
[6] Each collected media file was associated with a particular stakeholder based on two criteria: the stakeholder featured the media file on their external website; or the stakeholder was featured as a co-author or supporter of the advertisement. A co-author or supporter was indicated through an organization name or logo on the media file or web page housing the media file.
[7] For international organizations, only the Canadian chapter was included to narrow scope. The list of industry stakeholders was verified against the Canadian Association of Petroleum Producers' membership list to ensure that no major bitumen sands industry players were missed. The preliminary list of Aboriginal stakeholders was

identifying missing stakeholders, since some stakeholders were less well known to the general public and difficult to identify initially (ibid). Aboriginal Peoples were included as a distinct stakeholder type, recognizing that this group obtains specific legal rights regarding "self-government" and "land claim agreements" (Indigenous and Northern Affairs Canada, 2015).

Data collection involved searching each stakeholder's website for media documents in project scope, following a snowball approach. First, each organization's main page was reviewed for any in-scope media related to Canada's bitumen sands. Only the content directly referencing oil sands / tar sands / bitumen sands or Canadian pipelines (or featured under a bitumen-sands focused campaign) was collected. For organizations focused solely on bitumen sands issues, as well as energy companies involved in bitumen sands extraction, all in-scope media types were collected, even if they did not directly reference the bitumen sands. Any internal links that appeared bitumen sands-related were followed and their destination pages reviewed until the web site's saturation point was reached. Once the organization's external website was reviewed, any Twitter feeds, Facebook pages, and YouTube channels linked from the organization's external website were also reviewed for any posts, tweets, or video uploads of in-scope media documents, following the same criteria as outlined above[8]. Finally, if there were indications that other ads had existed online but were no longer available on websites, the website URL was entered in the online WayBack machine (https://archive.org/web/web.php) to check if the advertisement was available

verified against the list of Aboriginal groups who provided recommendations for the Government of Alberta's 2007 Oil Sands Consultations - Aboriginal Consultation Final Report (Government of Alberta, 2007).

[8] Energy company social-media accounts were an exception to this rule. For this content, only media directly referencing oil sands / tar sands / bitumen sands or Canadian pipelines was collected, due to the vast amount of unrelated content also featured on these organization's social media accounts.

through web archive pages. This step helps to address sample gaps in specific advertising campaigns, and helps to mitigate the study limitation of sample gaps resulting from the specific date within the data collection time period that a particular organization's website was reviewed. An access to information (ATIP) request for paid ads published by Natural Resources Canada during 2012 are also included in the sample, helping to further address sample gaps for the Federal Government paid still advertisements. Thus, the sample for content analysis is illustrative of all confirmed paid still advertisements available on key stakeholder web sites during the January 01, 2014 to August 31, 2015 time period that were captured during MediaToil data collection, and all Natural Resources Canada still ads provided through an access to information request.

Data Analysis

The content analysis focused on identifying the framing of four types of risk as defined earlier: explicit risk, implicit risk, no risk, and risk mitigation strategies, as well as the associated risk subjects presented in each advertisement. The identification of various risk types and subjects across a range of stakeholder group advertisements aims to produce "enlightening" results" of analytic interest (Rose, 2007, p. 60). To record this information systematically, the sequential process outlined in Figure 3 was completed for each advertisement in attempt to achieve "exhaustive" categories, which cover all aspects (Rose, 2007, p. 60) of each advertisement. Beginning with thorough descriptions of each advertisement's image foreground and background, as well as accompanying text (see Figure 3, Step 1), the representation of various risk types and subjects was described, focusing on both the image and text separately (see Figure 3, steps 2 and 3), and then the overall risk types and subjects, combining both the text and image descriptions (see Figure 3, step 4). Step 5 (see Figure 3) of the content analysis process involved the numerical recording of the

advertisement's risk types and subjects. The risk subjects associated with each risk type were assessed through thematic network analysis. Basic subject themes were identified based upon mutually exclusive sub-topics of similar specificity, which were then grouped under broader, mutually exclusive global themes (Astride-Sterling, 2001, p. 388) related to bitumen sands development, with similar topic generality. This flexible and systematic approach allows for a "rich exploration" of "underlying patterns" across advertisements, improving the finding's reliability and validity, as well as the study's replicability (Ibid, p. 386). The continual review of mutual exclusivity (Rose, 2007, p. 60) among sub-theme and broad theme categories also works to improve data reliability and validity. In the final stage of content analysis, both "absolute" and "relative" frequencies of the coded risk types and subjects were counted (Rose, 2007, p. 63). Both the total number of ads and the total percentage of all ads featuring each risk type and identified risk subjects among Aboriginal Peoples, civil society, government, and industry stakeholder ads were calculated to identify trends across stakeholder groups.

Figure 3: Content Analysis of Risk Types Presented in Each Advertisement

Content Analysis of Risk Types Presented in Each Advertisement	
Step	**Process Description**
1	Describe: • 1a) *Image Foreground* • 1b) *Image Background* • 1c) *Accompanying Text* • 1d) *Logo Text*
2	Describe: • 2a) *Image focus* (key topics represented visually regarding bitumen sands impacts, based on 1a and 1b descriptions) • 2b) *Image focus risk types* (key risk type represented visually based on 2a description)
3	Describe: • 3a) *Text focus* (key risk topics represented textually regarding bitumen sands impacts, based on 1c description) • 3b) *Text focus risk types* (based on 3a description)

4	Summarize: • 4a) *Overall ad focus* (key risk topics represented both visually and textually regarding bitumen sands impacts, based on descriptions 2a and 3a viewed together as a whole) • 4b) *Primary ad risk types* (key risk types represented both visually and textually regarding bitumen sands impacts, based on 4a description)
5	Record numerically: • 5a) *Individual risk types featured in the ad* (select: explicit risk, implicit risk, no risk, or risk mitigation strategy; based on 4b description) • 5b) *Individual risk subjects featured in the ad* (select or create new/existing sub-risk subject themes associated with each risk type, based upon mutually exclusive sub-topics of similar specificity; see Appendix 1 for a complete listing of all sub-risk subject themes identified during content analysis)
6	Organize: • 5b) *Individual risk subjects featured in the ad*, under broader, mutually exclusive global themes (Astride-Sterling, 2001, p. 388) related to bitumen sands development, with similar topic generality (see Appendix 1 for a complete listing of global themes and their associated sub-risk subject themes identified during content analysis)
7	Calculate: • *Total number of ads featuring each risk type and identified risk subjects among each stakeholder group* (Aboriginal Peoples, civil society, government, and industry stakeholders) • *Total percentage of all ads featuring each risk type and identified risk subjects among each stakeholder group* (Aboriginal Peoples, civil society, government, and industry stakeholders)

The discourse analysis of illustrative examples of the top risk types involved two phases: the identification of denotative and connotative symbols. This is important in assessing bitumen sands mythologies concerning risks, since for Barthes, “myth builds upon denotive signs” (Rose, 2007, p. 90). First, to record each illustrative advertisement’s dennotated symbols, key information was systematically recorded for each advertisement (see Figure 4), based on Deacon’s description of four key technical aspects of still images including: Shot type; composition type; colour; lighting; and content description (Deacon, 2007, pp. 198-205). The risk types present within the ads, determined during the content analysis, were also a key component of the denotative advertisement information in

identifying bitumen sands risk mythologies. For Barthes, this is the "first-order semiological system", which contains "rich" detail and obvious "signs", and what he terms the image's "meaning" (Rose, 2007, p. 90). The second stage of analysis focuses on the connotative level of "myth" concerning bitumen sands risks, utilizing the technical aspects and risk types identified in the first step of data analysis. Adapting Victoria O'Donnell's methodological approach for assessing discourse in television advertisements through cultural analysis (O'Donnell, 2007, p. 556-7), this study assesses each illustrative advertisement utilizing a set

Figure 4: Discourse Analysis of Illustrative Ads: Denotative Symbols

Discourse Analysis of Illustrative Ads: Denotative Symbols	
Denotative Signs / Meaning	**Categories**
Shot type	Full; Mid; Close-up; Extreme close-up; Above; Below (Deacon, 2007, pp. 198-201)
Composition type	Vertical; Horizontal; Diagonal (Deacon, 2007, pp. 201-2)
Colour	Colour; Monochrome; Black & white & red (Deacon, 2007, pp. 202-3)
Lighting	Dark areas/shadows; Bright light; Natural light; Artificial light (Deacon, 2007, pp. 203-4)
Content description	Image foreground; Image background; Accompanying text (Deacon, 2007, pp. 204-5)
Risk types	Explicit risk; Implicit risk; Risk mitigation strategy; No risk

of uniform questions as indicated in Figure 5. The questions focus on each advertisement's preferred meanings concerning bitumen sands risks, particularly in relation to its significance / power for the viewer to identify the second-order semiological, "or mythological, level of meaning" (Rose, 2007, p. 90). This includes a focus on the emotive quality of the advertisement, identifying "emotions that are particularly relevant for political behaviour" (Castells, 2009, p. 146) and "risk processing systems we use for understanding risk"

(O'Neill, Boykoff, & Niemeyer et al., 2013, p. 414). Research on climate change imagery, for example, has shown that "fearful" images can affect perceptions of issue importance, but can also "distance" and "disengage" individuals from acting (ibid); whereas "Nonthreatening imagery and icons that link to individual's everyday concerns (…) tend to be the most engaging" (O'Neill & Nicholson-Cole, 2009, p. 355). The answers to the guiding questions outlined in Figure 4, were reviewed for their relation to: "other signs", "wider systems of meaning", and the original denotative signs within the advertisements, to "determine the precise articulation of (…) mythology" (Rose, 2007, pp. 91-2) related to bitumen sands risks. At the second-level of (mythical) signs, which Barthes terms "form" (Rose, 2007, p. 90), signs lose their "richness", becoming filled with "signification" of naturalized myth, which supports an underlying ideology (Rose, 2007, p. 90-1). Thus, upon identifying each bitumen sands risk mythology, the discourse analysis utilizes the key ideologies identified in past environmental advertising literature (described earlier), to identify the advertisement's underlying (hidden) ideology concerning humans and the environment. While Rose notes that "interpretation of mythologies requires a broad understanding of a culture's dynamics" (Rose, 2007, p. 91), the content analysis in the first phase of research provides an excellent overview of the dominant cultural themes presented in bitumen sands ads across stakeholders, with the advertisements selected for discourse analysis already illustrative of the most commonly presented bitumen sands risk types and risk subjects to guide the focus of discourse analysis. Additionally, the systematic approach of utilizing identical guiding questions to focus on second-level signs based on denotative codes mitigates the limitation of researcher bias in connotative interpretation, improving the reliability and thus validity of analysis. Finally, research bias in identifying underlying environmental ideologies is also mitigated by building on ideology types identified in past literature.

