

THE LAND ECONOMIST

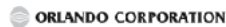


Premier Doug Ford, PLE (Hon)
Honorary Member of the Association of
Ontario Land Economists



Association of
Ontario Land Economists

THE COMPANY WE KEEP



The Association of Ontario Land Economists
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PROFESSIONAL MAGAZINE



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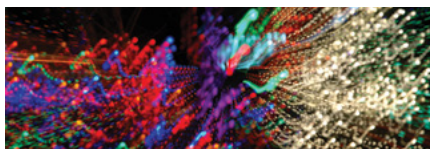
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FOR THE RECORD

Interview with Ontario Premier Doug Ford

By Mike O'Dwyer



*In this issue of **The Land Economist**, we're introducing a new, irregular feature: **For the Record**. It will focus on candid conversations with people from a variety of occupations and professions whose opinions, ideas and concerns are of interest or import to our readers.*

*We're kicking off **For the Record** with a conversation with Ontario Premier Doug Ford.*

Here's why ...

We have extensively covered Ontario's Ring of Fire in this and previous editions of *The Land Economist*. The critical-minerals rich Ring of Fire holds enormous potential. However, accessing this remote and challenging northern environment presents numerous logistical, environmental and political obstacles that continue to hinder its development.

Ontario Premier Doug Ford is a strong advocate for the Ring of Fire's development. Recently, *The Land Economist* had the opportunity to speak with the Premier about his plans and hopes for the rapid advancement of this project.

The Land Economist

Good afternoon, Premier Ford. Thanks for doing this, we appreciate it.

I understand you'll be at the Association of Ontario Land Economists' annual dinner meeting in September, where they will award you an honorary membership and a Professional Land Economist designation. Only Hazel McCallion and a select few others have also gotten the same honour, so congratulations on that.

Premier Ford

Well, I'm very honored. It's a real honor to receive that.

The Land Economist

We know you're really busy (so we'll) try to make this quick for you.

We sent some background material to your office, but I'm sure, given your busy schedule, you haven't had a chance to look at it.

So, just for some context as to why we're doing this: The AOLE has the long-standing expertise in infrastructure, planning, and innovation solutions. So, we're keenly interested in the Ring of Fire and its successful development.

That's why we'd like to hear directly from you where things are now and how Ontario can maximize this once-in-a-generation asset for the province and the country.

How does your plan for the Ring of Fire help realize Ontario's economic potential, in partnership with First Nations and Indigenous communities?

Premier Ford

Well, first of all, let me first start off with the fact that now more than ever, I always say we must make Ontario and Canada more resilient, self-reliant, not rely on the U.S. so much, and make sure that we have the strongest economy.

President Trump's tariffs impact our critical sectors right across the board and really bring uncertainty, and no one likes uncertainty when it comes to business or in their general lives. But we have to make sure that we bring certainty back here at home. And one of the avenues, obviously, is the Ring of Fire.

I always say we could be the wealthiest nation in the world if we start getting shovels on the ground, getting over 170 of the world's most strategic minerals and

deposits out of the ground -- including uranium and cobalt, nickel and copper.

[Speaking of copper], as you heard about President Trump putting tariffs on copper. At the end of the day, though, the US needs our critical minerals. They need them for their aerospace sector and manufacturing sector and their military.

And critical minerals are needed everywhere else, as well, no matter if it's electric vehicles, military jets or items like cell phones and computers and medical devices -- everything has a critical mineral in there somewhere.

We've invested over a billion dollars to support the critical mineral infrastructure that we need to get up to the Ring of Fire area, including to developing the all-season road network. And we're investing in high-speed internet, road upgrades, and community supports.

Now, the road to the Ring of Fire, yes, it's to get our critical minerals out, but it adds all sorts of different areas of support for our First Nations communities, like health care, and making sure they have proper energy so they aren't running on diesel all year round. It also provides access to

better health care and food access.

So that's what we're really going to be focused on, and we're not alone when we talk about this, because governments across Canada have acted to get the shovels in the ground as well. British Columbia, for example, which has an NDP government, passed legislation to fast-track the permitting, and so did the federal Liberal government.

And so it's really a growing national momentum right across party lines, and it really reflects the urgent need to modernize and accelerate nation-building projects, and that's exactly what our legislation does with Bill 5. It's about cutting government red tape at all levels and streamlining repetitive approvals.

What drives me absolutely crazy is when we're doing approvals and the feds overlap; the federal government needs to get out of our way so we can start developing our resources faster.

Ontario has the One Project, One Process model – which, by the way, the federal government is also implementing on nation-building projects – and in support of that model, over the summer, we invited the First Nations to Queen's Park to talk about Bill 5, because we wanted to make sure they were a part of it. And they realized that what we're putting in \$10 million of scholarships for their young people and \$70 million in training.

In total, we have offered First Nations Communities \$3 billion of equity to get involved, and I can tell you, at that Council Federation meeting (in the summer), all the Chiefs said one thing: Let's stop talking and let's start moving. So that's positive -- they understand.

I want is to make sure that the First Nations communities prosper and that Ontario and Canada prosper--, and we can do that when we work together.

The Land Economist

What are your next steps and immediate priorities?

Premier Ford

So, what we're doing is working with Aroland First Nations, and we've signed a partnership with them to start building that first 80-kilometer stretch to get into the Ring of Fire.

We've also negotiated a long-term

agreement with Webequie First Nations that includes the First Nations leading the environmental assessments for the proposed all-season road projects in the Ring of Fire. We're going to continue to work in lockstep with the First Nations leadership to plan critical infrastructure in the Ring of Fire.

I just want to congratulate them on the release of the draft environmental assessments this summer for at least the two out of the three road projects. These are significant milestones on the path to the all-season road access.

In terms of timing, Webequie First Nations is currently targeting a submission of the final reports to the provincial and federal governments by mid-2026 for the Webequie Supply Road and by early 2028 for the Northern Road Link Project.

The Land Economist

Given your progress, are you able to provide a realistic estimate of when the Ring of Fire will go live, when we'll actually begin to see minerals coming out of the Ring of Fire?

Premier Ford

Well, I want it to happen tomorrow. But realistically, probably closer to 2029 -- 2030, we will know exactly where mining companies are focused and are able to get their equipment in and out of there.

We need to find a way to get minerals out of the Ring of Fire and get them out to market. Too often we do what I call *rip and ship*, -- get minerals out of the ground and send it to some other country to be refined, and that's going to stop. We need to refine our minerals right here in Ontario.

The Land Economist

You mentioned how you're attempting to align with Ontario's Bill 5 with the Fed's Bill C-5. Is that partnership working well?

Premier Ford

Yes, it is. We're moving but I always have to push the federal government to move faster, quicker, and immediate. Those are my favourite three words: faster, quicker, and immediate. Because dealing with federal government is like trying to push a boulder uphill. And a lot of times the problem with government is government. They're the biggest culprits.

So, we're going to streamline everything. At one time it would take 15 years to get a permit to get minerals out of the ground.

We want to get it within 23, 24 months, max.

We want to even move it quicker than that to compete against the rest of the world.

The Land Economist

[Recently] Prime Minister Carney announced an agreement to supply Germany with rare minerals from Canada. Carney mentioned developing ports in the West and along the St. Lawrence but didn't include any Ontario developments in his announcement.

Does the omission of Ontario in Carney's announcement make any difference to you in terms of the provincial/federal fast-track partnership you talked about?

Premier Ford

Not necessarily. I just want to emphasize, yes, anyone can have our critical minerals as long as we refine them here. And then we'll put them into the open market around the world. And I'm confident that the federal government will be there to support us on the road to the Ring of Fire. Prime Minister Carney has told me that.

I'll have to take his word for it until otherwise. And either way, we're moving. We're moving as we're talking right now.

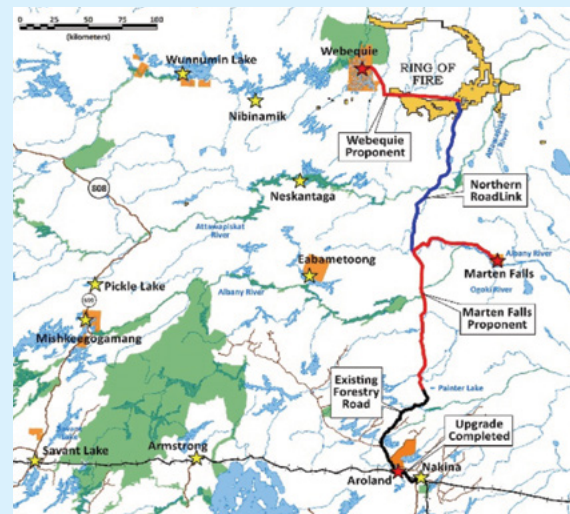
The Land Economist

Thank you for this conversation, Premier Ford.

Premier Ford

Well, thank you so much. I appreciate it.

These are the proposed Ring of Fire Roads and First Nations lands referenced in this conversation.



Editor's note:

Conversation date: August 25, 2025

AIRSHIPS UPDATE

EVERYTHING IS UP IN THE AIR – AND THAT’S WHY AIRSHIPS AREN’T

By Mike O'Dwyer



[LockheedMartin P-791 AMIRAAZAM16](#), CC BY-SA 4.0 via [Wikimedia Commons](#)

In previous editions of The Land Economist, we've explored why and how Lighter Than Air (LTA) airships could become a viable link in the Northern Ontario minerals extraction supply chain and to the protection of Canadian sovereignty in the north.

