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Institut canadien du droit des ressources**

**Assessing Where Renewable Energy and
Energy Efficiency Stand in Alberta Policy and
Government Organization**

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Abstract

Alberta has committed to “set a table” for renewable energy and to “encourage” energy efficiency and conservation. This commitment begs the questions of how fast or much these two sectors are expected to progress and what specific roles the province will play in promoting that progress. This paper addresses these questions by considering the evolution of provincial policy-making with respect to these two sectors and what governmental institutions have been created to specifically address the sectors.

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Unless specifically noted, all opinions in the paper are strictly those of the author. Likewise, any mistakes or errors are attributable solely to the author.

1.0. Introduction

Alberta has a rich endowment of renewable energy resources that will play an increasingly important role in our energy future.¹

Alberta will set a table that will allow renewable ... energy to flourish.²

[The Alberta] [g]overnment will encourage energy efficiency and conservation at all levels.³

At a basic level, these statements from the province's 2008 landmark *Energy Strategy* suggest that the Alberta government now considers renewable energy, and energy efficiency and conservation, as key components of the province's energy future, notwithstanding the primacy of fossil fuel production and consumption within the province. However, these statements beg the questions of how fast or much these two sectors are expected to progress and what specific roles the province will play in promoting that progress.

This paper addresses these questions in two ways. First, the paper charts the evolution of provincial policy-making with respect to renewable energy and energy efficiency and conservation. This effort builds on a 2007 report, by the Institute of Sustainable Energy, Environment and Economy, which assessed provincial policy with respect to renewable energy.⁴

Second, the paper assesses what provincial government institutions have been created to specifically address these two energy sectors. The term "institution" is often used broadly to include policies, laws, and social and cultural practices.⁵ However, the term is used in a narrower sense here to refer only to government organizations.

There is no single or consistent notion of the full scope of "renewable energy" sources. This paper simply refers loosely to "renewable energy," because the paper does not need to stake ground on this definitional spectrum.⁶ The term "energy efficiency"

¹ Government of Alberta (GOA), *Launching Alberta's Energy Future – Provincial Energy Strategy* (December 2008) at 23 [*Energy Strategy*], online: <<http://www.energy.alberta.ca/Initiatives/1505.asp>>.

² *Ibid* at 45.

³ *Ibid* at 21.

⁴ Michael M. Wenig, Dr. William A. Ross, J.P. Jepp & Richard Panton, *Legal and Policy Frameworks for Renewable Energy in Alberta*, Paper No. 12 of the Alberta Energy Futures Project (Calgary: Institute for Sustainable Energy, Environment and Economy, University of Calgary, January 2007) [ISEEE Report].

⁵ United Nations, Dept. of Economic and Social Affairs, *World Economic and Social Survey 2011 – The Great Green Technological Transformation* (New York: 2011) at 149.

⁶ See, e.g., ISEEE Report, *supra* note 4 at 2-5 for a discussion of the complexities of the "renewable energy" label. For a recent example of why "renewable energy" definitions matter, see *North Carolina, et al. v. Environmental Defense Fund, et al.*, No. COA11-142, Slip Op., 2 August 2011 (N.C. Ct. Ap.)

generally refers to the level of output of a given industrial, commercial, residential or other system per unit of energy input; “energy conservation” refers to efforts to reduce the demand for or use of energy.⁷ For brevity, the term “energy efficiency” will be used to refer to both “energy efficiency” and downstream energy “conservation,” unless otherwise noted.

Other terms worth noting are “alternative energy” and “clean (or green) energy.” These terms are often used in the same breath as renewable energy or, as indicated below, are meant at times to include renewable energy. However, several kinds of “alternative” or “clean/green” energy systems or technologies do not rely on renewable energy sources, but are ‘taxonomically’ quite close to renewable energy and/or energy efficiency (e.g. co-generation systems that capture and re-use waste heat; bio-digesters for livestock manure or domestic sewage; and, gasification systems for municipal solid waste). For practical reasons, this paper refers to “alternative” and “clean/green” energy when they are linked by the province to renewable energy, but otherwise does not attempt to chart provincial policy specifically with respect to alternative or clean energy as distinct energy categories.

Before considering provincial policies and institutions, Part 2 of this paper lists and discusses several key premises underlying the author’s choice of methods and analysis. Part 3 starts the paper’s policy analysis by addressing the top rungs of Alberta’s overall policy hierarchy—Alberta’s “vision” statement and twenty-year strategic plan. Parts 4 and 5 below address several policy-related precedents to Alberta’s landmark *Energy Strategy*, namely Alberta’s “Integrated Energy Vision” and 2008 *Climate Change Strategy*, and the policy recommendations from the Clean Air Strategic Alliance. Part 6 then addresses the 2008 *Energy Strategy* itself. Parts 7 and 8 focus on the provincial Energy and Environment departments’ three-year business plans and latest annual reports. These documents are relevant because they are considered additional reflections of government policy even though they are not titled ‘policies’ as such. These plans and reports also provide a threshold basis for considering the institutional questions addressed in this paper.

(construing the terms “biomass resource” and “renewable energy resource,” in North Carolina’s renewable energy portfolio standard, as including the primary harvest of whole trees).

⁷ See, e.g. GOA, *Alberta’s 2008 Climate Change Strategy – Responsibility/Leadership/Action* (January 2008) at 15 [2008 *Climate Change Strategy*], online: <<http://environment.alberta.ca/01757.html>>. For a discussion of the different notions of “conservation” in the upstream and downstream energy contexts, see Michael M. Wenig & Michal C. Moore, *Is Conservation Worth Conserving? The Implications of Alberta’s “Energy Resource Conservation” Mandate for Renewable Energy*, Occasional Paper #20 (Calgary: Canadian Institute of Resources Law, August 2007) at 10-11.

Part 9 extends this institutional analysis to Alberta Energy and Alberta Environment and Water’s organizational structures.⁸ Part 10 then compares these structures with those in Canada’s nine other provinces.⁹

2.0. Underlying Premises

This paper is based on several underlying premises that should be noted at the outset. First, the paper generally treats renewable energy and energy efficiency as ‘good things’; correlatively, and in a very general sense, the more renewable energy that is produced, and the greater the efficiency with which all energy sources or types are produced and consumed, the better. Admittedly, these premises are stated at a very high and superficial level and therefore overlook numerous complex issues which this paper does not attempt to resolve.

Another premise is that renewable energy and energy efficiency are sufficiently discrete topics (or energy ‘sectors’) that they are worth studying, and addressing by government, as distinct subjects. This premise should not be overstated however because, from an integrated, systems perspective, these two sectors are closely interconnected with each other, with the alternative and clean/green energy concepts noted above, and with numerous other energy topics or concepts or energy system components. From a holistic perspective, one might even say that energy should be studied and addressed by government *only* at the ‘system’ level. At the very least, individual energy system components or topics, including renewable energy and energy efficiency, should be addressed through integrated policies rather than in policy silos.

Still another premise for this paper is that provincial policy statements regarding renewable energy and energy efficiency matter—i.e. they are an indication of how the government ‘feels’ about this topic. The logic of this premise is obvious, but the premise is arguably only partially or somewhat accurate, because written policies may not be in synch with actual government programs or activities. In addition, some policies are written at such a high or general level, that they simply may not provide a useful indication of what a government is actually doing ‘on the ground’. For these reasons, this paper’s focus on Alberta’s policy statements provides only a partial indication of—in the

⁸ Since the latest provincial election, the name of Alberta’s environmental ministry has been changed from “Environment” to “Environment and Water.” “Welcome to Alberta Environment and Water”, online: <<http://environment.alberta.ca/index.html>>. For brevity, and to be consistent with the sources referenced below, this paper will refer to the department simply as Alberta Environment or Environment.

⁹ Other Alberta ministries not addressed in this paper—including Agriculture and Rural Development, Sustainable Resource Development, Municipal Affairs, Infrastructure, Housing and Urban Affairs, and Transportation—may also have organizational components that focus on or at least cover renewable energy or energy efficiency issues.

words of the quotations at the beginning of this paper—whether, how, and when the province will “set the table” for renewable energy and “encourage” energy efficiency. The paper discusses concrete actions but only somewhat; further research is necessary to identify *everything* the province has done to date to promote renewable energy and energy efficiency and all such steps the province has committed to take in the near or more distant future.¹⁰

A corollary to the premise that written policy matters, is that policy *evolution* also matters—i.e. changes to written policies over time also provide legitimate bases for inferring the government’s intent. That said, drawing inferences from changes in wording over time can be difficult because there may be several possible reasons for a given change. Sometimes changes may stem from changes in substantive policy views, but at other times changes may stem simply from different writing styles or formats. Thus, drawing inferences from the evolution of written policies can be somewhat like Cold War ‘Kremlinologists’ trying to understand Soviet politics based on changes in Kremlin seating plans, portraits, or other evidentiary minutia.

Finally, this paper’s consideration of government institutions is based on the premise that, in order to encourage or promote renewable energy and energy efficiency, there must be an institutional champion or cheerleader for those sectors within the provincial government. Newly-elected Premier Alison Redford seems to share this premise, given her commitment—during the recent Progressive Conservative party leadership campaign—to establish an “authority to direct government’s efforts in the renewable energy sector”.¹¹

¹⁰ Similarly, the paper focuses only on the most obviously relevant provincial policy documents and, thus, does not attempt to identify and assess *every* provincial policy or policy-laden decision relating to renewable energy and energy efficiency.

¹¹ Alison Redford Leadership Campaign, *Issues and Policy – Global Energy Capital – Canadian Energy Strategy*, formerly online: <<http://www.alisonredford.ca/issuespolicy/globalenergycapital/canadian-energy-strategy.cfm>> (copy on file with the author). See also e.g. TEC Edmonton, *Alison Redford on Technology, Research and Innovation*, online: <<http://www.tecedmonton.com/TECTALKBLOG/tabid/435/entryid/90/Alison-Redford-on-technology-research-and-innovation.aspx>>; and Standing Stone Developments, News Release, “Premier Alison Redford’s Energy Strategy” (3 October 2011), online: <<http://www.standingstonedevelopments.com/2011arcive.html>>. According to this campaign pledge, the new “authority” will be “based on the success of the Alberta Oil Sands Development Authority (AOSTRA)” and will have a “mandate and financial structure that allows—and even encourages—transnational and international partnerships.” *Issues and Policy*, *ibid*.

This premise is also reflected in, e.g., Clean Air Strategic Alliance (CASA), *Report of the Renewable and Alternative Energy Working Group to the CASA Electricity Project Team* (October 2003) [CASA 2003] at 11 (noting the creation of a “position specifically to pursue” several renewable energy-related goals, and “allocating the additional resources needed to fund such a position, as “one way to accomplish these important changes.”); and Canadian Renewable Energy Alliance, *Green Power for Electricity Generation – Creating an Industry in Canada* (August 2006) (recommending that provinces create “coordinating bodies”

A correlative premise is that, the higher the institution is in the government's organizational hierarchy, the better it is able to serve this function.¹² These premises are admittedly simplistic and beg numerous complex questions, including whether a policy objective might be better promoted by numerous organizational entities dispersed throughout a government than by a single entity focused solely on the objective. There are also more fundamental 'chicken and egg'-type questions which this paper does not attempt to answer, regarding the timing of governments' adoption of policy objectives relative to its creation of organizational cheerleaders.

3.0. The Top of the Policy Hierarchy: Alberta's Vision and Twenty-year Plan

The above-noted 2007 ISEEE report identified a four-tier overall provincial policy hierarchy consisting of: a "vision" for Alberta in 2025; a twenty-year strategic plan (adopted in 2006); a government-wide three-year business plan; and ministry-specific business plans.¹³ This hierarchy has now been simplified in the sense that the government-wide three-year business plan has been eliminated.¹⁴ In addition, while the strategic plan still starts with a written vision, the gist of the text in the plan's section, under the heading "Your Government's Vision for the Future," seems to be simply to follow the twenty-year plan's five goals.¹⁵ In a sense, the government's virtual melding

to "engage relevant ministries and stakeholders to oversee the establishment and implementation of targets for Green Power development and deployment"). See also Jeff Bell & Tim Weiss, *Greening the Grid – Powering Alberta's Future with Renewable Energy* (Edmonton: Pembina Institute, April 2009) at 73 (recommending that the province establish a task force of private sector and academic members to "consider the role of renewables" in Alberta).

