

Containing Clean Energy: An Analysis of Energy Policy Discourse in British Columbia, Canada

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Abstract

In 2007, the provincial government of British Columbia, Canada introduced a new clean energy agenda. Using a discourse analysis, this paper follows the evolution of the clean energy storyline and the implementation of the new policy from 2007–2010. I use this case study to illustrate how policy discourse has the potential to effect substantive change in energy infrastructure, but also how that potential does not guarantee substantive sociotechnical change. In this case, attempting to contain the overflows of the new discourse and to protect the incumbent energy regime resulted in a policy that, despite considerable potential, ended up supporting the status quo. In conclusion, I point to the potential of participatory processes that, by opening up the policy processes, may help facilitate energy transitions.

Introduction

In 2007, the provincial government of British Columbia, Canada introduced a new and ambitious climate policy. In conjunction, it revised the provincial energy policy and launched a new clean energy agenda. Like the climate policy, the clean energy agenda was introduced with a series of targets and statements but was missing details that were necessary for implementation. Using a discourse analysis, this paper tracks the ‘coming to ground’ of British Columbia’s clean energy agenda from 2007–2010, and the evolution of the clean energy storyline that was institutionalized via the 2010 *Clean Energy Act*.

In British Columbia, the clean energy discourse was championed by the provincial government. It is not, therefore, a case of attempting to introduce or legitimize a new discourse or a battle between competing discourses. Instead, the British Columbia case study illustrates a new energy

discourse being institutionalized and taking shape within the specific context of provincial energy governance and infrastructure. This analysis describes the potential of the clean energy discourse to substantially alter energy policy and infrastructure in the province. At the same time, it also shows how this potential was contained and largely curtailed by a government anxious to support the existing energy regime and to re-frame it as already clean.

Due to the minimal long-term impacts, the 2007 clean energy discourse may be dismissed as nothing more than empty political rhetoric. However, this analysis shows otherwise. It illustrates how policy discourse has the potential to effect substantive change in energy infrastructure but also how that potential does not guarantee substantive socio-technical change. In British Columbia, attempting to contain the ‘overflows’ (Callon 1998) that resulted from reframing energy discourse, and seeking to limit its impact on the incumbent energy regime resulted in a policy that, despite considerable potential, ultimately supported the status quo. In short, limiting public debate and protecting the incumbent regime resulted in severely limiting the transformative potential of the new discourse and policy.

Discourses, storylines, and overflows

This analysis defines discourse as ‘a particular way of representing the world’ (Phillips & Jørgensen 2002, 143) or, more specifically as ‘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). Important to this interpretation is that discourse is more than rhetoric; it has substantive effects and it sets the ‘conditions of possibility’ (Foucault 2002, 46).

This is true for both social and material realities. Studies examining the constructed nature of infrastructure have found that policy discourse and materiality are mutually constructed. For instance, Anique Hommels has argued for the constructed nature of obduracy in urban infrastructure—that rather than being inherently obdurate or malleable, these charac-

teristics, in both networks and their component parts, are negotiated. Thus strategies for creating malleability become part of the change, or 'unbuilding' process. This negotiation is, at least in part, undertaken in and through the policy process (Hommels 2005).

Similarly, Heather Lovell has argued that materials and policy discourse act together to stabilize or to promote change.

Materials confer stability on the policy process: their physical existence acts to narrow the framing of policy debate. But it is also true that new innovations benefit from the relative stability afforded to them by being built or manufactured: the translation of ideas into durable materials assists with promotion, and helps to gain credibility for the idea and for those involved, thereby lowering risk for others. (Lovell 2007, 2512)

Similarly, in subsequent research Lovell et al. argue that it is important 'to consider both the discursive and material dimensions of policy convergence, policy change, and implementation' (Lovell, Bulkeley, & Owens 2009, 94). This is particularly true for energy networks that are complex, durable, geographically-dispersed systems that typically exhibit considerable momentum.