So what's holding airships down? A lot or weighty problems. Read on ...

Failure to launch: The conundrum of lifting gasses

Airships gotta be buoyant, of course – but what will keep them in the air? Helium? Hydrogen? Here's where things stand (or float) right now ...

Hydrogen Update

Green Hydrogen going dark?

According to Bloomberg...

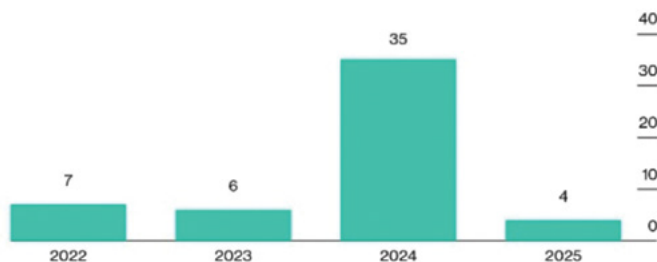
The hype for green hydrogen, or hydrogen produced via electrolysis powered by renewable electricity, has disappeared into the rear-view mirror. As the industry grapples with political uncertainty and rising costs, companies are reevaluating their clean hydrogen portfolios and canceling many projects altogether.

Three project developers have announced changes to their low-carbon hydrogen projects in just the past few weeks. Producers of electrolyzer equipment have also been hitting roadblocks.

These announcements come on the back of a blistering year for cancellations. Bloomberg tracked 35 green hydrogen project cancellations in 2024. The year before, that number was just six. However, it is likely that more projects were canceled, as many companies do not announce the abandonment of a project publicly.

Green Hydrogen Project Cancellations Skyrocketed in 2024

Number of green hydrogen projects canceled in a given year



Source: BloombergNEF

Note: Data as of March 11, 2025. Data for 2022 includes cancellations made in prior years.

BloombergNEF

More deflating hydrogen news ...

[BP shelves 18 early-stage hydrogen projects as part of \\$2bn cost cutting programme](#) (Hydrogen Insight Oct 30, 2024)

BP has cancelled or shelved 18 clean hydrogen projects as part of its bid to focus down on the five to ten developments it will take a final investment decision (FID) on by 2030.

[European airlines push back hydrogen ambitions](#)

Sector no longer expects fuel to make significant contribution to decarbonisation by 2050

[Airbus Delays Hydrogen Plane Amid 'Huge' Technology Challenges](#)

According to Bloomberg News (Feb 7 2025):

Airbus SE said that one of its most ambitious projects for future propulsion — using hydrogen to power an aircraft — is progressing slower than planned because of the technological hurdles involved, dealing a setback to the industry's efforts to clean up air travel.

[Hydrogen exports from Africa to Europe will remain “prohibitively expensive” without policy interventions, a new study suggested](#)



2 Africa - map by Seeds Scholars, licensed under CC BY 2.0

The fuel known as “green” hydrogen — made by splitting hydrogen out of water molecules using renewable electricity — has drawn much interest globally as a way to decarbonize heavy industries that are hard to electrify. As countries assess the most economically viable places from which to procure the fuel, some governments in Europe have been exploring importing cheaper green hydrogen in the form of ammonia from countries including Kenya, Mauritania, and Namibia. Research published by the journal Nature Energy, however, found that “[de-risking and strategic location selection](#)” would be key to making African green hydrogen exports competitive with those of other regions.

On the other hand ...

[Hydrogen touted as a zero-emissions fuel source](#)

[Lofty hopes for the hydrogen energy market – but only in Alberta, you say?](#)

As reported by Stephen Cook, CBC News Oct 3, 2022:

Hydrogen is being touted globally as a key role in decarbonization as it produces zero emissions when used as a fuel source.

The International Energy Agency says hydrogen demand reached 94 million tonnes in 2021. It estimates it could reach 115 million tonnes by 2030 under current conditions, noting it is well below the 200 million tonnes needed by 2030 to be on track for net-zero emissions by 2050.

A Bloomberg outlook estimates that in the most optimistic scenario, hydrogen could provide up to 24 per cent of global energy demand — almost 700 million tonnes per year — by 2050.

Alberta has been using hydrogen for years as feedstock for industrial processes. It's now aiming to be a hydrogen giant.

By 2030, the province wants to have incorporated the energy source in its domestic system as well as “established itself as the global supplier-of-choice in clean hydrogen exports.”

Alberta currently produces around 2.4 million tonnes of hydrogen per year. It aims to export three million tonnes by the end of the decade.

Both the provincial and federal governments are aligned in the desire to build a hydrogen market. Canada released its own [hydrogen strategy in 2020](#), positing it could generate almost \$50 billion in sector revenue by 2050.

“We see this as an enormous economic opportunity for Canada and an enormous opportunity to help the world to decarbonize,” [Former] Natural Resources Minister Jonathan Wilkinson said in an interview [in 2022]...

Wilkinson said [in 2022] the government is developing regulations for the development of hydrogen alongside international partners and making investments in the technology.

But is the Air coming out of the Alberta hydrogen bubble?

In the previous issue of the Land Economist, we reported on the proposed construction of an innovative Edmonton-based hydrogen complex. [But a potential board battle could kibosh that innovative Air Products blue hydrogen plant – and potential nanotube source.](#)

Industrial gasses company Air Products and Chemicals fight with active investor Mantal Ridge for board seats and finding a successor CEO could change the company's strategy and curtail development of what had been planned as the world's largest net-zero hydrogen complex.

Hydrogen powered turbines to create electricity?

[Researchers at Texas A&M](#) are exploring new technology including high-performing alloys to make efficient and greener hydrogen-powered turbines the wave of the future.

[As reported in thecooldown.com on Nov 6 2024:](#)

(A)pproximately 35% of U.S. electricity production comes from natural gas turbines. Since burning this dirty fuel is neither environmentally friendly nor sustainable.

Switching to hydrogen is a promising solution, but since it needs to burn at higher temperatures and creates a wet environment within the turbines, more resistant alloys are key to a greener future. Thus, the investigation of a new class of materials for turbines.

Creating new hydrogen-powered turbines to create electricity without the side effect of warming the atmosphere will rely on a robust green hydrogen supply.

Hydrogen powder?

Hydrogen has been called the fuel of the future. But one of the biggest issues in the hydrogen industry is transport. Hydrogen is flammable, unstable and low density so it's hard to handle and expensive to ship as a gas or liquid. While countries like the US are spending billions to refine traditional transport methods, Australia has found an innovative and cost-effective solution – shipping hydrogen as a powder.

Australia is pushing to become the leader of the hydrogen export market. By 2030, the country will provide huge quantities of green hydrogen to the world market, when supported by novel technologies such as powdered hydrogen transporter.

Toyota expanding hydrogen network in Japan

[As reported in NikkeiAsia on Feb 26, 2025:](#)

Toyota Motor is accelerating the use of hydrogen in trucks and factory equipment on its home turf in Japan's Chubu region and will produce the zero-emissions fuel at its headquarters plant.

Toyota recently began using fuel cell trucks in its supply chain in Chubu's Aichi prefecture, in addition to similar efforts in Europe.

[The African nation of Namibia sees serious potential in becoming a hydrogen energy powerhouse](#)

The startup Hylron has a production site in an area of the Namib Desert that averages only 30 hours of overcast skies per year, making it an enormously suitable location for solar and wind generation. The idea is to build out solar, hook it up to a hydrolysis plant that uses electricity to produce hydrogen and then use that hydrogen to either export or support green versions of heavy industry like steel production. The country is targeting 10-12 million tons of hydrogen per year.



"Namib Desert Deadylei" by sntgm dm is licensed under CC BY-SA 2.0

Helium Update

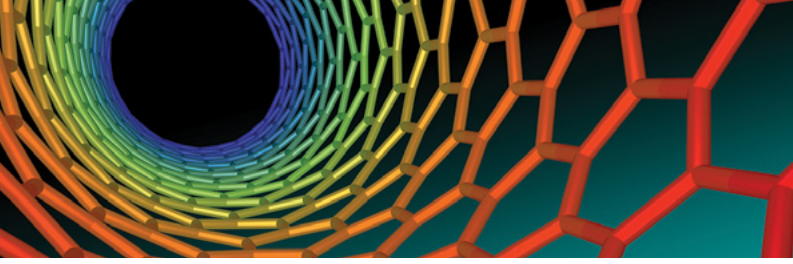
[As reported by OilPrice.com on Sept 12,2024:](#)

[Global Demand For Helium To Nearly Double By 2035](#)

- *Global helium demand is expected to nearly double by 2035.*
- *The semiconductor industry is projected to increase its helium use fivefold in the next decade.*
- *Helium is primarily obtained as a byproduct of natural gas extraction, but it is only economically recoverable in low concentrations, leading to supply shortages*



"Goodyear Blimp" by Mark Turnauckas is licensed under CC BY 2.0



"High resolution carbon nanotube" by ghutchis is licensed under CC BY 2.0

Airing it Out

Loftier Views on Airships Viability

Maybe nanotubes are the answer

According to [Livescience.com](https://www.livescience.com/64511-nanotubes-airships.html) on Jan 31, 2025

[New wonder material designed by AI is as light as foam but as strong as steel](#)

[Scientists](#) have used artificial intelligence to design never-before-seen nanomaterials with the strength of carbon steel and the lightness of styrofoam.