Figure 5: Discourse Analysis of Illustrative Ads: Connotative Symbols

Discourse Analysis of Illustrative Ads: Connotative Symbols	
1. Identify Mythology	
Connotative Signs / Form	**Denotative Signs / Meaning**
What are the "preferred meanings" concerning bitumen sand-related risks? (O'Donnell, 2007, p. 556-7)	• Overall ad focus • Overall ad risk type
How is the viewer's sight of bitumen sands risks "limited"? (O'Donnell, 2007, p. 556-7)?	• Composition type • Shot type
How is the viewer positioned as a "subject"? (O'Donnell, 2007, p. 556-7) in relation to bitumen sands risks?	• Composition type • Shot type
In what ways can the preferred meanings concerning bitumen sand-related risks "give the viewer a sense of power", "pleasure" or fear? (O'Donnell, 2007, p. 556-7)	• Overall ad focus • Overall ad risk type • Emotive qualities
"In what ways" does the advertisement's visualisation of bitumen sands risks appear "natural" or "real"? (O'Donnell, 2007, p. 556-7)	• Lighting • Image focus
"What is at stake in the representation" of bitumen sands risks? (O'Donnell, 2007, p. 556-7)	• Overall risk type
What is the primary overall emotive quality of the advertisement: "Fear" / "depression" or "Calm" / "enthusiasm"? (Castells, 2009, p. 146)	• Content description • Shot type • Composition type • Colour • Lighting
2. Identify Underlying Environmental Ideology	
Focus	**Categories**
What is the "dominant ideology" related to humans and nature underlying the advertisement's preferred meanings concerning bitumen sand-related risks? (O'Donnell, 2007, p. 556-7)	• Past identified environmental ideologies

Section 4: Results and Analysis

This section presents the study's key findings. First, the top risk subjects among each stakeholder group identified in the content analysis are outlined. This is followed by a discussion of broader key trends across stakeholder groups, focusing on risk type strategies, risk topic absences, and contradictory risk frames. Upon presenting the key findings from the content analysis, the section presents key mythologies of oil sands risks perpetuated by illustrative advertisements of the top risks subjects among each stakeholder group. The

underlying ideology of each mythology is also uncovered. The section concludes with a discussion of the results' significance in the context of the Risk Society.

TOP RISK SUBJECTS BY STAKEHOLDER GROUP

Advertisement Samples

Overall, 77 advertisements across all stakeholder groups met the inclusion criteria for still, paid advertisements. The two Aboriginal stakeholder ads were created in partnership

Figure 6: Number of Advertisements, Organizations, and Advertising Campaigns in Each Stakeholder Group

Total Number of Advertisements, Organizations, and Advertising Campaigns in Each Stakeholder Group			
Stakeholder Group	**Total # of Advertisements**	**Total # of Organizations**	**Total # of Advertising Campaigns**
Aboriginal Peoples	2	6[9]	0
Civil Society	14	57[10]	4[11]
Government	6	2[12]	1[13]
Industry	57	7[14]	11[15]

[9] Mikisew Cree First Nation, Athabasca Chipewyan First Nation, Beaver Lake Cree Nation, Gitga'at First Nation, Haisla First Nation, and Coastal First Nations

[10] ForestEthics, Sierra Club Canada Foundation, Climate Parents, Moms Clean Air Force, Corporate Ethics International, Environmental Defence, Earthworks, Oil Change International, Rainforest Action Network, Natural Resources Defense Council, and Prince Rupert Environmental Society, Sierra Club (US), T. Buck Suzuki Environmental Foundation, Northwest Institute, World Wildlife Fund, Dogwood Alliance, Public Information Network, Calumet Project, International Rivers, Dogwood Initiative, Frente Civico of Mexico, Institute of Ecology and Action Anthropology, International Campaign for Responsible Technology, RAVEN, Friends of the Earth (Europe), Center for Health, Environment and Justice, People & Planet, World Development Movement, National Wildlife Federation, BankTrack, Les Amis de la terre, Platform, Global Community Monitor, Climate Action Network, Pacific Environment, Polaris Institute, Keepers of the Athabasca, International League of Conservation Photographers, Canadian Indigenous Tar Sands Campaign / Indigenous Environmental Network, Urgewald, West Coast Environmental Law, CounterCorp Anti-Corporate Film Festival, Greenpeace Canada, Seventh Generation Fund for Indian Development, Raincoast Conservation Foundation, Living Oceans Society, Cultural Survival, Friends of the Earth (US), CRBM, GegenStroemung-CounterCurrent, Western Organization of Resource Councils, EarthJustice, Honour the Earth, CPAWS, Environment America

[11] PipeUpAgainstEnbridge.ca, BlackOutSpeakOut.ca, SaveOurSkeenaSalmon.org, and dirtyoilsands.org

[12] The Government of Canada and the Government of Alberta

[13] GoWithCanada.ca

[14] The Canadian Association of Petroleum Producers (CAPP), the Canadian Energy Pipeline Association (CEPA), Cenovus Energy, Enbridge, Shell Canada, Suncor Energy, and TransCanada

[15] capp.ca/oilsands, Energy at Work for All Canadians (oilsandstoday.ca), Canada's Energy Citizens, Delivering Your Energy Every Day (aboutpipelines.ca), adifferentoilsands.com, morethanfuel.com, more2thestory.com, Life Takes Energy, www.shell.com/investor, whatyescando.com, and Keystone-XL.com

with civil society stakeholders, so these ads fell under both stakeholder group categories. A number of the civil society ads were also supported by partnerships of multiple organizations. Figure 6 displays basic background information on the advertisement sample for each stakeholder group. In particular, the total number of ads in each sample should be kept in mind when reviewing the proceeding results sections. In particular, results presented as a percentage of overall advertisements within a stakeholder group aim to show the prevalence of a particular theme in comparison to other themes. However, in viewing overall percentages, it is important to keep in mind the significant difference in total ads among each stakeholder type in the sample, particularly between the number of industry and Aboriginal advertisements.

Top Risk Subjects

The top broad risk subject referenced in advertisements by each stakeholder included environmental risks; international relations risks; and culture, community, and lifestyle risks (see Figure 7)[16]. The top-cited broad risk topic among both Aboriginal and civil society ads

Figure 7: Total Top Risk Types and Broad Risk Topics

Top Risk Types and Broad Risk Topics		
Stakeholder Group	**Top Risk Type**	**Top Broad Risk Topic**
Aboriginal Peoples	Explicit Risk; Risk Mitigation Strategy	Environment
Civil Society	Explicit Risk; Risk Mitigation Strategy	Environment
Government	Implicit risk; No Risk; Risk Mitigation Strategy	International Relations
Industry	Implicit Risk	Culture, Community & Lifestyle

[16] The complete content analysis results are listed in Appendix A, which includes the final thematic coding frame of all global subject themes and sub-themes resulting from the thematic analysis, along with the calculations of total ads, and total percentage of all ads presenting each risk type and sub-risk subject identified during data coding.

was the environment. These references were presented as explicit threats or dangers, including risks to: water; vegetation (particularly threats of Boreal forest destruction); air; climate; wildlife (including specific references to fish and sea birds), and reference to general environment threats (such as dirty" oil). Next, the top broad risk theme presented in government advertisements was international relations. The government advertisement references to international relations risk were often implicit. For example, Canada is framed in all of the Government of Canada GoWithCanada.ca campaign ads as America's "best energy partner" (Government of Canada, 2014a) suggesting an implicit risk that importing oil from other countries would mean losing out on their best energy partner. Canada is also framed as a "neighbor that is committed to North American energy independence" (Government of Canada, 2014b), suggesting that importing oil from other countries may risk American and Canadian energy independence. Finally, the top referenced broad risk theme presented in industry advertisements was culture, community and lifestyle. This broad theme included sub risk topics like community development; quality of life; patriotism; vacations / special event travel; relationship experiences; food experiences; ideas & imagination; the experience of achievement through perseverance / hard work; and comforting / nostalgic experiences due to warm or cold temperatures. By emphasizing the positive contributions of Canada's oil development for community development, quality of life, national pride, and lifestyle experiences (illustrative of lifestyle branding trends), the advertisements' implicitly represented risk is the loss or reduction of these positive developments and personal experiences if Canada's oil development was reduced or stopped.