Understanding the relationship between discourses and materiality is especially critical when the goal is to influence the shape of energy systems and/or facilitate a transition to renewable or low-carbon energy systems, since energy policy discourse sets the 'conditions of possibility' (Foucault 2002, 46) for energy infrastructure. Ivan Scrase and David Ockwell argue that 'a transition to a low carbon energy system will require a "reframing" of energy policy problems and solutions in a way that either connects with, or overrides the powerful discourses that shape energy policy today' (2010, 2225).

Reframing energy policy requires the introduction of new narratives or storylines regarding energy problems and their solutions. Maartin Hajer uses the term 'storyline' to describe the narratives that reduce complex discursive spaces to manageable form. By simplifying narratives, storylines help to overcome fragmentation and facilitate agreement between actors while simultaneously helping to rationalize a specific approach to a problem (Hajer 1995).

Story-lines are therefore much more than simply 'arguments' ... They can ... act to define policy problems while obscuring underpinning interests, values and beliefs. They can add credibility to the claims of certain groups and render those of other groups less credible. They therefore 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 & Ockwell 2010, 2228)

While Hajer uses storylines to discuss how policy is discursively reframed, Michel Callon uses the term 'overflows' to describe how the content of problems are framed and reframed (1998). The framing of a policy problem necessarily includes certain concerns and excludes others. Overflows are the effects that are not accounted for in the framing of an interaction or problem. Rather than being an exception or the sign of a failure, overflows are '...the inevitable corollary of the requisite links with the surrounding environment' (Callon 1998, 8). To define a problem is to frame it and in the process overflows are created. The issue is not the existence of overflows—they are inevitable. Rather the issue is with the overflows that are identified and whether in the process of reframing they are brought into the frame or remain excluded.

As will be described in the case of the clean energy storyline in British Columbia, one overflow (carbon emissions from electricity production) is brought into the official policy discourse. However, the act of reframing energy discourse brought to the fore numerous other overflows that the provincial government sought to exclude from the official framing. Containing these overflows required limiting the public debate and negotiation of the clean energy storyline and, in effect, limited a potentially transformative storyline.

Clean energy in British Columbia

In the Canadian context, energy planning falls within the jurisdiction of individual provinces. As a result, both policy and infrastructure varies considerably from province to province based on the resources available, the policy tradition, existing infrastructure, and the political orientation of provincial governments.

British Columbia (BC) is the western-most province in Canada, and relative to the rest of the country, has a tendency toward both environmental and left-leaning politics. BC is also one of the country's 'hydroelectric provinces'—characterized by large-scale public development of hydroelectric resources in the mid-twentieth century. In BC the institutional legacy of this development, in the form of the public utility British Columbia Hydro and Power Corporation (BC Hydro), and the existing hydroelectric infrastructure continue to structure electricity policy and provision. In 2009, BC Hydro produced approximately 65 percent of the province's electricity, mainly via the large-scale hydroelectric facilities developed in the mid-twentieth century (Hoberg & Sopinka 2011). In the same year, total electricity production in the province was more than 85 percent hydroelectric (Ministry of Energy, Mines and Natural Gas nd).

BC is also the second largest oil and gas producing province in the country, after Alberta. Thus its predominately renewable electricity production is contrasted with extensive fossil fuel extraction. The development of unconventional gas resources in the past fifteen years has led to the rapid expansion of the oil and gas sector in the province. In 2011, conventional and unconventional natural gas production in the province was over 40 billion m³ (Canadian Association for Petroleum Producers 2011).

Within the province, development of energy infrastructure and provision has gone hand in hand with resource development. Historically, this was related to energy resources being developed for domestic use and export and to developing energy resources—specifically electricity—as an incentive to industries such as mining and forestry. As a result, two on-going narratives have long-supported energy development in the province.¹ The first narrative is based on the premise of economic opportunity being inherent in energy development. The second narrative is that energy development is undertaken to maintain low-cost, reliable electricity in the province (for household, commercial, and especially industrial use). This second narrative is linked to energy security and its variable, evolving meanings (Dusyk 2013).

