

# CLEAN ENERGY DISCOURSE IN BRITISH COLUMBIA, 1980-2014

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NICHOLE DUSYK

**I**N 2007, THE GOVERNMENT of British Columbia introduced new climate and clean energy policies. The high-profile climate policy set the ambitious target of reducing greenhouse gas emissions by 33 percent, of then current levels, by the year 2020. As the policy was elaborated in the following months, additional goals of an 80 percent reduction in emissions by 2050 and a carbon-neutral public sector by 2010 (later revised to 2012) were added. The climate policy garnered considerable public attention and spawned often vigorous debate, but less attention was given to the clean energy policy. Under the leadership of two premiers, first Gordon Campbell and then Christy Clark, however, the clean energy policy has become both high profile and controversial, especially as it has been adopted and modified in the promotion of liquefied natural gas (LNG) exports.

In this article, I trace the clean energy discourse in provincial energy policy from 1980 to 2014 with an emphasis on the post-2007 clean energy “storyline” (Hajer 1995). My analysis focuses on the interaction of energy infrastructure and policy discourse. The term “clean energy” occurred in provincial energy policy discourse before 2007 but thereafter it became the dominant energy storyline, serving as a fundamental link between the energy sector and the provincial climate policy. Not unexpectedly, when first announced in 2007, the clean energy policy made numerous commitments but lacked specificity about how they would be met. Nevertheless it had significant potential to affect the production and use of energy in the province. In part this was because, for the first time, it integrated a substantive environmental imperative into provincial energy policy. The legacy of the past is strong, however, and as the policy was implemented it became increasingly aligned with historical development patterns in the province. By 2014, the clean energy storyline had become a tool to expand both large hydroelectricity and natural gas extraction in

the province. This posed problems for two reasons. First, the emissions associated with expanding natural gas production and processing threaten the provincial climate targets (Glave and Moorhead 2013). In effect, the clean energy storyline now works against the climate policy rather than supporting it. Second, and more subtly, the storyline has reframed large hydroelectricity as an unproblematic fix to the province's energy needs – most notably for “cleaning up” the natural gas industry. Thus the politics of large hydro have been reframed to marginalize other, potentially significant, environmental and social costs of developing large hydroelectricity – costs such as the loss of agricultural land and wildlife corridors and infringing on the land and treaty rights of First Nations. Initially holding the potential for a new policy trajectory guided by environmental imperatives, the clean energy storyline has become a rationale for projects and policy approaches that are reminiscent of the previous century. It offers a clean energy future that looks conspicuously like the past.

#### ENERGY POLICY DISCOURSE

Discourse can be understood as “a particular way of representing the world” (Phillips and Jørgensen 2002, 143). More specifically, it is an “an ensemble of ideas, concepts, and categorizations that is produced, reproduced, and transformed in a particular set of practices and through which meaning is given to physical and social realities” (Hajer 1995, 60). Although focused on language, the “discursive constitution of society” is grounded in and constitutive of existing social practices (Fairclough 1992, 66). As such, discourse sets the “conditions of possibility” (Foucault 2002, 46) for social and material realities – including how we interpret reality and the futures we imagine possible.

The purpose of discourse analysis is to trace “linguistic regularity” in discussions or debates (Hajer and Versteeg 2005, 175). Discourse analysis of policy texts illustrates how language, argument, and stories frame policy problems, legitimate certain policy strategies, and enact normative presuppositions (Fischer 2003, 14). Discourse analytic theory posits that policy-making is a messy, non-linear process influenced by language and debate at every point (Fischer 2003). Thus an examination of the discourse of policy debates can illuminate the mechanics of policy change as well as the narratives and assumptions that are embedded within policy strategies.

Maarten Hajer uses the term “storyline” to describe the narratives that reduce complex discursive spaces to manageable form.<sup>1</sup> By simplifying, storylines help to facilitate agreement between actors while simultaneously helping to rationalize a specific approach to a problem (Hajer 1995). The success of particular policy strategies can be linked to the legitimacy and effectiveness of particular storylines, including the extent to which they become a rallying point for policy actors (Rydin 2003). Thus storylines act to “create social order within a given domain by serving as devices through which actors are positioned and ideas defined and linked together” (Scrase and Ockwell 2010, 2228).

In the energy policy sphere, discourse analysis has been used to characterize public and policy debate regarding wind energy (Jessup 2010; Mander 2008; Szarka 2004), solar energy (Hunold and Leitner 2011), coal mining (Usher 2013), shale gas extraction (Cotton, Rattle, and Van Alstine 2014), energy efficiency (Lovell 2007, 2008), and climate change (Bulkeley 2000; Lovell, Bulkeley, and Owens 2009). These analyses show how the discursive framing and mobilization of storylines can shape the overall trajectory of state energy policy by influencing, for example, whether traditional fossil fuel pathways are sustained or overturned (Scrase and Ockwell 2010). Demonstrating some of the high-level implications of policy discourse, one study of energy and climate policy in the United Kingdom concludes that climate change storylines have converged with energy policy storylines and that climate change has, in consequence, been framed as a problem that can be solved within present energy regimes rather than one requiring transformation of the energy sector (Lovell, Bulkeley, and Owens 2009).

Policy-making is not solely a discursive process; it is also linked to material objects and infrastructure (Hommels 2005; Lovell 2007, 2008). This is a two-way process with discourse influencing materiality and vice versa (Lovell 2007). Materiality can stabilize policy processes by narrowing the terms of debate and limiting the options that are explored (Lovell 2007). In British Columbia, the legacy of large-scale hydroelectric development by the Crown corporation BC Hydro and Power Authority circumscribes debate about new electricity supply in the province by

<sup>1</sup> For clarity I distinguish between the clean energy “storyline” and historical “narratives” in BC energy policy. The difference between a storyline and a narrative is one of emphasis and analytical focus rather than any substantive difference. In practice there are a number of concurrent narratives in provincial energy policy. At any one moment, particular narratives may rise to prominence and become a guiding rationale for policy intervention. As such, it can be called a storyline since it takes a specific and easily identifiable form (such as clean energy, public power, or energy security) and serves as a rallying point for or against particular forms of policy intervention.

providing a functioning model and setting a baseline for the assessment of cost, ownership models, energy sources, and policy tools.

