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# A National Energy Vision for Canada: A Principled Approach

by Karen Taylor



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Karen Taylor is an independent energy consultant to industry and investors, with deep experience in capital markets, regulatory policy, and infrastructure investing. She is Vice Chair of the Council for Clean & Reliable Energy, a non-profit organization that provides a platform for public dialogue and analysis on subjects related to energy policy and governance and is also an Executive Fellow with the Ivey Energy Policy and Management Centre.

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#### The Council for Clean & Reliable Energy

The CCRE is a non-profit organization that provides a platform for public dialogue and analysis on subjects related to energy policy and governance. It was established in 2005 by university academics, public and private sector executives, and labour leaders. Council members collaborate to broaden the public debate on energy issues.

The CCRE has invited energy leaders from around the world to facilitated conferences focused on sharing knowledge, experiences, and expertise to create a better understanding of the challenges and potential solutions to common areas affecting energy policy in Canada and abroad. Over the years, it has hosted conferences on distributed generation, biomass, coal and nuclear, public sector governance in the electricity sector, and the future of local distribution companies. Annually, the CCRE hosts the Energy Leaders Roundtable. It encourages energy experts to provide reasoned opinions and points of view about significant issues relevant to the sector.

These CCRE Commentaries are distributed to opinion leaders and made available to the public as part of its mission to create a broader and more inclusive public discourse. During the last decade, its efforts have been recognized and appreciated by decision-makers in government and the energy sector as providing a neutral forum for the free exchange of ideas and opinions. The CCRE remains committed to continuing to facilitate debate on the generation, transmission, and distribution of clean, affordable, and reliable energy with a clear focus on finding effective solutions for Canada and abroad.

For more information on the Council's recent initiatives, visit www.thinkingenergy.ca.

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# Foreword

# From Glen Wright, CCRE Chair

There is an urgent need in Canada and around the world for unity around responses to the challenges of developing appropriate energy, environment, and climate change policies. Global leaders are being called to a new level of cooperation to develop a shared vision for a low-carbon future that includes a step-by-step transformation plan.

Our role at the Council for Clean & Reliable Energy is to encourage the development of a National Energy Vision for Canada. The need to do so has been a recurring theme at our Energy Leaders Roundtables. But more than that, it is being called for as leaders around the world embrace a new level of global cooperation that, of necessity, merges the interplay among energy, climate and environmental policies and practices. As our energy leaders have so often underscored, it is time for a sensible and implementable National Energy Vision for Canada that satisfies energy and climate needs. In fact, it is well overdue.

This *CCRE Commentary* is a call for leaders from across our country to work in close cooperation to develop a National Energy Vision for Canada. The focus should be on a transformation plan that will reduce reliance on high-carbon energy sources and shift to new technologies and lower-carbon energy sources. In the interest of the health, welfare, and economic well-being of the country, it is past time that our political leaders collaborated on producing such a national plan of action.





# A National Energy Vision for Canada: A Principled Approach

# Karen Taylor

Over the past few years, the Council for Clean & Reliable Energy has received feedback at its Energy Leaders Roundtables that suggests there is a need to develop a path to resolve Canada's enduring energy policy dilemma — how to craft a national energy strategy that aligns the conflicting demands between producing and consuming provinces, among other factors — and cultivate a common ground on which to move forward in this direction. Based on this feedback, the Council sought input in 2020 from a number of influential Canadians on the concept of reaching a consensus on a National Energy Vision. These conversations yielded consistent, strong support for such a process and the principles that would inform it.

# WHAT IS A NATIONAL ENERGY VISION?

A National Energy Vision<sup>1</sup> is not the same as a climate framework. A National Energy Vision is the outcome of a process shaped by core principles that informs government decisions "with respect to the management of energy supply and demand,"<sup>2</sup> whereas a climate framework is focused on the reduction of greenhouse gases (GHG).

A National Energy Vision and a climate framework are, however, indelibly linked. They each inform the other and can only succeed or fail together. Canada's climate change initiatives are well established and are continuing to evolve, consistent with the growing intensity of the climate change crisis. Pursuant to the 2015 United Nations Climate Change Convention, the *Paris Agreement*, Canada committed to reducing its GHG emissions by 30 percent below 2005 levels by 2030. In 2016, as part of its commitment, the federal government and 11 of Canada's 10 provinces and three territories established the *Pan-Canadian Framework on Clean Growth and Climate Change*. This Pan-Canadian framework has four main pillars:<sup>3</sup>

- 1. Pricing carbon pollution;
- 2. Complementary measures to further reduce emissions across the economy;
- 3. Measures to adapt to the impacts of climate change and build resilience; and
- 4. Actions to accelerate innovation, support clean technology and create jobs.

Energy is the largely silent, under-explored partner of the Pan-Canadian Framework on Clean Growth and Climate Change.