Over time, three more narratives supporting energy development have been added to provincial energy discourse. The third narrative pertains to

electricity export. Export was initially justified as an economically efficient way to handle surplus electricity purportedly produced for domestic consumption. This narrative began to change in the 1990s to accommodate the economic opportunities and necessities of closer grid integration with the United States. In addition, beginning in 2002 with the deliberate move toward more private power production, energy development and the maintenance of existing public infrastructure has been rationalized via a fourth narrative of creating an enduring public legacy. The public legacy narrative adds weight to the notion of public good being served by energy development, particularly by large-scale, hydroelectric development. The final narrative found in BC energy policy is based on environmental imperatives and the impacts of energy development (Dusyk 2013).

Although consistently present, environmental narratives have historically been minor or rhetorical aspects of provincial energy discourse (Dusyk 2013, forthcoming). Nevertheless, a discourse analysis reveals that clean energy is not a new term within provincial policy.

Clean energy as a theme in BC Energy Policy first appeared in the 1990 energy plan, *British Columbia Energy Policy: New Directions for the 1990s* (Ministry of Energy, Mines and Petroleum Resources 1998). In this plan, clean energy is positioned as an over-arching category to represent mitigating the range of terrestrial, aquatic, and atmospheric impacts of energy development and use. Within the plan, clean energy is not integrated with either economic development or with affordable, reliable energy. Rather, the approach for the theme of clean energy, in the 1990 energy plan, is an end-of-pipe or add-on approach to controlling polluting emissions and minimizing the recognized impacts of energy development and use.

In the mid-1990s, the term sustainable energy was used in provincial energy policy discourse. This was introduced by the British Columbia Roundtable on the Environment and the Economy and elaborated by the short-lived, BC Energy Council. Although both these advisory groups served at the behest of the provincial government, the sustainable energy discourse was short-lived and did not make a significant impact on policy, infrastructure, or the patterns of energy production and use within the province.

A change in government in 2001 led to increased emphasis on energy policy and a return to the term 'clean energy'. The 2002 energy plan, *Energy For Our Future: A Plan for BC* (Ministry of Energy Mines and Petroleum Resources 2002) reverted back to the term clean energy through its voluntary 'BC Clean Electricity' targets. BC Clean Electricity was framed as a renewable energy portfolio. Nevertheless, it opened the door to increasing carbon-intensive, fossil fuel electricity generation, specifically from coal-fired electricity. This version of clean electricity was nearly realized with the province's first two coal-fired electricity plants approved in July 2006. However policy changed dramatically in 2007 with the introduction of a new provincial climate policy and its corresponding clean energy agenda.

Creating a future powered by clean energy

In February 2007 the provincial government in British Columbia announced a new climate policy that set an ambitious goal of reducing GHG emissions by 33 percent below 2007 levels by the year 2020. As the policy was elaborated in the following months, the 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 new policy represented an about-face for the government, which just three years earlier had released a climate action plan with no binding targets, and had just approved two coal-fired electrical generation plants. Although a reversal, the policies were positioned within the government's established neoliberal politics. The dual goal of economic development and the reduction of GHG emissions was clear. The 2007 speech from the throne, introducing a new session of the provincial legislature asserted that '[c]limate 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' (39).

The speech from the throne was quickly followed by the release of a new energy plan, *The BC Energy Plan: A Vision for Clean Energy* (Ministry of Energy, Mines and Petroleum Resources 2007). Like the climate policy, the energy plan was also a departure from recent policies. Specifically, it did an about face on regulating carbon emissions in the electricity sector. *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.

In effect, the targets for thermal generation meant that the two recently approved coal-fired generation stations could not proceed. 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 the public utility, BC Hydro, to phaseout the 900 MW Burrard Thermal Natural Gas Generating Station, as per the 2016 goal of net-zero emissions for existing thermal electricity generation, and to reinstate consultation and feasibility studies for the 900 MW Site C Hydroelectric Project on the Peace River. In addition, the plan made the potentially contradictory commitments to making British Columbia one of the ‘most competitive oil and gas jurisdictions in North America’ (4), while also committing to reduce emissions in oil and gas production by introducing targets for the phaseout of routine flaring at wells and production sites.