On the other hand, policy discourse contributes to the construction of technologies and infrastructures – to how material objects are designed, how they evolve over time, and the meanings that are ascribed to them. Considering urban change, Anique Hommels (2005) argues that the obduracy of urban infrastructure is not an essential physical property but, rather, a negotiated and evolving characteristic. In other words, the ability to change infrastructure is related, in important ways, to the discourses that are active in the policy arena. Heather Lovell examines the relationship between discourse and innovation in the housing sector in the United Kingdom. Her analysis reveals how the narrative of low-energy housing innovation has been simplified by the low-carbon storyline as elements that do not fit that storyline are omitted and technical innovations are emphasized over social or administrative solutions (Lovell 2008).

Discourse is inherently collective and therefore beyond the control of any single actor. Nevertheless, individuals and organizations use discourse to frame and interpret specific policies and technologies. Influential actors, such as government officials and ministries, can dictate the language of policy and regulation and thus strategically define and position technologies and sectors. An analysis of the nascent shale gas industry in the United Kingdom found that the government avoided the prevalent cleanliness/dirtiness storyline of shale gas and instead attempted to limit debate about the industry to economic concerns, regulatory requirements, and the distribution of benefits (Cotton, Rattle, and Van Alstine 2014). Although public debate has constructed the industry as inherently dirty or tried to position it as cleaner than other options, policy debates within government have sought to construct the industry in more neutral terms, without the moral and spatial orderings implicit in the cleanliness debate. All of these examples illustrate how policy actors actively (although not necessarily consciously or strategically) employ discourse to position and, often quite literally, construct technologies and infrastructures.

ENERGY POLICY IN BRITISH COLUMBIA<sup>2</sup>

In Canada, energy planning is a provincial responsibility. As a result, policy and infrastructure vary from province to province, according to the resources available, the policy tradition, existing infrastructure, and the political orientation of individual governments. British Columbia is one of the country's "hydroelectric provinces" – characterized by large-scale public development of hydroelectric resources in the mid-twentieth century. Envisioned and championed by Premier W.A.C. Bennett, who was in office from 1952 to 1972, the hydroelectric build-out began in the early 1960s and spanned two decades. It was undertaken by the Crown corporation British Columbia Hydro and Power Authority (BC Hydro) according to the "two rivers policy," which focused hydroelectric development exclusively on the Peace and Columbia River basins. The scale and concentration of development has resulted in significant environmental and social costs. The W.A.C. Bennett Dam on the Peace River, the first and largest dam constructed, flooded 141,000 hectares of land and affected communities for hundreds of kilometres up- and downstream of the dam (Pollon and Matheson 1989). The impacts reverberated through the communities of Hudson's Hope and Fort St. John and were particularly acute for First Nations – both in the immediate vicinity and in northern Alberta (Loo 2007). By the mid-1970s, public opposition to hydroelectric development was coalescing, and the need to regulate and "tame" BC Hydro's construction spree was evident (Smith 1988). Enacted in 1980, the Utilities Commission Act (R.S.B.C. 1996 c.473) created the British Columbia Utilities Commission (BCUC) and gave it a mandate to ensure new electricity projects were in the public interest. The first test of the regulatory regime was a two-year review (1981-83) of the Site C Project, the third dam planned for the Peace River. The review was pivotal. The BCUC recommended the project be delayed, and, consequently, the provincial cabinet did not approve it. The decision effectively halted the hydroelectric build-out, and no large hydroelectric impoundments have been built since. However, the legacy of the hydroelectric build-out remains to this day, institutionally

<sup>2</sup> The focus of this analysis is government discourse (as opposed to media or public discourse). The primary empirical sources are the four energy plans published by the BC government, a number of related strategies, and the provincial throne speeches (which announce government priorities and agendas for a given legislative session). These documents were first quantitatively coded to assess the frequency of terms and to track explicit definitions. Once quantitative emphases were established, they were qualitatively coded to identify key themes and to track the underpinning narratives. The initial findings were elaborated with additional analysis of unclassified, publicly available texts, including websites, press releases, and media articles.

in BC Hydro and in the existing hydroelectric infrastructure. In 2009, BC Hydro produced approximately 65 percent of the province's electricity (Hoberg and Sopinka 2011), and a further 20 percent was derived from other hydroelectric producers (Ministry of Energy Mines and Natural Gas n.d.)

British Columbia is also the second largest oil and gas producing province in the country, second only to Alberta. The development of unconventional gas resources, such as shale gas, in the past fifteen years has led to the rapid expansion of the gas sector; production increased by 42 percent between 2008 and 2013 (British Columbia Oil and Gas Commission 2015). In 2013, conventional and unconventional natural gas production in the province was nearly 44 billion cubic metres, with current production levels projected to last for twenty-seven years (British Columbia Oil and Gas Commission 2015). Due to limited domestic demand, this sector is tied to the proposed liquefied natural gas (LNG) industry; its future expansion depends on natural gas produced in the province's northeast being transported via pipeline to facilities on the west coast to be liquefied (by cooling to minus 162 degrees Celsius) and transported on specialized tankers to Asian markets.

Within the province, energy infrastructure and service has developed hand in hand with resource extraction. Historically, this was related to developing the energy sector as an industry and to developing energy services, particularly electricity, as an incentive to industries such as mining and forestry; indeed, the vision of Premier Bennett was of an industrialized north fuelling the province (Loo 2007). As a result, two ongoing narratives have long supported energy development in the province.<sup>3</sup> The first links economic opportunity to energy development. The second emphasizes energy security (and its variable, evolving meanings) by suggesting that energy development is undertaken to maintain low-cost, reliable electricity in the province for household, commercial, and (especially) industrial use (Dusyk 2013).

Over time, three more narratives supporting energy development have been added to provincial energy policies. The first relates to electricity export. Export was initially justified as an economically efficient way to handle surplus electricity (Froschauer 1999). This narrative began to

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<sup>3</sup> Historically, there are two large energy sectors in the province: (1) electricity and (2) oil and gas. Both are supported and regulated by provincial energy policy; however, from 1980 onward the momentum in the oil and gas industry has been towards supporting private development and streamlining regulation. In contrast, the publicly developed electricity industry has been subject to more explicit regulation and political intervention. As such, the narratives tend to refer to electricity production serving as a rationale for public investment and regulation.

change in the 1990s to accommodate the economic opportunities and necessities of closer grid integration with the United States (Calvert 2007). In addition, beginning in 2002 with the deliberate move towards more private power production, maintenance of the existing hydroelectric infrastructure – but not the public development of new infrastructure – has been rationalized through a second narrative about maintaining an enduring public legacy. The legacy narrative is entwined with the notion of the public good being served by energy development, particularly by large, hydroelectric development. The final narrative is based on environmental imperatives and the impacts of energy development. Although consistently present, environmental narratives have historically been minor or rhetorical aspects of provincial energy discourse (Dusyk 2013).