KEY AD TRENDS ACROSS STAKEHOLDERS

A number of key trends stand out from the content analysis results. This includes differences and similarities in the use of risk types as a rhetorical strategy in bitumen sands

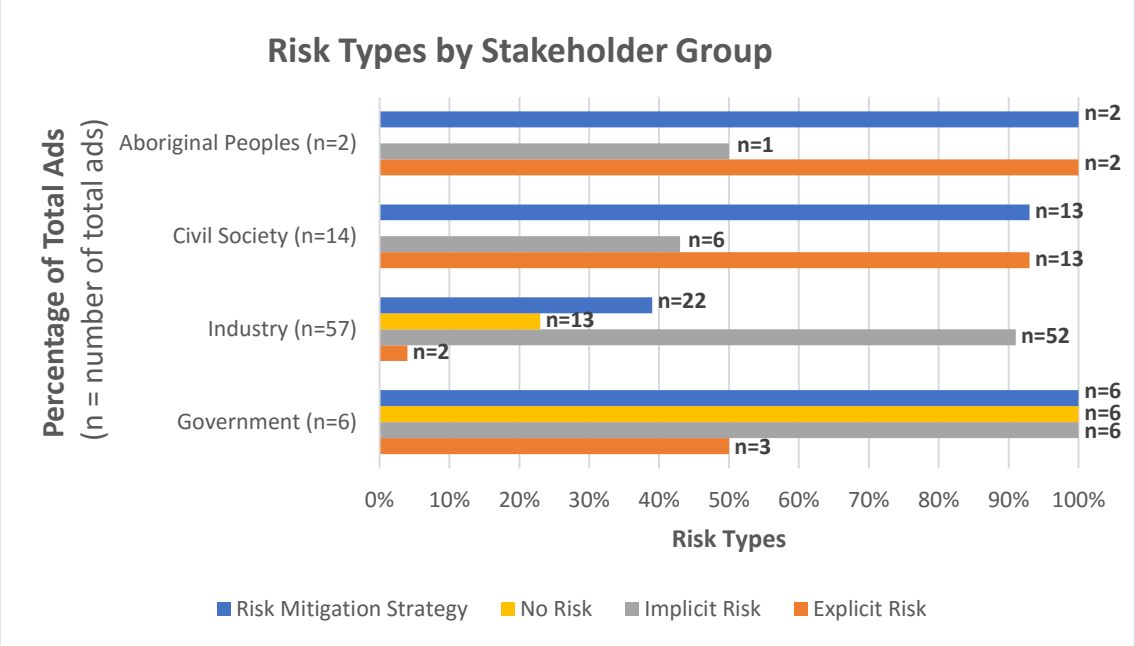
ads (explicit risk, versus implicit risk, versus no risk, versus risk mitigation strategies); key absences of particular risk subjects; and contradictory risk topic frames.

Risk Type Strategies

Explicit Risk

The content analysis revealed similarities as well as stark differences between the risk types used as persuasive tools in advertising by different stakeholder groups (see figures 7 and 8). The first stark difference concerns the presentation of explicit risk, which this study defines as a threat that could impact your life, society, culture, or environment and is explicitly represented through visuals or identified through text, or through a combination of

Figure 8: Risk Types by Stakeholder Group



both visuals and textual references. Consistent with bitumen sands discourses identified in past studies on media and organizational documents (Paskey Steward & Williams, 2013;

Gismondi & Davison, 2012), civil society[17] and Aboriginal stakeholders present explicit risks related to Canada's bitumen development in almost all advertisements. This demonstrates that presenting explicit risk is a top rhetorical strategy for these stakeholder groups. This contrasts with the industry advertisements, which present explicit risks related to bitumen development in very few ads. The government advertisements on the other hand, lie in the middle of these two extremes, with explicit risk presented in half of all advertisements. While the government ad sample is small and biased towards the key messages in the GoWithCanada campaign[18], the finding shows that the use of explicit risk in this sample is used frequently (50% of the time) as a rhetorical strategy by government stakeholders to promote bitumen sands development.

No Risk

Stark differences also appear in the use of "no risk" as a rhetorical strategy in bitumen sands ads. "No risk" was defined in this study as a potential risk that is represented as presenting no threat to your life, society, culture, or environment through visuals, text, or a combination of both visual and textual references. While no civil society or Aboriginal stakeholder ads present "no risk" in regards to bitumen sands impacts, "no risk" is presented in all government ads. Similar to its representation of "explicit risk", industry uses "no risk"

[17] It is of note that only anti-bitumen sands civil society organizations (defined in this study as non-profit non-governmental organizations and networks in favour of eventually ending bitumen sands extraction based on organization mission), were present in the sample of paid still ads. The pro-bitumen sands civil society organizations, (defined as non-profit non-governmental organizations and networks against eventually ending bitumen sands extraction) Canada Action and Ethical Oil, had seven ads captured during data collection, however none of these met the inclusion criteria for paid ads. This may be partly explained due to the informal/grassroots nature of both these organizations (for example no board of directors or annual reports), as well as the fact that both industry and government stakeholder paid ads captured during data collection are already advocating positions that align with the organizational goals of these organizations.

[18] 5/6 government advertisements in the study's sample are part of the GoWithCanada campaign.

as a persuasive strategy much less often than government as a percentage of overall ads, but still presents this risk type in almost a quarter of all ads.

Risk Mitigation Strategy

The presentation of implicit risks and risk mitigation strategies are less stark in differences across stakeholders. All stakeholders, except industry, present a high number of risk mitigation strategies as an overall percentage of all ads. A risk mitigation strategy was defined as a strategy, policy, or action to address, limit, or remove a threat that could impact your life, society, culture, or environment, which is explicitly or implicitly represented through visuals, accompanying text, or a combination of visual and textual references. Given that all of these stakeholder groups also present explicit risks in 50% or more ads, the high number of mitigation strategies makes sense, since explicit risks are presented along with a proposed solution. Fewer mitigation strategies are presented by industry stakeholders, featured in just over one third of ads. Again, similar to the "no risk" and explicit risk categories, the presentation of risk mitigation strategies is used less often by industry compared to government as a rhetorical strategy.

Implicit Risk

Implicit risks, on the other hand, are presented in the majority of industry ads – the top rhetorical risk strategy for this stakeholder group. Implicit risks are defined as a threat that could impact your life, society, culture, or environment, that is implied through a mitigation strategy, or through the imagined loss of something of valued, that is represented through visuals, text, or a combination of both visual and textual references. Implicit risk was also a top rhetorical strategy for government stakeholders, presented in all government ads. The risk type was presented less frequently by Aboriginal and civil society stakeholders,

although it was still present in half of all Aboriginal ads and over one third of all civil society ads.

Risk Topic Absences

A number of risk topics referenced by one or more stakeholder groups were absent in the ads of other stakeholder groups (see Figure 9). While risk absences may be either conscious or "unconscious" (Procter, 2008, p. 3), they may impact "doubt" and "uncertainty" (Tuana, 2008, p. 109) regarding the perceived salience of particular threats.

Figure 9: Risk Topic Absences by Stakeholder

Risk Topic Absences by Stakeholder	
Risk Topic Absences	**Stakeholders Implicated**
Health	• Government • Industry
Public services & federal government revenue	• Government • Civil Society • Aboriginal Peoples
Economy & Livelihoods	• Government
International relations	• Aboriginal Peoples • Civil Society
Goods & products (home & industrial)	• Aboriginal Peoples • Government
Oil Transportation	• Aboriginal Peoples

Industry and Government Ads

The lone risk category absent from industry ads, but identified in civil society and Aboriginal ads, is *health*. Both civil society and Aboriginal ads make reference to explicit health risks associated with bitumen development. This includes references to general health concerns, and one specific reference to abnormally high cancer rates in Aboriginal communities downstream from bitumen development operations. However, the representation of risks associated with human health concerns are absent from both

government and industry ads, even in the context of "no risk" or "implicit risks" addressed through "mitigation strategies". Industry and government stakeholders may not address health concerns defensively through either of these two tactics because it is not seen as a significant enough issue on the radar of the ads' target audiences. Its absence may cause or maintain public doubt and uncertainty on its salience as a threat to local communities.

A number of additional risk topics are absent from government ads, including risks to: *public services and government revenue*; *economy and livelihoods*, and *goods and products*. The reason these topics are ignored by government stakeholders is likely partly explained by the target audience of the ads in the study's sample, for whom this topic would be inapplicable. The Government of Canada ads are targeted towards an American audience on the issue of the Keystone XL pipeline. Additionally, the Government of Alberta ad is targeted towards a European audience, focused on the issue of the treatment of bitumen oil in the Fuel Quality Directive policy.

Civil Society and Aboriginal Ads

Two risk topics that are absent from civil society and Aboriginal ads are *public services and government revenues*, as well as *international relations*. Industry references a key contribution of bitumen development to public services like education, healthcare, and infrastructure, or general contributions to federal government revenue through taxes and royalty payments. However, in exposing threats associated with bitumen extraction and garnering support to stop extraction and/or pipeline infrastructure, it is in the interest of civil society and Aboriginal stakeholders to ignore any contributions of Canada's bitumen sands to beneficial public services. While this absence may work to silence or create doubt about risks to public services and government revenues in the absence of bitumen production, this power is likely much weaker then the absences in industry ads. Power is referred to here in

the context of the total number of ads exposed to the public. In the study's ad sample, industry stakeholders have four times the number of paid ads as civil society stakeholders, and 28 times the number of paid ads as Aboriginal stakeholders. The second broad risk topic absent from civil society and Aboriginal ads is international relations. This topic is frequently referenced by government stakeholders in reference to the value of importing Canadian oil for secure and responsible trade and North American energy independence and alliance. However, given the emphasis by civil society and Aboriginal stakeholders on explicit threats associated with bitumen production, it is likely that if this topic was referenced, it would be via a contradictory international relations risk frame than those presented by government. Finally, two additional absences in the small sample of Aboriginal advertisements are risk topics concerning goods and products, as well as oil transportation.

Contradictory Risk Frames

The content analysis results revealed that more common that risk topic absences between stakeholders, was the presentation of contradictory risk frames of the same subjects (see Figure 10). This applied to the topics of economy and livelihoods; energy supply; goods and products; lifestyle, culture and community; and the environment. Significantly, the environment was the most contradictory topic illustrating struggle over representations of risk, and is elaborated upon further below.