¹² No doubt this corollary underpins the recommendation, published in a 2007 Canada West Foundation report, that the province create a cabinet-ranking "Ministry of Sustainable and Renewable Energy Sources". Curtis Gillespie, "A SURE Thing: Making Alberta a Global Leader in Alternative Energy" in Robert Roach, ed., *Alberta's Energy Legacy – Ideas for the Future* (Calgary: Canada West Foundation, 2007) ch. 12 at 163.

¹³ ISEEE Report, *supra* note 4 at 62 (citing GOA, 2006-09 *Government of Alberta Strategic Business Plan* (2006) at 4). This overall hierarchy was in addition to the numerous cross-ministry and intra-ministry policies. ISEEE Report at 73.

¹⁴ GOA, *Government Strategic Plan and Ministry Business Plans* (2011) [GOA *Strategic Plan* (2011)], online: <<http://www.finance.alberta.ca/publications/budget/budget2011/business-plans-complete.pdf>>. This simplification follows the government's previous elimination of its fifteen-year "medium-term plans" that had linked the government's twenty-year plan with the government-wide and ministries' three-year plans. ISEEE Report, *ibid* at 63. Further research would be useful to determine the practical effects, if any, of this long term simplification of the province's overall policy framework.

¹⁵ GOA *Strategic Plan* (2011), *ibid* at 3. Besides referring to the twenty-year plan, the "vision" section states:

of its “vision” and twenty-year goals further simplifies the four-tier policy framework that was identified in 2007.

However, in a later part of the strategic plan, under the heading “Government’s Five Goals,” the plan states a “vision” of Alberta as an “an innovative and prosperous province where Albertans enjoy a high quality of life built on a healthy environment, a competitive economy and vibrant communities.”¹⁶ It is uncertain what if any inferences can be drawn from the government’s placement of this “vision” outside of the plan’s official “vision” section. Putting aside its unusual location, this “vision” statement is somewhat notable for its lack of express or direct reference to any form of energy. From this standpoint, the plan’s “vision” statement is consistent with the “vision” in place in 2006.¹⁷

As noted in the 2007 ISEEE report, the province’s 2006 twenty-year plan was based on “four pillars,” none of which referred to renewable energy or energy efficiency (or to any energy topic, for that matter), although the discussion under one of the pillars referred to the government’s promotion of “green power” and cross-referenced other government policies relating to bio-energy.¹⁸ As noted above, the government’s current twenty-year strategic plan is based on “five goals,” rather than on the “four pillars” used in the 2006 plan. The first of these goals—to “[e]nsure Alberta’s energy resources are developed in an environmentally sustainable way”—refers directly to “energy resources” and thus arguably elevates energy generally as a policy priority relative to the province’s 2006 twenty-year plan. However, as with the “pillars” in the 2006 plan, the current plan’s “goals” make no express reference to renewable energy or to energy efficiency.¹⁹

As with the 2006 plan’s inclusion of a discussion for each of its four pillars, the current plan includes a discussion of each of its five goals. In its discussion of the first goal, the current plan states that the government will “ensure that Alberta’s energy future is built on *clean energy production* and *wise energy use*.”²⁰ The term “wise energy use” is commonly associated with energy efficiency in other provincial policies (as shown

We will advocate for our people and our industries. We will improve the health system. We will build our competitiveness globally, across all sectors of the economy, by growing and protecting our markets, and seeking out new trade opportunities.

We will do these things while ensuring that Alberta remains in the strongest fiscal position of all the provinces, with savings to draw on during tough times, net assets instead of net debt, and the lowest overall taxes in Canada.

Ibid.

¹⁶ *Ibid* at 4.

¹⁷ ISEEE Report, *supra* note 4 at 64.

¹⁸ *Ibid* at 64-66.

¹⁹ GOA *Strategic Plan* (2011), *supra* note 14 at 5-14; ISEEE Report, *supra* note 4 at 64.

²⁰ GOA *Strategic Plan* (2011), *ibid* at 5.

below) so it presumably has that meaning here. This discussion lists several examples of “clean energy technology” which do not include renewable energy technologies, although at a later point the plan associates “alternative energy” with “clean energy,” and the former may impliedly include renewable energy.²¹

Notably, the plan’s discussion of this energy-related goal refers to the province’s 2008 *Energy Strategy* and 2008 *Climate Change Strategy*, each of which refers to both renewable energy and energy efficiency as discussed below. Also of note, the current plan’s fourth goal includes “[e]nchanc[ing] value-added activity” and “increas[ing] innovation,” in addition to “build[ing] a skilled workforce,” all of which are intended to “improve the long-run sustainability of Alberta’s economy.”²² The plan’s discussion of this goal starts with the frank statement that, “[o]ver the longer term, it is likely that no jurisdiction whose economy depends on hydrocarbon exports will escape an eventual transition to a lower global dependence on hydrocarbons.”²³ This recognition arguably provides a compelling and logical case for promoting renewable energy and energy efficiency. However, the remaining discussion under this goal makes no express reference to energy efficiency and only a brief reference to “alternative energy,” as among the “clean energy” sectors that will benefit from provincial efforts to promote technology innovation.

Besides including a discussion of each of its five goals, the current plan lists several “performance measures” for each goal. However, none of these measures relate directly to renewable energy or energy efficiency. (Nor, for that matter, are there any other directly energy-related performance measures.) That said, one of the performance measures for the plan’s energy-related goal is the greenhouse gas reduction target in the 2008 *Climate Change Strategy*, which target itself is based on projected “wedges” of provincial greenhouse gas reductions resulting from growth in energy efficiency and renewable energy.²⁴ The current plan’s indirect inclusion of a performance measure for renewable energy and energy efficiency is arguably somewhat of a step up for those sectors from the 2006 twenty-year plan.

In addition to listing five goals and accompanying performance measures, the current twenty-year plan states ten “core businesses” for the provincial government as a whole. None of these “core businesses,” or their accompanying brief descriptions, refers expressly to renewable energy or energy efficiency.²⁵ (By contrast, the first “core

²¹ *Ibid* at 5 and 12.

²² *Ibid* at 11.

²³ *Ibid*.

²⁴ *Ibid* at 5; 2008 *Climate Change Strategy*, *supra* note 7 at 20. None of these “wedges” refers expressly to renewable energy but the *Strategy* explains that the “greening energy production wedge” includes renewable energy. *Ibid* at 19.

²⁵ GOA *Strategic Plan* (2011), *supra* note 14 at 17.

business” includes “resource management” which, as the plan explains, includes “oil and gas”.²⁶) However, those topics could be implicit in several “businesses”.²⁷

In sum, “energy” is now a foundational topic in the province’s twenty-year plan, and the plan’s discussion of this topic refers to energy efficiency (“wise use”) and “clean/alternative energy,” which could well include renewable energy. However, given the plan’s lack of performance measures relating directly to either of these two sectors—other than greenhouse gas reduction targets—the significance of these references is uncertain.

4.0. Energy-specific Policies and Commitments Preceding the 2008 *Energy Strategy*

Alberta’s 2008 *Energy Strategy* was the product of a several year energy policy development that seemed to start with the province’s 2006 “Integrated Energy Vision” (hereinafter the “*Vision*”).²⁸ This document focused particularly on promoting a value-added approach to fossil fuel energy development, but it also promised a more general “energy systems” approach to energy development in Alberta. The *Vision* did not explain its role or location within the province’s overall policy framework except to speculate that a new cross-Ministry initiative “may be needed to focus” on the *Vision*.²⁹

Of particular relevance here, the *Vision* referred to energy efficiency several times in the context of upstream fossil fuel production and upgrading, and once in reference to electricity transmission,³⁰ but made only scant reference to energy efficiency or conservation in the downstream energy context.³¹ The *Vision* arguably provided a stronger endorsement of renewable energy than energy efficiency,³² but this endorsement was only in broad terms; it lacked specific targets or details, acknowledging instead that

²⁶ *Ibid.*

²⁷ For example, the plan’s brief discussion of its “core business” of “Environment” references “sustainable environmental management” and “actions taken on climate change,” both of which could implicitly include businesses relating to renewable energy and energy efficiency. *Ibid.*

²⁸ Alberta Energy, *Alberta’s Integrated Energy Vision* (2006) [*Integrated Energy Vision*]. See Michael M. Wenig & Dr. William A. Ross, “Making Progress Toward a Truly *Integrated Energy Policy*” (March/April 2007) 31 *LawNow* 43-44; ISEEE Report, *supra* note 4 at 71-72.

²⁹ *Integrated Energy Vision, ibid* at 12.

³⁰ *Ibid* at 5, 9, 10 and 14.

³¹ See *ibid* at 11 (heading: “Leading in Learning Regarding Energy Production, Conservation and Use”) and 14 (listing steps to “assure future electricity security and efficiency” in Alberta).

³² E.g., *ibid* at 13.

“[m]ore need[ed] to be done to understand” where renewable energy “fit into the larger energy scenario.”³³ However, the *Vision* was silent as to what these analytical steps would need to entail, when they would occur, and who would complete them.

The province followed its 2006 energy *Vision* with several commitments to develop a “comprehensive energy strategy” that would address both non-renewable and renewable energy resources as well as “conservation of energy use”.³⁴ However, shortly before producing this policy, in 2008 the province released its *Climate Change Strategy* (which itself followed two previous provincial climate change policies).³⁵ This *Strategy* referred to energy efficiency as the first of three policy “themes” and called for promoting renewable energy as among the means for taking action on the third theme of “greening energy production”.³⁶

The *Climate Change Strategy* backed these references with a projected 24 megaton reduction of greenhouse gas emissions by 2050 due to energy efficiency, which would be facilitated by a list of nine government actions. Four of these actions did not relate directly to energy efficiency. Two of the remaining five related to promoting public awareness of energy efficiency and greater efficiency of the government’s own energy use.

Another of the five actions listed in the 2008 *Climate Change Strategy* was to establish an “incentive program to promote the use of energy efficient appliances and home improvements”.³⁷ Consistent with this 2008 commitment, the province has developed several rebate programs. Those currently in effect are administered by the non-profit organization “Climate Change Central” and are for home energy audits, insulation, water and space heating, and new home purchases.³⁸

³³ *Ibid.*

³⁴ “Alberta Government Plan – Managing Growth Pressures”, online: <<http://www2.gov.ab.ca/home/506.cfm#2>>; “Alberta Speech from the Throne” (7 March 2007) at 10; and *2007-10 Government of Alberta Strategic Business Plan* at 4, 8 and 11-12. These commitments are discussed in Michael M. Wenig & Jenette Poschwatta, *Developing a “Comprehensive Energy Strategy” with a Capital “C”*, Occasional Paper #22 (Calgary: Canadian Institute of Resources Law, 2008) at 1 and 12.

³⁵ *2008 Climate Change Strategy*, *supra* note 7. For a discussion of those previous climate change policies, see ISEEE Report, *supra* note 4 at 59-75. For a detailed critique of the 2008 *Climate Change Strategy*, see Jenette Poschwatta, *Alberta’s 2008 Approach to Climate Change: A Step Forward?*, Occasional Paper #24 (Calgary: Canadian Institute of Resources Law, 2008).

³⁶ See *2008 Climate Change Strategy*, *ibid* at 7, 9, 13, 14, 15-16, 19.

³⁷ *Ibid* at 16.

³⁸ Climate Change Central, “My Rebates”, online: <<http://www.climatechangecentral.com/my-rebates/available-rebates>>.