The new nanomaterials, made using machine learning and a 3D printer, more than doubled the strength of existing designs.

We interviewed staunch airships supporter, David Prum, in a previous issue of [The Land Economist \(Fall 2024 V 54 No.2\)](#). In that interview, Prum touted nanotube technology's potential in the construction of airships:

"The most expensive component of any airship is its airframe. Using nanotubes for airframe construction will dramatically reduce the cost and also the quality and resilience of airship airframes."

"At the right price point, carbon nanotubes can also be used to weave ultra-strong ultra-light AeroStrut™ structures to make inexpensive super-resilient airframes for heavy-lift airships, dramatically reducing the overall cost of airships."

In a follow-up interview for this edition of the magazine, Prum clarified his position on nanotubes given the new developments in AI-designed nanomaterials using a 3D printer:

"The technology described (above) is certainly in the ballpark of our airship concepts and plans. I am agnostic regarding the materials that will ultimately make advanced airships feasible and affordable. Nanotube materials and related research is advancing so rapidly that we cannot know now what will ultimately prove to be the best

"We can build a useful airship today using cheap polyester yarns and polyurethane films. Polyester is slightly heavier than ideal but the great thing about an airship is that if you have a weight issue you simply make it a bit larger."

David Prum



More on airships for the north

You've heard from airships advocate, Barry Prentice, in previous issues of this [magazine \(Fall 2023 V53 No 3\)](#). Here he is in a video with more on airships as the transportation solution for remote applications:



[Watch Video](#)



Dr. Barry Prentice

And here is more on how airships could provide access to essential goods for remote northern communities:

[Should we bring back blimps to haul cargo north?](#)

According to an article (see hyperlink above) by Miranda Leybourne published in the Manitoba Co-operator on January 16, 2025:

One Manitoba company is pitching airships as a way to connect Canada's North with food and essential goods

Update: Northern Transportation Symposium Videos

We previously reported on Northern Transportation Symposium held on September 5-6, 2024 in Thompson, Manitoba. The speakers' videos have now been posted at <https://nts Symposium.ca/#videos>. ➡



Michael O'Dwyer has had careers as a writer and editor – newspapers, magazines, radio, television, websites, marketing/advertising – and as a senior communications practitioner/manager/partner in both government and industry. His film/TV productions have won numerous international awards and have been shown on all major Canadian networks and on television and in theatres around the world.

Values: An Economist's Guide to Everything That Matters

Mark Carney 2021, William Collins Publishers.

OR

Value(s): Building a Better World for All

2021 McClelland & Stewart

Book Review by Ian Ellingham



Photo of Mark Carney
"Mark Carney and Valdis Dombrovskis" by European
Communities is licensed under [CC BY 4.0](#).

This book exists under two titles, my copy, purchased in 2023 in the UK and initially read on a flight back to Canada, has a yellow cover and the title rather curiously printed upside down. The other has a white cover with a globe and has what is obviously a more reader market-oriented title: *Value(s): Building a Better World for All*. With Carney now Prime Minister, it seemed appropriate to go through the book again to see what thoughts might be guiding his government and us.

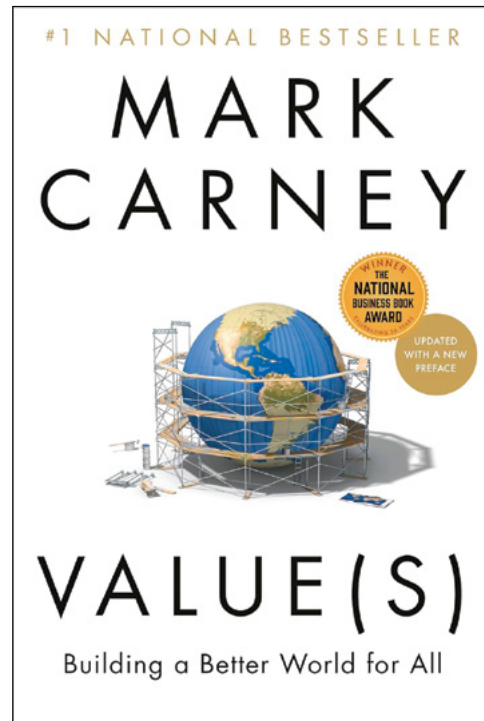
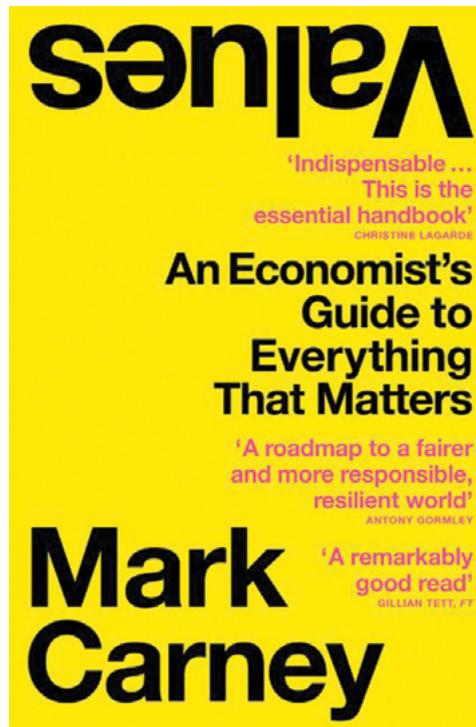
The title of the British copy is a better description – the book was clearly written by an economist and indeed it is a comprehensive exploration of (almost?) 'everything' that matters to humanity. There are three sections, the first explores the nature of value, where it comes from, how it has been understood historically – and typically expressed monetarily. He sees two notions of 'value' – one being market value and the other about more fundamental values, such as concern for both the present and future well-being of the wider population. The second section, entitled, 'Three Crises of Value(s)', looks at the financial crisis of 2008/2009, which he steered Canada through; the Covid crisis, during which he was Governor of the Bank of England, and the ongoing climate issues. The third section, looks to the future, and contains what might be regarded as an extremely loose set of principles that might guide Carney's tenure as PM.

An obvious criticism is that, as Prime Minister, he is unlikely to act entirely

consistently with the beliefs and philosophies expressed in his book. He does recognise this, stating that it "...creates a target-rich environment for critics who can spot gaps between preaching and practising." In reading the book today, one has to be aware that it was written before Carney joined active politics. Thus, some interpretation is required, as the realities of the political arena mean that compromise is inevitable – the Canadian system does not give absolute power to a prime-minister, especially one who is a few seats short of a majority, and inevitably has to deal with an assortment of provincial premiers, each with their own agenda. But, at least, the book gives us a rough sense of his world-view – and a way that what we, as a society, should value.

It is necessary to recognise that we inevitably interpret books through filters – our individual backgrounds, the nature of the times, and, in this case, one filter, perhaps inevitably, as living as a member of some particular generation at a certain time in Canada, and as individuals who are likely entranced by real estate, and have a grasp of the essentials of economics. In 2023, when I first encountered the book, Donald Trump had yet to reappear as president, and Carney was the chair of Brookfield Asset Management. This time, I encountered different messages, and I also must recognise the influence of a complex project I am currently working on.

While it is likely that you will be reading this book through a Canadian filter, it is a



book that focusses on the larger issues – those things that tend to affect reasonably-affluent developed democracies – including the fault lines that divide people. How do we achieve fairer societies, both now and into the distant future? Carney is searching for more humane societies, and, as an economist, trying to develop and explain ways of achieving them.

The exploration of 'values' is not about dollars or pounds or euros, but about the fundamental aspects of values. What do we, as people and societies, ultimately value, and what should we do about it? In chapter 6 'The Market Society and the Value of Nothing', he explains: "In economics, the combination of subjective value and marginalization changed the perceptions of value from the intrinsic characteristic of a good or service to its exchange value in price in the market. In the process, the importance of distribution of income and the distinctions between productive and unproductive activities were downplayed, and, with them, corporate purpose and national ideals were devalued." (If you need to, read that again) This thinking leads logically into an exploration of what sorts of values should dominate economic thinking, and guide the activities of governments and corporations. As a small player in the world's building systems, I have to agree intellectually, but that does not make it necessarily easier when confronting the economic structures that I have to work within. Carney's analysis of values takes us into the world of sustainability, social contracts, inclusiveness, intergenerational equity and other matters that may not be valued monetarily. This sets a challenge to those who participate in the real estate world to give more thought to what we are actually doing. Deeper thought might even lead to more profitable and lower-risk projects – but perhaps that is just my idealism.

Those of us toiling away in the trenches of the property world might consider some of Carney's insights. One is the complexity of values, and the need to view them from different perspectives in order to arrive at a more complete understanding of our objectives. Perhaps at 499 pages, including references (no index), it is not going to be read by everyone. But to the land economist, it lays out thoughts

about that question all of us ask (hopefully) – Even if we agree, how should we respond? It is apparent from my discussions with some newer AOLE members (done relative to pieces for 'The Company We Keep') that most of us have commitment beyond simply meeting short- and medium-term market demands – although we have to do that too. We face the reality of land, clients, contractors, bankers, tenants and short-term markets, so, like Carney in his role as prime minister, have to balance a multiplicity of competing factors. He cautions that we can be overwhelmed by information, and that we need to be wary of 'facts' – especially about where they come from. We have to recognise uncertainties, and be careful about single-point projections. One obvious response is for each of us to update some of our basic economics and knowledge of economic history. The other is to recognise the long-term importance of what land economists do, because we are manipulators of built environments, and our actions can have intergenerational consequences. This places a big burden on us to attempt to meet the demands of the value(s) Carney discusses and proposes.