Figure 10: Contradictory Risk Frames by Stakeholder

Contradictory Risk Frames by Stakeholder		
Broad Risk Topic	**Stakeholders Implicated**	**Contradictory Risk Frame**
Energy supply	• Industry • Government	• Implicit risk of failing to meet global energy demand and the need for secure and reliable energy sources, without bitumen sands development

	• Aboriginal Peoples • Civil Society	• Explicit financial and efficiency risks of bitumen sands development as an energy supply source
Economy & livelihoods	• Industry	• Implicit risk to economy and livelihoods in the absence of bitumen development
	• Aboriginal Peoples • Civil Society	• Explicit risk to economy and livelihoods in failing to transition away from oil toward renewable energy sources
Environment	• Industry • Government	• *No environmental threats* associated with bitumen development*;* • *De-amplification of environmental threats* associated with bitumen development through mitigation strategies
	• Aboriginal Peoples • Civil Society	• Explicit threats to the environment associated with bitumen development
Lifestyle, culture & community	• Industry • Government	• Implicit risk to communities, quality of life, lifestyle experiences, and national pride without bitumen development
	• Aboriginal Peoples • Civil Society	• Explicit risks to communities, culture, quality of life, and patriotism associated with bitumen development
Goods & Products	• Industry	• Implicit risk of losing valued products made possible by Canada's oil
	• Civil Society	• Explicit risks to valued food products due to of bitumen oil development • Explicit risks of ongoing bitumen sands development through the consumption of products that use oil derived from Canada's bitumen oil sands
Oil Transportation	• Industry • Government	• No risk associated with oil transportation via pipelines • Explicit risk associated with not building pipeline infrastructure to get Canada's oil to international markets
	• Civil Society	• Explicit risk associated with inevitable pipeline oil spills

Conflict over the Representation of Environmental Risk

Overall, environmental risks were the most referenced risk topic across all stakeholder groups. Figure 11 illustrates the total number of references to environmental sub-themes

across each stakeholder group (many ads include references to multiple sub-themes), and Figure 12 illustrates the total number of references to each individual sub-theme across stakeholders as a percentage of all ads. On the one hand, the high number of references to the broad environment theme, as well as cross-over among environmental sub-themes, demonstrates a risk topic of potentially common ground across all stakeholder groups. Yet, environmental risks were presented through contradictory frames, illustrating a key topic of political struggle over the meaning of bitumen sands threats. Aboriginal and civil society stakeholders present high level threats to the environment associated with bitumen sands development. In contrast, government and industry de-amplify environmental threat levels through either the presentation of no environmental risk, or implicit reference to environmental risks addressed through mitigation strategies.

Environmental risks were the top risk topic represented in both civil society and Aboriginal ads. Similar to the health risks emphasized by these groups, the environmental

Figure 11: Total Number of Sub-Theme Reference Related to the Broad Theme of Environment

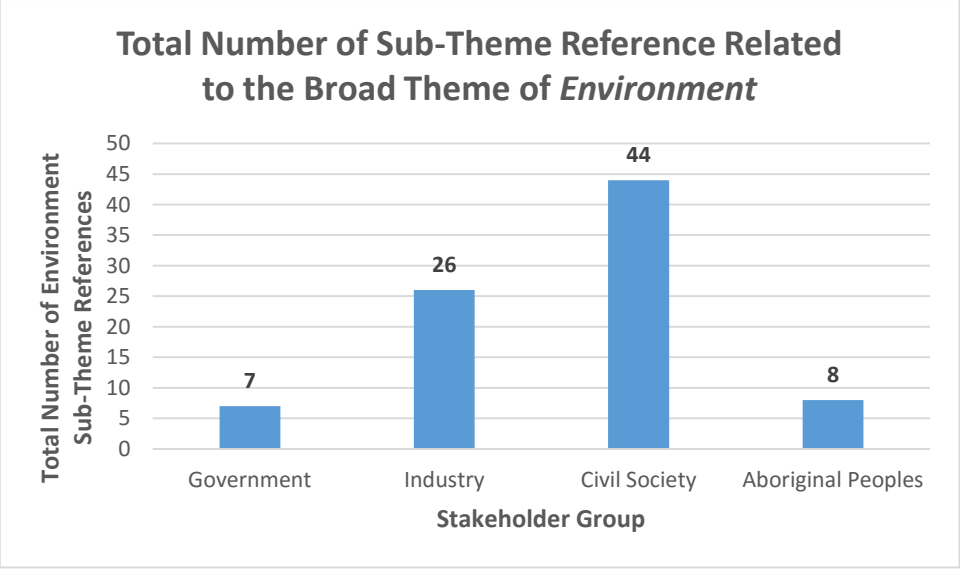
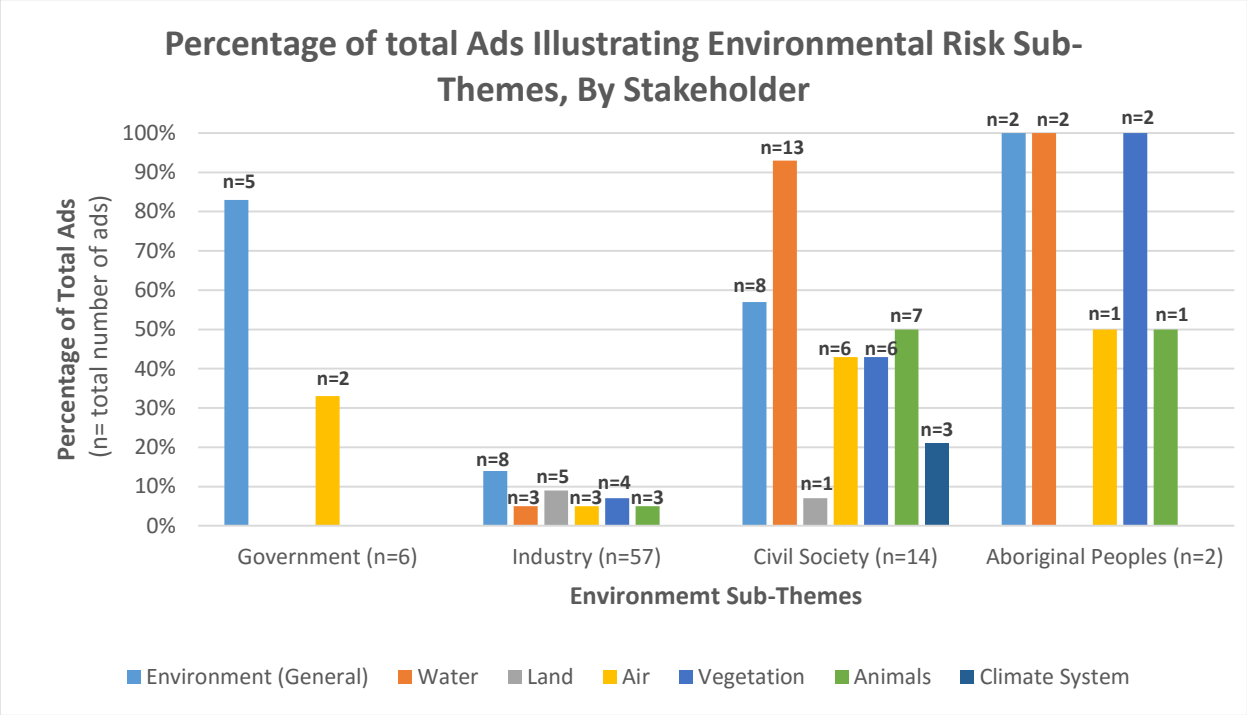


Figure 12: Percentage of Total Ads Illustrating Environmental Risk Su-Themes, By Stakeholder



risks were explicit and tended to insinuate high threat levels, with textual qualifiers like "contaminates", "destroys", "toxic" (ForestEthics, 2009), and "poisons" (ForestEthics, 2011). The government ads de-amplify or distract from these perceived risks, either representing oil development as void of environmental risk (with references like Canada's oil is the "environmentally responsible choice" (Government of Canada, 2004), or redirecting the focus on environmental risk in terms of the increased environmental risks associated with oil development in non-Canadian countries. Thus, the civil society, Aboriginal and government ads present a contradictory representation of environmental risks: explicit environmental risks associated with Canada's bitumen development, versus explicit environmental risks associated with not importing Canada's bitumen oil. Industry similarly presents bitumen development as void of environmental risks. This includes references like

"oil sands development that is safe and responsible" (Cenovus Energy, 2011), and "it's a beautiful, healthy landscape again" in reference to land reclamation (Canadian Association of Petroleum Producers, 2011). Additionally, the industry ads also implicitly acknowledge environmental risks in reference to mitigation strategies, with the effect of de-amplifying the threats, since they are presented as being addressed. Again, there are contradictions even within the sample of industry ads between the representation of "no environmental risk" associated with bitumen development, versus risks associated with bitumen development that are or will be addressed. These contradictory representations are further contradicted by the representation of explicit and highly threatening risks represented by civil society and Aboriginal stakeholders.

The risk mitigation strategies featured to address the environmental risks of bitumen sands development are similarly contradictory. Civil society focuses on moving away from oil development to address explicit risks with reference to strategies like transition / investment in renewable energy, corporate social responsibility efforts, campaign actions, and opposition to oil transportation by pipeline, tanker and rail. Aboriginal stakeholder ads similarly focus on eventually ending bitumen development, with reference to transition / investment in renewable energy; campaign actions; stopping pipeline transport, and international relations. Government ads emphasize investment in innovation and technology, support of decarbonisation efforts, and the prevalence of stringent environmental regulations to mitigate environmental risks to the air. Similar to government, industry stakeholders primarily focus on innovation and technology, as well as land reclamation and time as strategies that will address various environmental risks. Singular references are also made in industry ads to mitigation strategies of testing and monitoring, in-situ oil extraction methods, following set processes, investment in renewable energy, and supporting a diverse energy

portfolio, as well as one reference to further develop Canada's bitumen sands today for profits that can be invested in renewable technology development. Innovation and technology were the most frequently referenced mitigation strategies by both government and industry, consistent with the findings of Gismondi and Davidson (2012, p. 70). Overall, the various environmental mitigation strategies presented in industry and government ads have the effect of de-amplifying environmental risks associated with bitumen sands extraction, to legitimatize ongoing development operations.

KEY BITUMEN SANDS MYTHOLOGIES

The proceeding section aims to further investigate what types of bitumen sands mythologies and underlying ideologies about the relationship between humans and nature are perpetuated to the public. This section assesses illustrative examples of the top most frequently depicted risk topics by each stakeholder group identified during the content analysis. This included: 1) *The environment* (the top-referenced broad risk theme in civil society and Aboriginal ads); 2) *International relations* (the top-referenced broad risk theme in government ads); and 3) *Culture, community and lifestyle* (the top-referenced broad risk theme in industry ads). The results are summarized in Figure 13 below.