These narratives are the enduring rationale behind energy development in the province. Their relative meaning and emphasis may change and at times new narratives emerge. Analyzing the narratives and how they are mobilized into specific storylines provides a way to track the emphasis of provincial energy policy and how it evolves over time.

#### EARLY INTERPRETATIONS OF CLEAN ENERGY, 1980-2006

Clean energy first appeared as a theme in provincial energy policy in the 1990 energy plan entitled *British Columbia Energy Policy: New Directions for the 1990s* (Ministry of Energy Mines and Petroleum Resources 1990).<sup>4</sup> *New Directions* positioned clean energy as a catch-all theme for mitigating the range of terrestrial, aquatic, and atmospheric impacts of energy development and use, and it adopted an “end-of-pipe” approach to controlling polluting emissions and minimizing the recognized impacts of energy development and use. A far more integrated discourse of sustainable energy – a discourse that had environmental imperatives as an organizing theme – was introduced in the mid-1990s by the British Columbia Roundtable on the Environment and the Economy and elaborated by the British Columbia Energy Council. However, sustainable energy was a short-lived discourse that failed to gain political traction in British Columbia.

In 2001, the election of the BC Liberal Party, led by Gordon Campbell, reintroduced clean energy as a policy goal. The 2002 energy plan, *Energy for Our Future: A Plan for BC* (Ministry of Energy Mines and Petroleum

<sup>4</sup> *New Directions* was the second energy plan published in British Columbia; the first was published in 1980.

Resources 2002), set voluntary BC Clean Electricity targets as part of a renewable energy portfolio, requiring that half of new electricity generation be “Clean Electricity.” No criteria were established for the other 50 percent of new electricity projects. Therefore, instead of making room for the development of renewable energy, as they were ostensibly intended to do, the BC Clean Electricity targets provided a foothold for coal-fired electricity to enter the province’s hydro-dominated electricity grid. In this version of clean electricity, “clean” was purely rhetorical as the province’s first two coal-fired electricity plants, approved in July 2006, threatened to make the province electricity grid much more carbon intensive.

#### A NEW VISION FOR CLEAN ENERGY, 2007-10

In February 2007, the Liberal government, still led by Gordon Campbell, announced its new ambitious climate policy. Positioned within the government’s established neoliberal politics, it coupled the reduction of greenhouse gas emissions with economic development. The speech from the throne asserted that “climate action must be seen and pursued as an economic opportunity as well as an environmental imperative” (Lieutenant-Governor 2007). Fundamental to the merger of these two goals was the concept of clean energy, which was framed as supporting both policy objectives. To this end, the speech promised to “unleash our Pacific promise as a budding powerhouse of clean, renewable energy” by pursuing the province’s “potential as a net exporter of clean, renewable energy.”

The speech from the throne was quickly followed by release of *The BC Energy Plan: A Vision for Clean Energy* (Ministry of Energy Mines and Petroleum Resources 2007). Unlike previous energy plans, *A Vision for Clean Energy* set a number of carbon reduction targets, committing to: a 90 percent clean and renewable electricity mix, net-zero emissions for new electricity generation, and net-zero emissions by 2016 for existing thermal generation. The plan also made a commitment to electricity self-sufficiency plus “insurance” by 2016, a continued ban on nuclear power, and 50 percent of new electricity demand supplied through energy efficiency and conservation. In terms of large-scale electricity supply, the plan instructed BC Hydro to phase out the 900 MW Burrard Thermal generating station and to reinitiate consultation and feasibility studies for the 900 MW Site C Hydroelectric Project on the Peace River. In addition, the plan made potentially contradictory commitments to making



British Columbia one of the “most competitive oil and gas jurisdictions in North America” (4) and to reducing emissions in oil and gas production by phasing out routine flaring at wells and production sites.

*A Vision for Clean Energy* was a dramatic policy reversal for the government – one that required cancelling construction of the two recently approved coal-fired generators. The plan presented a new storyline, one that positioned clean energy as the cornerstone of provincial energy policy rather than as a rhetorical strategy or an “end-of-pipe” solution. It set firm targets for greenhouse gas emissions and for conservation and energy efficiency. Taken together, these commitments offered the potential for significant change in energy production and use in the province. Reconfirming the existing ban on nuclear energy and committing to carbon neutral electricity suggested that the issue for energy policy was how and how much to scale up renewable electricity production (Jaccard, Nyboer, and Melton 2012). However, there were still a number of questions about implementation: How would the government’s “vision of clean energy leadership” deal with the tension between reducing carbon emissions and being “among the most competitive oil and gas jurisdictions in North America”? And what emphasis would be placed on demand management?

An important step in the process of articulating and translating the new clean energy policy into practice was the development of BC Hydro’s Long Term Acquisition Plan (LTAP) laying out plans for the provincial grid, including the development, purchase, and phase-out of generation and investment in energy efficiency and conservation. In a surprising turn of events, in July 2009, the BCUC rejected BC Hydro’s LTAP. This was due, in part, to the proposed phase-out of the natural-gas fired Burrard Thermal Plant. Used to meet peak electricity demand and to help manage transmission in the Lower Mainland, the Burrard Thermal Plant was one of only a handful of fossil fuel generators in the provincial grid. Phasing out this plant was intended as a step towards ensuring that all thermal electricity generation would be carbon neutral by 2016. The 2007 energy plan had characterized Burrard Thermal as obsolete, arguing: “Even though [BC Hydro] could generate electricity from Burrard Thermal ... the plant is out-dated, inefficient and costly to run” (Ministry of Energy Mines and Petroleum Resources 2007, 14). However, its phase-out was complicated by the cost of replacing its generation capacity and the transmission benefits derived from its operation.

The rejection of BC Hydro’s LTAP suggested some opposition to the government’s proposed approach to making the electricity grid carbon

neutral (Hoberg and Jung 2009). Specifically, it raised questions about the extent to which “cleaning up” the provincial electricity grid made economic and practical sense, especially since, by the government’s own declarations, the grid was already more than 90 percent clean (Ministry of Energy Mines and Petroleum Resources 2007).