Still another action listed in the 2008 *Strategy* was to “[i]mplement energy efficiency standards in building codes for homes and commercial buildings”.³⁹ In late 2009, the province conducted public consultations on revising its building codes to promote energy efficiency. However, the province later apparently decided that, rather than write its own building code, it will consider adopting a model national energy building code which it expected to be published in November 2011.⁴⁰

The fifth of the five actions listed in the 2008 *Climate Change Strategy* was to develop an “Energy Efficiency Act”.⁴¹ However, the province purportedly recently decided to forego adopting new energy efficiency legislation on the ground that there is sufficient authority in existing provincial laws, particularly the *Climate Change and Emissions Management Act*.⁴² It is uncertain whether this apparent decision will be revisited in light of Premier Redford’s recently-announced intent to make Alberta a national leader in energy efficiency.⁴³

³⁹ 2008 *Climate Change Strategy*, *supra* note 7 at 16.

⁴⁰ Alberta Municipal Affairs, “Energy Efficiency and the Alberta Building Code”, online: <http://www.municipalaffairs.alberta.ca/CP_EnergyCodes.cfm>. Letter from Hon. Hector Goudreau, Minister of Alberta Municipal Affairs to Ken Elsey, President, Canadian Energy Efficiency Alliance (9 May 2011), online: <<http://www.energyefficiency.org/News/PressReleases.html#buildingcode>>; National Research Council Canada, *National Energy Code of Canada for Buildings (NECB)*, online: <<http://www.nationalcodes.ca/eng/necb/index.shtml>>. See also Canadian Energy Efficiency Alliance, News Release, “Building Code in Alberta Needs to Update its Energy Efficiency Standards” (24 January 2011) (criticizing the province’s decision to forego adopting building efficiency standards for the interim period before the 2014 target in the national model code), online: <<http://www.energyefficiency.org/News/PressReleases.html#buildingcode>>.

From 2005-06, Alberta provided modest rebates for purchases of energy-efficient clothes washers, and from 2004-05, the province provided rebates up to \$400 for the purchase of high-efficiency furnaces. Climate Change Central, online: <<http://climatechangecentral.com/projects/efficiency/archived/alberta-furnace-replacement-program-2004>>, and <<http://climatechangecentral.com/projects/efficiency/archived/second-alberta-furnace-replacement-program>>. The province is currently running a \$4 million incentive program, ending December 2011, to encourage businesses to adopt energy efficient lighting systems. Climate Change Central, online: <<http://climatechangecentral.com/projects/efficiency/current/light-it-right>>.

⁴¹ 2008 *Climate Change Strategy*, *supra* note 7 at 16.

⁴² SA 2003, c C-16.7. This “decision” is reported on the internet home page of the Alberta Energy Efficiency Alliance (AEEA). See <http://www.aeea.ca/index.htm>. In January 2010, that non-profit group produced a “discussion paper” with suggested components of new energy efficiency statute, so presumably the government’s decision was made after this paper was produced. See AEEA, *Alberta Energy Efficiency Act – Discussion Paper* (January 2010), online: <<http://www.aeea.ca/index.htm>>. However, the author could not verify the government’s decision, including its timing and rationale, directly from citable government sources.

⁴³ In her 3 November 2011 “mandate letters” to the Ministers of Alberta Energy, Environment, Sustainable Resources Development and Agriculture and Rural Development, Premier Redford instructed those ministers to jointly “design and implement an initiative to make Alberta Canada’s leader in energy efficiency and sustainability.” Letters from Hon. Alison M. Redford, Q.C. to Hon. Frank Oberle, Hon.

Ironically, the provincial Legislature recently repealed a legislative tool for promoting—or even requiring—efficient use of fossil fuels by the province’s largest industrial and manufacturing operations. This tool consisted of similar provisions in each of the province’s three fossil fuel “conservation” statutes which required large-scale industrial and manufacturing users of those fossil fuels (other than electricity producers and upstream fossil fuel producers) to obtain “industrial development permits” from the Energy Resources Conservation Board (ERCB).⁴⁴ Under these provisions, the ERCB had broad discretion in deciding whether to grant “industrial development permits,” subject only to a “public interest” decision-making standard and a requirement that it consider the “efficient use without waste” of the energy resource being used, and the “present and future availability of” the relevant fossil fuel resource “in Alberta”. The ERCB likewise had broad discretion in setting the permits’ terms and conditions, which discretion presumably included requiring the permittees to undertake fossil fuel energy efficiency audits and to adopt measures to maximize their efficient use of fossil fuels. In 2011 the Legislature repealed the “industrial development permit” program.⁴⁵

Besides projecting emissions reductions from energy efficiency, the *Climate Change Strategy* projected a 37 megaton greenhouse gas reduction by 2050 from “greening energy production”. However, the *Strategy* did not specify how much of this reduction would be attributed to renewable energy production. The *Strategy*’s listed “actions” under this category are to fund and invest in green technology and to “[f]urther remove barriers and consider incentives for expanding the use of renewable and alternative energy sources”. The *Strategy* notes that these “barriers” include “challenges small producers face trying to access the electricity grid” and the “development and market introduction of new bio-energy products”.⁴⁶

These three actions are described in relatively broad terms so it is hard to assess the degree to which they have been completed. Clearly, progress has been made. For example, with respect to funding, the province’s Climate Change and Emissions Management Fund has granted over \$65 million in 2010-11 for renewable energy

Evan Berger, Hon. Diana McQueen, and Hon. Ted Morton (3 November 2011), online: <http://alberta.ca/premier_cabinet.cfm>.

⁴⁴ *Oil and Gas Conservation Act*, RSA 2000, c O-6, s 43; *Oil Sands Conservation Act*, RSA 2000, c O-7, s 12; and *Coal Conservation Act*, RSA 2000, c C-17, ss 28-31.

⁴⁵ *Energy Statutes Amendment Act, 2011*, SA 2011, c 11 (in force 13 May 2011). For a more detailed discussion of the “industrial development permit” program before it was repealed, see *Canada Energy Law Service* (Toronto: Thomson Carswell, 2007) at ss 451-467; see also Nigel Bankes, “The Energy Resources Conservation Board proposes to repeal provincial legislation” (8 December 2010) University of Calgary Faculty of Law Blog on Developments in Alberta Law, online: <<http://ablawg.ca/2010/12/08/the-energy-resources-conservation-board-proposes-to-repeal-provincial-legislation/#more-963>>.

⁴⁶ 2008 *Climate Change Strategy*, *supra* note 7 at 19.

projects.⁴⁷ As for removing barriers, in February 2008, within a month after publishing the *Climate Change Policy*, the province issued the *Microgeneration Regulation*, which allows small renewable electricity producers to sell excess electricity on the grid.⁴⁸

In sum, the 2008 *Climate Change Strategy* made only broad or vague commitments for promoting renewable energy. The *Strategy*'s committed actions for promoting energy efficiency, besides public education, were arguably more concrete, although one of these actions (new legislation) was dropped and another (new building codes) is still in progress. However, the *Strategy*'s biggest significance is arguably the fact that it pegged specified portions of future projected greenhouse gas emissions reductions to renewable energy and energy efficiency. This approach further solidified those sectors' places in the provincial energy policy landscape.

5.0. The CASA Working Groups/Project Teams

The work of the Clean Air Strategic Alliance (CASA) is still another notable precedent for the province's 2008 *Energy Strategy*. CASA is a multi-stakeholder organization established by the province in 1994 to provide consensus-based recommendations for the province's monitoring and protection of air quality in Alberta.⁴⁹ In 2002 the Hon. Lorne Taylor, Alberta Environment's then Minister, asked CASA to provide recommendations for managing air pollution from the province's electricity sector. In response, CASA established an electricity project team which, in turn, set up two working groups – one addressing “renewable and alternative energy” and the other “energy efficiency and conservation”. (Both of these groups later evolved into project “teams”.) Each of the groups' work is summarized below, followed by a few thoughts on the significance of this work in the province's broader policy-making context.

5.1. CASA's Renewable and Alternative Energy Project

In 2003, the renewable and alternative energy working group produced a detailed report with ten recommendations that were incorporated into the electricity team's broader report and later officially accepted by the province. Many of the group's

⁴⁷ Climate Change and Emissions Management Corporation (CCEMC), “Funded Projects”, online: <<http://ccemc.ca/funded-projects>>. This Fund is generated from payments of a \$15/tonne provincial charge on greenhouse gas emissions above specified thresholds for major emitters in the province, under the *Climate Change and Emissions Management Act*. See Alberta Environment, “Climate Change and Emissions Management Fund”, online: <<http://environment.alberta.ca/02486.html>>.

⁴⁸ Alta Reg 27/2008. See Alberta Utilities Commission, *Rule 024 – Micro-Generation*, online: <<http://www.auc.ab.ca/rule-development/micro-generation/Pages/default.aspx>>.

⁴⁹ See CASA, “About Us”, online: <<http://www.casahome.org/About.aspx>>.

recommendations were focused on further defining and achieving the goal, in the province's then-existing climate change policy, for a 3.5% increase in the output of renewable and alternative energy by 2008.⁵⁰ However, the group also recommended that a CASA-based "implementation team" be formed to address several further issues, including "[s]etting a further target for renewable and alternative energy beyond 2008."⁵¹

Consistent with this recommendation, in 2004 CASA formed a renewable and alternative energy project team which reported back to CASA in 2005 with a list of recommendations and discussion of items for further consideration.⁵² Of particular note, although the team's "key objectives" included setting a renewable energy production target beyond 2008, the team's public, private, and non-profit stakeholders were unable to reach a consensus on this item so the team did not provide a recommended future target. However, the team recommended that such a target should be set by the government.⁵³

The team produced a final report in 2007, after which it was disbanded.⁵⁴ This report predicted that the province would exceed its 2008 targeted 3.5% increase in renewable electricity production by a "significant margin," noting several provincial programs as "contribut[ing]" to this achievement, but also crediting federal tax and production incentives as a "significant factor".⁵⁵ The final report also noted the province's indication that it would develop a post-2008 target in the context of its development of a "comprehensive energy strategy".⁵⁶

According to its final report, the CASA team considered but ultimately decided to forego developing a proposed renewable and alternative energy "policy framework". Instead, the team recommended that the province should take this task on itself, with the objective of "increas[ing] the supply of and demand for renewable and alternative electrical energy in Alberta." The team also suggested a list of objectives and principles for guiding such a policy framework. The former included: fostering market demand, internalizing energy-related costs and benefits, creating a stable and attractive investment environment, and reducing regulatory barriers. Several suggested principles essentially

⁵⁰ *CASA 2003*, *supra* note 11. This project, as well as the province's 3.5% target, is discussed in ISEEE Report, *supra* note 4 at 34, 61-62 and 70.

⁵¹ *CASA 2003*, *supra* note 11 at 11.

⁵² CASA Renewable and Alternative Energy Project Team, *Renewable and Alternative Energy as a Source of Electricity in Alberta – Report to the CASA Board* (Edmonton: CASA, December 2005).

⁵³ *Ibid* at 35; see also *ibid* at 2 and 24.

⁵⁴ CASA Renewable and Alternative Energy Project Team, *Recommendations for a Renewable and Alternative Electrical Energy Framework for Alberta – Final Report* (Edmonton: CASA, March 2007).

⁵⁵ *Ibid* at 3-4.

⁵⁶ *Ibid* at 6.

involved supporting a wide or diverse range of renewable electricity sources.⁵⁷ The province apparently accepted the team's recommendations,⁵⁸ although it is uncertain whether there is a written record of this acceptance.⁵⁹

5.2. CASA's Energy Efficiency and Conservation Project

CASA's energy efficiency and conservation working group produced a report in 2003 with four recommendations that were adopted by CASA's broader electricity team and that were purportedly subsequently accepted by the government. Unlike the largely technical focus of the renewable energy group's recommendations, the energy efficiency group's recommendations were broadly focused. Two of the group's four recommendations were for the province to promote energy efficiency by entering into future "greenhouse gas sectoral agreements" and by providing "stable and sufficient funding" for energy efficiency programs. A third recommendation was for the government-established organization titled "Climate Change Central" to conduct studies, provide public information, and work with municipalities on various issues relating to energy efficiency. The group's fourth recommendation was for CASA to establish an energy efficiency project team with eleven listed tasks. These tasks included not only further research but hands on "wor[k] with" various agencies and private sectors to promote various energy system outcomes.⁶⁰ The group's list of recommended follow up tasks is notable not just for its length but for the hands-on roles that the group sought for the proposed project "team."

