

AI Monaco speech to the Business Council of British Columbia

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Introduction

Good morning – it's a pleasure to be here today on the traditional territory of the Coast Salish peoples. First, thanks to BCBC for developing strong public policy solutions.

If there was ever a time for good policy thinking, it's now.

You probably expect me to talk about pipelines, but I'm not going to do that.

Instead, I'll focus on another issue critical to all Canadians – Energy, with three themes:

- The changing energy landscape, and what the future of global energy looks like;
- How we reconcile our voracious appetite for energy while addressing the environment; and
- How the energy industry's thinking has evolved on the environment.

But first, let me provide some context for my remarks.

Who we are

Enbridge has been delivering energy as far back as 1848 in Ontario.

Today, we're the largest energy infrastructure company in North America.

We move 25% of all crude oil, and 20% of the natural gas.

Our gas distribution franchise serves 3.7 million customers.

We've built a strong renewables business including offshore wind in Europe.

Rampion, which is located in the English Channel, powers 700,000 homes with zero-emission energy.

In BC, we're synonymous with natural gas – our West Coast system moves 55% of all BC production.

In the context of the current Canadian energy debate,

...we're proud to deliver the energy that heats homes, fuels transportation and powers industry.

What we do provides a bridge between energy and quality of life.

And our people in BC communities – from Fort Nelson to the US border, make that happen.

Let's turn to the energy landscape.

Energy Landscape

The landscape has shifted dramatically from scarcity to abundance.

A few short years ago, the world was obsessed with running out of energy.

But technology changed all that by unleashing massive resources where cost effective, just-in-time supply pushes out higher-cost energy.

Consumers are now the loudest voice in this new era.

And they've been clear – they want low-cost, reliable and sustainable energy.

Energy policy is now seen through the prism of climate change, reflecting those voices.

But some things haven't – and won't – change.

We all want energy to keep doing what it's been doing for generations:

- Lifting billions from poverty and improving quality of life.
- We want lights to come on when we flick the switch.
- We want to be able to fly anywhere, any time.
- And now people want Amazon and Uber Eats to deliver convenience at their door.

Even as societal values and consumer preferences shift, the world is demanding more and more energy.

Energy Demand

By 2040, energy consumption will grow by more than 25% -- that's not just my view, it's broadly shared and here's why.

By 2050 global population will grow from 7.6 to 9.7 billion.

Today, there are 33 cities with more than 10 million people...

...by 2030 there will be 43 megacities and 80% of the world's population will live in urban centers.

And the middle class will grow by 2 billion.

Istanbul Airport

Since 1990, emissions from international aviation have increased 83%.

Istanbul is building an airport to serve 200 million passengers a year, 7x YVR.

So, unless you don't believe in population growth, urbanization and people's desire to improve their standard of living...

...our reality **is that the world will need more energy, not less - no credible source disputes that.**

Our Challenge

Yet, it's just as important we recognize the need to address climate concerns – everyone agrees with that too.

And there's lots of science behind that imperative.

So, this is the conundrum.

How do we meet our future energy needs while addressing concern for our environment?

I believe it starts with a mindset shift – one that recognizes we need collective action across the energy system.

It means applying new technology, implementing smart policies, and focusing on consumption.

And, keeping energy affordable for developing countries, and the most vulnerable people.

In Canada, 80% of emissions come from personal, commercial and industrial use.

The fact is we need to innovate across the entire energy value chain, including both supply and consumption.

Energy Supply

If you look at how energy demand will be met in the future, renewables will play a bigger role – more than double by 2040.

Part of it comes from new policy, but also from significant reductions in wind and solar costs.

But even with that, growth in consumption means more than 70% of energy demand will need to be met by conventional energy.

Even under the most aggressive climate policy assumptions, the number will still be almost 60%.

What we need to recognize, and as part of the mindset shift, is the power of what we've done in already reducing energy intensity.

Between 2000 and 2017, the application of technology, policy and conservation programs prevented 12% more energy use than would have otherwise been the case.

That's significant and we need more of that.

In fact, energy demand growth is now about one half the rate of GDP growth, because of efficiency measures.

But cleaner conventional energy can, and must, play a big role – and natural gas will do much of the heavy lifting.

Consider what natural gas has already done.

By replacing coal-fired electricity generation, mostly with natural gas, US emissions have dropped to levels last seen in the early 1990s while the U.S. economy grew by 80% (that's staggering).

Natural Gas

This is a photo of a highly efficient combined cycle co-gen gas plant with some large-scale wind turbines in the Netherlands.

I show this picture because it represents how we need to think about optimizing all sources of energy.

The fact is that natural gas is a perfect partner for renewable energy in that it's ideal in managing renewable intermittency.

If we can shift our mindset, there's huge potential for natural gas to partner with renewables to reduce emissions across the globe.

This brings me to what Canada is doing.

Canada must set its sights higher to lead globally

We should be proud of what Canada is doing to reduce emissions.

80% of our electricity sector already produces zero-emission energy.

Ontario eliminated coal-fired generation, and Alberta and Saskatchewan will eliminate coal emissions by 2030. Canada was the first country to commit to methane emission regulations from venting and flaring.