Figure 13: Key Bitumen Sands Mythologies & Underlying Environmental Ideologies

Key Bitumen Sands Mythologies & Underlying Environmental Ideologies				
Stakeholder Group	**Top Risk Topic**	**Illustrative Ad**	**Key Bitumen Sands Mythology**	**Underlying Environmental Ideology**
• Government	International Relations	*America and Canada: Friends and Neighbors Advertisement*	Canada provides sustainable and reliable energy.	• Nature as commodity • Sustainability
• Industry	Culture, Community & Lifestyle	*E=Guilty Pleasures*	Oil is essential to blissful domestic experiences.	• Nature as commodity

• Aboriginal Peoples • Civil Society	Environment	*Canada's Avatar Sands*	Canada's tar sands threaten the environment and indigenous communities.	• Nature as divine & requiring protection • Green radicalism

Canada's Tar Sands Threaten the Environment and Indigenous Communities

The advertisement titled *Canada's Avatar Sands* (Figure 14) provides an illustrative example of environmental threats – the most frequent broad risk subject referenced in civil society and Aboriginal stakeholder ads. Published as a "Full-Page ad in Hollywood's Variety" (2016, Sierra Club Canada Foundation), the ad is supported by 51 civil society organizations based in the Canada, the United States, Germany, Mexico, and the United Kingdom, as well as four First Nations Groups. This advertisement perpetuates the mythology that *Canada's tar sands threaten the environment and indigenous communities*. The ad references the 2009 top grossing box office film *Avatar*. *Canada's Avatar Sands* equates the basic storyline of *Avatar* to Canada's bitumen sands development. Set in the future, the *Avatar* film shows "planet Earth (…) attempting to solve its energy issues by mining a rare new mineral (…) called 'Unobtainium'" – found only "on a distant planet, in the very centre of a lush tropical forest" home to "the planet's aboriginal inhabitants" and wildlife. "An American mining corporation" sets up a military base to "drive the natives off their land" and avatars are created to study the native inhabitants and convince them to leave voluntarily (Bradshaw, 2009). *Referencing the film's theme song* "*I see you*", the ad uses the film's premise to highlight the explicit risks of Canada's oil sand development to the environment and indigenous communities. The textual references signify that Canadian director James Cameron "has shined a light on a dark reality": that Canada's tar sands

Figure 14: Canada's Avatar Sands Advertisement

development is like energy development in *Avatar*. In both cases, "indigenous Peoples (…) are endangered by toxic pollution and future oil spills", "Shell, BP, Exxon and other *sky people* are destroying a huge ancient forest", and "giant Hell trucks are used to mine the most polluting, expensive *unobtanium* oil to feed America's addiction". The word "Ava*tar*" plays on the word "tar" to reference Canada's tar sands, a term frequently used by bitumen sands critics (Paskey, Steward & Williams, 2013, p. vi).

The lighting in the ad also works as a signifier – with visualizations of light uncovering the dark reality of the bitumen sands' environmental destruction. Using the same font style as the *Avatar* film, the phrase "tar sands" within the "Avatar Sands" ad title is illuminated a pale blue. The dark blue letters "Canada's Ava" stand out, as a representation of Pandora's land and Na'vi people, but also Canada's land and First Nations. The purer colour of these words in contrast to the pale blue colour of the phrase "tar sands" signifies their purity and need of protection from "tar sands" and "unobtainium" development.

Similar signification applies to the ad's photo images. The images of the bitumen sands mining pit and mining truck are photorealistic, providing authenticity to the visualization of victim (the land) and tool of destruction (a mining truck). Both the mining site and the areas beneath the ad's text are dark. The natural light in the background appears muted and foggy, setting an ominous mood and suggesting a haze lying over the mining pit. The words "tar sands" appear faintly illuminated with unnatural light, as is a mining truck in the bottom right corner of the ad. The ad's text emphasizes explicit environmental threats of "toxic" pollution, potential oil spills that "endanger" local indigenous peoples, and "destruction" of Canada's boreal forests. The image of a bitumen mining site contextualizes a local place, emphasizing "the photograph as witness" and a "record" of the "reality" (Hansen & Machin, 2008, p. 783) of bitumen sands destruction. The aerial shot from above also signifies a high threat level, giving the viewer a god-like view which illustrates the enormity of mining destruction to the earth. Indeed, the viewer's gaze is limited to the mining site, which encompasses the entire image frame; what lies beyond the mining site and what lay there before mining is unknown. Although the viewer is left to imagine what existed there before bitumen mining, he/she imagines that it used to be boreal forest. Canada's boreal forests, which are specifically mentioned and referred to as "ancient forests"

are presented as something "divine (…a) source and embodiment of authenticity, sanity and goodness, to be revered and protected, 'not to be tampered with'" (Hansen, 2010b, p. 157). While bitumen sands workers are absent from view, indigenous communities are presented via textual references as victims endangered by the bitumen sands development and its associated environmental impacts. All of these first-order signs work together to present to audiences the seemingly naturalized mythology that Canada's bitumen sands development threatens the environment and indigenous communities.

The visual authenticity and enormity of the mining pit image, as well as the image's lighting function to illustrate the "dark reality" of bitumen sands development: environmental threats to indigenous communities and boreal forest. Yet, these signs may also illicit feelings of paralysis and fear that may make the viewer feel helpless in addressing these threats, as suggested by Remillard's assessment of the portrayal of Canada's bitumen sands in National Geographic (2013, p. 141). The ad's risk mitigation strategy for addressing these threats is a call to action to "help us stop tar sands development and the pipelines that will lock us into 30 more years of tar sands oil instead of transitioning to a clean energy future". Indeed, the choice presented to the viewer is a binary between transitioning to a clean energy future, or 30 more years of ongoing bitumen sands development threatening the environment and indigenous communities. This dichotomous choice further signifies the ad's naturalized mythology that oil sands threatens the environment and indigenous communities.

The dominant environmental ideologies underlying the mythology that the bitumen sands development threatens the environment and indigenous communities include an ideology of the environment as a source of divinity, emphasizing a second ideology of green radicalism to ensure its protection. As mentioned earlier, the ideology that the environment is "divine", emphasises nature as a "source" of "authenticity, sanity and goodness, to be

revered and protected" (Hansen, 2010b, p. 157). The ad's mythology also promotes the environmental ideology of "green radicalism", which "rejects the basic structure of industrial society" (…) in favour" of alternatives" (Dryzek, 2005, pp. 15-6). While signifying the mythology that bitumen development threatens the environment and local communities, the entire industry of bitumen production is rejected. The ad calls for a "stop" to development and pipeline projects in favour of an alternative clean energy economy to fuel society's energy needs. Although, what actions can be taken to help stop these projects and move to a clean energy economy are not mentioned, beyond going to the ad's campaign site dirtyoilsands.com.

Oil is essential to blissful domestic experiences

Enbridge's E = Guilty Pleasures (Figure 15) provides an illustrative example of the top broad risk topic most referenced by industry stakeholder ads: culture, community and lifestyle. Created as part of Enbridge's "Life Takes Energy Campaign", the ad was published on pages 2 and 3 of the November 2014 Report on Business Magazine, which was a theme issue related to bitumen sands. The ad perpetuates the mythology that *Canada's oil is essential to blissful domestic experiences.* The ad suggests that Enbridge's "energy" (oil) plus the viewer's "energy" (effort) equals "guilty pleasures" and "sweet creations", like gourmet Belgian chocolate cupcakes. The cupcake becomes a signifier for domestic bliss, characterized by "pleasures" and "creations". The ad's text states: "We didn't crack the eggs. Or splurge on the Belgian chocolate. But we did heat the oven to bake the gourmet cupcakes that'll be eaten before they've had the chance to cool. When the energy you invest in life meets the energy we fuel it with, sweet things happen." The implicit risk is the loss of gourmet cupcakes and the domestic experience of their creation and enjoyment, without Enbridge energy. The viewer is directly addressed in the ad and given a sense of power.

Figure 15: E=Guilty Pleasures Advertisement

They are asked to reflect on and feel good about what they can accomplish when they combine their energy with Enbridge energy. The textual references thus illicit a feeling of calmness / enthusiasm about oil and its role in the gourmet baking experience, and the viewer is encouraged to see oil as playing a key role in the experience of baking bliss.

Domestic bliss is also connoted visually. The photorealist image gives the gourmet cupcake scene a sense of realness. The horizontal, close-up shot of the colourful and decadent counter scene focuses the viewer's gaze to iced chocolate cupcakes on a plate, cupcakes on a cooling rack, a bowl of raspberries, a small sieve full of icing sugar resting on a small bow, and a robin's egg blue tea towel against a stone counter backdrop. The image's vibrant and eye-pleasing colours, as well the bright natural light shining on the counter scene help to set a mood of calmness and / or enthusiasm for making and enjoying gourmet

