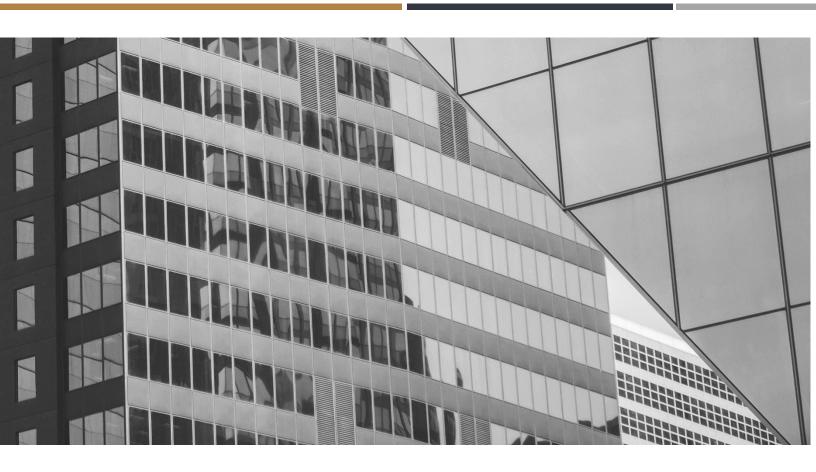




WHAT IS THE FUTURE OF CANADA'S ENERGY SECTOR?

EMERGING THEMES OF VISION EXECUTIVE SUMMARY

Mac Van Wielingen – September 2020



"EMERGING THEMES OF VISION": INTRODUCTORY COMMENTS

The development, production, and consumption of energy is foundational to sustaining and advancing Canada as a modern and prosperous country. It is uniquely important in that it cuts across all of society's activities. It impacts the interests of all of us, in different ways, in different regions of Canada.

The aggregation of interests relating to the energy sector can be logically understood as a significant part of the national interest of our country. Thus, national policy relating to our energy sector, and more broadly, our resource sectors, is of critical importance to all Canadians.

The energy sector impacts our economic prosperity, jobs and tax base, and the capacity to fund and sustain our social prosperity. It links with a myriad of local, regional, national and global environmental concerns, and has direct impact on opportunities, social conditions and the well-being of eight million people primarily within the energy producing region of the West, as well as Newfoundland and Labrador where it accounts for over 25% of GDP.¹ Energy and resource development in Canada also has direct impacts on Indigenous people through land, environmental issues, employment, and investment partnering opportunities. Lastly, the energy sector has a profound link with issues of national governance; the effectiveness of regulatory process and decision making; the necessity of predictability as a pre-condition to attract capital; and the fair treatment of provinces and regional interests.

The energy and resource sectors in Canada are inextricably linked to the strength of our economy, our prosperity as a people, the fabric of our national unity, and the strength of our national institutions. As such, issues within our energy sector inevitably challenge the effectiveness of our national and provincial leadership, and the integrity and quality of government policy and decision making.

The myriad of interests and the complexity of issues creates a rich terrain for conflict, polarization, and quite frankly, political advantage seeking within polarization. The complexity and conflict, and the materiality of all that is at stake, necessitates new approaches to create fresh insight and understandings to move our country forward on energy strategy and policy in a way that is in the interest of all stakeholders. This initiative – "Themes of Vision" – is an attempt at a new approach.

This content has evolved through multiple discussions, presentations, submissions and testimonials to different stakeholder groups over the past two years, and is a response to the need within Canada for a shared vision for our energy sector. The initiative involves identifying specific Emerging Themes of Vision and to put forward each theme with a supporting narrative. The idea is to unpack the aggregation of themes that may exist within a broader vision to support more clarity, and hopefully more understanding, across the different perspectives held by various stakeholders. A related critical emphasis is to identify new ideas and understandings, and new themes and shifts in perception, that may be surfacing, and which may illuminate the path forward.



For some of these emerging themes I have identified sub-themes that are less visible and discussed less frequently.