In the August 2009 speech from the throne the provincial government responded to the BCUC by insisting that the government would proceed with its plan to reduce reliance on the Burrard Thermal Plant and pursue all of its clean energy objectives (Lieutenant-Governor 2009a). This exchange forced the government to clarify its position and to assert carbon neutral electricity as a priority in the storyline. Implicit was its focus on the electricity sector and, thus, a distinction between downstream emissions from burning natural gas for electricity generation and upstream emissions from natural gas production. The government’s clean energy storyline prioritized the former while effectively omitting the latter. The BCUC decision and the government’s response to it was also characteristic of a ramped up clean energy discourse in the province. The global economic downturn that began in December 2008 had added urgency to the clean energy agenda and its potential for economic development. In particular, the intent to export clean electricity became more directed and explicit in 2009 (Hoberg and Sopinka 2011).

The emphasis on electricity supply and especially on exporting electricity was exemplified by the increasing popularity of the “powerhouse” metaphor, which offered a utilitarian image emphasizing the electricity sector and the production of new supply. It also served to position the province’s resources (and the province as a whole) in relation to other jurisdictions.<sup>5</sup> The powerhouse metaphor also linked the clean energy storyline to previous policies in two ways. First, it provided a direct linguistic connection to previous policies. In 2004, three years before the introduction of the clean energy agenda, the speech from the throne declared: “British Columbia is North America’s new energy powerhouse” (Lieutenant-Governor 2004). This was an articulation of the government’s neoliberal policies, which included expanding the development and export of electricity by private power companies – a goal echoed in 2007 by the commitment to becoming a “powerhouse of clean, renewable energy” (Lieutenant-Governor 2007).

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<sup>5</sup> In addition to the government’s prolific use of the metaphor, it was also adopted in the CleanWorks BC campaign – a corporate-led campaign launched in 2010 to promote investment in the province’s energy sector. Adopting language similar to the government’s, the campaign website (no longer active) referred to “a global clean energy powerhouse.”

Second, and again echoing the neoliberal policies of the Campbell government, the powerhouse metaphor was underpinned by two narratives stressing the economic opportunities inherent in energy development and energy exports. Within the clean energy storyline, the narrative of economic opportunity is rhetorically reframed to emphasize “clean, renewable” energy but otherwise remains consistent. The export narrative becomes more explicit. The need to maintain affordable, reliable electricity remains consistent; however, in the clean energy storyline, the gap between electricity production and use is highlighted and energy security – a common component of the narrative – is measured by electricity self-sufficiency. The legacy narrative – once used to highlight the value of *existing* hydroelectric infrastructure as opposed to *new* hydroelectric infrastructure – is reformulated to include public development of new projects, specifically the Site C Project. What distinguishes the clean energy storyline within provincial policy discourse is the integration of an environmental imperative in the form of minimizing greenhouse gas emissions from electricity production. For the first time, an environmental imperative became a central component of government discourse.

By 2010, the clean energy storyline was well elaborated. The February 2010 speech from the throne envisaged “a future powered by clean energy” and stated the government’s intent to “launch a comprehensive strategy to put BC at the forefront of clean energy development” (Lieutenant-Governor 2010). That strategy included the aggressive promotion of energy resources, the introduction of new legislation, and a decision to move forward with the Site C Hydroelectric Project.

In April 2010, when Site C was formally advanced to environmental and regulatory review (stage three in a five-stage development process), it was simultaneously rebranded as the Site C Clean Energy project. The rationale was that the project was itself a source of clean energy and would support the further development of clean energy in the province. “As a source of firm energy Site C will facilitate the development of clean energy projects by providing additional capacity to back up intermittent resources, such as wind, run-of-river hydro and solar” (Office of the Premier 2010).<sup>6</sup> The electricity produced by Site C was also described as filling the electricity gap – a gap that was, at least to some degree, created by the phase-out of Burrard Thermal Plant and the stipulation for electricity self-sufficiency plus “insurance.” Also circulating were rumours that Site C would be used to power the booming natural gas

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<sup>6</sup> Firm energy is energy capacity that is available at any time. It is contrasted with intermittent energy, such as that produced by wind turbines and solar panels.

industry. Regardless of intent, however, rebranding Site C as clean energy had significant implications. The storyline emphasized building new clean electricity supply, and, since 2002, provincial policy had prohibited BC Hydro from building any new supply other than large hydro. Therefore, Site C was the only choice for new public supply. The storyline deflected questions of whether new supply requirements could be met via efficiency and conservation or whether the Canadian entitlement under the Columbia River Treaty should be repatriated.<sup>7</sup> Moreover, the rhetoric of cleanliness has moral and spatial orderings that associate it with what is good and desirable (Douglas 1984), and discourses “fix meaning by excluding all other meaning potentials” (Phillips and Jørgensen 2002, 190). Bringing large hydroelectricity into the clean energy storyline branded the project as an inevitable good and marginalized other environmental and social costs. Whereas local residents and First Nations fought for years to have the negative impacts of hydroelectric development recognized (Pollon and Matheson 1989), the clean energy storyline positioned large hydroelectricity as necessary and unproblematic – even visionary. This was, in part, accomplished by rewriting the hydroelectric legacy.

British Columbia is already a world leader in the use of clean and renewable electricity, due in part to the foresight of previous generations who built our province’s hydroelectric dams. These dams – now British Columbians’ “heritage assets” – today help us to enjoy 90 per cent clean electricity, one of the highest levels in North America. (Ministry of Energy Mines and Petroleum Resources 2007, 12)

This version smoothes over the hubris that characterized the hydroelectric build-out (Loo 2007; Smith 1988) and conveniently omits the destruction and displacement that resulted from it. In doing so, it polishes the legacy of hydroelectricity in the province, marginalizing both past grievances and the anticipated impacts of Site C.