As with the renewable energy group, CASA reconstituted the energy efficiency group in 2004 as a project team (the "energy efficiency" portion of the team's title was changed to "electrical efficiency"), which published follow up reports in 2006 and 2007 before being disbanded. The team's overall aim was to implement all of the working group's four recommendations, but the team's 2006 report fell well short of meeting this goal, as reflected not only in its brevity (less than ten pages excluding appendices) but also in its candid, up-front discussion of the team's "challenges". These challenges included the

⁵⁷ *Ibid* at 7-8.

⁵⁸ E-mail from Robyn-Leigh Jacobsen, Senior Manager, Program Planning & Delivery, CASA to Michael M. Wenig (copy on file with the author) (12 September 2011).

⁵⁹ According to CASA, this acceptance is implied in the CASA Board of Directors' own acceptance of the group's report and recommendations, because of the government's membership on the CASA Board. *Ibid.* (At present, officials from Alberta Energy, Environment, and Health & Wellness are members of the CASA Board. See CASA, "Board of Directors", online: <<http://casahome.org/About/Governance/BoardofDirectors.aspx>>.)

⁶⁰ *Report of the Energy Efficiency and Energy Conservation Working Group to the CASA Electricity Project Team* (Edmonton: CASA, 2003), online: <<http://www.casahome.org/Projects/CompletedProjects/Electricity.aspx>>.

“lengthy and demanding task” of developing efficiency targets for all sectors, the “difficulty of marshalling resources due to the disperse nature of electrical efficiency,” the apparent lack of “clear leader(s)” to “champion” electrical efficiency programs, and the team’s limited mandate to focus on efficiency only in the electrical energy context.⁶¹

Still another challenge noted by the team was a lack of “direction and vision” from the provincial government. The report explained that, “[t]ypically, a government policy or some form of strategic direction is needed before targets can be set” and that setting targets in the absence of any such guidance is “extremely difficult.” Given this challenge, the team chose to forego setting targets absent a “clearer indication” from the province “regarding its support for efficiency in general.”⁶²

Given this lack of direction and the other challenges noted, the team focused essentially on making the case for the province’s future development of an “overarching” energy efficiency policy “framework”. The team’s roughly two page justification for this framework discussed the benefits of promoting energy efficiency, noted a few obstacles, and ended with the plea for provincial “leadership in overcoming the barriers to energy conservation and efficiency” and for an overarching framework to address these barriers in a “coordinated, efficient and effective manner.”⁶³

Besides arguing for the province’s development of a framework, the CASA team offered several suggestions for the content of such a future framework, including an identification of:

- the ministry responsible for implementing the framework and of the roles of all other relevant organizations;
- financing or funding sources;
- the process (“timelines and actions”) for necessary follow up steps;
- a “diversity of approaches” for promoting the framework’s objectives; and
- measurement, reporting, and evaluation components.⁶⁴

Before being disbanded, the CASA team produced another report focused specifically on residential electricity use, but with the aim of providing a model for considering

⁶¹ CASA Electrical Efficiency and Conservation Project Team, *The Need for an Overarching Energy Conservation and Efficiency Framework in Alberta* (Edmonton: CASA, 30 November 2006), online: <<http://www.casahome.org/Projects/CompletedProjects/ElectricalEfficiencyandConservation.aspx>>.

⁶² *Ibid* at 6.

⁶³ *Ibid* at 6-8.

⁶⁴ *Ibid* at 8-9.

efficiency targets and tools for other electricity-consuming sectors.⁶⁵ The team's report identified numerous actions or programs for achieving a specified numerical target for reduced electricity consumption by the residential sector.⁶⁶ However, the team referred to this target only as one that was "discussed"; the team stopped short of formally "adopting" the target and recommending that it be approved by the province.⁶⁷

5.3. Reflections on the CASA Work

The CASA reports discussed above were based on considerable thought and work by knowledgeable, dedicated experts and should be useful both for their informational content and as a reflection of where energy sector participants stand on key issues relevant to renewable energy and energy efficiency. As relevant here, however, the CASA reports are arguably most notable for their consistent call for considerable additional policy-making in these two areas. In other words, the reports indicate that there was a significant policy vacuum in these areas preceding the province's adoption of the 2008 *Energy Strategy*. The CASA reports are also notable for their authors' views that the recommended policy "frameworks" needed to be developed by the provincial government, not CASA itself.

In at least one other area—flaring and venting of solution gas by oil and gas production facilities—CASA project teams have stepped farther into the government's shoes by setting priorities and targets and recommending specific, consensus-based regulatory tools for the government's use.⁶⁸ By contrast, CASA's work in the areas of renewable energy and energy efficiency showed that policy-making by multi-stakeholder consensus was infeasible in those areas. This outcome is not surprising given the breadth of issues arising from and related to, and the overall complexity of, the two subjects.

Finally, the CASA teams not only faced a lack of direction from the province, but also arguably faced a limiting internal mandate—to determine how and whether renewable energy and energy efficiency should be promoted to reduce air pollution from the province's electricity sector. While renewable energy and energy efficiency should be considered in relation to this objective, they should be considered on numerous other grounds as well. Not surprisingly, the teams' reports recognized these additional benefits. However, the teams' narrowly focused *raison d'être* would still seem to have been a

⁶⁵ CASA Electrical Efficiency and Conservation Project Team, *Electrical Efficiency and Conservation in the Residential Sector in Alberta – Final Report* (CASA, 27 February 2007) at 1, online: <<http://www.casa.home.org/Projects/CompletedProjects/ElectricalEfficiencyandConservation.aspx>>.

⁶⁶ *Ibid* at 9-20.

⁶⁷ *Ibid* at 8-9.

⁶⁸ See CASA, "Flaring and Venting Implementation", online: <<http://casahome.org/Projects/CompletedProjects/FlaringandVentingImplementation.aspx>>.

constraint on their ability to consider and develop sufficiently holistic or comprehensive policy perspectives.

6.0. The 2008 *Energy Strategy*

In December 2008, Alberta released the *Energy Strategy* which, in then-Energy Minister Mel Knight's words, is a "comprehensive plan for Alberta's energy future".⁶⁹ The *Strategy's* scope is relatively comprehensive in the sense that it addresses both renewable and non-renewable energy resources, upstream production and downstream consumption and intermediary components between these two energy system end points, value added energy processing, and the energy/environment/economy interface.

Perhaps as a result of its comprehensive scope, the *Strategy's* overall format or structure is complex. As set out in part 2, titled "Alberta's Energy Vision," the *Strategy's* components consist of a vision statement (part 2.2), six "critical assertions" (part 2.3), three "desired outcomes" (part 2.4), and seven steps (later termed "levers" or "tools") for achieving the outcomes (part 2.4). This hierarchy makes sense in the abstract but is confusing in its actual detail or layout.

This confusion begins with the *Strategy's* three outcomes, the first two of which are for two energy system components ("clean energy production" and "wise energy use") but the third of which ("sustained economic prosperity") refers to a meta- or higher order objective that arguably should precede the *Strategy's* energy "vision" (discussed below).⁷⁰ The *Strategy's* six "critical assertions" are themselves a functional hodgepodge so it is unclear whether the "assertions" are properly introduced ahead of—and thus as conceptual predicates to—the three "outcomes," or whether they should more logically follow the "outcomes".⁷¹ Still another source of confusion stems from the *Strategy's* three separately listed but partly overlapping and in some respects duplicative lists of "approaches," "assertions," and "levers".⁷²

⁶⁹ *Energy Strategy*, *supra* note 1 at 2.

⁷⁰ The *Strategy's* actual "overview" discussion of this third outcome focuses on the more down-to-earth topic of promoting value-added energy production and processing, although the list of "approaches" at the end of the "overview" are not limited to value-added issues. *Ibid* at 27-29.

⁷¹ The first two "assertions" are stated as findings or conclusions, the next three are broad descriptions of government actions (i.e. "will do"-type statements), and the last—"Alberta will build on success"—is a sort of blend of the conclusion- and "will do"-types. *Ibid* at 20.

⁷² In fact, each of the lists of "approaches" and levers itself appears to be somewhat internally duplicative. Compare, e.g., *ibid* at 24 ("Invest in development and implementation of gasification technology as well as carbon capture and storage") and 29 ("Invest in energy technology ... including gasification and carbon capture and storage"), and compare *ibid* at 38 (forthcoming energy efficiency

Putting aside the *Strategy*'s complex overall structure, the following is a discussion of each of the *Strategy*'s primary components. The *Strategy* starts with a discussion of the provincial, national, and international contexts for energy development and use in Alberta, and then summarizes several challenges posed by those contexts. The *Strategy* then states an energy-related "vision" of the province as "aspir[ing]" to be a "global energy leader, recognized as a responsible world-class energy supplier, an energy technology champion, a sophisticated energy consumer, and a solid global environmental citizen."⁷³ While this "vision" statement does not mention either renewable energy (or, for that matter, non-renewable energy) or energy efficiency, it has a broader focus than the purely production-oriented "vision" statement in the 2006 *Integrated Energy Vision*.⁷⁴

Of the *Strategy*'s seven "critical assertions" (including their accompanying, two-sentence explanations), none specifically reference renewable energy but one states that the government will "encourage" energy efficiency.⁷⁵ Similarly, and as listed above, one of the *Strategy*'s three desired outcomes is specifically targeted at "wise use" of energy (which term the *Strategy* later clearly ties to energy efficiency and conservation⁷⁶), but none specifically reference renewable energy.⁷⁷ However, the "overview" discussion of the "clean energy production" critical assertion clearly includes renewables as among the "clean energy" sources that the province should promote.⁷⁸

policy framework will include "work[ing] with Canada to assess vehicle emission standards in the province") and 40 ("Going forward, Alberta will ... "[w]ork with Canada to ensure that ... vehicle emission standards are improved").

⁷³ *Ibid* at 20.

⁷⁴ *Integrated Energy Vision*, *supra* note 28 at 5 ("Alberta is a global energy leader, using its world class knowledge, expertise, and leadership to both develop the vast energy resources of the province and to market these resources and abilities to the world.").

⁷⁵ *Energy Strategy*, *supra* note 1 at 20-21. While none of the assertions specifically mention renewable energy, the first assertion specifically mentions non-renewable energy by stating that "the development of clean hydrocarbons is essential to Alberta's energy future". *Ibid* at 20.

⁷⁶ *Ibid* at 25-26 and 38-40.

⁷⁷ *Ibid* at 21. According to the *Strategy*, "[w]ise energy use is within our reach. It is the right thing to do, and the world is watching Alberta. Champions of energy production, Albertans can also set the standard in its consumption." *Ibid* at 26. The *Strategy* explains that, as a "resource-rich province" Alberta has "often considered development before energy efficiency or conservation". The *Strategy* also admits candidly that the "way we use energy leaves a lot to be desired and lists, as examples of this approach—driving "long distances on congested roadways to work," "leaving lights on or failing to stem the quiet energy consumption of electrical devices," and "inadequately insulating" residences. The *Strategy* also notes the importance of curbing energy consumption for purposes of cutting greenhouse gas emissions. *Ibid* at 4. Similarly, the *Strategy* notes that Albertans are "among the highest per-capita energy consumers" in the world and therefore "need to set a more appropriate example." *Ibid* at 25-26.

⁷⁸ *Ibid* at 23. The *Strategy* refers to promoting renewable energy as "[p]erhaps the option talked about most often". According to the *Strategy*, the province has a "rich endowment" of renewable energy sources

Notwithstanding this linkage, the *Strategy*'s actual list of actions relating specifically to renewable energy, from among all of the *Strategy*'s three sets of action items noted above, is sparse. Two of these actions, listed among the “approaches” to promoting “clean energy,” are to: “support renewable energy development” and “promote a market for its consumption”.⁷⁹ Both actions are listed in such broad terms (“support” and “promote”), they provide no clue as to what if anything will be done.