A Vision for Clean Energy presented a new storyline—one that positioned clean energy as the cornerstone of provincial energy policy, rather than as a rhetorical strategy or an add-on solution. The centrality of clean energy is indicated by its inclusion in the title. The plan set firm targets for GHG 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 the issues for energy policy were how and how much to scale up renewable electricity production (Jaccard, Nyboer, & Melton 2012). However, there were still a number of questions about how the policy

would be implemented. This included how the government's 'vision of clean energy leadership' would deal with the tension between reducing carbon emissions and being 'among the most competitive oil and gas jurisdictions in North America' (Ministry of Energy, Mines and Petroleum Resources 2007, 4). It was also unclear how much emphasis would be given to demand management in relation to the obvious emphasis on clean energy supply.

In the year following the announcement of the new climate and energy policies, the new clean energy policy objectives had to be translated into practice. An important step in this process was the development of BC Hydro's Long Term Acquisition Plan (LTAP). The LTAP lays out the public utility's plans for the provincial grid, including the development, purchase, and phaseout of generation, as well as its investment in energy efficiency and conservation. Because of BC Hydro's ownership stake in the grid and its management responsibilities, the LTAP is an important point of implementation for electricity policy in the province.

In a surprising turn of events, in July 2009, the provincial regulator rejected BC Hydro's LTAP. Although the regulator cited other issues with the LTAP, its decision was in part due to the proposed phaseout of the Burrard Thermal Natural Gas Generating Plant. Used to help meet peak electricity demand and to help manage transmission, the Burrard Thermal Plant is one of only a handful of fossil fuel generators in the provincial grid. The decision to phaseout the plant was based on the objective of cleaning up the provincial electricity grid by removing fossil fuel electricity generation. However, this was complicated by the cost of replacing Burrard's electrical capacity, and the possibility that the public utility might choose to keep the plant operational for its transmission benefits. Although not stated as such, the provincial regulator's rejection of BC Hydro's LTAP suggested some opposition to the government's proposed approach to eliminating all fossil fuel electricity generation (Hoberg & Jung 2009). Specifically, it raised questions about the costs of 'cleaning up' the provincial electricity grid and especially the almost exclusive emphasis on the downstream emissions of burning natural gas for electricity while upstream emissions from natural gas production remained largely outside of the clean energy discourse.

The BC government responded to the regulator in its August 2009 speech from the throne. The speech stated that the regulator would receive special direction, and that it intended to proceed with its plan of reducing reliance on Burrard Thermal Plant and pursuing all of its clean energy objectives (Lieutenant-Governor 2009).

This exchange between the government and the provincial regulator signaled the ramping up of clean energy discourse in the province. The global economic downturn that began in December 2008 had added urgency to the clean energy agenda, and the rhetoric around economic development and of the export potential of clean energy was increasing. In particular, the intent to export clean electricity became more directed and explicit in 2009 (Hoberg & Sopinka 2011). The exchange also added nuance to the clean energy storyline with clear emphasis on the ‘cleanliness’ of electricity generation, and on downstream rather than upstream emissions in the oil and gas sector.

The emphasis of the storyline was also evident in the ‘powerhouse’ metaphor that was becoming the central metaphor in the clean energy storyline. In the first articulation of the new policy, the 2007 speech from the throne set the goal of becoming a ‘powerhouse of clean, renewable energy’ (Lieutenant-Governor 2007). A powerhouse provides a utilitarian image that emphasizes the electricity sector and production of new supply. It also serves to position the province’s resources (and the province as a whole) in relation to other jurisdictions. Both the narratives of economic development based on energy development and the opportunity to export British Columbia’s energy resources are inherent in the metaphor. Although the province has long been an exporter of electricity, the clean energy storyline included export as a formal policy objective and thus, for the first time, export became an explicit rationale for the development of new supply.