For more, you will have to wait for his next book: *"The Hinge: Time to Build an Even Better Canada"*. The publisher informs us that it is expected in January 2026, although one might suspect that Carney has other things to worry about. Presumably it will include more specific details about how he might undertake to manage Canada,

but, given the uncertainty of politics –one might wonder how he would (a) find the time, and (b) be able to write and publish this before things changed yet again. As an economist, he will obviously remember a comment, usually ascribed to John Maynard Keynes, that when the facts change it is only reasonable to change one's mind, and, soon after his election, Carney, in removing the consumer carbon tax, offered "I am a pragmatist above all, so when I see that something's not working, I will change it."

The book concludes with a chapter entitled 'Humility' and is broken down into five related sections: Humility, Uncertainty, Chance, Responsibility, and Renewal. The words on humility are interesting: "It matters because it is an attitude to leading and governing. Not an impediment to acting. Humility is recognising that there will be surprises. ... The humble can plan for failure, even if they don't know how or when it will happen. ... Humility allows us to set goals before we know all the answers...." From this base of humility flows the other concluding statements. Carney states the obvious: chance has favoured us with great opportunities and abilities to do something with them. That implies that we have personal responsibilities to improve "...the systems in which we work and live." For us, as people involved in the creation and management of the built environment, that has immediate application, as few other people (except perhaps central bankers and prime ministers) have so much capability to do so. ➤



Editor's Additions:
Mark Carney talks about his book in this video interview.

[Watch Video](#)

Value(s): *Building a Better World for All* is available at Indigo, Amazon and other book sellers.

[Indigo](#) [Amazon](#)

Values: *An Economist's Guide to Everything That Matters* (UK version of the book) is available at Amazon and from other book sellers

[Amazon](#)



Dr. Ian Ellingham

Dr. Ian Ellingham was educated at the University of Cambridge, where he received a Master of Philosophy in Land Economy and a PhD in Architectural and Urban Studies. Previously he studied at the University of Western Ontario, where he received an MBA. He is a Fellow of the Royal Architectural Institute of Canada and a member of the Association of Ontario Land Economists and currently serves on the Association's Board of Directors as well.

After two decades in development management, he has focused on research, writing and teaching, and has been the chair of the journals OAA Perspectives and The Right Angle Journal. He is an associate of Cambridge Architectural Research, where he has undertaken research for various government agencies and private-sector organisations. His primary interests are in decision-making in the built environment, and in the human response to buildings.

AIRING OUT THE CANADIAN ARCTIC SOVEREIGNTY QUESTION

Is Canada's claim to Arctic sovereignty melting away?

By Mike O'Dwyer

Arctic ice is melting and so are Canada's historic claims of Arctic sovereignty

In a [Message by Bill Blair, Canada's \[Then\] Minister of Nation Defence, published on the Government of Canada website in 2024](#), he wrote: *Canada has benefited enormously from our geography. Surrounded by 3 oceans, and our closest ally to the south, our country has enjoyed a degree of protection that has helped keep our borders safe and secure. That reality is changing in the Arctic.*

You bet it is.

On that same Government of Canada website, [Then] Minister of Foreign Affairs Melanie Joly, wrote: *Canada is at an inflection point in the Arctic.*

Yep! And here's why ...

- **Russia** is rushing to stake a broad claim to Canada's Arctic. Putin's annexation of Crimea and invasion of Ukraine are bloody, irrefutable evidence of Russia's complete disregard for international order.

And now Russia wants our Arctic perhaps in collusion with a fellow traveller or two.

The proofs of Russia's far north intentions are in plain view. Putin's puppet regime has ended its cooperation with the NATO group of northern allies: Canada, the United States, Iceland, Denmark, Sweden, Finland and Norway. It has invested in new Arctic military bases and is building the largest naval fleet in the region. And it is leaning on willing partner China for the funds to support its northern expansion.

- **China** was all-in with Russia from the get-go -- it had already declared its intention to be a 'polar great power' by 2030 and had sent a coast guard fleet into the Arctic for the first time late last year.
- **U.S.A.** That 'friendly country' to the south is not so friendly right now. Not only does its President crave the untapped mineral wealth of the Canadian Arctic, but Donald Trump is also blustering about absorbing our country into the USA as its 51st State.

[Trump views the Canadian Arctic as ripe for the taking because it is, in his view, weakly defended by Canada, with big surveillance gaps.](#) He might decide to stake claims to our minerals, expand drilling in Canadian waters, override commercial fishing rights and even try to take control of the Northwest Passage.

(He wants Greenland, too, for 'strategic reasons' – or more accurately, that country's mineral wealth. And, even though it all sounds preposterous, the would-be dictator is serious.)

To add infamy to ignorance, [Trump is also apparently intent on destroying – or at the very least, diminishing – NATO](#). Which, of course, would make Putin happy and more unchecked in his determination to claim the Arctic for Russia.

WHERE NATO STANDS

The North Atlantic Treaty Organization (NATO) is a military alliance established in 1949. Originally created to defend against Soviet incursions into central and Western Europe after WWII, NATO evolved into a 'cooperative security' organization whose members agree to defend each other against attacks by third parties.

NATO currently has 32 member states – 30 European and 2 North American.



Building gradually from 2006 and growing over the last decade especially, tensions in the Arctic have risen to levels unseen since the days of the Cold War. Hard security is at the forefront of Northern European policy agendas once again, with military strategists and defense experts discussing the GIUK gap, Arctic missile placements, and increased military exercises in the north. While NATO does not have an official Arctic policy or command center, it is very much present in the region, both through its historic guardian of the northern flank, Norway, active participants Canada, the United States, Iceland and Denmark, and newest members Finland and Sweden.

— [Excerpt from a report by Alina Bykova, The Arctic Institute, June 2024](#)

All of that makes the protection of Canada's Arctic sovereignty vitally, strategically urgent – made even more so by, of all things: climate change.

- Climatologists tell us that the Arctic has warmed nearly four times as fast as the rest of the planet in recent decades.

As Arctic ice continues to melt, experts believe this will open up a commercially viable Northwest Passage corridor that would cut 7,000 kilometres from the current shipping route between the North Atlantic and Pacific via the Panama Canal.

Canada considers the Northwest Passage to be Canadian *internal* waters but the US, Russia, China and some European countries say the passage is *international* waters.

It is critical to our Arctic Sovereignty that all these issues be fully and completely addressed now.



Arctic winter ends with lowest sea ice cover in recorded history

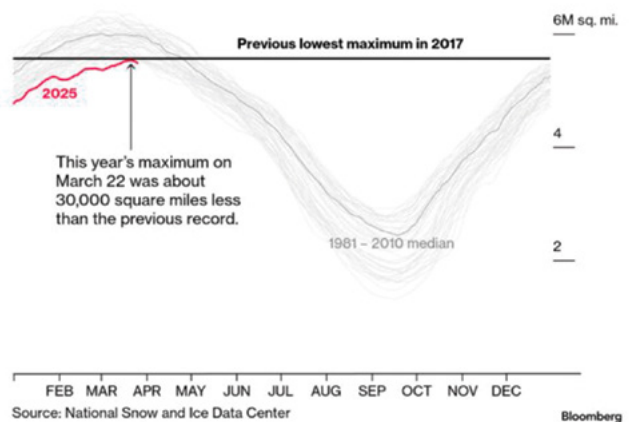
Euronews
Seth Borenstein with AP
March 2025

The Arctic reaches its maximum sea ice in March each year and then starts a six-month melt season. The National Snow and Ice Data Center said the peak measurement taken Saturday was 14.33 million square kilometres - about 80,000 square kilometres smaller than the lowest previous peak in 2017.

That's a difference about the size of California.

Arctic Sea Ice Hits Record Winter Low

Extent of Arctic Ocean with at least 15% sea ice, 1978-2025



Canada has an Arctic Policy, of course – our country has a policy about everything! (You can find Canada's Arctic Policy [here](#).) The quotes leading off this article came from it. The Policy does read well. But in practical terms or, more accurately, in practice, it falls short.

Arctic Circle

The Arctic Circle appears in blue on this map. (source: CIA World Factbook/public domain)

Canada has 162,000 km of Arctic coastline. Forty per cent of Canada's landmass is in its three Northern Territories.

The Arctic Ocean likely had the smallest winter ice cover in 47 years of satellite records after a record year for heat. The loss of Arctic ice threatens to [accelerate feedback loops](#) involved in climate change. Warmer, darker, more open ocean waters absorb solar energy that would otherwise be reflected by ice.

Here are a few salient excerpts from the Policy:

The waters of Canada's Arctic Archipelago, including the various channels comprising the Northwest Passage, are internal waters of Canada by virtue of historic title and in accordance with international law. Canada's Arctic sovereignty encompasses land, sea and ice. It extends without interruption to the seaward-facing coasts of the Arctic islands and beyond.

More than ever, the Arctic is a theatre of interest for many non-Arctic states and actors aspiring for a greater role in Arctic affairs. Canada's adversaries also try to achieve influence through non-military tactics, including cyber activities, foreign interference and economic coercion.

The North American Arctic is no longer free from tension. Canada must work even closer with its closest ally, the United States, to maintain a secure North American homeland. Canada should also be closer than ever to its Nordic allies.