In a list of “levers,” the *Strategy* states another action—to introduce a renewable fuels standard.⁸⁰ This action is much more concrete than the other two and has in fact already occurred through the province’s adoption in 2010 of the *Renewable Fuel Standard Regulation*, which essentially requires an average 2% renewable diesel content in diesel fuel, and a 5% renewable alcohol content in gasoline, sold in Alberta after 1 April 2011.⁸¹

While the *Strategy* is short on actions relating specifically or solely to renewable energy, it does contain several other actions that either the *Strategy* expressly relates to several energy sources including renewables, or that have obvious significance for renewables. Chief among these actions are to:

- gradually increase carbon pricing for major greenhouse gas emitters;⁸²
- invest in clean energy research, development and deployment;⁸³
- strengthen the electricity transmission system;⁸⁴
- “[r]educ[e] regulatory bottlenecks” for small energy producers;⁸⁵ and

that will “play an increasingly important role in our energy future.” The *Strategy* notes that, while “many factors” will constrain the growth of renewable energy sources, they are “undeniably cleaner sources of energy than fossil fuels.” *Ibid.*

⁷⁹ *Ibid* at 24.

⁸⁰ *Ibid* at 35.

⁸¹ Alta Reg 29/2010. To qualify as “renewable,” the fuel must have at least 25% less greenhouse gas emissions intensity than the fuel for which it is being substituted. See GOA, *Talk about bioenergy* (March 2010), online: <<http://www.energy.alberta.ca/BioEnergy/pdfs/FactSheetBioInit.pdf>>.

⁸² *Energy Strategy*, *supra* note 1 at 24; see also *ibid* at 39 and 40.

⁸³ *Ibid* at 41.

⁸⁴ *Ibid* at 43-44. See GOA, *Energy – Annual Report 2010-2011* at 38, online: <<http://www.energy.alberta.ca/Org/Publications/AR2011.pdf>> (noting that the province’s *Transmission Regulation* was amended in 2010 to require the construction of transmission to “areas of renewable or low emission electricity.”) and *Transmission Regulation*, Alta Reg 86/2007, ss 8(b) and 10(1)(a)(iii) (requiring the Independent System Operator to forecast the “timing and location of future generation additions” including renewable sources, when forecasting Albertans’ electricity needs for transmission planning purposes and preparing a long term transmission system plan).

- update the micro-generation policy.⁸⁶

The *Strategy* lists two other actions that likewise impliedly relate to renewable energy, but that are written in such broad terms it is hard to know what they will actually entail. These actions are to:

- “[e]xplore and capitalize” on “synergies available through innovative integration of energy sources”; and
- “[s]eek innovative application of energy production” from sources other than fossil fuels.⁸⁷

As for actions to promote energy efficiency, the *Strategy* provides a list of eight steps to “accomplish wiser energy use”. The steps relate to a wide range of important topics including public knowledge and awareness, building efficiency, urban planning and mass transit, vehicle emissions/efficiency, and electricity grid capacity. However, these topics are introduced with verb phrases like “work with/to,” “actively support” or “support,” and “invest in,” that are so broad or general they are unclear as to what specifically will be done and when and who will be accountable for doing them.⁸⁸

As if in answer to this high level of generality, the *Strategy* later states, in its discussion of “levers” to “[e]ncourage” energy efficiency, that the province “will develop an over-arching policy framework to increase energy efficiency and conservation in all sectors within Alberta.”⁸⁹ The *Strategy* states that the “policy framework” will “include action” in four areas—electricity measurement, transportation, building design, and urban planning. According to the *Strategy*, future actions in the first area include: “promot[ing]” smart metering and smart grids. Transportation-related actions are to implement a then-recent \$2 billion provincial funding program for urban public transit, “examine the goals for energy efficiency” of government vehicles, and “work with” the federal government to “assess” emission standards for vehicles in Alberta. In the third area, future actions are to “strengthen” building codes, “support selected retrofit/renovation programs,” and “requir[e]” new government-funded buildings to meet top ratings in Leadership in Energy and Environmental Design (LEED). As for the fourth area, the *Strategy* promises that the province will “work” with municipal governments to “encourage” “rethink[ing]

⁸⁵ *Energy Strategy*, *supra* note 1 at 45.

⁸⁶ *Ibid.*

⁸⁷ *Ibid* at 24 and 29.

⁸⁸ *Ibid* at 26. One step—“[s]upport through planning, technology and education the realization of greater efficiency in the production, conversion and consumption of energy”—is so broad it reads more like a high level policy vision or mission than a means for achieving them.

⁸⁹ *Ibid* at 38.

urban planning, especially in the context of urban sprawl and the need to increase density”⁹⁰

As described above, the *Energy Strategy*’s list of actions to promote energy efficiency is much broader in scope than the three actions listed in the 2008 *Climate Change Strategy*. On the other hand, the *Strategy* does not reference the “Energy Efficiency Act” promised in the January, 2008 *Climate Change Strategy*. Nor is it clear that the *Climate Change Strategy*’s commitment to an incentive program for energy efficient appliances is encompassed in the *Energy Strategy*’s commitment to “support selected retrofit/renovation programs”.

Putting aside the question of how the *Energy Strategy*’s actions compare to the *Climate Change Strategy*, the former are hardly concrete or certain in and of themselves – some are noted simply for inclusion in a future policy framework, some are written in loose terms (“support,” “work with,” “encourage), and some even lack a clear indication of desired outcomes (e.g. an assessment of vehicle standards).

In sum, the 2008 *Energy Strategy* further entrenched renewable energy and energy efficiency as subjects of provincial policy, but arguably does little more than that. In particular, the *Energy Strategy* does not neatly carry over or transition from the *Climate Change Strategy*’s commitments. And the *Energy Strategy*’s largely broadly worded provisions hardly provide the kind of policy framework that the CASA teams called for and that were promised by the government’s own prior policy documents.

7.0. Alberta Energy’s Business Plan

This part analyses whether and how Alberta Energy’s three-year business plan addresses renewable energy and energy efficiency. The analysis focuses on the text of Energy’s current business plan, but also considers this text in light of Energy’s previous three-year plan and latest annual report, as well as the provincial policies discussed above.

According to Energy’s current business plan, the department’s mission is to “assure sustained prosperity in the interests of Albertans through the stewardship of energy and mineral resource systems, responsible development and wise use of energy.”⁹¹ Obviously, the mission statement itself makes no express reference to renewable energy but does refer to energy efficiency through its reference to “wise use of energy”.⁹²

⁹⁰ *Ibid* at 38-39.

⁹¹ Alberta Energy, *Energy – Business Plan 2011-14* in *GOA Strategic Plan* (2011), *supra* note 14 at 53.

⁹² This reference seems somewhat toned down from Energy’s previous business plan whose mission statement included providing “leadership in energy ... conservation and efficiency”. Alberta Energy,

Similarly, the business plan's list of Energy's "core businesses" "include[s] ... promoting energy efficiency and conservation by Albertans and industry". As with the mission statement, this non-exclusive list of "core businesses" makes no reference to renewable energy.⁹³

This "core business" is mirrored in the list of "core businesses" in Energy's most recent annual report, which includes the additional "core business" of "[d]evelop[ing] policy for and manag[ing] development of Alberta's non-renewable resources *and renewable energy*."⁹⁴ It is unclear what if any inferences can be drawn from the business plan's omission of this additional core business.

Besides its mission statement and list of core businesses, Energy's business plan has three main components: a set of three "goals," and lists of "priority initiatives" and "performance measures" accompanying each goal. The three goals collectively refer broadly to Alberta's "energy supply," "energy," and "energy resources," but make no specific reference to either renewable or non-renewable energy sources. One might therefore consider these broad, neutral references as suggesting a balanced approach toward promoting renewable and non-renewable energy sources. However, the business plan's "priority initiatives" suggest that no such balance is intended. Of the plan's fifteen "priority initiatives," none relate specifically to renewable energy, but five either refer specifically to non-renewable energy sources or to programs that relate only to those sources.⁹⁵ At least part of a sixth priority initiative—to "[l]ead the long-term streamlining and rationalization of the natural resource regulatory system"—has been applied in practice only to oil and gas development.⁹⁶ While at least several of the other ten priority initiatives could apply to both renewable and non-renewable energy, the lack of reference to renewable energy in any of the eight accompanying "performance measures" suggests

Energy – Business Plan 2010-13 in *Government of Alberta Strategic Business Plan and Ministry Business Plans* (2010) at 92.

⁹³ *Energy – Business Plan 2011-14*, *supra* note 91 at 53.

⁹⁴ *Energy – Annual Report 2010-2011*, *supra* note 84 at 8 (emphasis added).

⁹⁵ These five references are to Alberta's "royalty system," energy and mineral resource "revenues," "investment competitiveness within the natural gas and oil sectors," "upgrading and refining," and carbon capture and storage. *Energy – Business Plan 2011-14*, *supra* note 91 at 53-55.

⁹⁶ *Ibid* at 54. This initiative is being implemented through the province's "regulatory enhancement project," a major part of which was the Energy Minister's creation of a "Regulatory Enhancement Task Force" which recently produced a report and recommendations. See GOA, *Enhancing Assurance – Report and Recommendations of the Regulatory Enhancement Task Force to the Minister of Energy* (December 2010), online: <<http://www.energy.alberta.ca/Org/pdfs/FinalEnhancingAssuranceReportREP.pdf>>. The report makes it clear at the outset that its focus is on the upstream oil and gas sectors. *Ibid* at 4. To date, there has been no similar initiative for the renewable energy sector.

that the business plan does not have specific or defined objectives to promote renewable energy through these other initiatives.⁹⁷

The business plan's lack of performance measures relating directly to renewable energy is particularly notable given that Energy's previous business plan, for the period 2010-2013, included volume-based performance measures for the production in Alberta of two energy sources—ethanol and biodiesel—that are commonly considered to be “renewable” sources.⁹⁸ Although Energy's 2011-14 business plan—published in February 2011—omitted these renewable fuel targets, Energy's subsequently published 2010-11 “Annual Report” addresses the progress toward achieving these targets.⁹⁹ This inconsistency makes it unclear where these biofuels targets stand among the province's energy priorities. Putting aside the Annual Report's reference to these targets, it is also unclear why the 2011-14 business plan omits them.

Energy's 2010-13 business plan also included a performance measure of “continuous improvement” in the number of “microgeneration sites” in the province.¹⁰⁰ Because many such sites are likely to produce energy from renewable sources, this is an indirect performance measure for renewable energy.¹⁰¹ Once again, Energy omitted this measure

⁹⁷ Three of the first four performance measures relate to non-renewable energy sources. Of the last four, two relate to performance aspects of the electricity system—transmission losses and margin between “firm generating capacity” and “peak demand”—that do not indirectly promote renewable electricity production. The third relates to compliance rates of non-renewable energy producers regulated by the Energy Resources Conservation Board. The fourth relates to the Alberta Utilities Commission's time-frames for processing “needs and facilities applications”. *Energy – Business Plan 2011-14*, *supra* note 91 at 54.

⁹⁸ *Energy – Business Plan 2010-13*, *supra* note 92 at 100. These measures were listed under the plan's goal of encouraging value-added energy developments in Alberta. *Ibid.* Governments' promotion of ethanol production and use has garnered considerable comment and critique. See, e.g. S.M. Jordaan & M.C. Moore, *Ethical risks of environmental policies: the case of ethanol in North America*, vol 3, issue 9, SPP Research Papers – Energy and Environment (Calgary: University of Calgary School of Public Policy, December 2010).

⁹⁹ The Annual Report was published after the 2011 fiscal year end in March 2011. *Energy – Annual Report 2010-2011*, *supra* note 84 at 4. This report notes that the province produced 40 million litres of ethanol in 2010, which is just under 25% of the 150 million litre *lower end* of the targeted range in the 2010-13 business plan. *Ibid.* at 19; *Energy – Business Plan 2010-13*, *ibid.* at 100. However, the 2010 production is the same as that in 2009 and 2008. *Energy – Annual Report 2010-2011*, *ibid.* at 19.

¹⁰⁰ *Energy – Business Plan 2010-13*, *ibid.* at 103.