This process reflects a deeper understanding of the need for leadership that can unify versus magnify divisions. There is something truly futile about repeating the same arguments, albeit often repackaged in different ways, which often just creates deeper divisions and dysfunction. We need to find ways to bridge our differences and, in a sense, unwind the polarization that exists. This will not happen unless leaders within Canada, and ultimately the public, are prepared to see, acknowledge and hold polarizing perspectives at the same time to constructively support the development of new understandings.

This document should be used as a reference to support discussion. Generally, the points made within each theme are expressed more as if I or someone else was speaking to you, the reader. It is somewhat informal and is not intended to be complete. Although extensively researched and well-referenced, some points are expressed in a particularly emphatic way to challenge conventional or polarized and politicized perspectives.

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September 28, 2020



"THEMES OF VISION"

INTRODUCTORY CONTEXT: MAJOR MACRO THEMES

There are multiple major forces of change that are having a deep impact on the Canadian energy sector and society that create the context for answering the question:

"What is the Future of Canada's Energy Sector?"

- 1. New era of abundance of oil and gas, and substitutes, versus the prior era of shortages.
- 2. New era of innovation and accelerated technological change creating efficiencies, "disruption" and advancement.
- 3. New era of extreme concern about emissions, climate change, environmental impacts, and mobilized "social media" driven activism against oil and gas.
- 4. New era of global disintegration of traditional loyalties and multilateral cooperation, with increasing conflict, fragmentation, nationalism, and protectionism.
- 5. New era of increasing conflict, extreme divisiveness and polarization within Canada, and an apparent willingness to amplify and exploit polarization in the absence of unifying influences.
- 6. New era of an "awakened energy producing region" in Canada (Western Manitoba, Saskatchewan, Alberta, and Eastern British Columbia) approximately 7.5 million Canadians to the vulnerability of being under-represented in national policy and decision making.
- New era of COVID pandemic recovery efforts after unprecedented economic shut-down, massive increases in government debt, and continuing fear of virus relapse and further shut-downs.



EXECUTIVE SUMMARY: "THEMES OF VISION"

EMERGING THEME #1: SOLVING FOR MULTIPLE ESSENTIAL PRIORITIES

Energy strategy and policy cannot solve for one variable. This reality is starting to sink in among policymakers and the public. Energy is so pervasive and interconnected within all that we do as a society, the desired outcomes of energy policy are not singular; they are multiple, overlap, are often in conflict, and can potentially operate synergistically. Reducing emissions is a critical priority, but our environmental aspirations and commitments must be considered alongside our economic and social aspirations, and our need for governance excellence, which includes regulatory effectiveness, fairness, ethics, and at the highest level, the functionality of our nation. The new construct that is emerging that we all must embrace is E-ESG: Economics – Environment, Social, and Governance. With the inclusion of Economics, the concept of ESG is far more relevant to the corporate sector, investors, lenders, and policy makers, than the more narrow construct of ESG. Energy policy must satisfy a set of conditions that link to all that is important across Economics, the Environment, our Social well-being, and our aspirations for Governance integrity and excellence.

EMERGING THEME #2: A "CUSTOMER FIRST," ADAPTIVE MINDSET TO THE CHALLENGE OF EMISSIONS

The job of industry has changed; customer preferences have changed. The public, our investors and lenders, and our stakeholders, are no longer preoccupied with the perception of a limited resource. The reality is that our customers and our stakeholders want low carbon energy products and high ESG standards and, as leaders in business, we must deliver and we are delivering.

The Canadian energy industry must maintain, and even step-up, its commitment to reduce emissions and meet ESG standards. While oil and gas industry emissions have increased overall because of rising oil sands production and exports, emission intensity on a barrel produced basis have decreased by 28% since 2000² and are set to decline a further 20% through to 2030.³ This is one example of how industry is evidencing a major strategic commitment to reduce emissions and progress is demonstrable.