If our methane standards were imposed worldwide, greenhouse gases emitted from oil production would fall by 23%.

I'll come back to what conventional energy is doing in a minute but let me first say this.

While we engage in a polarized debate here at home, we're missing the bigger picture – the opportunity for Canada to make a global impact on emissions.

Yes, it's important to focus on Canada's 1.6% of global emissions, but we need to set our sights higher if we want to make a real difference.

After all, climate change is a global problem and emissions don't care about borders.

Meanwhile investment in Canadian energy is lagging.

New capital raised last year for Canada's energy sector was the lowest in 27 years, down 94% from the previous five years.

By contrast, between 2016 and 2018 conventional energy investment in the U.S. was up \$50B or 41%.

The U.S. is proud of their energy advantage – we are not.

So, what can we do?

Our opportunity

I believe that Canada can take a page out of BC's book.

BC's Low Carbon Industrial Strategy and North Coast First Nations are leading the way – looking to capitalize on BC's emerging low-carbon economy.

The vision is to reduce global emissions by delivering low-carbon products, goods and services to the world.

Taking a page out of that book, by developing and exporting Canadian natural gas, we can have a big impact on global emissions by displacing coal – just as we saw in the U.S.

In fact, the Paris Agreement contemplates international cooperation to reduce emissions.

This approach can refocus Canada on the dual goals of environmental and economic performance.

It allows us to continue to improve our own environmental performance, which builds the foundation for a low-carbon export strategy.

And it would attract much needed investment to BC and find support in Alberta and Saskatchewan.

As trade-reliant, exporting focused economies, these provinces want to build their economies while also addressing emissions.

And most of all, they want Canadians to know that they are part of the solution, which brings me to the Canadian energy sector.

Canada's Energy Sector

Canada's energy sector has always been about responding to challenges.

In the past, the challenges were primarily energy security and driving economic growth.

The energy sector responded – finding energy cheaply by applying technology and great skills.

On the environment, Canada's energy sector is responding again.

This time by reducing emissions intensity by 28% since 2000.

Suncor is investing \$1.4B to reduce emissions at one of its plants by 25%.

Saskatchewan's Boundary Dam project is pioneering carbon capture technology, which can be exported to the world.

And BC LNG projects will have the lowest emissions in the world.

New technologies, collaboration, digitization and automation are transforming the industry.

Innovation

EVOK Innovations, CRIN and COSIA are collaborations that deliver breakthrough ideas in energy.

Vancouver-based EVOK is investing in a company removing CO₂ from gas mixtures, and another that transforms that CO₂ into valuable products.

COSIA has shared 1,000 environmental technologies and developed a \$20M Carbon X-Prize.

...to convert CO₂ emissions from industrial facilities into valuable products that we use every day.

One of the finalists – Calgary-based Carbon Upcycling Technologies – is using waste CO₂ to transform the plastics, adhesives, concrete and lithium ion battery industries.

Emissions Reduction Alberta is commercializing Carbon Cure technology that could reduce more than one million tonnes of CO₂e per year by 2030.

They've just announced another \$50M which targets natural gas innovation.

What Enbridge is doing

Although Enbridge is not a large emitter, we're taking a leadership role. We've led by:

- Diversifying our assets to align with the future global energy mix.
- Investing in renewables and low emissions natural gas, which is replacing coal as we speak.
- Setting and meeting GHG reduction targets – and we're developing more aggressive ones today.
- And partnering with Hydrogenics to build North America's first utility scale power to gas project.

The concept takes surplus electricity and stores it in our pipeline system where it's blended to reduce carbon content.

Our innovation lab is using predictive analytics and AI to improve efficiency and environmental performance.

And our conservation programs have reduced CO₂ emissions equivalent to taking 9.3 million cars off the road for 1 year.

While tech innovation is critical, social innovation is important too.

Indigenous Relationships

That's why we've evolved our engagement approach with Indigenous communities.

We've learned some tough lessons over the years – and we're working hard to build trust in communities.

Today we train our people to understand deep Indigenous connections to land and water.

We build cultural awareness within our company.

We listen carefully to concerns, and then address them.

And we're focused on improving partnerships with Indigenous nations and groups.

This led to \$450M in Indigenous economic opportunity on our Line 3 project.

20% of our workforce on that project identified as Indigenous.

We committed to a 20% equity stake for 6 First Nations along the East West Tie Line – an electricity transmission line from Thunder Bay to Wawa, Ontario.

We are proud of these advancements.

Conclusion

I'll conclude with this.

The world faces a serious dual challenge – meeting our energy needs while addressing the environment.

Canada has a tremendous opportunity to seize a global leadership role to address this challenge by bootstrapping our strong environmental record...

...to an export strategy to provide low carbon energy, goods and services that the world needs and wants.

But we need to start pulling in the same direction by encouraging innovation across the entire energy system.

And, if we have the courage to do that – we can also chart a path to renewed investment and a bridge between Canada's regions.

Canada has a long history of working together to solve complex problems.

On energy and the environment, we've been inwardly focused.

It's time to put aside our differences and take control of our economic future while tackling one of the biggest challenges facing the world today.