¹⁰¹ According to Energy's latest Annual Report, “solar systems accounted for two thirds of the [microgeneration] systems installed with small wind generators making up most of the remainder.” *Energy – Annual Report 2010-2011*, *supra* note 84 at 40.

from its 2011-14 business plan, but referenced the measure in its 2010-11 Annual Report.¹⁰²

Energy's approach to renewable energy in its 2011-14 business plan is notable for yet another omission—it makes no reference to the government's development of a renewable energy policy. As noted above, this task was implied in the province's 2006 *Integrated Energy Vision* and CASA's renewable energy project team recommended that the province develop a similar policy.

Notwithstanding the business plan's silence with respect to this policy development, this task is mentioned in Energy's most recent annual report, albeit cursorily.¹⁰³ In fact, the project appears to be proceeding, as evident from an 30 August 2011 invitation to selected non-government individuals to participate in a one-day, facilitated "information gathering" meeting in mid-September 2011, to "assist" the province in preparing an "Alternative and Renewable Energy Policy Framework".¹⁰⁴ (The invitation states that this project is being undertaken by a cross-departmental team lead by Alberta Energy.) Further research is needed to determine the extent and nature of other work done to date in developing this "policy framework". However, the invitation referenced above suggests that the project is still in its early stages.¹⁰⁵ In addition, the characterization of this product as only a "policy framework," rather than simply a "policy," might suggest that the end-product itself will only be a guide for developing further policy. However, this inference is uncertain, as the word "framework" may be intended to mean a comprehensive, hierarchical structure of policies, rather than simply a foundation for further policy development.¹⁰⁶

In contrast with its non-attention to renewable energy, and consistent with Energy's mission statement, Energy's 2011-14 business plan does specifically reference energy efficiency. Under Energy's second goal of achieving "effective stewardship of Alberta's energy resources," the plan lists the following as a priority initiative: "Industry, citizens and communities conserve and use energy wisely." Curiously, a previous Energy

¹⁰² *Ibid* at 20.

¹⁰³ This reference notes that "[b]arriers and opportunities for distributed generation are considerations in development of" this "policy framework". *Ibid* at 38.

¹⁰⁴ E-mail from I. McKay, Subject: Invitation to Alternative and Renewable Energy Policy Framework Information Gathering Session (copy on file with the author) (30 August 2011).

¹⁰⁵ For example, the invitation states that the meeting's purpose is to obtain input on the identification of potential energy sources and barriers, which identification is described as a "first step" in the policy development process. The invitation also states that this input will be used to develop a "white paper" which will then be used to solicit broad public input, following which a "report" will be prepared which will then lead to an identification of policy options. The invitation states that the report is expected to be completed in early 2012, but does not provide a timeline for completion of the subsequent steps. *Ibid*.

¹⁰⁶ See Wenig & Poschwatta, *supra* note 34 at 6.

business plan listed this energy efficiency initiative as a “goal” in and of itself.¹⁰⁷ However, it is uncertain whether this change from a goal to a goal-based initiative reflects a lowering of energy efficiency in the province’s overall policy priorities or simply a consolidation and reorganization of Energy’s overall policy themes.¹⁰⁸

Also by way of comparison, the previous plan included a “strategy” under its “wise use” goal, of providing “[s]upport [for] development of an energy efficiency policy framework....”¹⁰⁹ By contrast, Energy’s current plan makes no reference to a forthcoming energy efficiency policy framework. However, as noted above, in her 3 November 2011 “mandate letters” to the Ministers of Alberta Energy, Environment, Sustainable Resources Development and Agriculture and Rural Development, Premier Redford instructed those ministers to jointly “design and implement an initiative to make Alberta Canada’s leader in energy efficiency and sustainability.”¹¹⁰ This mandate indicates that energy efficiency policy development remains a provincial priority, if not solely for Alberta Energy to achieve.

Energy’s current plan lists two performance measures for its energy “stewardship” goal, which collectively do not suggest an aggressive, comprehensive approach to increasing overall energy efficiency in the province. Of these two performance measures, only one is a direct measure of energy efficiency and that measure applies only in the narrow context of percentage of “fuel gas” used in industrial operations.¹¹¹ The other performance measure is a poll-based ranking of Albertans’ self-assessment of how “knowledgeable” they feel about the “energy industry in Alberta.”¹¹² This benchmark of Albertans’ overall energy knowledge can hardly indicate Albertans’ specific knowledge of energy efficiency issues, let alone provide a direct and accurate measure of the province’s progress in achieving the “wise energy use” goal.

Energy’s current business plan refers to “energy efficiency” in another “priority initiative,” this one listed under the plan’s third goal of “[l]ead[ing] and support[ing] the development of energy related infrastructure, innovation, markets and regulatory

¹⁰⁷ *Energy – Business Plan 2010-13*, *supra* note 92 at 102.

¹⁰⁸ Energy’s 2010-13 plan listed eleven goals whereas the 2011-14 plan lists only three which appear to encompass the previous eleven. *Ibid* at 96-107; *Energy – Business Plan 2011-14*, *supra* note 91 at 53-55.

¹⁰⁹ *Energy – Business Plan 2010-13*, *supra* note 92 at 102.

¹¹⁰ Redford, *supra* note 43.

¹¹¹ *Energy – Business Plan 2011-14*, *supra* note 91 at 54.

¹¹² *Ibid* at 54; E-mail from AlbertaConnects to M. Wenig (copy on file with the author) (9 August 2011).

systems”. The relevant initiative states: “Alberta has a competitive and *efficient* energy system ensuring Albertans’ electricity and natural gas needs are met.”¹¹³

This statement sounds more like a description of the *status quo* than an actual “initiative” for achieving some desired future state. In addition, because of the statement’s general reference to an “efficient energy *system*,” the statement’s intended focus seems less on “energy efficiency” than on the efficiency of the regulatory, bureaucratic, and/or organizational/institutional framework’s governing energy along the upstream-downstream continuum. This conclusion is supported by Energy’s 2010-13 business plan, which included this initiative as a “goal” and then explained the goal with references to “efficient energy markets” and “policy and market design” to “assur[e]” “reliable energy supplies and competitive prices”.¹¹⁴ Regardless of the uncertain focus of this particular “initiative” under the plan’s third goal, one of the four “performance measures” under this goal is the percentage of “transmission losses,” which is an important energy efficiency parameter, even if only in the narrow context of electricity transmission.¹¹⁵

In sum, Energy’s current business plan includes only one “priority initiative” relating directly to energy efficiency, and its two efficiency-related “performance measures” target only narrow, specific segments of the province’s overall or comprehensive energy system. These efficiency-related provisions are at least a step up from the plan’s virtual inattention to renewable energy which itself is somewhat of a step back from Energy’s previous plan. Perhaps most notably, Energy’s plan is silent with respect to developing the provincial renewable energy or energy efficiency policies that were central to the CASA team’s government-accepted recommendations.

8.0. Alberta Environment’s Business Plan

The 2007 ISEEE report noted that Alberta Environment was designated as the lead department for implementing the province’s then-existing climate change policy and had committed in its 2005-2008 business plan to implement the CASA renewable energy project team’s recommendations. However, the report questioned the propriety of these roles based on Environment’s lack of clear legislative authority to implement the climate change policy and CASA team’s objectives for renewable energy growth.¹¹⁶ The following discussion addresses whether Environment’s role has been clarified or changed since these conclusions were made in 2007.

¹¹³ Energy – Business Plan 2011-14, *supra* note 91 at 55 (emphasis added).

¹¹⁴ Energy – Business Plan 2010-13, *supra* note 92 at 104.

¹¹⁵ Energy – Business Plan 2011-14, *supra* note 91 at 55.

¹¹⁶ ISEEE Report, *supra* note 4 at 67-68 and 70.

As reflected in its current three-year business plan, Alberta Environment’s mission and three primary goals are all focused on achieving “environmental outcomes” that were not specified in the goals themselves.¹¹⁷ As such, the goals make no express reference to renewable energy or energy efficiency. Similarly, none of Environment’s fourteen “priority initiatives” listed under its three goals refers expressly to renewable energy or energy efficiency. However, one of the “performance measures” listed under the plan’s second goal is the percentage of Albertans engaged in “energy conservation”. This measure is notable from several standpoints.

First, it is listed under the goal that “Albertans, communities, governments and industry work together to achieve identified environmental outcomes”. However, there is no indication as to what “identified environmental outcome” relates to this performance measure. Second, because the performance measure is focused on “Albertans,” rather than on Environment, it is not a direct measure of Environment’s own “performance” in achieving the relevant “environmental outcome”. Third, and closely related to the prior point, this measure is unrelated to either of the two “priority initiatives” that are listed under the same business plan goal that accompanies the performance measure.¹¹⁸ Thus, it is unclear what if any steps Environment will take to promote Albertans’ achievement of this performance measure.

Fourth, the target for this performance measure is the same (90%) for each of the plan’s three fiscal years and the plan reports this same percentage as the baseline.¹¹⁹ Thus, this performance measure just calls for maintenance of the status quo; it does not seek further improvement in Albertans’ “engage[ment]” in energy conservation. Perhaps this approach is warranted on the ground that 90% is already high. However, because the measure only reports the percentage of Albertans’ “engaged” in conservation, rather than the actual amounts of energy being conserved through their “engagement,” one cannot reasonably infer from the 90% “engage[ment]” rate how much energy is actually being “conserved”.

Finally, it is uncertain why the performance measure is focused only on Albertans’ engagement in conservation, but not also in energy efficiency, given that the two practices are typically referenced in the same breath. In this instance, the term

¹¹⁷ *Environment – Business Plan 2011-14* in GOA, *Government Strategic Plan and Ministry Business Plans* (2011) at 57-59, online: <<http://www.finance.alberta.ca/publications/budget/budget2011/business-plans-complete.pdf>>. Environment’s mission also refers to “lead[ing] to sustain environmental quality for Albertans.” *Ibid* at 57.

¹¹⁸ The two initiatives both relate to “cumulative effects management”. *Ibid*.

¹¹⁹ *Ibid*.

“conservation” may have been used broadly to include energy efficiency, but further research is needed to confirm this shorthand.¹²⁰

As for the rest of Environment’s business plan, the plan’s third goal is that Albertans have “effective risk-based policies, processes and infrastructure” to achieve “identified environmental outcomes”. Two of the initiatives for achieving this goal are: to “identify improvements that promote environmentally responsible clean energy development” and to “[u]pdate Alberta’s *Climate Change Strategy* to align with national and international policy developments.”¹²¹ Both of these initiatives could relate to promoting renewable energy or energy efficiency, although the extent of that focus is hardly clear from the narrative statements.

In addition, the initiative involving “identifying improvements” is hardly ambitious, and “updating” climate change policy to reflect external events may or may not be an ambitious undertaking in the near or medium term. Even if substantial updates are warranted soon, that commitment is still limited to policy development rather than to policy implementation.

One of the three “performance measures” listed under this goal makes a somewhat more direct link to renewable energy and energy efficiency. This measure consists of numeric targets for total greenhouse gas emissions for Alberta-based sources for each of the business plan’s three years, based on targets set in the province’s 2008 *Climate Change Strategy*.¹²² Because those targets are based on emissions reductions from “clean energy” and “energy efficiency” measures, as noted in Part 3 above, this performance measure likewise impliedly reflects contributions from those sectors. However, as with the other performance measure already discussed, the business plan does not make clear what role Environment is expected to play in promoting the achievement of this measure.

Unlike Environment’s business plan, the department’s most recent annual report makes numerous specific references to energy efficiency and several to renewable energy. The report states at the outset that Environment “oversees policies and initiatives associated with ... climate change”.¹²³ However, the report does not make clear what this

¹²⁰ Two other accompanying measures relate to Albertans’ engagement in “waste conservation” and “water conservation”. *Ibid.* Thus, the term “energy conservation” may have been chosen simply for consistency in word use across these three benchmarks.

¹²¹ *Ibid.* at 58.

¹²² *Ibid.* Although the numeric targets increase during this period, they are meant to represent desired *limits* on expected emissions increases. Environment’s previous business plan included this performance measure but also listed, as one of the department’s six “strategic priorities,” its implementation of the *Climate Change Strategy. Environment – 2010-13 Business Plan* in GOA, *Budget 2010 – Striking the Right Balance* (2010) at 114 and 118.