With a slightly revised powerhouse metaphor, the February 2010 speech from the throne declared ‘a future powered by clean energy,’ and stated the government’s intent to ‘launch a comprehensive strategy to put B.C. at the forefront of clean energy development’ (Lieutenant-Governor 2010). The strategy contained several components, including a decision to move forward with the Site C Hydroelectric project on the Peace River, aggressive

promotion of the province's energy resources, and the introduction of new legislation.

The strategy and the clean energy storyline were more fully articulated in May 2010, when the government tabled the *Clean Energy Act* (R.S.B.C 2010 c.22). Since 2007, the rhetoric around clean energy in the province had been growing, and the Act was the culmination and institutionalization of the government's clean energy storyline. It revised and legislated many of the objectives and commitments that had preceded it since 2007, increasing the target for energy efficiency and conservation to 66 percent of new electricity demand and also raising the required amount of clean and renewable electricity to 93 percent. In a list of energy objectives it mandated electricity self-sufficiency and formalized its stated 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 regulator. Furthermore, nine projects were fast-tracked through approvals and exempt from the typical regulatory review.

Although the *Clean Energy Act* moved forward with a host of initiatives, a number of overflows identified by the public, advocacy groups, and a specially appointed Green Energy Task Force were missing. These included recommendations for regional planning and for First Nations and community involvement in clean energy development. Also missing from the *Clean Energy Act* were any targets or regulation pertaining to the oil and gas industry. Thus the clean energy storyline, as institutionalized, was a supply-oriented policy with a clear agenda for exporting electricity to other jurisdictions. It also positioned the electricity sector, already defined as 90 percent clean and renewable, as the object of clean energy policy, while the oil and gas sector was positioned as outside of the storyline.

Creating and containing a clean energy future for British Columbia

The provincial government acted quickly to institutionalize the clean energy storyline via the *Clean Energy Act*. However it also gained pur-

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chase through the enrollment of actors willing to take on and promote the storyline. The primary coalition of support was found in the energy industry. This was exemplified in the Clean Works BC advertising campaign launched by a consortium of renewable energy advocates during the 2010 Olympic Winter Games. The consortium included the Independent Power Producers Association of BC, BC's Clean Tech CEO Alliance, and the BC Technology Industry Association. The campaign website stated,

You are here in the windy, sunny, hydroelectric, geothermic, hydrogen-celled, bio-energetic heart of the clean energy future ... This is a place with energy, a province fueled by ingenuity, powered by nature, and energized by a 100 billion dollar investment opportunity. An opportunity to build a global clean energy powerhouse.²

The language of the promotional materials matches the provincial storyline with only minor alterations such as revising the powerhouse metaphor to a 'global clean energy powerhouse.' This suggests the formation of a 'discourse coalition' (Hajer 1995) that focused on the economic opportunity and export potential of clean energy.

A storyline simplifies the problem framing, but maintains interpretive flexibility, facilitating the development of discourse coalitions. However the clean energy storyline left little room for negotiation, either in its content or in the implementation process.

The economic and export narratives underpinning the storyline, exemplified in the above quote, are rhetorically supported by extending the boundaries of clean energy to all existing and future electricity production in the province. This tactic is seen in both the formal and regulatory definitions of clean energy. The *Clean Energy Act* specifies that a "clean or renewable resource" means biomass, biogas, geothermal heat, hydro, solar, ocean, wind or any other prescribed resource.' It also states that the minister may prescribe 'resources for the purposes of the definition of "clean or renewable resource"' in section 1(1).'

The decision to prescribe the definition in legislation has limited the interpretive flexibility and the space for deliberation, contestation, and negotiation. It eliminates the opportunity to negotiate what consti-

tutes clean energy and closes down discussion of how clean energy might be differently understood or implemented across the province. One example is the omission of energy efficiency and conservation as a clean resource. Although there was a precedent to include energy efficiency and conservation in the formal definition, the decision to omit it reveals and reinforces the focus of the clean energy storyline and its emphasis on energy supply.