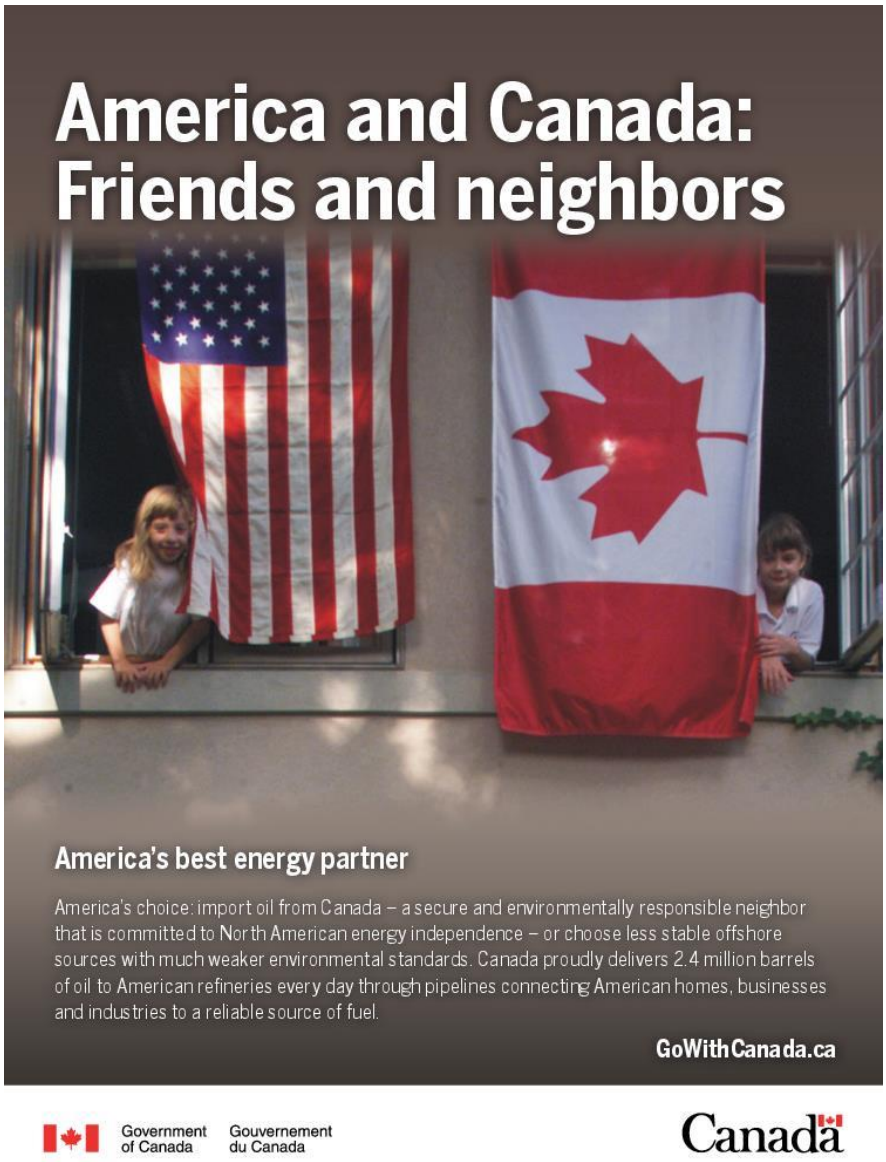
cupcakes. The generic nature of the image is illustrative of "branding" trends which focus less on "describing product details" and more "on loading the product with certain values" (Hansen & Machin, 2008, p. 783). The visualization of this "Nonthreatening imagery" which links "to individual's everyday concerns" may be highly "engaging" for viewers, as found by O'Neill & Nicholson-Cole (2009, p. 355).

Indeed, the viewer's gaze is limited to the baking counter, disconnected from any potential risks associated with oil use and production. Hidden from sight includes the oil's journey from raw resource to cooking fuel. Who and what is impacted by the development, transportation and use of oil in the stove, or any of the other products featured on the counter? While the viewer is asked to connect the value of oil to domestic bliss, they are at the same time disconnected from the production, transportation, and consumption impacts of this oil product and the other products that are part of the ad's baking experience. Particularly interesting is the absence in this ad to any specific oil references, let alone references to bitumen sands. Oil is referred to instead through the generic term of energy, which is a neutral term in regards to public controversy. Thus, the dominant environmental ideologies underlying the mythology that oil is essential to blissful domestic experiences is the "commodification" (Corbett, 2014, p. 558) and "control" (Hansen, 2014, p. 553) of nature. This is a "view of nature as a resource to be dominated, exploited and consumed" (Hansen, 2010b, p. 157) through the harnessing of energy resources for product consumption. This commodification of nature is viewed as positive and "unproblematic" (Corbett, 2014, p. 558) through positive emphasis on domestic bliss.

Canada Provides Sustainable and Reliable Energy

The advertisement titled *America and Canada: Friends and Neighbors* (Figure 16) provides an illustrative example of international relations risks – the risk topic most

Figure 16: America and Canada: Friends and Neighbors Advertisement



referenced by government stakeholder ads. Created for the Government of Canada as part of its "GoWithCanada" campaign, the ad was focus-group tested and aimed at an American audience to promote permit approval for the development of the Keystone XL pipeline. The ad suggests that Canada is America's best energy trade partner, perpetuating the mythology that *Canada provides sustainable and reliable energy*. First, the implicit risks presented in the ad include losing out on a trade partner that would "support North American energy

independence" if America imports oil from countries other than Canada. The contribution of Canada's oil to energy independence signifies its association with energy security and reliability. Second, Canadian energy production is presented as having no associated environmental risks, with the textual disclaimer that Canada is an "environmentally responsible" neighbour. While the word "responsible" is somewhat vague, it never-the-less signifies the sustainability and safety of Canadian oil production. Third, the explicit risks featured in the ad are explicit security and environmental risks of importing oil from countries other than Canada. The risk mitigation strategy emphasized to address these risks is to import Canadian oil. Non-Canadian oil sources are thus framed as less secure and less protective of the environment than Canadian-produced oil, again signifying the sustainability and reliability of Canadian oil sources.

The visual emphasis supports the signification of sustainability and reliability by emphasizing Canada as a friendly neighbor with shared culture values. The ad's image is photorealist, giving the impression of realness. It features a gray building with two smiling children leaning through large open windows. Draped across each window is a large flag: one American and one Canadian. The child on the left is leaning her head into the American flag, and the child on the right is resting her hand on the bottom edge of the Canadian flag. The building is covered in shadow, but this is contrasted with bright, warm light etching: the open window, the girl peeking out the window on the left side, and both flags hanging over the windows. From a mid-level camera shot, the viewer is given a literal picture of two friendly Canadian and American children who are neighbours. The image plays on the special relationship between the two countries, as neighbors and friends, sharing cultural similarities (like the two children pictured in the ad, leaning through open windows). This image, combined with the warm, nostalgic feeling evoked by the light etching the backdrop

emotes a sense of calm / enthusiasm for Canada as a trade partner. Again, similar to the E=Guilty pleasures ad, the visualization is "Nonthreatening" and links to "everyday concerns", which may engage the viewer (O'Neill & Nicholson-Cole, 2009, p. 355). Although, the viewer is not empowered with concrete actions to support Keystone XL besides going to the website GoWithCanada.ca. Overall, the ad signifies Canada as a safe and reliable energy partner.

Interestingly, the ad does not make any reference to Canada's bitumen sands, although this is a key issue tied up with the controversy over the Keystone XL pipeline. The viewer reads about the environmental responsibility and security of Canadian oil, with the viewer's gaze focused on an image two smiling American and Canadian neighbours – peaking out of sun-etched windows – connoting calm emotions and shared values. Yet, hidden from sight is any mention of Canada's bitumen oil development, a key source of oil that would be transported through the Keystone XL pipeline. Again, similar to the illustrative industry ad example, "who" and "what" is impacted by the development, transportation and use of Canadian oil is absent from the ad. While the American viewers of the ad are asked to connect to the "2.4 million barrels" of "reliable" Canadian-derived oil" brought through pipelines to "American homes, businesses and industries" every day, they are disconnected from the production and consumption impacts of this product. Instead, they are presented with the mythology that Canada provides sustainable and reliable energy. Similar to the illustrative industry ad, the environmental ideology underlying this mythology is the commodification and control of nature through the harnessing of oil products, presented as positive and "unproblematic" (Corbett, 2014, p. 558). Yet, the ad also emphasizes the ideology of "sustainability", which "sees economic growth and environmental protection as essentially complimentary" (Dryzek, 2005, pp. 15-6). In this sense, increased Canadian oil

production that is environmental responsible is viewed as not only possible, but complimentary.

BITUMEN SANDS PR AND RISK SOCIETY

According to Beck, in the "risk society", the "dark sides of progress increasingly come to dominate social debate" (Beck, 1995, p. 2). This study found that environmental risk topics were indeed the top overall referenced risk category in absolute numbers across all stakeholders. This was a conflict over the visibility of environmental risks, with conflicting representations across stakeholders. The environment was the top-referenced risk category within civil society and Aboriginal stakeholder ads, which presented a high frequency of explicit environmental threats. In contrast, government and industry stakeholders often present either "no environmental risk", or de-amplify environmental threats through implicit references to environmental risks in the context of their mitigation through various strategies. The risk mitigation strategy most referenced to address these threats is the application of innovation and technology. Additionally, reference to environmental threats is often completely absent from industry ads, with a focus on culture, community and lifestyle.

However, the case thus also illustrates that political conflict in the risk society, as presented in this study's sample of paid still ads, is about more than making environmental risks visible or invisible. Conflictual representations of additional risks associated with industrial society were variously presented across multiple stakeholders including contradictory framing of risks to energy supply; economy and livelihoods; environment; lifestyle, culture and community; goods and products; and oil transportation. Indeed, conflictual representation was a more prominent pattern than risk absences. The key risk topic absences of note were the absence of health risks in government and industry ads, and the absence of public service and government revenue; and international relations risk in

civil society and Aboriginal ads. Such opposing and often one-sided frames were further illustrated by the mythologies of illustrative ads from the top referenced risk categories among each stakeholder group. The mythology that *Canada's Tar Sands Threaten the Environment and Indigenous Communities* versus the mythologies that *Oil is Essential to Blissful Domestic Experiences* and that *Canada Provides Sustainable and Reliable Energy* being reinforced to the public through advertisements are not well suited to balanced debate and discussion. They hide fundamentally opposing ideologies concerning the relationship between humans and nature. As mentioned earlier, this may have negative implications for public perception, dialogue and action concerning future bitumen sands development policy, given the emotional and unconscious power of imagery. Further, the perpetuation of these mythologies are tipped in favour of industry advertisements in regards to power in resources, illustrated by the unbalanced number of paid ads among each stakeholder group available in this study's sample. The less threatening mythologies presented in government and industry ads may also be more engaging to the public.

Finally, as a site of "social contestation", the case does show a conflict "between those afflicted by risks and those who profit from them" (Beck, 1992, p. 46). The risks highlighted by industry tended to highlight: implicit risks (something related to oil presented as essential, that would be risked with decreased oil supply) the absence of risks, and strategies to mitigate risks, with only two references to explicit risks. Civil society and Aboriginal stakeholders, on the other hand, most often referenced explicit risks (93% and 100% of ads, respectively). Significantly, 100% of the government stakeholder ads present "no risk" associated with Canada's bitumen development (more than the overall percentage of industry ads), and 50% of the ads present explicit risks associated with not developing/importing Canadian bitumen sands. The Harper government in power during the

time of data collection was clearly an active player in this media conflict on the side of industry, which may have implications for public trust and confidence in institutional processes for energy infrastructure development. Further, Beck's warning that the "power of media publicity" may be constrained by concentrations in capital (Beck, Ibid, p. 198) holds true in the case of organizational economic constraints for advertising. It is striking that the study's sample contained four times as many industry ads as civil society ads and 28 times as many industry ads as Aboriginal stakeholder ads. The Aboriginal stakeholder group is the least represented in this media conflict, likely related to power differentials in the capital to spend on advertising campaigns. Additionally, many of the civil society ads and all of the Aboriginal stakeholder ads involved partnerships of multiple organizations – illustrating strategies to increase power in the context of the network society and to pool limited resources.