¹²³ GOA, *Environment – Annual Report 2010-2011* (2011) at 8, online: <<http://environment.alberta.ca/03648.html>>.

oversight role really entails. In its “discussion” section, the report lists eight different, specific programs relating to energy efficiency and/or renewable energy. Of these eight programs, six involve a rebate, grant or other kind of provincial funding; the seventh involves public education (the “One Simple Act” program) and the eighth involves the granting of carbon offset credits.¹²⁴ Of the eight programs, only one is described as being administered directly by Environment (the “Light it Right” rebate program for energy efficient lighting); three are administered by the “Climate Change Central,” an arm’s length, non-profit organization; and two are administered by the Climate Change and Emissions Management Corporation.¹²⁵

In short, Alberta Environment’s latest annual report suggests that the department has a fairly small ‘hands on’ or ‘front line’ role in promoting either renewable energy or energy efficiency. However, further research is needed to determine the extent of the department’s influence on or leverage over the ‘front line’ agencies like Climate Change Central and the Climate Change Emissions Management Corp, through its “oversight” of climate change “policies and initiatives”.

9.0. The Institutional Voices within Alberta’s Energy and Environment Departments

As noted in Part 1 above, this paper considers the presence or absence of an organizational focus on renewable energy and energy efficiency within government as a benchmark of provincial interest in and support for those sectors. Because of its energy focus, Alberta’s energy department is the most obvious location for a provincial institutional voice for renewable energy and energy efficiency. This inference is supported, in part, by Alberta Energy’s leadership in the cross-departmental team assigned to develop a renewable energy policy framework, as noted in Part 6 above. And indeed, Energy’s structure includes an organizational unit named “Energy Efficiency and Conservation,” and another unit named “Alternative Energy,” both of which are discussed below.¹²⁶

¹²⁴ *Ibid* at 21-22 and 28-29.

¹²⁵ *Ibid*. One of these two—a grant to Medicine Hat for a solar thermal demonstration project—is funded jointly by the Corporation and by the provincial government using pass-through money from the federal “EcoTrust” fund. *Ibid* at 29; CCEMC, *Renewable Energy Projects* at 2 (unnumbered), online: <http://ccemc.ca/_uploads/RENEWABLE-ENERGY-PROJECT-INFORMATION.pdf>. For at least one other energy efficiency program funded in part by Alberta Environment—this in the context of agricultural production—see Agricultural Research and Extension Council of Alberta, “Energy Conservation and Energy Efficiency Project”, online: <http://www.areca.ab.ca/index.php?option=com_content&view=article&id=233&Itemid=147>.

¹²⁶ See Alberta Energy, “Organizational Structure”, online: <http://www.energy.alberta.ca/About_Us/1909.asp>. This page is linked to a more detailed organizational structure provided by the province’s on-line

Alberta's environment department is a less obvious location for a provincial institutional voice for renewable energy and energy efficiency, given its focus on regulating pollution. However, because of Alberta Environment's chief role in developing and implementing provincial climate change policy, that department's organization is also worth considering. Indeed, Environment has an Energy Efficiency, Alternative and Renewable Energy Section which is discussed below.

9.1. Alberta Energy's Alternative Energy Unit

The Alternative Energy unit is one of two units within Energy's "Infrastructure and Alternative Energy Branch" which, in turn, is one of three branches of the ministry's "Electricity & Alternative Energy, & Carbon Capture & Storage Division". That division, in turn, is one of the four divisions in Energy that are led by Assistant Deputy Ministers.¹²⁷ The Alternative Energy unit has five staff including the Director and a Manager (plus one administrative assistant).¹²⁸

When created in 2008, the unit's full name was "Alternative and Renewable Energy".¹²⁹ However, "Renewable Energy" was later dropped from the unit's title. The reason for this omission may well have been simply a practical need to consolidate titles.¹³⁰ However, given the province's historical policy references to "alternative energy" as distinct from "renewable energy", this change in the unit's title might also imply a diminished provincial interest in renewable energy, at least, relative to "alternative energy" (as that term has historically been viewed).

Putting aside the unit's on again/off again approach to renewable energy in its title, what work is the unit actually doing in this area? In July 2011, the unit's director was contacted by e-mail to obtain a copy of the unit's operating plans or equivalent statement of functions and current work, but no response was provided.¹³¹ In 2010, the unit's staff provided the author with slide presentations which focus on the province's bioenergy

directory of employees and government organizations. GOA, "Contact the Government of Alberta", online: <<http://alberta.ca/home/includes/directorysearch/goaBrowse.cfm?txtSearch=Energy&Ministry=ENERGY&levelID=16416>>. The term "organizational unit" is from this on-line directory.

¹²⁷ *Ibid*; Alberta Energy, *Organization Chart* (24 March 2011), online: <<http://www.energy.alberta.ca/Org/pdfs/EnergyOrgChart.pdf>>.

¹²⁸ "Contact the Government of Alberta", *supra* note 126.

¹²⁹ Telephone call with J. Bell, Alternative Energy Specialist, Alberta Energy (September 2011); E-mail from J. Bell (28 November 2011).

¹³⁰ This motive is evident from the multi-faceted title of the division which houses this unit. As noted above, the division's title refers to "electricity," "alternative energy," and "carbon capture and storage," so it would be problematic to also include "renewable energy" under this kitchen sink-type labeling format.

¹³¹ E-mail from M. Wenig to S. Carlisle (on file) (9 July 2011).

policy, the microgeneration regulation, and on developing policies by 2010 relating to “alternative and renewable energy” and “distributed generation”.¹³² However, the Alternative Energy unit’s role in these areas is not clear from the slides. The slides’ references to renewable energy sources other than biofuels suggest the unit’s focus on “alternative energy” includes those other renewable sources. That said, Energy’s on-line outline of its “Organizational Structure” lists only biofuels and nuclear energy following the Alternative Energy unit’s heading, suggesting that non-biofuel renewable energy sources are either ignored or are at least given lower priority than biofuels.¹³³

The Alternative Energy unit is also no doubt involved in the government’s development of the forthcoming alternative and renewable energy “policy framework” noted in Part 6 above. However, further research is needed to determine the unit’s contribution to this project and, particularly, the extent to which the unit’s staff are fulfilling Energy’s leadership role in the cross-ministry initiative.

9.2. Alberta Energy’s Energy Efficiency and Conservation Unit

This is one of four units within the “Carbon Capture and Storage and Energy Efficiency and Conservation Branch,” which is another branch in the ministry’s Electricity, Alternative Energy and Carbon Capture and Storage Division noted above. The Branch’s other three units all relate to carbon capture and storage.¹³⁴

The Energy Efficiency & Conservation unit (hereinafter “Energy Efficiency”) was established in 2009 to “contribute to achieving *Provincial* and *Energy Strategy* outcomes.”¹³⁵ At present, the unit has just two staff—a Director and a Senior Analyst.¹³⁶ The Energy Efficiency unit was originally in the same branch as the Alternative Energy unit, but was subsequently moved to its present location. According to the Energy Efficiency unit’s Director, the logic for Energy’s pairing of energy efficiency with carbon capture and storage is that “both areas of work contribute to achieving *Provincial Energy Strategy* outcomes and to reducing greenhouse gas emissions under the province’s *Climate Change Strategy*.”¹³⁷ However, this logic does not explain the unit’s separation

¹³² Alberta Energy, “Alternative and Renewable Energy Overview” (Presentation delivered at the ACCA Annual Rise and Shine Forum, 15 October 2009); *Alternative Energy Overview* (Alberta’s Regional Economic Development Conference, Edmonton, 13-14 May 2009).

¹³³ Cf. “Organizational Structure”, *supra* note 126 (outline-form listing of Energy organizational units listing “Bioenergy and Nuclear” in parentheses besides the “Alternative Energy” unit).

¹³⁴ Alberta Energy, *Organization Chart*, *supra* note 127.

¹³⁵ Telephone calls with A. Nikiforuk, Director, Energy Efficiency & Conservation, Alberta Energy (20 September 2011 and 24 November 2011).

¹³⁶ “Contact the Government of Alberta”, *supra* note 126.

¹³⁷ A. Nikiforuk telephone calls, *supra* note 135.

from Alternative Energy, which also presumably shares the greenhouse gas reduction objective. The Energy Efficiency unit's essentially lateral shift within Energy's bureaucracy, and the unit's present location in the same branch with three other units all focusing on carbon capture and storage, arguably suggests that the energy efficiency unit has not found a solid footing within Energy's overall organizational structure and thus reflects a low policy priority.

As with Energy's alternative energy unit discussed above, the author was unable to obtain a written mission statement or work plan for the energy efficiency unit. According to its director, the unit's mission is reflected in the second goal in Energy's current business plan, and second "priority initiative" under that goal, of promoting "effective stewardship" and "wise use" of Alberta's energy resources, respectively.¹³⁸ However, these references are no more informative of the unit's mission than the unit's own title. According to the unit's director, the unit is contributing to the work of a Canadian provincial/territorial/federal government committee charged with implementing an energy efficiency action plan approved by all provincial and federal energy ministers.¹³⁹ Further research is needed to determine what if any practical effect this inter-governmental work is having in promoting energy efficiency within Alberta.

The unit's director further explained that, in conjunction with this inter-jurisdictional work, chief among the units' tasks is to contribute to the four ministries' mandate to "design and implement" an initiative to make Alberta the national leader in energy efficiency and sustainability, as recently directed by Premier Redford in the 3 November 2011 "mandate letters" noted above.¹⁴⁰

9.3. Alberta Environment's Energy Efficiency, Alternative and Renewable Energy Section

Unlike Alberta Energy's two separate units discussed above, Alberta Environment has combined the energy efficiency and alternative/renewable energy portfolios. The section responsible for these sectors was created shortly after the province's adoption of its 2008 *Climate Change Strategy*.¹⁴¹ According to on-line information, the section currently has eight (non-administrative) personnel and is part of a Clean Energy Policy branch which

¹³⁸ *Ibid.*

¹³⁹ *Ibid.* The action plan was adopted at a 2011 conference of Canadian Energy and Mines Ministers. See Canadian Intergovernmental Conference Secretariat, online: <<http://www.scics.gc.ca/english/conferences.asp?a=viewdocument&id=1612>>.

¹⁴⁰ A. Nikiforuk telephone calls, *supra* note 135.

¹⁴¹ Telephone call with Monica Micek, Senior Policy Advisor, Energy Efficiency, Alternative and Renewable Energy Section, Alberta Environment (19 September 2011).

in turn is one of five units that comprise Environment's Policy division which itself is one of five divisions led by Assistant Deputy Ministers.¹⁴²

As with both of the Alberta Energy units discussed above, Environment's section does not have a publicly available mission statement or work plan. No doubt its current priority includes contributing to the cross-ministry energy efficiency "initiative" called for in Premier Redford's recent "mandate letters". Research to date was unable to clarify what if any role the section is playing in developing the still-forthcoming provincial renewable energy policy discussed in Part 6 above.

9.4. Preliminary Thoughts on Energy and Environment's Institutional Voices for Renewable Energy and Energy Efficiency

The three organizational units discussed above are notable, perhaps first and foremost, for their lack of transparency. Neither Energy nor Environment's business plans or latest annual reports specifically discuss any of these units, and there is scant information on only one of the units on Energy's web-site.¹⁴³ As noted previously, there are no publicly available mission statements or work plans for any of the units (which practice may be consistent with that of other units within Energy, Environment and other provincial ministries).

Putting this transparency problem aside, the units' location in Energy and Environment's organizational hierarchies—i.e. their rank two tiers below the division level—arguably suggests that they are considered relatively unimportant.¹⁴⁴ This inference is further supported, for the Energy units, by their combination in a branch with seemingly unrelated other units (the Alternative Energy unit is combined with Infrastructure and the Energy Efficiency unit is combined with Carbon Capture and Storage), and their small staff sizes.