An under-recognized reality is that about 80% of final end-use emissions come from consumer preferences and choices as to how oil and gas products are combusted. What is somewhat submerged in policy discussions is the importance of end user decisions as to how oil and gas products are used in combustion – this is the material issue not being addressed. On the extraction side, the industry is focused and committed, spending billions to reduce emissions, but yet it's the "beating post" for those who want to phase-out the industry. Attacking the upstream industry is easier than confronting the consumption problem and behaviours of individuals.

EMERGING THEME #3: EMISSIONS ARE CRITICALLY IMPORTANT BUT THERE IS MORE TO CANADA'S ESG STORY

Demonstrable progress in reducing emissions is become increasingly clear, but there is much more to Canada's ESG story. Canada's ESG standards and performance are among the best in the world. We have a world class pipeline transportation system; a world class marine transportation system; our corporate governance is among the best in



the world;⁵ the energy sector is the largest employer of Indigenous people in Canada;⁶ and our oil and gas sector is the largest investor in clean energy tech in Canada.⁷ In addition, extensive research, entrepreneurial initiatives, innovation, and new technologies are ongoing in response to environmental issues.^{8,9} The main point is that a "customer first" stakeholder, adaptive mindset exists in Canada, and it is deepening and evolving. We are not perfect, we still have problems, but our ESG standards and performance are among the best in the world.

EMERGING THEME #4: THE ENERGY TRANSITION IS BEST DESCRIBED AS AN ENERGY EVOLUTION

It is a fact that oil demand in most developed countries has plateaued and has been on a modest, declining trend. With economic development, increased efficiencies, and more viable and commercially available substitutes, oil demand growth has abated. There's nothing new in this understanding. Global growth has been mainly in developing countries, notably the Asia-Pacific region. As these countries continue to advance, the trend towards the plateauing and ultimate decline in total oil demand is a reasonable expectation, and now with the push to decarbonize and with advancing technologies, notably the electrification of transportation, the plateau and eventual decline of oil consumption appears more pronounced.

However, the main misunderstanding in all this is the timeframe within which the transition occurs. If this could happen quickly, within ten years, our strategic choices would be extremely limited. The fact is that the future looks more like an evolution than a transition. It's a multi-decadal, maybe even multi-generational, evolving market. Peak oil demand as some sort of a marker or proclamation for the death of the Canadian oil industry is absurdly unthoughtful and non-strategic. It is, however, a proclamation that we need to become more strategic to find our role and path in this market. Canada's oil production is arguably the most reliable supply in the world. Our oil sands have essentially no natural decline, and we have relatively stable political and social dynamics, certainly compared with other global suppliers. Canada's long-life oil and natural gas should command an enduring position in the global market. Broadly, in considering the long-term outlook, what is needed is energy policy that supports a competitive, adaptive mindset, where we apply Canadian initiative, ingenuity, expertise, technology, and capital to advance our hard, long march to reduce emissions, reduce costs, increase efficiencies, maintain our reliability, and win as much of the available market as possible.

EMERGING THEME #5: "BEST BARREL" AS AN ASPIRATIONAL PATH

In a long-term transition to decarbonization, where oil and gas is phased out over 30, 50, or 100 years, whatever the timeframe, "The last barrel to be phased out should be the best barrel, and the best barrel should be Canada's barrel." A commitment to the "best barrel" changes the narrative on the challenge for the Canadian industry. It leads logically to the question, "what does the best barrel look like and how do we get there?"

We have the expertise and depth of understanding to do this. We don't need this to be defined for us in Europe or anywhere else, nor do we need armies of analysts and consultants to do this. It is a market and strategic-based question as to how we believe that we can compete. Industry leaders are embracing this "customer first" mindset and are committed to delivering results. But success is dependent on aligned and supportive policy and regulations.