The difference between a climate strategy and an energy strategy is effectively illustrated by the UK *Energy White Paper: Powering our Net Zero Future*,<sup>4</sup> issued on December 16, 2020. Released by the Secretary of State for Business, Energy and Industrial Strategy, the Energy White Paper addresses the need to fight climate change and achieve the net-zero-by-2050 target from the perspective of the changes required in how energy is produced and used. The paper sets out the "strategy for the wider energy system that: transforms energy, supports a green recovery, and creates a fair deal for consumers."<sup>5</sup> It discusses many of the difficult and likely unpopular changes that will be required relating to future energy production by fuel type, demand reduction, need for technological innovation and social policy to reduce fuel poverty and address other social inequities.

"A National Energy Vision informs government decisions with respect to management of energy supply and demand".

<sup>&</sup>lt;sup>1</sup> For the purposes of this Commentary, "strategy," "policy" and "vision" are used interchangeably.

<sup>&</sup>lt;sup>2</sup> Prontera, A. 2009. "Energy Policy: Concepts, Actors, Instruments and Recent Developments." World Political Science Review. January.

<sup>&</sup>lt;sup>3</sup> Government of Canada. 2018. "Pan-Canadian Framework on Clean Growth and Climate Change."

<sup>&</sup>lt;sup>4</sup> For more, see https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/945899/201216\_BEIS\_ EWP\_Command\_Paper\_Accessible.pdf.

<sup>&</sup>lt;sup>5</sup> Ibid. p. 4.



# WHY A PRINCIPLED APPROACH?

Reaching a consensus on a National Energy Vision will be a daunting task, given Canada's constitutional division of powers, the location and form of our energy resources, the drivers of energy demand and the "results of the choices and the power configurations inherited from the past."<sup>6</sup> A forward-looking, principles-based process should increase the likelihood of reaching a consensus on such a vision.

A principled approach captures the inherent strengths that are characteristic of a "principle" or "principles": (i) they are generally not prescriptive; (ii) they allow an underlying justification to shine through and may often be indistinguishable from values, interests, rights, policies and goals; and (iii) they have weight in deliberation because they may point in different directions and are susceptible to being balanced against one another.<sup>7</sup> Borrowing from innovations in Canadian law and regulation, a principled approach entails a preference for flexible solutions that reflects the interests and values at stake in the policy under consideration. Broader in scope than a rule or code, principles are more flexible and can be applied in fully contextualized circumstances.<sup>8</sup>

A principled approach to reaching a National Energy Vision consensus will help ensure that the process aligns interests and reconciles conflicts in a manner that is consistent with what Canadian's value most. Importantly, the process is not a negotiation or a series of transactions and is not intended to pick winners or losers. Instead, it is a long-term, evolutionary process that needs defined check-in points and achievable milestones. Ideally, a principles-based process would result in a shared National Energy Vision and call to action that allows governments at all levels (federal, provincial, municipal, territorial, Indigenous) to effectively set the policy table and create the requisite incentives, such that individual parties acting in their own self-interest concurrently advance the National Policy Vision and achieve key outcomes, notably Canada's climate-change framework.

Finally, a principled approach to reaching a consensus on a National Energy Vision would move the energy and associated climate change conversation back to Canada's sensible centre by clearly identifying what matters to Canadians. Throughout the COVID-19 pandemic, Canadians have overwhelmingly demonstrated a collective willingness and ability to act for the benefit of the broader community while simultaneously looking to government for a strong civil response and substantive action.

Clearly, it is time for a principle-based National Energy Vision process.

# WHAT ARE THE PRINCIPLES THAT SHOULD INFORM THE CONSENSUS AND GUIDE THE PROCESS?

The process to reach a consensus on a National Energy Vision should be guided by the following principles. These principles are not inherently hierarchical nor are they listed in order of importance. However, some may carry substantially more weight than others in the process to reach a consensus.

**Advance Reconciliation**<sup>9</sup> **with Indigenous Peoples:**<sup>10</sup> Indigenous Peoples are not an issue to be addressed in the process to reach a National Energy Vision consensus. Rather, Indigenous Peoples should be included in the process to reach such a consensus on a nation-to-nation basis, consistent with the principles of reconciliation and the *United Nations Declaration on the Rights of Indigenous Peoples*. Notably, the federal government's Bill C-15, tabled on December 3, 2020 requires Canada to "take all measures necessary to ensure that the laws of Canada are consistent with the (UN) Declaration"<sup>11</sup> and "prepare and implement an action plan to achieve the objectives of the Declaration."<sup>12</sup>

"A National Energy Vision and a climate framework are indelibly linked."

<sup>&</sup>lt;sup>6</sup> Prontera, A. 2009. "Energy Policy: Concepts, Actors, Instruments and Recent Developments." World Political Science Review. January. p 2.