Northerners understand how close a neighbour Russia is. Canada must be clear-eyed about the implications of its geographic proximity to Russia. Canadian Forces Station Alert, on Ellesmere Island, Nunavut, is closer to the Russian military's air force base at Nagurskoye, Russia, than Iqaluit is to Ottawa or Toronto is to Winnipeg.

For over a decade, Russia has invested in modernizing its Arctic infrastructure and its military capabilities in the Arctic to develop resources and control access to the region, with particular emphasis on its own western region and approaches. It is looking to profit from climate change in the region and will continue promoting the development of the Northern Sea Route as a major international shipping route. Given the strategic importance Russia places on its Arctic region, Canada expects these activities will continue.

Russia has also intensified its disinformation campaigns, conducted below-threshold military activities, and crafted a vehement domestic narrative of a "hostile, unfriendly West," in part to justify its own militarization of the Arctic.

Russia's historic posture has been to ensure sovereignty and control over its own Arctic region and to limit the role of non-Arctic states in Arctic affairs. However, because of sanctions and of its massive expenditures on its illegal war against Ukraine, Russia is increasingly reliant on China to fund and support the development of its projects in the Arctic. These include investments in Arctic research, oil and gas development, ports and other critical infrastructure. We anticipate this trend will continue and lead to increased activity by China in the Russian Arctic.

Russia and China are aligned in their desire to undermine the liberal-rules-based international system, but the power asymmetry between them often highlights the divergence in their interests. Russia is increasingly dependent on China and is reversing its historic posture by opening its Arctic to China. For instance, in July 2024, Russia and China, building on their 2022 statement to cooperate in the Arctic, conducted joint military exercises in the Russian High North. In addition, Russian and Chinese warships have conducted joint patrols in international waters off the Aleutian Islands; the 2 countries' coast guards have conducted joint patrols into the Bering Sea; and Russian and Chinese military aircraft have been detected, tracked and intercepted by the North American Aerospace Defense Command

(NORAD) while flying in Alaska's Air Defense Identification Zone. This demonstrates the continued deepening of Chinese-Russian military cooperation, particularly in the North Pacific approaches to the Arctic.

While the risk of military attack in the North American Arctic remains low, the region represents a geographic vector for traditional and emerging weapons systems that threaten broader North American and transatlantic security. Canada is seeing a number of potential threats, including increased Russian activity in Canadian air approaches, China's regular deployment of dual-use—having both research and military application—research vessels and surveillance platforms to collect data, and a general increase in Arctic maritime activity. Adversaries and competitors also employ disinformation and influence campaigns, malicious cyber operations and espionage and foreign interference activities to target Canadians, including northerners.

Close partnership with the United States is essential to the maintenance of a secure, strong and well-defended North American homeland, on which the 2 countries' mutual prosperity depends. It is critical in deterring and defending against increasingly sophisticated threats to North America, including in the Arctic and its approaches in the North Atlantic and North Pacific. We expect Canada-United States defence cooperation in the Arctic to continue to grow, as it is fundamental to both countries' national security interests.

Strong and resilient Arctic and northern communities increase Canada's defence against threats. With increased tension and with competitors looking to exploit vulnerabilities in the Canadian North, Canada must take action to build trust in public institutions and deepen ties with like-minded states. Canada's diplomacy and defence and security policies must work hand in hand to keep these emerging threats in check.

The security of the European High North is also of critical importance to Canada's security and economic well-being. NATO has strengthened its deterrence and defence posture, including in the European High North, in response to the increased threat posed by Russia. Canada will continue to share information on threats in the Arctic with allies and to support NATO operations and presence in the European High North.

Climate change is both the most pressing and the most proximate threat to Canada's security in the Arctic and the people who live there.

Climate change is progressing at an alarming pace, with the Arctic warming 4 times faster than the global average, causing significant impacts on natural and human environments. These impacts serve as threat multipliers because changing environmental conditions create additional opportunities for foreign adversaries and competitors to covertly or overtly operate in the Canadian Arctic.

The total surface area of Arctic Ocean ice is shrinking, with varied implications for maritime shipping, trade and resource extraction across the Arctic. Maritime traffic in the Arctic will continue to increase, which will drive further foreign interest in the region.

This includes maritime traffic in Canada's Arctic Archipelago, despite the risks and hazards associated with the unpredictable ice conditions.

With retreating sea ice and new technologies improving navigation and accessibility, foreign activity in the Arctic will continue to increase, bringing with it related safety, security and environmental challenges. With other Arctic states, Canada must be prepared to respond.

In parallel, climate change is driving interest in the Arctic as a sustainable and reliable source of critical minerals, such as lithium, graphite, nickel, cobalt, copper and rare earth elements integral to the transition to a low-carbon economy. For Canada and its allies, the Arctic's resource potential provides an opportunity to diversify critical mineral production in partnership with territorial and provincial governments, Arctic and northern Indigenous Peoples and local communities.

There you have it: An edited review of Canada's policies and plans for protecting our Arctic sovereignty. How's it going, eh? About as well as you can expect from serial Canadian governments who are very good at formulating reams of policies, announcing them at photo-op speeches, printing them in nicely designed publications and then ... wandering off to the next shiny issue.

But there actually has been progress -- albeit somewhat muted by unexpected turbulence churned up by our 'closest ally' -- with, one hopes, more progress to come.

Here's where we stand (on somewhat slippery turf) today ...

Getting boots on the ground (or tundra, ice or snowmachine)

Canada currently has 300+full-time military personnel in the North plus 1,700 Rangers who assist in northern operations and activities.

There are Canadian Armed Forces bases in Yellowknife, Whitehorse and Iqaluit as well as CFS Alert at Ellesmere Island, the northernmost year-round inhabited place in the world, and an Arctic Training Centre in Resolute Bay, Nunavut.



"Sampling Melt Ponds" by NASA Goddard Photo and Video is licensed under CC BY 2.0.



Canadian Rangers in Nunavut, Canada by US Mission Canada, CC BY 2.0

The Canadian Rangers are a part of the Canadian Armed Forces (CAF) Reserves working in remote, isolated and coastal regions of Canada. They provide lightly-equipped, self-sufficient mobile forces to support CAF national security and public safety operations within Canada.

More than half of the 5,000 Canadian Rangers force are Indigenous. They live in 220 northern communities and speak 26 Indigenous languages and dialects.

Their duties include reporting unusual activities; surveillance and sovereignty patrols; search and rescue; disaster relief; and support of Armed Forces operations and survival training.

Canadian Rangers with Lee-Enfield Rifle No. 4 rifles in 2011

Canadian Rangers in Nunavut, Canada

By US Mission Canada - https://www.flickr.com/photos/us_mission_canada/5878501412/in/photostream, CC BY 2.0, <https://commons.wikimedia.org/w/index.php?curid=16023089>



'Arctic ranger training exercise' by US Embassy Canada is marked with Public Domain Mark 1.0.

In March, Prime Minister Mark Carney (who was born in Fort Smith, Northwest Territories, by the way) promised to boost Canada's military and security presence in the Arctic, including \$420 million to allow a greater, sustained, year-round presence in the Arctic, as well as expanding training and deployment.

Also in March, [\[Then\] National Defence Minister Bill Blair said the Feds would invest more than \\$2.5 billion over 20 years to build 5 or more northern operational support hubs](#) that will include airstrips, logistics facilities and equipment to augment current Northern infrastructure.

Up, up (and maybe away)

The North American Aerospace Defence Command (NORAD) was established in 1958 as a bilateral partnership between Canada and the United [States responsible for aerospace warning, aerospace control, and maritime warning](#).

There are approximately 1,000 Canadian Armed Forces personnel assigned to NORAD throughout North America.

Canada provides fighter aircraft on alert status to NORAD during normal operations and also operates and maintains the Canadian portion of the North Warning System as well as three forward operating locations in Inuvik, Iqaluit and Yellowknife to support fighter operations and provide aerospace surveillance and control in Canada's North.

IN 2023, the Feds announced the intent to purchase of 88 US-built F-35 Lightning II fighter jets at a cost of \$10 billion to improve our aerospace capabilities. Even though Canada has already plunked down big money for the first 16 US-built warplanes (due to be delivered next year) [the purchase is now being re-examined with the objective of finding non-US suppliers](#).

The reason: Trump's tariffs and threats to annex Canada. However, the issue remains unresolved partly because a withdrawal from the



PIN-DA Short Range Radar site, Edinburgh Island, Nunavut, licensed under CC BY-SA 3.0

F-35 contract will affect Canadian aerospace companies that are part of the F-35 supply chain.

Combat aircraft are unlikely to play a major role in Arctic security. In spite of Russia's renewed proclivity for flying its ageing bombers outside Canada's northern airspace, there is no realistic situation in which the RCAF will have to engage hostile aircraft in the region. Such hostilities would require a shooting war, during which Russia would have little to gain by sending valuable fighters into a region possessing no strategically important targets that could not be more easily destroyed by ballistic or cruise missiles. Canada will need to maintain a small fighter force stationed in the North, ready to escort Russian planes out of its Air Defence Identification Zone or to intercept if they should violate Canadian airspace. Still, this is a duty easily managed by the RCAF's existing fleet of CF-18s operating from its four forward operating locations in the North.