EMERGING THEME #6: GLOBAL LEADERSHIP IN CLEAN, RELIABLE, AND RESPONSIBLE ENERGY DEVELOPMENT

The Canadian energy sector is a global leader in scale and capabilities. Our oil sands and Montney resource are extraordinary endowments for Canadians, global customers, and everyone in the world. These resources exist in one of the most stable, reliable countries in the world with recognized leading ESG standards and a well-evidenced commitment to improve, advance, and "do better." With the world population set to grow from 7.8 billion to about 10 billion through to 2050, 10 the world needs reliable clean energy from responsible suppliers. This is the opportunity for Canada – to offer more of ourselves into the world on a "no harm" basis, cleaning up our own environmental impacts, and offering products and technologies that will reduce emissions and improve environmental conditions globally. Among the top 10 oil and gas producers in the world, Canada ranks first in 14 of 19 E-ESG global indexes.

In comparing Canada to other oil and gas producing countries, how is it possible that activists and political leaders argue we need to phase-out and remove ourselves from markets? Given the long-term nature of the transition to decarbonization, would it be in the world's best interest for Canada to remove itself as a supplier?

EMERGING THEME #7: GLOBAL-FIRST AND CANADA-FIRST

One of the best kept secrets in the world of energy activism in Canada is that global country by country compliance with Paris climate targets has been met with minimal and inconsistent degrees of success. While global emission reductions are happening, mostly in advanced economies, a deep dive into various country energy policies offers ample evidence that most are just going through the motions. For example, the U.S. officially withdrew from the Paris agreement in November 2019, ¹¹ and in October 2019, Equinor, the state-controlled energy company of Norway, began producing from the Johan Sverdrup field – a C\$19.2 billion North Sea mega-project which will produce up to 660,000 barrels per day¹² over for the next 50 years – more than twice the size of the recently cancelled Teck Resources project in northern Alberta. We are potentially tanking our own interests in order to meet the commitment of an international multilateral agreement that is seriously incomplete in its current form, and most other countries who are signatures to this agreement are nowhere close to meeting their commitments. This information begs the question, should Canada's priority be compliance to incomplete, inadequate international agreements, which large emitters like India, China, Russia, and U.S. are basically ignoring, or is our concern to solve the fundamental challenge of reducing global emissions?

If you were part of a group running the world, when you look at the timeframe of energy transition, when you look at the need for innovation, when you take into account the need for reliability, and social and ethical considerations, would you argue that Canada should be shut-down as some activist and political leaders argue?

EMERGING THEME #8: NEW ECONOMIC AND FINANCIAL REALITIES WILL FORCE A RESET OF PRIORITIES

There is no "going back to normal" or "the way things were" prior to the COVID-19 lockdown. There is one fundamental that will not change with economic recovery, at least not for many years, maybe decades. Even when our economy comes back to some form of "normal," our indebtedness will not go back to where it was for many years, if ever. The inevitable consequence is a loss of financial capacity and flexibility. Prior to the COVID lockdown,



the economic fundamentals in Canada were grim: Growth in GDP per capita since 2013 was less than one-half that of the U.S., and Canada had the worst performance of all G7 countries;¹⁴ Business investment is about 20% below peak levels of 2014;¹⁵ and labour productivity has significantly lagged that of U.S. In 2019 Canada generated \$52.60 per U.S. in output per hour of labour compared to \$71.80 in the U.S.^{16,17}

Further, over the last five years, total cumulative returns on Canadian companies in Canadian markets has been 4.5%. Global equities generated a total cumulative return over this time frame of 32.5% (over 7x Canada). Canadian returns on Canadian companies in Canadian financial markets have not come close to global returns. As a Canadian, if you were fortunate enough to accumulate savings, the last thing you should have done is to invest in Canadian companies on Canadian stock exchanges.

The general point is this: we were in a slow-moving crisis of investment, competitiveness, and economic underperformance before the pandemic-related collapse. Now, we've gone right over the edge. Canada is in a new era of both stagnant productivity and excessive levels of indebtedness which should force a reset in priorities towards increased fiscal responsibility, new initiatives to attract investment capital, and policies and strategies that will shift towards productivity growth and restoring prosperity.