Section 5: Conclusion

Alberta's bitumen sands are a fundamentally mediated issue for most people (Gismondi & Davidson, 2011, p. 39). Recent work has focused on bitumen sands discourses through: longitudinal studies of trends and changes over time, news media and magazine representations, as well as audience perceptions of industry legitimacy. This study aimed to shed new light on the representation of the bitumen sands through the lens of risk, and applied to the genre of advertisements collected online. Understanding and exposing the representation of risks and the perpetuation of key bitumen sands "myths" and their underlying ideologies concerning the role between humans and nature, is important for informed public discussion and policy development. It allows for challenges to ideologies through the identification of "symbolic constructions that continually reinforce

counterproductive environmental perceptions" (Cantrill, 2014, p. 201). The study's findings are limited in regards to sample representativeness due to the non-probability sampling method, so the results are illustrative in nature.

The content analysis investigated what types of risks are depicted in bitumen sands related still advertisements by Aboriginal Peoples, government, industry, and civil society stakeholders, in order of frequency. The results showed that the most frequently referenced broad risk category in each stakeholder group was: the environment for civil society and Aboriginal stakeholder groups; culture, lifestyle and community for industry stakeholders; and international relations for government stakeholders. The content analysis also investigated how the top risk types in each stakeholder group are represented across stakeholder groups, with a particular focus on absences. The study identified a number of contradictory presentations of similar risk topics across stakeholders, as well as risk absences and de-amplifications. A striking absence of risk identified in the civil society and Aboriginal ads were risks to health and Aboriginal communities. Both of these risks were absent for the government and industry ads, which may have the effect of silencing or causing doubt on these issues. On the other hand, topics such as the role of oil in the Canadian economy, federal government revenue, or particular goods and products, for example, are mostly absent from civil society ads. The environment was the most contested risk topic, illuminating a conflict over the visibility of environmental risks, with conflicting representations across stakeholders including explicit threats versus threat absences through "no risk" frames, and de-amplification of environmental threats through implicit references to environmental risks that are addressed through mitigation strategies.

The study's discourse analysis focused on illustrative examples of ads featuring the most referenced broad risk categories, and assessed what types of bitumen sands mythologies

and underlying ideologies about the relationship between humans and nature are perpetuated by each stakeholder group. The civil society mythology that *Canada's tar ands threaten the environment and indigenous communities,* highlights explicit threats from bitumen sands development, ignoring any positive contributions of bitumen sands operations to society. This mythology rejects an oil-driven energy economy in favour clean energy alternatives. The industry mythology that *oil is essential to blissful domestic experiences* supports the ideology that nature is for commodification. This commodification provides profits to the implicated companies and their shareholders, while the mythology distracts from and ignores risks highlighted by other stakeholder groups, connecting the viewer to feel-good life-style experiences. The government mythology that *Canada provides sustainable and reliable energy* also supports the ideology of nature as commodification, which again, provides government revenues. But the mythology also supports the ideology of sustainability, which de-amplifies concerns of environmental risk through claims that economic growth from bitumen sands development is complimentary to environmental protection. Taken together, these bitumen sand mythologies present a risk conflict over future bitumen sands development between the risks to the environment and indigenous communities advocated by civil society and Aboriginal groups threatened by these risks; versus risks to domestic bliss and sustainable, reliable energy provision advocated by industry and government, who profit on continued bitumen sands development. These mythologies are under-cut by fundamentally opposing ideologies concerning the relationship between humans and nature: nature as commodification, compatible with sustainability; versus nature as protection, incompatible with an oil based economy. These opposing and one-side mythologies reinforced to the public present conflictual messaging not well suited to balanced debate and discussion. Further, the defining power to make risk visible is tipped in favour of industry

advertisements in regards to the number of paid ads available to the public in this study's sample, which may also be more engaging to the public. The least visible group was Aboriginal stakeholders. In the context of the Risk Society, these results provide empirical evidence of the power differentials and strategies used across stakeholder groups to persuade the public over the absence/visibility and framing of key bitumen sands risks. The results further show the underlying environmental ideologies these representations sustain and reproduce.

Understanding the representation of risk through visual advertisements is particularly important for future research to understand public perceptions and actions concerning future policies on bitumen sands development. Advertisements are a particularly important genre of study due to their pervasiveness, political intention, and potential for unconscious emotional persuasion. Future research should build on this study's findings to investigate the impact (if any) of the representation of bitumen sands risks on both public perception and action in Canada. Additional areas for further research but out of scope for the purposes of this study include assessing the lived experiences of bitumen sands risks, and distinctions "between risk as a reality to individuals and groups and the perception of risk" (Eldridge, 2012, p. 110). Future research should also extend this study's assessment to unpaid ads, which may provide a more representative sample of the power of ads in the network society.

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Appendix 1: Risk Types & Subjects by Stakeholder Group

Risk Types by Stakeholder Group				
	Explicit Risk	**Implicit Risk**	**No Risk**	**Risk Mitigation Strategy**
Government (Federal & Provincial)				
Total ads representing risk subject	**3**	**6**	**6**	**6**
Total ads	**6**	**6**	**6**	**6**
% of total ads illustrating risk subject	**50%**	**100%**	**100%**	**100%**
Industry				
Total ads representing risk subject	**2**	**52**	**13**	**22**
Total ads	**57**	**57**	**57**	**57**
% of total ads illustrating risk subject	**4%**	**91%**	**23%**	**39%**
Civil Society (Anti-bitumen sands)				
Total Ads representing risk subject	**13**	**6**	**0**	**13**
Total ads	**14**	**14**	**14**	**14**
% of total ads illustrating risk subject	**93%**	**43%**	**0%**	**93%**
Aboriginal Peoples				
Total Ads representing risk subject	**2**	**1**	**0**	**2**
Total ads	**2**	**2**	**2**	**2**
% of total ads illustrating risk subject	**100%**	**50%**	**0%**	**100%**

Broad Risk Subject: Environment								
	Total # of sub-theme references	Environment (general)	Water	Land	Air	Vegetation	Animals	Climate System
Government (Federal & Provincial)								
Total ads representing risk subject	7	**5**	**0**	**0**	**2**	**0**	**0**	**0**
Total ads		**6**	**6**	**6**	**6**	**6**	**6**	**6**
% of total ads illustrating risk subject		**83%**	**0%**	**0%**	**33%**	**0%**	**0%**	**0%**
Industry								
Total ads representing risk subject	26	**8**	**3**	**5**	**3**	**4**	**3**	**0**
Total ads		**57**	**57**	**57**	**57**	**57**	**57**	**57**
% of total ads illustrating risk subject		**14%**	**5%**	**9%**	**5%**	**7%**	**5%**	**0%**
Civil Society (Anti-bitumen sands)								
Total Ads representing risk subject	44	**8**	**13**	**1**	**6**	**6**	**7**	**3**
Total ads		**14**	**14**	**14**	**14**	**14**	**14**	**14**
% of total ads illustrating risk subject		**57%**	**93%**	**7%**	**43%**	**43%**	**50%**	**21%**
Aboriginal Peoples								
Total Ads representing risk subject	8	**2**	**2**	**0**	**1**	**2**	**1**	**0**
Total ads		**2**	**2**	**2**	**2**	**2**	**2**	**2**
% of total ads illustrating risk subject		**100%**	**100%**	**0%**	**50%**	**100%**	**50%**	**0%**

Broad Risk Subject: Health			
	Total # of sub-theme references	Health (general)	Cancers
Government (Federal & Provincial)			
Total ads representing risk subject	0	0	0
Total ads		6	6
% of total ads illustrating risk subject		0%	0%
Industry			
Total ads representing risk subject	0	0	0
Total ads		57	57
% of total ads illustrating risk subject		0%	0%
Civil Society (Anti-bitumen sands)			
Total Ads representing risk subject	6	5	1
Total ads		14	14
% of total ads illustrating risk subject		36%	7%
Aboriginal Peoples			
Total Ads representing risk subject	2	1	1
Total ads		2	2
% of total ads illustrating risk subject		50%	50%

Broad Risk Subject: International Relations			
	Total # of sub-theme references	Trade	North American Energy Independence / Alliance
Government (Federal & Provincial)			
Total ads representing risk subject	9	5	4
Total ads		6	6
% of total ads illustrating risk subject		83%	67%
Industry			
Total ads representing risk subject	1	1	0
Total ads		57	57
% of total ads illustrating risk subject		2%	0%
Civil Society (Anti-bitumen sands)			
Total Ads representing risk subject	0	0	0
Total ads		14	14
% of total ads illustrating risk subject		0%	0%
Aboriginal Peoples			
Total Ads representing risk subject	0	0	0
Total ads		2	2
% of total ads illustrating risk subject		0%	0%

Broad Risk Subject: Economy / Livelihood						
	Total # of sub-theme references	**Jobs (individuals)**	**Economic growth (Canadian businesses)**	**Economic Growth (National - Canada or US)**	**Economic Growth (Regional, Canada)**	**Economic Growth (Aboriginal Peoples)**
Government (Federal & Provincial)						
Total ads representing risk subject	0	**0**	**0**	**0**	**0**	**0**
Total ads		**6**	**6**	**6**	**6**	**6**
% of total ads illustrating risk subject		**0%**	**0%**	**0%**	**0%**	**0%**
Industry						
Total ads representing risk subject	39	**16**	**6**	**10**	**6**	**1**
Total ads		**57**	**57**	**57**	**57**	**57**
% of total ads illustrating risk subject		**28%**	**11%**	**18%**	**11%**	**2%**
Civil Society (Anti-bitumen sands)						
Total Ads representing risk subject	2	**1**	**0**	**1**	**0**	**0**
Total ads		**14**	**14**	**14**	**14**	**14**
% of total ads illustrating risk subject		**7%**	**0%**	**7%**	**0%**	**0%**
Aboriginal Peoples						
Total Ads representing risk subject	2	**1**	**0**	**1**	**0**	**0**
Total ads	2	**2**	**2**	**2**	**2**	**2**
% of total ads illustrating risk subject		**50%**	**0%**	**50%**	**0%**	**0%**