<sup>&</sup>lt;sup>7</sup> Dufraimont, L. 2013. "Realizing the Potential of the Principled Approach to Evidence." Queen's Law Journal. Vol. 39, Issue 1 (Fall), pp. 20-27. <sup>8</sup> Ibid.

<sup>&</sup>lt;sup>9</sup> The Truth and Reconciliation Commission of Canada describes "reconciliation" as being about: "establishing and maintaining a mutually respectful relationship between Aboriginal and non-Aboriginal peoples in this country. In order for that to happen, there must be awareness of the past, acknowledgement of the harm that has been inflicted, atonement for the causes, and action to change behaviour." *See What We Have Learned: Principles of Truth and Reconciliation.* 2015. p.113.

<sup>&</sup>lt;sup>10</sup> Indigenous Peoples collectively refers to the First Nation, Inuit and Métis people who live in Canada. See Joseph, B. 21 *Things You May Not Know About the Indian Act.* Indigenous Relations Press. Port Coquitlam. 2018. p 12.

<sup>&</sup>lt;sup>11</sup> Government Bill (House of Commons of Canada) Bill C-15. First Reading Dec. 3, 2020. Section 5.

<sup>12</sup> Ibid. Section 6 (1).



**Inclusive**: The process should be inclusive, overcoming deficiencies relating to gender equality and representation of visible and racialized minorities, with opportunities for engagement and participation.

**Fact and Science-based Discussion:** It is essential that the effort to reach a consensus reflects a shared set of facts and be based on science. Such a foundation facilitates the transparent discussion and assessment of the opportunities and limitations of energy supply and consequences of energy demand. Facts and science will reveal where technological innovation to transform energy supply and other policies to reduce demand will be required.

**Need for Comprehensive and Reliable Data:** Managing energy supply and demand and informing debate, tradeoffs and choices requires comprehensive and reliable data. Absent such data, many of the other principles that will inform the process to reach a consensus may be frustrated by ill-conceived actions or not achieved. Examples of these data gaps include:

- Technical performance data by fuel type, including but not limited to the energy density<sup>13</sup> of different fuel types and capabilities.<sup>14</sup>
- GHG footprint and other environmental consequences of each fuel type on a full life-cycle basis (production to consumption to retirement/decommissioning/shut-in) per unit of production. This full life-cycle analysis is not the sole burden of the fossil-fuel industry. No process that transforms a natural resource into a consumable energy form is free of GHG or other environmental consequences. Canadians need to understand that there is no free lunch in energy production. In order to make the right choices, discussion needs to occur based on facts and science, backed up by credible and comprehensive data.
- GHG emissions in Canada and the energy-consumption decisions that create these emissions. Increasingly, there are commercial tools and apps that measure a GHG footprint, democratizing the GHG reduction effort to the individual<sup>15</sup> in a highly transparent way.

Without data collection and measurement, it will be difficult to manage energy supply and demand and the associated GHG emissions. In addition, leveraging Canada's energy advantage internationally requires that the associated GHG footprint be transparently measured and credible, such that Canadians and our trading partners will have confidence that Canada's energy exports will, in fact, displace dirtier energy from other sources.

**Fulfil Canada's Climate Change Goals and Promote Environmental Sustainability:** As previously discussed, Canada's climate change framework is indelibly linked to a National Energy Vision. Similarly, the management of energy supply and demand must also be sustainable, meaning that the actions taken today do not compromise the ability of future generations to effectively manage energy demand and supply.<sup>16</sup>

**Reasonable and Defined Transformation Period:** Although the COVID-19 pandemic reduced global energy demand in 2020 by approximately five percent and the associated GHG emissions by approximately seven percent,<sup>17</sup> future energy demand is expected to continue to grow. Indeed, the International Energy Agency expects overall oil and gas demand to grow over the 2021-to-2030 period, albeit at different rates. Given the energy density and capability of these fuels, a reasonable and defined transformation period is needed to enable the technological innovation required to manage their GHG footprints. A similar period is required to transform Canada's energy demand.

"Leveraging Canada's energy advantage internationally requires transparent and credible measurement of its GHG footprint."

<sup>&</sup>lt;sup>13</sup> Energy density is the amount of energy that can be stored in a given mass or a substance or system. The higher the energy density of a system or material, the greater the amount of energy stored in its mass. See also: https://energyeducation.ca/encyclopedia/Energy\_density.

<sup>&</sup>lt;sup>14</sup> Fuel-type capability is a blended concept, referring to: (i) effective capacity factor, which is the actual output of a resource over time compared to its stated nameplate rating; and (ii) effective capacity, which is the percentage of a resource's nameplate capacity that is counted for capacity-reserve purposes by an electricity control area operator or independent system operator.