EMERGING THEME #9: CANADA'S ENERGY STRATEGY AND POLICIES "FEEL GOOD AND SOUND GOOD," BUT MAY FAIL OUR NATIONAL INTERESTS

I hear bits and pieces of this theme in various discussions – the view that our energy strategy is flawed. I am organizing these points through the lens of my own understandings of strategy development and implementation, and my experience in mentoring executive leaders around the question, "what does great strategy look like?" My response always includes fundamentals or criteria that great strategy must satisfy, notably: materiality, knowing whats important, and comprehensiveness, the inclusion of all that is most important.

On materiality, our energy strategy and policy over the past five years, has been heavily tilted towards the singular outcome of emissions. The simple reality is that Canada's total emissions are immaterial to the problem of global emissions. This is a fact that must be recognized as we develop and implement our energy strategy. Meeting emission targets within international agreements where most others are non-compliant creates strategic risk. The mindset of "phase it out," "shut it down," "don't support it," and "tax it," is sabotaging our national interests and ironically, will not make a material difference to the problem of global emissions and climate risk.

Canadians can be proud that we have achieved a very high level of environmental standards and performance. We need to stay on track to reduce emissions, but where our strategy is failing is the lack of a comprehensive embrace of our national interests. Our tilt towards the environment has come at the expense of maintaining the necessary conditions to support competitiveness, productivity, and enduring prosperity. It has also come at the expense of creating more jobs and long-term ownership opportunities for Indigenous people. Our existing vision and strategy for our energy sector, and indeed our resource sectors broadly, are failing Canada's national interests.

EMERGING THEME #10: A STRATEGIC AND COLLABORATIVE MINDSET ALIGNED WITH GLOBAL AND NATIONAL INTERESTS

This theme is a combination of all the themes and represents a grand vision that serves and optimizes the interests of all Canadians. It transcends the fractured polarization that now characterizes much of the world's relationships



and also Canada's internal state.¹⁹ During these intensely fractious times within so many countries, we have the opportunity to demonstrate a level of unique collaboration and effectiveness.

- 1. Vision, strategies, and policies are developed to serve and optimize Canada's multiple essential interests across economics, environment, social, and governance considerations.
- 2. Industry moves forward with a customer-first mindset to reduce emissions and adverse environmental impacts.
- 3. Canada's energy and resource sectors are understood as being among the best in the world, and our political leaders step into a non-partisan embrace of this reality.
- 4. Acceptance of the reality that the *energy transition* is best described as an *energy evolution*; very long-term and requiring multiple solutions. Modern renewables wind and solar have serious limitations and cannot carry the total freight to deep decarbonization.
- 5. Industry and government collaborate to support and evidence progress towards the "best barrel." Emissions will be important, but other considerations are also important, such as reliability of supply.
- Industry and government collaborate to build a globally focused clean energy sector offering both low-carbon
 products as well as renewables, clean technologies, exemplary regulatory process, and mechanisms to
 support capital formation, all leveraging off of Canada's exceptional international profile.
- 7. Shift to a global-first, Canada-first commitment, based on a deep understanding of Canada's national interests, with a commitment to meet Paris Accord targets subject to satisfactory resolution of exports, and also more evidence of compliance from major emitters.
- 8. Embrace a deep understanding of the importance of productivity, investment, and competitiveness, to rebuild the post-COVID economy and to sustain Canada's financial and social prosperity.
- Commit to a strategic mindset based on fundamentals to serve the national interest of Canada recognizing that Canada's role in reducing emissions has to go beyond our borders and that we have a set of essential needs that must be accommodated, versus denied or resisted.

All of this converges into an intelligent, internally consistent, logical policy framework that serves the interests of all Canadians and all people of the world.

The critical factor is government leaders who are prepared to lead, and to not amplify or exploit polarization. It requires national political leaders to be demonstrably and visibly supportive of Canada's leading global energy sector, and more broadly, all of our resource sectors.²⁰

It requires leaders who will face outward to the public and globally, and present the facts and fundamentals that Canada is arguably the most responsible energy and resource developer in the world; that we are serving the essential interests of all Canadians, in all regions of Canada, and our global customers, in the context of a long-term transition towards decarbonization, and the realization of exceptionally high ESG standards and performance.



ENDNOTES



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