- Excerpt from The Canadian Armed Forces in the Arctic: Purpose, Capabilities, and Requirements by Adam Lajeunesse Canadian Defence & Foreign Affairs Institute, University of Calgary

In March, Prime Minister Carney announced the construction of 'Over the Horizon Radar' an early warning radar system that detects aerospace threats – including hypersonic and long-range cruise missiles – approaching North America. First announced by the Feds in 2022, the system, budgeted at \$6.9 billion over 20 years will cover airspace from the US border to the Arctic. Expected to be operational by 2029, it is based on Australian technology and will be situated in Southern Ontario.

Needless to say (but I'll say it anyway) Trump has also weighed in on NORAD. He has said [he is reconsidering military cooperation, including NORAD](#). Secretary of State Marco Rubio has since tried to walk back Trump's comments. But Trump has doubled down on doing damage to NORAD, saying he wants to recast it as a 'defend-America-first' organization, relegating Canada to a minor role.

In other Arctic surveillance news:

- [Canadian surveillance is still provided by the Royal Canadian Air Force's \(RCAF\) Aurora aircraft](#), that are in the midst of a \$2 billion upgrade of their mission systems and sensors, which should keep the planes active until at least 2030.
- [Canada is also considering the use of drones to supplement its close surveillance capabilities](#). Requiring less maintenance and manpower than traditional aircraft, unmanned aerial vehicles (UAV) could, theoretically, be used economically in a wide assortment of roles, from tracking ships to monitoring pollution incidents.

In related Arctic Sovereignty news ...

Government Announces Major Increase in Defence Spending

[In June, PM Carney announced 'the largest generational investment' in Canada's defence spending](#). Building on commitments made previously in Canada's defence policy, [Our North Strong and Free](#) (ONSAF) aims to **strengthen Canada's sovereignty**, prosperity, and economic growth.

The plan includes an increase of over \$9 billion in defence investment this fiscal year (2025-26), bringing Canada's defence spending to 2% of gross domestic product.

Included in the plan:

- 1 billion to grow existing resources and to introduce emerging military capabilities that will allow Canada to become increasingly self-sufficient in fulfilling its responsibility to defend its territory and citizens, **especially in the Arctic**.
- 2 billion to diversify Canada's defence partnerships beyond the United States.
- Developing new drones and sensors to monitor the seafloor and the Arctic.
- Repairing and maintaining existing ships, aircraft, and other assets.
- Expanding the reach, security mandate, and abilities of the Canadian Coast Guard and integrating it into our NATO defence capabilities – to better secure our sovereignty and expand maritime surveillance.

The plan will support key capabilities, including:

- Arctic Over-the-Horizon Radar
- Joint Counter-Drone Program
- Joint Support Ships
- Long-range precision strike capability
- Increased domestic ammunition production

Quotes

*"In an increasingly dangerous and divided world, **Canada must assert its sovereignty**. We will rapidly procure new equipment and technology, build our defence industrial capacity, and meet our NATO defence commitment this year. Canada will seize this opportunity with urgency and determination."*

— The Rt. Hon. Mark Carney, Prime Minister of Canada

*"For generations, Canadians have served our country with honour, and (now), we renew our promise to stand behind them. We are equipping our Armed Forces with the capabilities and support they need to protect Canadians and uphold our commitments around the world. This historic investment will **strengthen our sovereignty** and invest in the Canadian economy – growing a world-class defence industry that fuels innovation and job creation."*

— The Hon. David J. McGuinty, Minister of National Defence

*"[Our geography does not protect us as well as it used to](#). We need to have more investment to actually exercise our own **sovereignty here in Canada and of course this implies the Arctic**."*

"It is getting more contested, more traffic, more people interested in this area so of course we have to invest more in the Arctic to make sure our sovereignty is respected."

"This (plan provides the) building blocks that (go) to our providing that defensive posture we need to have in the Arctic."

— (CAF) Chief of the Defence Staff General Jennie Carignan

[Carney names Virginia Mearns as Canada's new Arctic ambassador](#)

In July, Prime Minister Mark Carney announced the appointment Virginia Mearns of Iqaluit to represent the North as Canada's new Arctic ambassador.

The ambassador position was a pillar of the federal government's \$34.7-million Arctic foreign policy that was [announced](#) late last year.

As Arctic ambassador, Mearns will work with Canada's Arctic allies, Indigenous Peoples and provincial and territorial governments to promote the country's domestic and foreign policy agendas, advance Canada's Arctic interests and raise awareness of Indigenous rights in the Arctic.

Ice breaker? (or breaking up can be hard to do)

The Canadian Coast Guard (CCG) currently operates 19 icebreakers. Many of them operate in southeastern Canada during the winter to keep waterways open then deploys up to 8 icebreakers in the Arctic from June to November each year.

Eight years ago, a Transport Canada report warned that our country's coast guard fleet was falling apart and in desperate need of new ships.



Canadian Ship Louis S. St-Laurent and Coast Guard Cutter Healy in the Arctic Ocean

The Canadian Coast Guard Ship Louis S. St-Laurent makes an approach to the Coast Guard Cutter Healy in the Arctic Ocean, Sept. 5. The two ships are taking part in a multi-year, multi-agency Arctic survey that will help define the North American continental shelf.

U.S. Coast Guard Atlantic Area

Courtesy Photo

Date: 09.05.2009

Location: At Sea

"Canadian Ship Louis S. St-Laurent and Coast Guard Cutter Healy in the Arctic Ocean" by DVIDSHUB is licensed under CC BY 2.0.

Ten years ago, Canada launched a National Shipbuilding Strategy (NSS) -- a long-term, multi-billion-dollar program to renew CCG and Royal Canadian Navy fleet -- that has so far delivered three light icebreakers.

Also on order: 8 new icebreakers, including 2 heavy polar icebreakers capable of year-round operation in the Arctic, with the first heavy polar icebreaker scheduled for completion in 2030.



Davie Shipbuilding, Lévis, Quebec By Cephas - Own work, CC BY-SA 3.0

In March, the federal government announced plans to construct two new Arctic icebreakers for the Canadian Coast Guard. The first contract, worth \$3.2 billion, went to Vancouver-headquartered Seaspan, which is set to begin the construction process in April.

The second icebreaker will be built in Lévis by the Quebec shipbuilder Davie as part of a \$3.3 billion deal. It is expected to be completed by 2030.

In July 2024, Canada, the US and Finland signed the ICE Pact. (You can read more about ICE [here](#) and [here](#).) It was intended to be a collaborative effort to build best-in-class icebreakers and to help safeguard the Arctic and Antarctic regions, notably from Russian and Chinese incursions.

But the ICE Pact appears to be cracking, thanks to Donald Trump. In his desire to revive US shipbuilding, moribund since WWII, and 'make American shipbuilding great again' he is now pushing for the accelerated construction of 'totally made in America' icebreakers. But that reality is far in the future if ever to be realized.

The US currently has only two aging icebreakers in the Arctic.

Icebreakers require very specialized construction techniques. (Finland is the acknowledged world leader in icebreaker design and construction.) The US lacks in all areas of icebreaker shipbuilding capabilities and has experienced continued delays in its Polar Security Cutter program.

Prime Minister Mark Carney has pledged to buy new submarines, fleets of drones and more heavy-duty icebreakers as part of a commitment to raise defence spending. [He said Canada will commit to all orders underway through the National Shipbuilding Strategy.](#)

In the meantime, [it has been reported](#) that Russia currently has a fleet of 40 icebreakers and has already launched seven nuclear powered icebreakers and a new class of 'combat' icebreakers (with guns and launchers for anti-ship and land-attack cruise missiles) and is developing more powerful icebreakers that can outperform Canada's current and future vessels.

If you have managed to read through this rather extensive article, you may have noticed that Canada has plenty of plans for safeguarding our Arctic Sovereignty -- and has even managed to achieve some on-the-ground (on-the-ice?) improvements, with (hopefully) more to come in the not-to-distant (?) future.

But it's not enough. With myriad forces arrayed against us -- the easily identified foes, Russia and China, and that unexpected adversary, our 'friendly neighbour' the US -- more needs to be done fast.

The Land Economist certainly doesn't have all the answers, or even a very few. But we do have one very strong recommendation for safeguarding Canada's Arctic Sovereignty: Airships. 🛩



The World of Energy

By Mike O'Dwyer

"Harness this energy and give it to others. Planet Earth, Sol System, Milky Way, Out Here" by Wonderlane, CC BY 2.0

As we've noted in this issue of *The Land Economist*, Canada and Ontario in particular have fallen significantly behind the rest of the world on mineral discovery, extraction and production. We are a mineral rich country but, until very recently (c'mon down Premier Doug Ford and Prime Minister Mark Carey) we haven't had the political or corporate will to realize the extraordinary potential that lies beneath us.

But in these turbulent, troubling and, yes, perhaps promising times, there is a veritable cornucopia of energy news, views and activity writing headlines around the world. Here's a digest of some of it – important because Canada desperately needs the *energy* to compete and succeed. And as no one has ever written (until now) *knowledge is energy*. So read on and become energized ...

HEY, AI: WILL WE HAVE THE ENERGY?

A lack of transparency and tracking around the energy usage of artificial intelligence obscures the full scale of its impact on the grid, MIT Technology Review argued.

According to the MIT Technology Review, a single query on ChatGPT or another chatbot isn't very energy-intensive, but taken in aggregate, the AI boom demands a "staggering" amount of resources, the magazine wrote in a sweeping analysis: "It's likely that [our AI footprint today is the smallest it will ever be.](#)" Tech firms are investing heavily in data centers to keep up, but some of the largest AI models, which

aren't open-source, "are serving up a total black box" on their energy consumption, one expert said, making it difficult to plan for future energy grids.