Broad Risk Subject: Culture / Community/ Lifestyle												
	Total # of sub-theme references	Communities / Community development	Quality of Life	Culture (General)	Patriotism	Vacations / Special event travel	Relationship Experiences (Family / Romance / Friendship)	Food Experiences	Ideas / Imagination	Experience of achievement through perseverance / Act of hard work	Comforting / nostalgic experiences due to warmth or cold	Independence / Freedom
Government (Federal & Provincial)												
Total ads representing risk subject	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total ads		**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
% of total ads illustrating risk subject		**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**
Industry												
Total ads representing risk subject	**52**	**7**	**12**	**0**	**7**	**3**	**8**	**3**	**2**	**6**	**3**	**1**
Total ads		**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**
% of total ads illustrating risk subject		**12%**	**21%**	**0%**	**12%**	**5%**	**14%**	**5%**	**4%**	**11%**	**5%**	**2%**
Civil Society (Anti-bitumen sands)												
Total Ads representing risk subject	**9**	**2**	**2**	**4**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total ads		**14**	**14**	**14**	**14**	**14**	**14**	**14**	**14**	**14**	**14**	**14**
% of total ads illustrating risk subject		**14%**	**14%**	**29%**	**29%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**
Aboriginal Peoples												
Total Ads representing risk subject	**3**	**1**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total ads		**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
% of total ads illustrating risk subject		**50%**	**50%**	**0%**	**50%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**

Broad Risk Subject: Goods & Products (home & industrial)										
	Total # of sub-theme references	Energy / Oil Products (general)	Vehicles	Communication Devices	Food Products	Clothing	Home Power / Heating Products	Industrial Power / Heating Products	Entertainment Products	Medical Products
Government (Federal & Provincial)										
Total ads representing risk subject	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total ads		**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
% of total ads illustrating risk subject		**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**
Industry										
Total ads representing risk subject	**34**	**5**	**14**	**3**	**3**	**1**	**2**	**2**	**2**	**2**
Total ads		**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**
% of total ads illustrating risk subject		**9%**	**25%**	**5%**	**5%**	**2%**	**4%**	**4%**	**4%**	**4%**
Civil Society (Anti-bitumen sands)										
Total Ads representing risk subject	**6**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**
Total ads		**14**	**14**	**14**	**14**	**14**	**14**	**14**	**14**	**14**
% of total ads illustrating risk subject		**0%**	**0%**	**0%**	**43%**	**0%**	**0%**	**0%**	**0%**	**0%**
Aboriginal Peoples										
Total Ads representing risk subject	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total ads	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
% of total ads illustrating risk subject		**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**

Broad Risk Subject: Public Services / Federal Government Revenue						
	Total # of sub-theme references	**Healthcare**	**Education**	**Tax Revenues / Royalty Payments**	**Social Programs**	**Infrastructure**
Government (Federal & Provincial)						
Total ads representing risk subject	**0**	**0**	**0**	**0**	**0**	**0**
Total ads		**6**	**6**	**6**	**6**	**6**
% of total ads illustrating risk subject		**0%**	**0%**	**0%**	**0%**	**0%**
Industry						
Total ads representing risk subject	**14**	**4**	**4**	**3**	**1**	**2**
Total ads		**57**	**57**	**57**	**57**	**57**
% of total ads illustrating risk subject		**7%**	**7%**	**5%**	**2%**	**4%**
Civil Society (Anti-bitumen sands)						
Total Ads representing risk subject	**0**	**0**	**0**	**0**	**0**	**0**
Total ads		**14**	**14**	**14**	**14**	**14**
% of total ads illustrating risk subject		**0%**	**0%**	**0%**	**0%**	**0%**
Aboriginal Peoples						
Total Ads representing risk subject	**0**	**0**	**0**	**0**	**0**	**0**
Total ads		**2**	**2**	**2**	**2**	**2**
% of total ads illustrating risk subject		**0%**	**0%**	**0%**	**0%**	**0%**

Broad Risk Subject: Energy Supply					
	Total # of sub-theme references	Global Energy Demand / Needs	Energy Reliability / Security	Energy Financial Costs	Energy Efficiency
Government (Federal & Provincial)					
Total ads representing risk subject	6	**2**	**4**	**0**	**0**
Total ads		**6**	**6**	**6**	**6**
% of total ads illustrating risk subject		**33%**	**67%**	**0%**	**0%**
Industry					
Total ads representing risk subject	7	**6**	**1**	**0**	**0**
Total ads		**57**	**57**	**57**	**57**
% of total ads illustrating risk subject		**11%**	**2%**	**0%**	**0%**
Civil Society (Anti-bitumen sands)					
Total Ads representing risk subject	2	**0**	**0**	**1**	**1**
Total ads		**14**	**14**	**14**	**14**
% of total ads illustrating risk subject		**0%**	**0%**	**7%**	**7%**
Aboriginal Peoples					
Total Ads representing risk subject	2	**0**	**0**	**1**	**1**
Total ads		**2**	**2**	**2**	**2**
% of total ads illustrating risk subject		**0%**	**0%**	**50%**	**50%**

Broad Risk Subject: Oil Transportation					
	Total # of sub-theme references	**Oil Transportation (General)**	**Pipelines**	**Tankers**	**Rail**
Government (Federal & Provincial)					
Total ads representing risk subject	**1**	**0**	**1**	**0**	**0**
Total ads		**6**	**6**	**6**	**6**
% of total ads illustrating risk subject		**0%**	**17%**	**0%**	**0%**
Industry					
Total ads representing risk subject	**8**	**2**	**6**	**0**	**0**
Total ads		**57**	**57**	**57**	**57**
% of total ads illustrating risk subject		**4%**	**11%**	**0%**	**0%**
Civil Society (Anti-bitumen sands)					
Total Ads representing risk subject	**15**	**0**	**5**	**5**	**5**
Total ads		**14**	**14**	**14**	**14**
% of total ads illustrating risk subject		**0%**	**36%**	**36%**	**36%**
Aboriginal Peoples					
Total Ads representing risk subject	**0**	**0**	**0**	**0**	**0**
Total ads		**2**	**2**	**2**	**2**
% of total ads illustrating risk subject		**0%**	**0%**	**0%**	**0%**

Broad Risk Subject: Democracy / Public Relations	
Government (Federal & Provincial)	
Total ads representing risk subject	**1**
Total ads	**6**
% of total ads illustrating risk subject	**17%**
Industry	
Total ads representing risk subject	**1**
Total ads	**57**
% of total ads illustrating risk subject	**2%**
Civil Society (Anti-bitumen sands)	
Total Ads representing risk subject	**4**
Total ads	**14**
% of total ads illustrating risk subject	**29%**
Aboriginal Peoples	
Total Ads representing risk subject	**0**
Total ads	**2**
% of total ads illustrating risk subject	**0%**

Risk Mitigation Actions											
	Total # of sub-theme references	R&D / Innovation	Development Future / Pace	Monitoring / Testing	Time	Land Reclamation	In-Situ Mining	Transition / Investment in Renewable Energy	Decarbonisation Efforts / Carbon Price / CCS	Energy Efficiency	Diverse Energy Portfolio
Government (Federal & Provincial)											
Total ads representing risk subject	12	2	0	0	0	0	0	1	1	1	0
Total ads		6	6	6	6	6	6	6	6	6	6
% of total ads illustrating risk subject		33%	0%	0%	0%	0%	0%	17%	17%	17%	0%
Industry											
Total ads representing risk subject	35	10	1	1	3	3	1	1	0	0	1
Total ads		57	57	57	57	57	57	57	57	57	57
% of total ads illustrating risk subject		18%	2%	2%	5%	5%	2%	2%	0%	0%	2%
Civil Society (Anti-bitumen sands)											
Total Ads representing risk subject	33	0	1	0	0	0	0	2	0	0	0
Total ads		14	14	14	14	14	14	14	14	14	14
% of total ads illustrating risk subject		0%	7%	0%	0%	0%	0%	14%	0%	0%	0%
Aboriginal Peoples											
Total Ads representing risk subject	7	0	1	0	0	0	0	2	0	0	0
Total ads		2	2	2	2	2	2	2	2	2	2
% of total ads illustrating risk subject		0%	50%	0%	0%	0%	0%	100%	0%	0%	0%

Risk Mitigation Actions (continued)												
	CSR Efforts	Processes (General)	Regulations	Supply of global energy products	Campaign Action	Global Trade	Pipeline Transport	Tanker Transport	Rail Transport	Rational / Factual Political debate	Community Engagement / Consultation	International Relations
Government (Federal & Provincial)												
Total ads representing risk subject	**0**	**0**	**1**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
Total ads	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
% of total ads illustrating risk subject	**0%**	**0%**	**17%**	**83%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**17%**
Industry												
Total ads representing risk subject	**2**	**1**	**0**	**3**	**3**	**2**	**1**	**0**	**0**	**1**	**1**	**0**
Total ads	**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**	**57**
% of total ads illustrating risk subject	**4%**	**2%**	**0%**	**5%**	**5%**	**4%**	**2%**	**0%**	**0%**	**2%**	**2%**	**0%**
Civil Society (Anti-bitumen sands)												
Total Ads representing risk subject	**4**	**0**	**0**	**0**	**7**	**0**	**7**	**6**	**5**	**0**	**0**	**1**
Total ads	**14**	**14**	**14**	**14**	**14**	**14**	**14**	**14**	**14**	**14**	**14**	**14**
% of total ads illustrating risk subject	**29%**	**0%**	**0%**	**0%**	**50%**	**0%**	**50%**	**43%**	**36%**	**0%**	**0%**	**7%**
Aboriginal Peoples												
Total Ads representing risk subject	**0**	**0**	**0**	**0**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**1**
Total ads	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
% of total ads illustrating risk subject	**0%**	**0%**	**0%**	**0%**	**100%**	**0%**	**50%**	**0%**	**0%**	**0%**	**0%**	**50%**