In addition to constraining negotiation of the clean energy storyline, prescribing the definition of clean energy allowed the provincial government to designate a range of the province's energy resources as part of the clean energy future. This was signaled by prolific use of the word 'clean' as an adjective, particularly for resources that might not typically be associated with clean energy. For instance, the 2007 Speech from the Throne makes reference to natural gas as 'one of the cleanest-burning fossil fuels'; to converting 'landfill gas into clean energy'; to using 'bio-waste to produce clean energy'; to turning 'waste wood into clean fuel'; and to supporting 'clean thermal power production' through the export of wood pellets. The implication is that all of the province's existing and future electricity generation should be reinterpreted as a potential component of the provincial 'clean energy powerhouse'—that the energy system is already and will continue to be clean.

While the definition of clean energy has brought on side a number of corporate interests, as illustrated in the Clean Works BC coalition, it has not been as successful in recruiting environmental and public power advocates. For environmental groups, the narrow focus on climate change missed attention to other environmental and social impacts that were excluded in the clean energy framing. They critiqued the government,

for a lack of land-use and regional planning; for excluding public participation in decision-making; for deficient project assessment and monitoring requirements; for concerns over project licensing; for perceptions of weak energy conservation efforts; for negative impacts on BC's long-term planning and electricity security needs; and for restructuring BC Hydro and restricting its ability to directly produce power. (David Suzuki Foundation, Pembina Institute, Watershed Watch Salmon Society, & West Coast Environmental Law 2009, 1)

Although supporting immediate and concerted action to mitigate climate change, their concerns stemmed from the uncritical expansion of supply without appropriate attention to the cumulative impacts of energy development, comprehensive planning, or public debate.

Similarly for public power advocates, the issue was also regarding the specifics of supply development. They disagreed with the aggressive support of private power, and expressed doubt that any amount of privately-owned development would be in the public interest (Shaffer 2010).

Although both public power and environmental advocates may have agreed with some aspects of the clean energy storyline, for instance enforced limits on GHG emissions or the development of large-scale hydroelectricity, they continued to have fundamental reservations about the planning process and the development models that underpinned the storyline. Each group identified ‘overflows’ that were not included in the clean energy storyline. Accounting for the overflows would require negotiating a more nuanced and qualified definition of clean energy development.

However there was little opportunity for public debate in the reframing of the objectives of electricity policy and the new emphasis on building electricity supply for export (Hoberg & Sopinka 2011). The government’s response to critiques—many related to the lack of public debate—was to prescribe its own storyline in the *Clean Energy Act*. This included mandating its own definitions and objectives as well as streamlining controversial projects that embody the clean energy storyline. In addition, the institutional and regulatory reform included in the *Clean Energy Act* eliminated the independent scrutiny and opportunity for public input via the provincial regulatory review process. Although the Act was debated for several days in the provincial legislature, ‘the Opposition focused on high level issues and no section-by-section debate of the provisions of the bill was conducted’ (Hoberg & Sopinka 2011, 18). Thus, calls for revision and negotiation of the clean energy storyline were met with specific, prescriptive legislation, and resulted in the closing down rather than opening up the planning process.

Discussion

In their analysis of climate and energy policies in the United Kingdom, Lovell et al. found that the circulating storylines regarding climate change 'have all been influenced by the existing sociotechnical energy regime to fit with a "business-as-usual" trajectory of growth for the energy sector' (Lovell, Bulkeley, & Owens 2009, 103).

In British Columbia, the clean energy storyline merges climate change and energy discourses. It is a supply-oriented policy that positions British Columbia as a 'powerhouse' of clean energy. As such, it does introduce a substantive environmental imperative, specifically the regulation of GHG emissions from electricity generation into provincial energy policy. This is notable since it is the first time a substantive environmental imperative was so thoroughly integrated into provincial energy policy. With the emphasis on cleaning up the electricity grid, the clean energy storyline reframes all existing and potential electricity development in the province as clean, and attempts to eliminate any generation that may be labeled dirty, such as Burrard Thermal Plant. This supports the development of new forms of renewable energy but also perpetuates the momentum of the existing regime, particularly the legacy of large-scale hydroelectricity. Similarly, the storyline positions the electricity sector as the object of cleanliness while the oil and gas sector is situated outside of the discourse. Thus the focus is on downstream emissions from the burning of natural gas to generate electricity while the upstream emissions of oil and gas extraction are left unregulated by the clean energy policy. Therefore, like the example from the United Kingdom, cited above, the clean energy storyline aligns with the incumbent energy regime and the existing infrastructure in the province. Thus, despite the institutionalization of a new discourse and the integration of a substantive environmental imperative into energy discourse, the impacts of the clean energy policy in British Columbia appear modest.