In June 2010, the urgency and specific imperatives of the clean energy storyline were formalized in the Clean Energy Act (R.S.B.C 2010 c.22). The act marked the culmination and institutionalization of the government’s clean energy storyline, legislating many of the objectives and commitments of the preceding three years. The target for energy efficiency and conservation was increased to 66 percent of new electricity demand, and the target for clean and renewable was increased to 93

<sup>7</sup> Under the terms of the Columbia River Treaty, an annual allotment of 4540GWh of energy produced downstream at hydro facilities in the United States is owed to British Columbia. This electricity has always been sold rather than repatriated for domestic use.

percent. It provided a clear definition of a “clean or renewable resource’ as biomass, biogas, geothermal heat, hydro, solar, ocean, wind or any other prescribed resource”; but, significantly, it left that definition open to ministerial discretion. It mandated electricity self-sufficiency plus 3000GWh of “insurance” and formalized the intent to export “clean and renewable” electricity. The act also made some significant regulatory and institutional changes. The system planning authority was transferred from the provincial regulator to the provincial cabinet, with only domestic rate-setting left under the purview of the British Columbia Utilities Commission. Nine projects, including Site C, were fast-tracked and exempted from regulatory review under the Utilities Commission Act. This left the projects open to criticism as there was no transparent process to ensure they were either necessary or in the public interest.

Meanwhile, recommendations for regional planning, cumulative impact assessment, and First Nations and community involvement in clean energy development identified by advocacy groups and a specially appointed Green Energy Task Force were ignored. Targets or regulations pertaining to the oil and gas industry were also missing from the Clean Energy Act. Thus, the clean energy storyline, as institutionalized, was a supply-oriented policy with a clear agenda for exporting electricity to other jurisdictions. It also made the electricity sector, already better than 90 percent clean and renewable, the focus of clean energy policy and largely omitted oil and gas from the storyline.

#### THE WORLD’S CLEANEST FOSSIL FUEL, 2010-14

From the outset, oil and gas extraction posed a problem for the clean energy storyline. Although the storyline focused on electricity generation and energy efficiency and conservation, in the 2007 energy plan there was one target aimed at the oil and gas sector – a commitment to phase out routine flaring from oil and gas wells. By 2010, however, a distinction had been drawn between the upstream emissions from producing natural gas and the downstream emissions from burning it to produce electricity. At the same time, natural gas was kept on the periphery of the new storyline. It was touted as a transition fuel,<sup>8</sup> described as “one of the cleanest-burning fossil fuels” (Lieutenant-Governor 2009b), and simply labelled as clean natural gas. When Christy Clark succeeded Gordon Campbell as premier in 2011, natural gas became more central

<sup>8</sup> For a critique of the transition fuel claim in British Columbia, see Stephenson, Doukas, and Shaw (2012).

to a government whose platform turned on creating jobs and supporting families in British Columbia, even though, in May 2011, the new premier proclaimed support for the provincial climate policy and the Clean Energy Act (Clark 2011).

In September 2011 the Clark government released *Canada Starts Here: The BC Jobs Plan* (Government of British Columbia 2011), anticipating that jobs would be created by increasing economic ties and provincial exports to Asian countries. It focused on eight industries, including natural gas, and highlighted “the significant strategic asset we have in BC Hydro” (6). Invoking the economic development and legacy narratives, the plan states: “Competitively priced clean, renewable, reliable power has been the lifeblood of our industries for the past 50 years” (ibid.). The document committed the BC government to building one LNG pipeline and terminal by 2015 and to have three in operation by 2020. The government’s strategy for creating an LNG industry would necessarily depend upon a massive expansion of unconventional gas extraction in the province’s northeast corner.

In February 2012, the government released two documents: *British Columbia’s Natural Gas Strategy: Fuelling BC’s Economy for the Next Decade* (Ministry of Energy and Mines 2012a) and *Liquefied Natural Gas: A Strategy for BC’s Newest Industry* (Ministry of Energy and Mines 2012b). The first touts a future for British Columbia as a “global leader in natural gas” (Ministry of Energy and Mines 2012a, 3) to be realized through the maintenance and development of natural gas supply and new markets. The powerhouse metaphor is revised from a “powerhouse of clean and renewable energy” to a “global economic powerhouse” (14, 15). Focused on economic growth and export, the strategy makes no commitments to mitigating the environmental impact of natural gas development, although it does attempt to bring natural gas into the clean energy storyline by asserting natural gas as “a climate solution ... [a] widely recognized ... transition fuel to a low carbon global economy” (11). Here the argument is that natural gas exports could “significantly lower global greenhouse gas emissions by replacing coal-fired power plants and oil-based transportation fuels with a much cleaner alternative” (4). By shifting the scale and aspiring to “leadership in the transition to a low carbon global economy” (2), strategists made a discursive move that shifted attention from the increase in provincial greenhouse gas emissions produced by natural gas production.

The *Liquefied Natural Gas* strategy advances a similar argument. Intended to promote the industry, it provides information on LNG and

its economic benefits. Again, the boundaries used to account for GHG emissions are redrawn.

Natural gas has a key role to play in reducing greenhouse gas emissions (GHGs), and that is one of the driving factors behind its growing use in Asia ... These reductions will affect BC's own climate action targets, but since climate change is a global phenomenon, they will have a positive overall impact. (Ministry of Energy and Mines 2012b, 7)

Thus the potential increase in domestic emissions is rationalized by the potential to lower emissions in Asian jurisdictions. The *Liquefied Natural Gas* strategy also invokes economic development, energy export, and legacy narratives:

British Columbia has a long history of clean energy leadership, dating back to the 1960s when BC Hydro was established. Today, clean hydroelectric power, along with other renewable sources ... meets over 93 percent of British Columbia's electricity needs. We are also offsetting two-thirds of our electricity demand growth through efficiency and conservations measures. (Ibid.)

Having already committed to producing the world's cleanest LNG,<sup>9</sup> the province now proclaims: "LNG development in BC will have lower lifecycle greenhouse gas emissions than anywhere else in the world by promoting the use of clean electricity to power LNG plants" (ibid.). This bold commitment quickly came under fire. Critics speculated that it would lead to further increases in domestic electricity rates, which were already on the rise due to commitments made in the Clean Energy Act (Lee and Calvert 2012).