These inferences may, however, be overstated, to the extent that the units' work is supplemented by that of other units in the same and other branches and divisions of Alberta Energy and Environment that may also deal with renewable energy and energy efficiency. For example, Energy's bullet-form "organizational structure" document lists six main divisions or subject areas, including "Energy Future" and "Resource Development Policy," which collectively include several sub-headings (or

¹⁴² "Contact the Government of Alberta", *supra* note 126; GOA, *Environment and Water – Organizational Chart* (28 November 2011), online: <http://environment.alberta.ca/documents/dep_org.pdf>.

¹⁴³ See "Organizational Structure", *supra* note 126.

¹⁴⁴ This said, at least the name of the units' division includes the term "alternative energy," as noted above.

branches/units) that could cover renewable energy and energy efficiency.¹⁴⁵ Further research is needed to determine whether and the extent to which these other units supplement the work of the Alternative Energy and Energy Efficiency units.

The division of labour between the two Energy units and the one Environment unit is unclear and is likely still being worked out in conjunction with the ongoing policy development work.

In this future exercise, the organizational questions that should be addressed include:

- Should policy makers be in the same department as policy implementers?
- Should renewable energy and energy efficiency be viewed as discrete topics or as integrally connected with each other or with even broader energy system components?
- What is the appropriate level in the departments' organizational hierarchy for housing organizational champions for these two sectors? Are champions necessary?
- Should organizationally strong champions be established in order to develop appropriate renewable energy and energy efficiency policies, or should the policies come first and then the organization(s) designed to implement the policies?

10.0. Inter-provincial Comparison

The Energy and Environment ministries' units discussed above can be viewed, not just within the provincial government's organizational structure, but in comparison with the relevant governmental structures of other Canadian jurisdictions. The table in Appendix 1 lists the comparable organizational units in the other nine Canadian provinces. This listing is based in large part on a review of organizational charts and similar information on each of the provinces' official web-sites. These sources are limited in the sense that they generally provide only the organizational units' formal titles and structural hierarchy; thus, they may not reflect provinces' coverage of renewable energy and energy efficiency in units whose formal names omit references to those topics. The comparison also does not include the roles of provincially-owned utilities like Hydro-Quebec and

¹⁴⁵ *Ibid.* The potentially relevant topics/units within the "Energy Future" category are: "Strategic Energy Secretariat (Provincial Energy Strategy)" and "Climate Change". The topics/units within the "Resource Development Policy Division" are: "Economics and Markets," "Environment and Resource Services," "Research and Technology," and "Regulatory Affairs". *Ibid.*

B.C. Hydro both of which produce electricity from numerous hydropower sources and whose mandates may also include promoting energy efficiency.

With these limitations in mind, the table shows that none of the other nine provinces have stand-alone ministries or departments addressing either renewable energy or energy efficiency; nor has any of the other provinces assigned one or both of these subject areas to a stand-alone division within a given ministry.¹⁴⁶ From these perspectives, Alberta Energy’s Alternative Energy and Energy Efficiency units, and Alberta Environment’s Energy Efficiency and Alternative and Renewable Energy Section, are not hierarchical laggards.

The table also indicates that, of Canada’s other nine provinces, two—Quebec and Saskatchewan—do not appear to have any organizational units focused specifically on either renewable energy or energy efficiency. Alberta is thus ahead of these two provinces in terms of its organizational dedication to these two subject areas.

Of the remaining seven provinces, only three—British Columbia, Ontario, and New Brunswick—have organizational units officially covering *both* renewable energy and energy efficiency (either in separate units or together in a single unit). Thus, in terms of the scope of coverage, the Alberta Energy and Environment units discussed above put the province above the median among the provinces.

Of the seven provinces with *either* renewable energy and/or energy efficiency units, three—British Columbia, Ontario, and Prince Edward Island—appear to have placed these units just one rung below the division level, which is one rung higher than the Alberta Energy and Environment units discussed in Part 9 above. Three other provinces—Manitoba, New Brunswick, Nova Scotia—refer to renewable energy and/or energy efficiency but are not clear as to where those topics are addressed in the relevant ministry’s intra-divisional hierarchy.

In sum, Alberta Energy and Environment’s renewable energy and energy efficiency units get a mixed score when compared with comparable units in other provinces, at least, when judged from several parameters relating solely to organizational hierarchy. However, the implications of this finding are hardly certain, given the superficial nature of the comparison and the limited scope of organizational information that was assessed.

¹⁴⁶ For purposes of this inter-provincial comparison, the term “division” is used here in the Alberta sense of an organizational unit managed directly by an assistant deputy minister.

11.0. Conclusion

The topics of renewable energy and energy efficiency have become entrenched in Alberta's energy policy and will likely be represented by one or more government organizational units in the future. However, while these two sectors have 'landed' on the province's policy landscape, it is still unclear where precisely these topics or sectors have landed, and how much policy 'space' they have been allotted now and will be allotted in the future.

This uncertainty is reflected, perhaps first and foremost, in the province's protracted progress in developing both the renewable energy and energy efficiency policy frameworks that have been talked about for several years. The uncertainty is arguably also reflected in the following several aspects of the Alberta policy documents discussed above:

- shifting emphases between renewable energy and energy efficiency from one policy to the next;
- inconsistent or discontinuous references to renewable energy and energy efficiency among different levels of Alberta's policy hierarchies;
- renewable energy's ambiguous place within the broader sectors of "alternative," "clean," or "green" energy;
- a dearth of clearly defined, measurable actions to fulfill broadly worded policy objectives and numeric emissions targets; and
- use of insufficiently comprehensive parameters—i.e. parameters other than projected greenhouse gas emissions reductions—for defining provincial objectives or targets.

Premier Redford's recent call for a new cross-ministry "energy efficiency and sustainability initiative" further entrenches energy efficiency in the province's policy landscape, and will hopefully result in actual and effective policy development, unlike the previous calls for and provincial commitments to develop an energy efficiency policy.

It remains to be seen what if any inferences can be drawn from the Premier's omission, in her mandate letters, of any express reference to renewable energy. It is also unclear whether she intends to proceed with her campaign pledge to establish a new renewable energy "authority". If this project is still on, the designers of the new "authority" will need to decide how it best fits within the provincial government's existing organizational framework (and whether its mandate should be expanded to include energy efficiency). This framework includes the two Alberta Energy units, and one Alberta Environment unit, discussed above. The logic of these three units' present

co-existence is hardly clear, so the concept of a new “authority” only compounds this organizational uncertainty.

Appendix 1

Departmental Organizations Relating to Renewable Energy and Energy Efficiency in Other Canadian Provinces and the Canadian and U.S. Governments (research current to 3 July 2011)	
British Columbia ¹	<ul style="list-style-type: none"> • Department of Energy & Mines includes an Electricity and Alternative Energy division, led by an Assistant Deputy Minister. • Two of the division's branches are: Renewable Energy Development, and Energy Efficiency. • Energy & Mines Minister is a member of Cabinet.
Manitoba ²	<ul style="list-style-type: none"> • Department of Innovation, Energy and Mines includes an Energy division which consists in turn of several Business Development Initiatives: "Transportation Fuels"; "Wind and Solar Electricity"; and "Geothermal & Solar Thermal". • Department's Minister is a member of Cabinet.
New Brunswick ³	<ul style="list-style-type: none"> • Department of Energy consists of six branches including Electricity and Renewables whose mandate includes "research and market development of renewable power and energy efficiency resources, [and] implementation of climate change initiatives". • Department's Minister is a member of Cabinet.
Newfoundland & Labrador ⁴	<ul style="list-style-type: none"> • Department of Natural Resources consists of three branches including the Energy Branch whose three Sections include the Energy Policy Section. The four divisions of this Section include those relating to: Electricity and Alternative Energy; and Energy Efficiency. • Department's Minister is a member of Cabinet. • Premier's Executive Council includes an Office of Climate Change, Energy Efficiency and Emissions Trading which has "lead responsibility" within the government for "strategy and policy development" in these areas.
Nova Scotia ⁵	<ul style="list-style-type: none"> • Department of Energy consists of five divisions including the Energy Markets division which is responsible for providing "technical and policy advice" to the Nova Scotia Government regarding several energy sectors including renewable energy. • Department's Minister is a member of Cabinet.

¹ Online: <<http://www.empr.gov.bc.ca/EAED/Pages/default.aspx>>; <<http://dir.gov.bc.ca/gtds.cgi?page=2&Index=ByUnitHier&OrgCode=MEM&PrevPage.x=24&PrevPage.y=12>>; <www.gov.bc.ca/premier/cabinet_ministers/>.

² Online: <<http://www.manitoba.ca/iem/energy/index.html?print>>; <<http://www.manitoba.ca/minister/>>.

³ Online: <www.gnb.ca/0085/Electricity-e.asp>; <<http://app.infoaa.7700.gnb.ca/gnb/pub/ListMinister1.asp>>.

⁴ Online: <<http://www.nr.gov.nl.ca/nr/departement/branches/index.html>>; <<http://www.exec.gov.nl.ca/exec/MINISTER.HTM>>; <<http://www.exec.gov.nl.ca/exec/cceeet/index.html>>.

⁵ Online: <<http://gov.ns.ca/energy/what-we-do.asp#energy-markets>>; <<http://nslegislature.ca/index.php/people/cabinet/>>.

Ontario ⁶	<ul style="list-style-type: none"> • Energy department consists of four divisions including “Renewables & Energy Efficiency” led by an Assistant Deputy Minister and consisting in turn of the Energy Efficiency & Distributed Energy office and the Renewable Energy Facilitation office. • Energy Minister is a Cabinet member.
Prince Edward Island ⁷	<ul style="list-style-type: none"> • Department of Environment, Energy and Forestry consists of five divisions including the Energy division which includes an Office of Energy Efficiency. • Department’s Minister is a member of Cabinet.
Quebec ⁸	<ul style="list-style-type: none"> • Ministry of Natural Resources and Wildlife includes an Energy Bureau. No apparent subdivisions for renewable energy and/or energy efficiency. • Department’s Minister is a member of Cabinet.
Saskatchewan ⁹	<ul style="list-style-type: none"> • Ministry of Energy and Resources focuses on oil and gas and minerals. No division/branch whose title includes electricity, renewable energy, or energy efficiency. • Ministry of Environment includes Climate Change and Strategic Management branch which oversees or coordinates various provincial programs to promote low carbon energy approaches. • Both Ministers are members of Cabinet.
Government of Canada ¹⁰	<p>Natural Resources Canada (NRCAN) has six primary sub-units, including the Office of Energy Efficiency and the Electricity Resources Branch whose three divisions include the Renewable and Electrical Energy Division. The Office of Energy Efficiency has seven sub-units besides the Director General’s Office. Six of these sub-units are for: housing, transportation, fuels, industrial programs, equipment, and buildings.</p>
U.S. Government ¹¹	<p>Department of Energy, a cabinet-level department, has three offices led by Under Secretaries (Energy chief’s title is Secretary). One of these three offices is un-named but has five sub-offices led by Assistant Secretaries, one of which is the Office of Energy Efficiency and Renewable Energy which invests in research & development and leverages private and public partnerships to promote renewable energy and energy efficiency technologies.</p>

⁶ Online: <www.mei.gov.on.ca/en/pdf/Orgchart-Energy_EN0611.pdf>; <<http://www.premier.gov.on.ca/team/default.asp?Lang=EN>>.

⁷ Online: <<http://www.gov.pe.ca/eef/dg.inc.php3>>; <<http://www.gov.pe.ca/index.php3?number=1030751>>.

⁸ Online: <<http://www.mrnf.gouv.qc.ca/english/energy/index.jsp>>; <<http://www.premier-ministre.gouv.qc.ca/equipe/conseil-des-ministres-en.asp>>.

⁹ Online: <<http://www.er.gov.sk.ca/>>; <<http://www.environment.gov.sk.ca/gogreen>>; <<http://www.gov.sk.ca/cabinet>>.

¹⁰ Online: <<http://www2.nrcan.gc.ca/dpspub/index.cfm?fuseaction=orgchart.viewTree&userLang=E>>.

¹¹ Online: <<http://www.energy.gov/media/DOECHART-NONAMES-05-03.pdf>>; <http://www1.eere.energy.gov/office_eere/pdfs/eere_programs_overview.pdf>.

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