Clean energy provided more than 40% of global electricity in 2024, a record

Solar's rapid growth drove the increase—it accounts for 7% of the world's power—although it was still dwarfed in overall contribution by hydropower, at 14%. Nuclear, wind, and bioenergy account for most of the rest. Research suggested that [clean power's expansion will outpace growth in electricity demand.](#)

But fossil fuels may not be squeezed out thanks to Donald Trump who recently signed [four executive orders intended to boost the country's coal industry](#), allowing older plants to remain open to meet growing demand being driven by data centers.

Moreover, President Trump's trade war [threatens to slow down](#) a fast-growing technology that's key to the clean-power transition and preventing blackouts — big batteries.

[Global grids are struggling to handle a huge expansion of renewable power](#)

Construction of solar and wind farms has outpaced that of the infrastructure required to transport the electricity generated to homes and businesses, forcing grids in Britain, China, and the European Union to curtail the production of green power, often by paying producers to stay idle.

On the other hand ...

[Microsoft says it's 'slowing or pausing' some AI data center projects, including \\$1B plan for Ohio](#)

As reported by Matt O'Brien, AP, April 9, 2025

Microsoft said it is "slowing or pausing" some of its data center construction, including a \$1 billion project in Ohio, the latest sign that the demand for [artificial intelligence technology](#) that drove a massive infrastructure expansion might not need quite as many powerful computers as expected.

Microsoft has long built data centers around the world to run its cloud computing services. The generative AI boom accelerated the demand for such facilities, both to train new AI systems and to keep them running as millions of people start using chatbots and other AI tools at work and home.

Analysts with TD Cowen reported earlier this year that Microsoft was also scaling back some of its international data center expansion and canceling some leases in the U.S. for use of data centers operated by other companies.

The computing it takes to run AI tools is expensive and requires a large amount of electricity — so much so that Trump this week cited AI needs as part of the justification for [using his emergency authorities](#) to boost the declining U.S. coal industry, a reliable but polluting energy source. Tech companies have also sought to tap into nuclear power, including a [proposed Microsoft-backed revival](#) of the shuttered Three Mile Island plant in Pennsylvania, which would feed an electricity grid supplying data centers in Ohio as well as Virginia, the nation's [biggest data center hub](#).



*"Data Center" by Chad Davis, CC BY 2.0
"Council Bluffs" Drone "Google Data Center" Iowa, United States*

GEOTHERMAL

[The Caribbean island nation of Dominica will build a geothermal power plant, taking advantage of its volcanic springs](#)

The 10-megawatt plant will come online this year and should generate enough power for all 66,000 residents as well as the tiny country's thriving tourism sector and replace diesel imports by 2030. It will be just the second geothermal plant in the Caribbean — Guadeloupe has had one since the 1990s — but the technology is having a moment: Traditional geothermal needs to be in volcanically active areas, but recent breakthroughs building on fracking technology allow it to be used almost anywhere. The International Energy Agency found last year that [geothermal could meet 15% of global demand growth until 2050](#).



"Geothermal Energy" by Bureau of Land Management, CC BY 2.0

*Geothermal Energy
The U.S. Department Of The Interior's Bureau of Land Management has approved 58 renewable energy projects since 2009 (as of 2016 photo upload date), including 35 solar projects, 11 wind projects, and 12 geothermal projects. These projects represent a total of nearly 15,500 megawatts of capacity that could provide power to about 5 million homes.*

HYDRO

[China began building the world's largest hydropower plant as Beijing looks to extend its lead in renewable energy production](#)

The \$170 billion project on the Yarlung Tsangpo river is expected to be able to generate 300 billion kilowatt-hours of electricity annually, equal to the amount of electricity consumed last year in Britain. The plant is set to be completed in the 2030s. China has been adding green energy infrastructure at an unprecedented rate, with the country now forecast to account for almost 60% of all renewable energy capacity installed worldwide between now and 2030, the International Energy Agency said last year.

NUCLEAR UP AND ATOM!

Nuclear energy is making a comeback

[The World Bank will finance nuclear energy once again, lifting a decades-long ban](#)

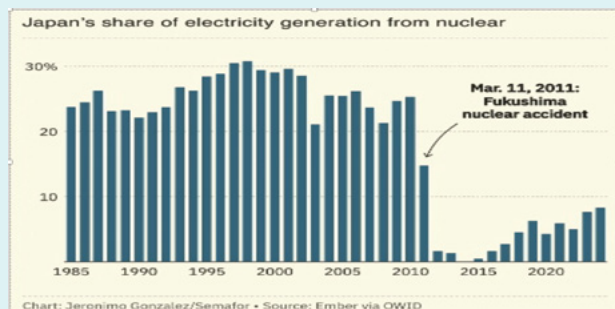
The decision comes amid a broader global acceleration in the development of nuclear power facilities and technologies: The UK said recently that Rolls-Royce had become the first company to win government backing to [produce small modular reactors](#), and committed £14.2 billion (\$19.3 billion) to [build the Sizewell C nuclear plant](#). In the US, meanwhile, Big Tech firms — along with the government itself — are increasingly looking to nuclear to fill the coming gap driven by a buildout of data centers, as well as reduce overall dependence on China for industrial supplies and foreign providers of energy more generally. [“It’s time for nuclear,”](#) US President Donald Trump said at the White House last month.

[Japan returns to nuclear](#)

The country all but switched off its nuclear fleet in the wake of 2011’s earthquake and the Fukushima reactor’s subsequent meltdown. But soaring gas prices after Russia’s invasion of Ukraine, growing need for energy for data centers, and Japan’s decarbonization targets have led to a rethink. The country has restarted 14 of the 54 shuttered plants, [and plans to build new, small modular reactors on the sites of several others](#). Tokyo — the most fossil fuel-dependent economy in the G7 — has further-reaching ambitions, too: Last month it announced plans to deploy nuclear fusion power by the 2030s, [including a collaboration with British scientists to share technology](#).



[Nuclear Power Plant \(Ohi, Japan\), Kansai Electric Power Co, by IAEA, Imagebank, CC BY-SA 2.0](#)



NUCLEAR FUSION

The race to achieve nuclear fusion is on – who will win it?

According to an article by Katie Tarasov, CNBC, March 16, 2025

[China and the U.S. are in a race to create the first grid-scale nuclear fusion energy](#). After decades of U.S. leadership, China is catching up by spending twice as much and building projects at record speed.

Often called the holy grail of clean energy, nuclear fusion creates [four times more](#) energy per kilogram of fuel than traditional nuclear fission and four million times more than burning coal, with no greenhouse gasses or long-term radioactive waste. If all goes to plan, it will be at least a [\\$1 trillion market](#) by 2050, according to Ignition Research.

There’s a big *but*, though: although many countries have achieved fusion reactions, sustaining them for long enough to use in the real world remains elusive.

RENEWABLES

[More than 90% of new renewable energy capacity is now cheaper than fossil fuels, study shows](#) (Rosie Frost, euro news)

The global switch to renewable energy has passed a “positive tipping point”, according to two recent United Nations reports.

Solar and wind are now almost always the least expensive and fastest option for new energy generation, according to the UN.

In 2024, data reveals that additions to global renewable energy capacity reached 582 gigawatts - a nearly 20 per cent increase from 2023 and the highest annual expansion since records began.

Almost all new power capacity built around the world came from renewables, and almost every continent on Earth added more renewables capacity than fossil fuels last year.

Nearly three-quarters of the growth in electricity generated worldwide was from wind, [solar](#) and other green sources, according to the UN’s multiagency report, called Seizing the Moment of Opportunity.

Energy prices could drop over the coming years, as oil prices fall and the world pivots to renewables

Crude is expected to enter a “low price cycle,” with the cost of a barrel remaining below \$75, and as low as \$45, a barrel until 2027, Eurasia Group analysts said in a note to clients, partly driven by China joining the West in seeing fossil fuel demand peak. Electricity prices are largely pegged to natural gas, and falling demand is lowering the cost of that, too. The green transition has pushed fuel import needs down, particularly in China, which saw a record 60 gigawatts — [enough to power roughly 40 million homes](#) — of solar capacity added in the first quarter of 2025.

WIND

[California Achieves Historic Clean Energy Milestone](#)

New data shows the Golden State was powered by two-thirds clean energy in 2023, a historic first. California is now the “largest economy on the planet to achieve this milestone,” according to State Governor Gavin Newsom.

Though 2023 is the latest year for which full data is available, [more recent numbers](#) are just as promising. So far this year, clean energy sources have provided 100% of the state’s electricity for an average of seven hours a day. And more than 9 out of 10 days have been powered by renewable energy sources for at least some time, a 750% increase in clean energy days since 2022.

[Netherlands lowers offshore wind goal](#) – and U.S. wind development looks ‘bleak’

The Netherlands slashed its offshore wind power generation goal by up to 40%, marking the latest setback for the sector. Offshore wind costs have grown in recent years; the Dutch climate minister called the previous target of 50 gigawatts by 2040 “[not realistic](#).” The pivot reflects how the industry, while on the verge of a rebound, is vulnerable to supply chain constraints and price changes. [The outlook in the US is especially bleak](#) for offshore wind: Republicans’ tax-and-spending bill passed in July curtailed tax credits for the projects, leaving no room for them to be affordable.

However ...