In response to these concerns, on 21 June 2012, the premier announced that the government would classify natural gas, when used to power liquefied natural gas facilities, as a clean fuel. Allowing LNG facilities to burn natural gas would ease the pressure to build new electricity supply for the industry. When asked how natural gas could suddenly be declared clean, the Minister of Energy and Mines, Richard Coleman, replied: "Some of us always thought it was clean as a transitional fuel. There was always this debate which has taken place in and out of government" (Bailey and Stueck 2012). This response highlighted the political nature of the term "clean" and the contested place of natural gas within the clean energy storyline – although neither could explain

<sup>9</sup> The commitment was first made by Premier Clark in January 2012 at the World Economic Forum Meeting in China.

the government's "weirdly hypocritical" position on burning natural gas (Palmer 2014). In July 2012, natural gas was officially brought into the clean energy storyline by amending the definition of a clean resource in the Clean Energy Act.<sup>10</sup>

In 2013, the government repeated its claim to be working closely "with industry and First Nations to build the world's cleanest LNG industry" (Ministry of Energy and Mines 2013). But declaring natural gas clean did nothing to change the environmental or emissions profile of an industry dependent on the expansion of unconventional gas extraction. Calling the government to task, critics asked *how* the government planned to create the world's cleanest LNG and what kinds of regulation might be needed to minimize the lifecycle emissions of natural gas in the province. A September 2013 report by Clean Energy Canada concluded that, as it stood, LNG produced in British Columbia would be more than three times as carbon intensive as the current world-leading operations (Glave and Moorhead 2013).

Shortly thereafter the government backed down from its commitment to the "lowest lifecycle emissions." It committed instead to having the cleanest LNG *facilities* in the world. Ignoring emissions produced in the extraction and transportation of natural gas, up to two-thirds of the lifecycle emissions of the proposed LNG industry would no longer count in the definition of the "cleanest LNG" (Horne 2014). Justifying this change, Premier Clark stated: "We don't produce LNG in the northeast, we produce natural gas. We will produce liquefied natural gas in the northwest, so that's what we have been talking about. There is no 'L' in LNG until it gets to Kitimat or Prince Rupert" (Hunter 2013). The distinction drawn here mirrors the distinction made earlier in regard to the Burrard Thermal Plant. In particular, it prioritizes downstream emissions and suggests that upstream emissions are not, and never were, part of the discussion.

Still, the government maintained that British Columbia would produce the cleanest LNG in the world even as it revised its commitment a third time. In May 2014, the definition was changed once again so that the cleanliness of British Columbia's LNG facilities would be measured only against other gas-fired facilities rather than against those that used electricity. As Richard Coleman explained: "It's all about us meeting the commitment that we will have the industry that is the cleanest – the cleanest means to me that we will beat any other gas-fired plant in the world" (Hunter and Jang 2014).

<sup>10</sup> The amendment was made on 24 July 2012 by Order in Council No. 572.



Even as the bar for the cleanest LNG was being lowered, the government claimed that natural gas was the “world’s cleanest non-renewable fuel” and that developing an LNG industry was the “greatest single step British Columbia can take to fight climate change” (Lieutenant-Governor 2014). This was premised on the potential of BC LNG to replace coal-fired electricity in Asia and, as Premier Clark argued, debunking the “myth that our control or responsibility for climate change stops at our borders – that that is the only way we should measure it” (Hunter 2012). According to the February 2014 speech from the throne:

The People’s Republic of China accounts for fully one quarter of the world’s carbon emissions. This is chiefly because they rely on coal to generate power. By switching even a small percentage of that to the world’s cleanest-burning non-renewable resource, China could reduce emissions by over 90 megatons per year. That is more than our total provincial emissions in a year and a half. (Lieutenant-Governor 2014)

With this rhetorical gambit, British Columbia’s provincial emissions were classed as upstream and therefore of less importance than the downstream emissions they would mitigate – although the idea that they would reduce emissions in China was controversial and nearly impossible to prove (Horne and McNabb 2014; Stephenson, Doukas, and Shaw 2012).

By 2014, the clean energy storyline was not about mitigating GHG emissions but, rather, about using the rhetoric of clean energy and the province’s track record on climate policies (such as the carbon tax) to promote and expand natural gas development and export. Thus, it shifted away from the strong environmental imperative of the original clean energy storyline and, once again, made the goal of achieving a clean energy future a rhetorical strategy.

Meanwhile the Site C project was being moved forward. In May 2014, a joint federal-provincial review panel tabled its environmental impact assessment report. It made fifty recommendations, including referring the project to the BCUC to examine BC Hydro’s load forecasts and cost estimates and delaying the decision for several years until demand from the LNG sector, to which it was still tied, could be verified. In December 2014, the government announced that construction would begin on the Site C Clean Energy Project in summer 2015 – without further review: “Affordable, reliable, clean electricity is the backbone of British Columbia’s economy. Site C will support our quality of life for decades to come and will enable continued investment and a growing economy”

(Office of the Premier 2014). In a highly unusual move, the chair of the joint-review panel, Harry Swain, publicly criticized the government's decision, calling it "unwise" and the failure to adequately investigate alternatives a "dereliction of duty" (Gilchrist 2015).

## DISCUSSION

This analysis of the clean energy storyline operates at several interconnected levels. First, it considers what clean energy has come to mean in British Columbia. In particular, it describes how the initial clean energy storyline, introduced in conjunction with the 2007 climate policy, was ambitious and closely aligned with provincial climate targets. As the storyline was elaborated and institutionalized, the ambition was scaled back. Although clean energy continued to be defined as low-carbon energy, the object of clean energy was narrowed to the electricity sector, with an emphasis on downstream greenhouse gas emissions. Similarly, when Premier Clark explicitly brought LNG into the clean energy storyline, this storyline was repeatedly redefined and, with each redefinition, weakened in ambition.

Discourse is constituted within and influences political, economic, and technological contexts. The focus here is on the interaction of discourse and infrastructure and on illustrating how policy discourse has altered energy infrastructure in the province. Even a seemingly simple redefinition of the term "clean" can have considerable consequences on the acceptability of specific forms of energy production. In British Columbia, this can be seen in how the decommissioning and building of electricity generating stations – specifically, the Burrard Thermal Plant and the Site C Hydroelectric Project – are rationalized using the clean energy storyline and the notion of clean electricity. The potential to transform the energy sector in British Columbia, however, has been curtailed as the clean energy storyline has been made to fit within the historical development path. Because this path includes hydroelectricity and oil and gas, reproducing it has led to policies that both support and hinder greenhouse gas abatement. The clean energy storyline did reverse the planned introduction of coal-fired electricity into the provincial grid, but it has also been used as a questionable rationale for expanding natural gas extraction in the province.