<sup>&</sup>lt;sup>15</sup> Apps to track an individual's carbon footprint include: Capture, Map My Emissions, For Good, UN Carbon Footprint Calculator, WPD Carbon Tracer, Pawprint and CoGo.

<sup>&</sup>lt;sup>16</sup> Adapted from University of Alberta Office of Sustainability. 2012. "What is sustainability?"

<sup>&</sup>lt;sup>17</sup> World Energy Outlook 2020. International Energy Agency. October.



**Affordability:** Canada is the second largest country in the world and is located in the northern hemisphere. The cost of energy materially affects the lives of all Canadians. The Canadian Urban Sustainability Practitioners (CUSP) network uses home energy cost burden as the proxy for measuring energy poverty. CUSP describes energy poverty as a "household that spends more than 6% of its after-tax household income on home heating and electricity."<sup>18</sup> Energy poverty is an essential consideration for any process to reach a consensus on a National Energy Vision. Similarly, the energy cost per unit of production or output is a key element of Canada's global competitive position and is a key factor in our future national economic prosperity.

**Economic Prosperity:** The consideration of Canada's long-term economic prosperity is central to reaching a consensus on a National Energy Vision. It would be detrimental to all Canadians to shut down or prejudice certain industries that are perceived to impair Canada's climate change goals, only to import goods and services that are produced using energy that has a larger GHG footprint. To do so would transfer economic power and prosperity to nations/regions that do not share Canadian values with respect to climate change, the environment, sustainability, social equity, and human rights. Importantly, such transfers minimize Canada's opportunity to shape the technological advancement and innovation necessary to align the principles set out herein, to the detriment of our future national prosperity.

**Equitable Sharing of Benefits and Costs:** The process to achieve a National Energy Vision consensus must enable complementary policies to support future investments in education, expansion of the labour force, productivity investments and effective oversight. Doing so will ensure that the benefits and costs associated with energy supply and demand are shared equitably by Canadians and that important principles, like polluter pay and financial adequacy to address environmental remediation, are substantively addressed.

**Transparent:** Process credibility and support for the emergent consensus on a National Energy Vision will be enhanced if the hows and whys of trade-offs among key principles are broadly disseminated and supported by analysis that explains choices and recommendations.

# WHAT DOES THE PROCESS LOOK LIKE?

As an organization dedicated to promoting public debate on energy in a neutral and non-partisan forum, the Council has various tools at its disposal to gain insight into what the process should look like, who should be engaged and how it should be funded. These tools include direct outreach to organizations such as the Council of the Federation, created by Canada's provincial and territorial premiers to "play a leadership role in revitalizing the Canadian federation and build a more constructive and cooperative federal system."<sup>19</sup> Other tools include virtual events and the CCRE's signature Energy Leaders Roundtables. The CCRE is actively engaged in the development of a process to create a National Energy Vision consensus.

# **CONCLUSION**

The indelible link between energy and climate on the one hand and Canada's ongoing energy policy dilemma on the other warrants a call to action: it is in the best interest of all Canadians for our Indigenous and elected provincial, territorial and federal leaders to undertake a principles-based process to reach a consensus on a National Energy Vision, one that shapes Canadian energy supply and demand, works hand in glove with Canada's climate change framework, and has a reasonable and defined transformation period.

"A reasonable and defined transformation period is needed."

<sup>&</sup>lt;sup>18</sup> Canadian Urban Sustainability Practitioners. 2019. "Energy Poverty in Canada: a CUSP Backgrounder." October. p 3.

<sup>&</sup>lt;sup>19</sup> See Council of the Federation Founding Agreement. 2003. December. Available at: https://www.canadaspremiers.ca/founding-agreement.

# REFERENCES

Canadian Urban Sustainability Practitioners. 2019. "Energy Poverty in Canada: a CUSP Backgrounder."

Council of the Federation Founding Agreement. 2003. December.

Dufraimont, L. 2013. "Realizing the Potential of the Principled Approach to Evidence." *Queen's Law Journal*. Vol. 39, Issue 1 (Fall).

Government Bill (House of Commons of Canada) Bill C-15. First Reading Dec. 3, 2020.

Government of Canada. 2018. "Pan-Canadian Framework on Clean Growth and Climate Change."

International Energy Agency. 2020. World Energy Outlook 2020.

Joseph, B. 21 Things You May Not Know About the Indian Act. Indigenous Relations Press. Port Coquitlam. 2018.

Prontera, A. 2009. "Energy Policy: Concepts, Actors, Instruments and Recent Developments." *World Political Science Review*. January.

Truth and Reconciliation Commission of Canada. 2015. "What We have Learned: Principles of Truth and Reconciliation."

UK Secretary of State for Business, Energy and Industrial Strategy. 2020. "Energy White Paper: Powering our Net Zero Future."

University of Alberta Office of Sustainability. 2012. "What is sustainability?"