However, this analysis shows that the new discourse cannot be written off as empty policy rhetoric. The potential of the discourse is evident in the exchange over the Burrard Thermal Plant. The storyline rendered the natural gas-fired generator as dirty and obsolete, legislating its phaseout

and replacing its capacity with a new large-scale hydroelectric facility. Although the fate of the Burrard Thermal Plant was contested, the clean energy storyline clearly had the potential to retire some forms of electricity generation and rationalize the building of others.

Thus the storyline, as institutionalized in the *Clean Energy Act*, has had substantive impacts. However, rather than contributing to the transformation of the energy sector, most of these impacts have reproduced the patterns and practices of energy development and use in the province. As such, it is not empty policy rhetoric but a policy discourse that has been made to perpetuate the existing order rather than transforming it.

However, in making it fit with the existing regime, the provincial government had to work to contain the overflows that erupted from the clean energy storyline. The clean energy storyline brought on board a number of supporters. The Clean Works BC coalition shared the government's storyline, but the others, such as environmental advocates and public power advocates brought somewhat different perspectives. They agreed with the limiting of GHG emissions from electricity generation but also identified a number of overflows omitted from the government's storyline. These included the contradictions inherent in phasing out gas-fired electricity generation, while at the same time allowing the continued expansion of natural gas industry in the province. In addition, the supply-oriented focus and the scaling up of renewables, including wind and hydroelectricity, brought on-going planning concerns to the fore, including the relative emphasis that should be given to energy efficiency and conservation. Finally, concerns were raised about both the overall development model and the opportunities for meaningful public and First Nations input into energy planning in the province.

The provincial government sought to contain the proliferation of overflows using several tactics. They controlled official definitions of clean energy by prescribing them in legislation but allowing ministerial discretion in amending the definition. The government limited public debate about the storyline as a whole by quickly institutionalizing a specific storyline in the *Clean Energy Act*. Public debate was also limited by the content of the *Clean Energy Act*, including its exemption of nine projects from existing regulatory processes, and more fundamentally, from insti-

tutional changes in the Act that transferred review authority from the provincial regulator to the provincial government.

This analysis supports the importance of policy discourse and the potential contained within it to help transition energy systems. It also supports more participatory processes where a diversity of actors would be allowed to identify overflows and work with policy-makers to integrate them into official policy discourse. In this case, the storyline used to build support was not open to negotiation and the interpretive flexibility inherent in the term 'clean energy' was not enough to support a diversified discourse coalition. However, the willingness to negotiate and integrate a broader set of overflows into the frame might have changed the momentum of this policy, enabling its transformative potential. For instance, there was no obvious reason the clean energy storyline had to be supply-oriented. A sustained emphasis of efficiency and conservation, along-side the focus on clean energy supply might have had significant impacts on infrastructure and energy use in the province; it could have been used to support aggressive standards and policies for net-zero buildings and communities across the province.

A more generalized lesson from this case may be that facilitating energy transitions in systems that have extensive infrastructure and entrenched interests may require opening up the policy-making process so that a range of actors can contribute to the identification of overflows and the reframing of policy discourse. This approach may help counter the momentum of the incumbent regime and allow new discourses to have more substantive and transformative effects on patterns of energy production and use.

Notes

- ¹ Historically, there are two large energy sectors in the province: electricity, and oil and gas. Both are supported and regulated by provincial energy policy, however from 1980 the momentum in the oil and gas industry has been toward 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 modern circulating narratives tend to refer to electricity production.

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- ² The Clean Works BC website (<http://www.cleanworksbc.com>) is no longer active. For this research, it was last accessed on November 13, 2010.

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