Reinitiating the Site C Project has more ambivalent outcomes. While hydroelectricity does provide relatively low-carbon electricity, reframing Site C as clean energy marginalizes the environmental and social costs

of the project. This has immediate consequences for the Site C project and for the politics of hydroelectricity in the province as the legacy of injustice and environmental degradation that has accompanied past hydroelectric development is also rewritten with the clean energy storyline. Using the “clean” electricity of Site C to rationalize the LNG industry is also a highly suspect trade-off. Even when only accounting for carbon emissions, an expanding natural gas sector compromises the province’s legislated climate targets. Add in the full range and cumulative impacts of hydroelectric and natural gas production and the logic does not add up: clean energy becomes merely window dressing.

In a number of ways, the clean energy storyline is reminiscent of BC energy policy-making in the mid-twentieth century. The supply-side focus, the premier championing specific sectors (namely, hydroelectricity and natural gas), and the development of hydroelectricity as a means to support industry are all too familiar. So is the distribution of costs: disproportionately to the residents of northeastern British Columbia (who bear the most immediate impacts of both Site C and of natural gas development) and to the public via the \$8.8 billion price tag on Site C and the imperative to counter increased emissions in the natural gas sector by reducing emissions elsewhere in the province.

In the final analysis, this is a story of missed opportunity. In its early days, combined with the momentum surrounding the provincial climate policy, the clean energy storyline presented an opportunity to transform energy policy – to rethink and reorient how energy is produced and consumed in the province. This kind of transition could have redistributed the costs and benefits of energy development by, for example, shifting more of the costs of climate mitigation to the natural gas sector. As the storyline has evolved, however, this opportunity has been narrowed to the extent that, by 2014, the clean energy storyline has become a rallying point for maintaining, and indeed scaling up, the present trajectory. Moreover, the momentum around climate policy and the engagement of non-governmental actors was an opportunity to collectively forge a more encompassing definition of clean energy – one that might have, for instance, integrated regional and cumulative impact assessment. This opportunity was also lost as the provincial government moved to institutionalize its own narrow definition of clean energy. While the Clean Energy Act has mandated carbon emissions in the electricity sector, the provincial government has made it clear that it is not above manipulating the legislation and definitions therein to its own ends. Thus, we again find ourselves in well trodden territory, with

British Columbia's energy policy being effectively at the mercy of the premier of the day and his or her political will.

#### REFERENCES

- Bailey, Ian, and Wendy Stueck. 2012. "BC Liberals Declare Natural Gas a Clean Energy Source." *Globe and Mail*, 21 June. Available at <http://www.theglobeandmail.com/news/british-columbia/bc-liberals-declare-natural-gas-a-clean-energy-source/article4362331/>.
- British Columbia Oil and Gas Commission. 2015. *Hydrocarbon and By-Product Reserves in British Columbia* (Victoria: Government of British Columbia).
- Bulkeley, Harriet. 2000. "Discourse Coalitions and the Australian Climate Change Policy Network." *Environment and Planning C: Government and Policy* 18: 727-48.
- Calvert, John. 2007. *Liquid Gold: Energy Privatization in British Columbia*. Halifax: Fernwood.
- Clark, Christy. 2011. "Open Letter to British Columbians from Premier Christy Clark: Building on BC's Leadership in the Green Economy." Government of British Columbia.
- Cotton, Matthew, Imogen Rattle, and James Van Alstine. 2014. "Shale Gas Policy in the United Kingdom: An Argumentative Discourse Analysis." *Energy Policy* 73: 427-38.
- Douglas, Mary. 1984. *Purity and Danger: An Analysis of the Concepts of Pollution and Taboo*. London: Routledge.
- Dusyk, Nichole. 2013. "The Transformative Potential of Participatory Politics: Energy Planning and Emergent Sustainability in British Columbia, Canada." PhD diss., University of British Columbia.
- Fairclough, N. 1992. *Discourse and Social Change*. Cambridge: Polity.
- Fischer, Frank. 2003. *Reframing Public Policy: Discursive Politics and Deliberative Practices*. New York: Oxford University Press.
- Foucault, Michel. 2002. *The Archaeology of Knowledge*. London: Routledge.
- Froschauer, Karl. 1999. *White Gold: Hydroelectric Power in Canada*. Vancouver: UBC Press.
- Gilchrist, Emma. 2015. "BC Government Should Have Deferred Site C Dam Decision, Says Chair of Joint Review Panel." *DeSmog Canada*, 10 March. Available at <http://www.desmog.ca/2015/03/10/exclusive-b-c-government-should-have-deferred-site-c-dam-decision-chair-joint-review-panel>.
- Glave, James, and Jeremy Moorhead. 2013. *The Cleanest LNG in the World? How to Slash Carbon Pollution from Wellhead to Waterline in British Columbia's Proposed Liquefied Natural Gas Industry*. Vancouver: Clean Energy Canada.
- Government of British Columbia. 2011. *Canada Starts Here: The BC Jobs Plan*. Victoria: Government of British Columbia.
- Hajer, Maarten. 1995. *The Politics of Environmental Discourse: Ecological Modernization and the Policy Process*. Oxford, UK: Clarendon Press.
- Hajer, Maarten, and Wytse Versteeg. 2005. "A Decade of Discourse Analysis of Environmental Politics: Achievements, Challenges, Perspectives." *Journal of Environmental Policy and Planning* 7 (3): 175-84. doi: 10.1080/15239080500339646.

- Hoberg, George, and Lisa Jung. 2009. "Why the BC Utilities Commission Rejected BC Hydro's Long Term Plan." Available at <http://greenpolicyprof.org/wordpress/?p=289>.
- Hoberg, George, and Amy Sopinka. 2011. *The Export Question: Designing Policy for British Columbia Electricity Trade*. Victoria: Pacific Institute for Climate Solutions.
- Hommels, Anique. 2005. *Unbuilding Cities: Obduracy in Urban Socio-technical Change*. Cambridge: MIT Press.
- Horne, Matt. 2014. *Liquefied Natural Gas and Carbon Pollution in British Columbia*. Vancouver: Pembina Institute.
- Horne, Matt, and Joshua McNabb. 2014. *Liquefied Natural Gas and Climate Change: The Global Context*. Vancouver: Pembina Institute.
- Hunold, C., and S. Leitner. 2011. "Hasta la Vista, Baby! The Solar Grand Plan, Environmentalism, and Social Constructions of the Mojave Desert." *Environmental Politics* 20: 687-704.
- Hunter, Justine. 2012. "Natural-Gas Plans Could Alter BC's Climate-Change Goals." *Globe and Mail*, 13 May. Available at <http://www.theglobeandmail.com/news/british-columbia/natural-gas-plans-could-alter-bcs-climate-change-goals/article4170462/>.
- . 2013. "Clark Accused of Watering Down Clean LNG Promise." *Globe and Mail*, 2 October. Available at <http://www.theglobeandmail.com/news/british-columbia/clark-accused-of-watering-down-clean-lng-promise/article14648992/>.
- Hunter, Justine, and Brent Jang. 2014. "Cabinet Minister Clarifies LNG's 'Clean' Promise." *Globe and Mail*, 13 May. Available at <http://www.theglobeandmail.com/news/british-columbia/bc-energy-minister-clarifies-lngs-clean-promise/article18653923/>.
- Jaccard, Mark, John Nyboer, and Noel Melton. 2012. *Scaling-Up Renewable Electricity in BC: Tackling the Institutional and Political Challenges*. Victoria: Pacific Institute for Climate Solutions.
- Jessup, Brad. 2010. "Plural and Hybrid Environmental Values: A Discourse Analysis of the Wind Energy Conflict in the United Kingdom." *Environmental Politics* 19 (1): 21-44.
- Lee, Marc, and John Calvert. 2012. *Clean Electricity, Conservation and Climate Justice in BC: Meeting Our Energy Needs in a Zero-Carbon Future*. Vancouver: Canadian Centre for Policy Alternatives.
- Lieutenant-Governor. 2004. "Speech from the Throne opening the 5th Session of the 37th Parliament of British Columbia." Victoria, BC, 10 February.
- . 2007. "Speech from the Throne Opening the 3rd Session of the 38th Parliament of British Columbia." Victoria, BC, 13 February.
- . 2009a. "Speech from the Throne Opening the 5th Session of the 38th Parliament of British Columbia." Victoria, BC, 16 February.
- . 2009b. "Speech from the Throne Opening the 1st Session of the 39th Parliament of British Columbia." Victoria, BC, 25 August.
- . 2010. "Speech from the Throne Opening the 2nd Session of the 39th Parliament of British Columbia." Victoria, BC, 9 February.

- . 2014. "Speech from the Throne Opening the 2nd Session of the 40th Parliament of British Columbia." Victoria, BC, 11 February.
- Loo, Tina. 2007. "Disturbing the Peace: Environmental Change and the Scales of Justice on a Northern River." *Environmental History* 12: 895-919.
- Lovell, Heather. 2007. "Exploring the Role of Materials in Policy Change: Innovation in Low-Energy Housing in the UK." *Environment and Planning A* 39: 2500-17.
- . 2008. "Discourse and Innovation Journeys: The Case of Low Energy Housing in the UK." *Technology Analysis and Strategic Management* 20 (5): 613-32.
- Lovell, Heather, Harriet Bulkeley, and Susan Owens. 2009. "Converging Agendas? Energy and Climate Change Policies in the UK." *Environment and Planning C: Government and Policy* 27: 90-109.
- Mander, S. 2008. "The Role of Discourse Coalitions in Planning for Renewable Energy: A Case Study of Wind-Energy Deployment." *Environment and Planning C: Government and Policy* 26: 583-600.
- Ministry of Energy and Mines. 2012a. *BC's Natural Gas Strategy: Fuelling BC's Economy for the Next Decade and Beyond*. Victoria: Government of British Columbia.
- . 2012b. *Liquefied Natural Gas: A Strategy for BC's Newest Industry*. Victoria: Government of British Columbia.
- . 2013. *British Columbia's Liquefied Natural Gas Strategy, One Year Update*. Victoria: Government of British Columbia.
- Ministry of Energy Mines and Natural Gas. n.d. "Electric Generation and Supply." Available at <http://www.empr.gov.bc.ca/EPD/Electricity/Supply/Pages/default.aspx>.
- Ministry of Energy Mines and Petroleum Resources. 1990. *British Columbia Energy Policy: New Directions for the 1990s*. Victoria: Government of British Columbia.
- . 2002. *Energy for Our Future: A Plan for BC*. Victoria: Government of British Columbia.
- . 2007. *The BC Energy Plan: A Vision for Clean Energy Leadership*. Victoria: Government of British Columbia.
- Office of the Premier. 2010. "Province Announces Site C Clean Energy Project: Project to Create 35,000 Jobs, Lasting Benefits," press release, 19 April (Victoria: Government of British Columbia).
- . 2014. "Site C to Provide More Than 100 Years of Affordable, Reliable Clean Power," press release, 16 December (Victoria: Government of British Columbia).
- Palmer, Vaughn. 2014. "On Power, BC Liberals Have Natural Gas to Burn, Valleys to Flood." *Vancouver Sun*, 12 May 2014. Available at <http://www.vancouversun.com/opinion/columnists/Vaughn+Palmer+power+Liberals+have+natural+burn+valleys/9832200/story.html>.
- Phillips, Louise, and Marianne W. Jørgensen. 2002. *Discourse Analysis as Theory and Method*. London: Sage.
- Pollon, Earl K., and Shirlee Smith Matheson. 1989. *This Was Our Valley*. Calgary: Detselig.

- Rydin, Yvonne. 2003. *Conflict, Consensus, and Rationality in Environmental Planning: An Institutional Discourse Approach*. New York: Oxford University Press.
- Scrase, J. Ivan, and David G. Ockwell. 2010. "The Role of Discourse and Linguistic Framing Effects in Sustaining High Carbon Energy Policy: An Accessible Introduction." *Energy Policy* 38: 2225-33.
- Smith, L. Graham. 1988. "Taming BC Hydro: Site C and the Implementation of the BC Utilities Commission Act." *Environmental Management* 12 (4): 429-43.
- Stephenson, Eleanor, Alexander Doukas, and Karena Shaw. 2012. "Greenwashing Gas: Might a 'Transition Fuel' Label Legitimize Carbon-Intensive Natural Gas Development?" *Energy Policy* 46: 452-59.
- Szarka, Joseph. 2004. "Wind Power, Discourse Coalitions and Climate Change: Breaking the Stalemate?" *European Environment* 14(6): 317-30.
- Usher, M. 2013. "Defending and Transcending Local Identity through Environmental Discourse." *Environmental Politics* 22: 811-31.