Globally, offshore wind projects totalling more than 11 gigawatts of offshore wind capacity locked in financing in the first half of 2025, more than in all of 2024, including:

- Danish developer Ørsted which raised nearly \$3 billion to finish a [600-megawatt offshore wind farm in Taiwan](#).
- Spain’s Iberdrola and the United Arab Emirates’ Masdar have agreed a \$5.2 billion deal for a new offshore wind project in the UK, which the companies said is the [largest single offshore wind deal of the decade](#).



[Wind Energy Institute of Canada, North Cape PEI Canada](#) by [NNECAPA Photo Library](#). CC BY 2.0

The WEICan facility at the North Cape is used to conduct wind energy research and test wind technologies. Various scales and styles of wind turbines can be seen from the trail that runs along the bluffs above the Gulf of St. Lawrence.

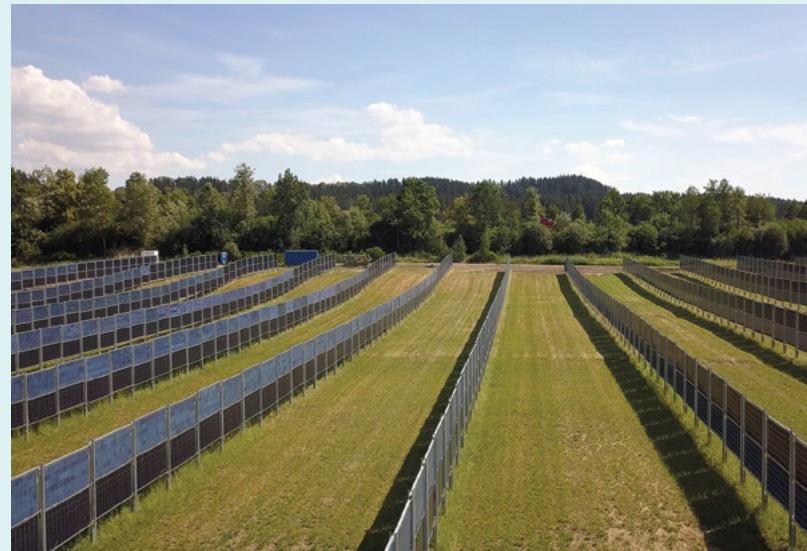
SOLAR

AND ON THE SUNNY SIDE OF THE NEWS ...

Shady solar panels are really cool

[Experience in the U.S. Southwest has shown that solar arrays effectively shade crops from sun while moisture cools the panels to increase their productivity.](#)

For 12 years, University of Arizona researcher Greg Barron-Gafford has been investigating agrivoltaics, the integration of solar arrays into working farmland by growing crops under solar panels and the practice is spreading.



[Tobi Kellner - Own work](#), CC BY-SA 4.0.

Aerial picture of an agrivoltaics solar plant with walls of vertical bifacial modules near Aasen, Donaueschingen, Germany. The 4.1 MW(p) solar plant covers an area of 14 ha, around 90% of the area can still be used for agricultural purposes, in this case growing grass as fodder.

According to Barron-Gafford, in addition to generating carbon-free electricity, agrivoltaics could offer a ray of hope for agriculture in an increasingly hotter and drier Southwest, as the shade created by these systems has been found to decrease irrigation needs and eliminate heat stress on crops. Plus, the cooling effects of growing plants under solar arrays can actually make the panels work better. However, costs, some farmer-resistance and other challenges are impeding the uptake on agrivoltaics.

[Solar takes top spot in the EU for the first month ever](#)

In June 2025, Solar power generated 22.1% of EU electricity (45.4 TWh) in June 2025, more than any other power source. This is an increase of 22% from June 2024. In second place was nuclear with 21.8% (44.7 TWh), followed by wind with 15.8% (32.4 TWh).

[Solar minigrid brings light and hope to a Goma neighborhood, offering blueprint for rest of Congo,](#)

according to an article by Tammy Webber, Justin Kambumba and Moses Sawasawa, AP, June 30, 2025

In several Goma neighborhoods where almost nobody had electricity just five years ago, a small solar network is offering a flicker of hope despite widespread poverty and the city’s violent takeover by Congolese rebels early this year.

[Pakistan's quiet solar rush puts pressure on national grid](#)

Pakistanis seeking escape from soaring electricity bills and prolonged power cuts are generating and selling their own power using cheap Chinese panels and threatening the viability of Pakistan's debt-ridden power grid.

[Solar Geoengineering – feasible?](#)

The concept of deliberate solar geoengineering to counter the imminent impact of climate change is still a controversial bit of science, but a new study found solar geoengineering may at least be feasible with current technology. A core concept under consideration is the release of sulfur dioxide particles into the atmosphere at high altitudes, reflecting solar rays, which research suggests could lead to a cooling effect that could reduce the warming effect of climate change. However, research generally suggests that the most effective height for the particle spray is 12.5 miles above Earth, well above what most existing aircraft can safely fly. A new study published in *Earth's Future* found that, while only 35 percent as efficient, spraying particles at lower altitudes of 8 miles above the surface would still work. Simulations found that 12 million metric tons of reflective sulfur dioxide at 8 miles altitude and 60 degrees latitude in spring and summer would result in a 0.6 degrees Celsius cooling effect.

[We will now dim the sun. Or not ...](#)

Researchers quietly planned a test to dim sunlight. They wanted to 'avoid scaring' the public, according to an article by Corbin, Hiar, Politico, July 27, 2025

A team of researchers in California drew notoriety last year with an aborted experiment on a retired aircraft carrier that sought to test a machine for creating clouds.

But behind the scenes, they were planning a much larger and potentially riskier study of salt-water-spraying equipment that could eventually be used to dim the sun's rays — a multimillion-dollar project aimed at producing clouds over a stretch of ocean larger than Puerto Rico.

Public backlash scuttled the project.

Solar geoengineering encompasses a suite of hypothetical technologies and processes for reducing global warming by reflecting sunlight away from the Earth that are largely unregulated at the federal level. The two most researched approaches include releasing sulfate particles in the stratosphere or spraying saltwater aerosols over the ocean.

[But critics of the technologies warn](#) that they could also disrupt weather patterns — potentially affecting farm yields, wildlife and people. Even if they succeed in cooling the climate, temperatures could spike upward if the processes are abruptly shut down before countries have transitioned away from burning planet-warming fossil fuels, an outcome described by experts as “termination shock.”

As a result, even researching them is controversial — and conspiracy theories driven by weather tragedies have worsened the backlash.

[Canada Is Home to the World's Largest Solar Panel Mural](#) according to an article by Marika Price Spitulski, Nice News, July 29, 2025

Located in Edmonton, this 12-story structure, called SunRise Residential, has been retrofitted with 34,500 square feet of building-integrated photovoltaic panels, resulting in an annual reduction of about 150 tons of carbon emissions. Starting from year five, the solar generation is projected to save owners and residents a total of around \$80,000 per year, per a case study conducted by solar panel company Mitrex.

The building itself is an example of recycling: Previously called Capital Towers, it was erected in the '70s in the Alberta city, but required extensive improvements for its apartments to serve as safe options for renters today. Rather than tearing it down, real estate investment trust Avenue Living gave it an eco-friendly makeover.



World's Largest Solar Panel Mural, Sunrise Residential Building, Edmonton Alberta.

[SOLAR FORECAST: CLOUDY WITH A CHANCE OF TRUMP](#)

The U.S. Interior Department announced [a stricter “elevated review”](#) process for wind and solar energy projects, while the White House issued pollution exemptions for some coal plants.

The move is seen by critics as a tactic for slowing down the process of approving renewable energy projects on public lands and represents a further attack on the sector by the Trump administration.

[On the other hand ...](#)

[90% of US Power Capacity Installations Are Renewables](#)

In the U.S., clean energy is playing a bigger and bigger role in new power installations.

Texas has led the charge on solar and wind in the US: By the end of last year it had nearly double the amount of any other state, with California in second place. Texas has boosted wind capacity by 50%, solar capacity by 800%, and battery storage by 5,500% since 2019 and generated about 30% of its electricity from renewable sources in 2024. 🐾

What If There Was A War Between The US And Russia?

By Mike O'Dwyer

Only in Canada, you say ...

Recently, I came across this news story, by David Helwig in the Village Report(March 13, 2025)

[Veteran union leader talks about Donald Trump and nuclear missiles](#)

When Canada helped start NORAD, the deal was that nuclear attacks would be brought down here, not in the U.S. The president of USW Local 2251 thinks that's being a darn good ally

With all the on-again, off-again steel tariff craziness we've witnessed in recent days, what has Mike Da Prat been thinking about?

After more than two decades heading United Steelworkers Local 2251, Da Prat is pretty much a household word around Sault Ste. Marie.

Amid this week's Trump tariff chaos, Da Prat's thoughts have turned to something that happened when he was a just a child: the founding of the bi-national North American Aerospace Defense Command (NORAD) in 1958.

And Da Prat is also thinking about U.S. President Donald Trump's depiction of Canada as some kind of freeloader on American military strength south of the border.

Da Prat doesn't see it that way at all.

"We agreed to go along with NORAD. What really is NORAD? It's an early detection system for the protection of America.

"Well, let's put it this way: NORAD was supposed to protect North America from missiles coming from Russia over the polar cap. OK, there was no reason for a missile to land up in Canada because there were no targets.

"Yet, if missiles were detected by NORAD, they would have had to be intercepted. Where would they have been intercepted? Over Canada.

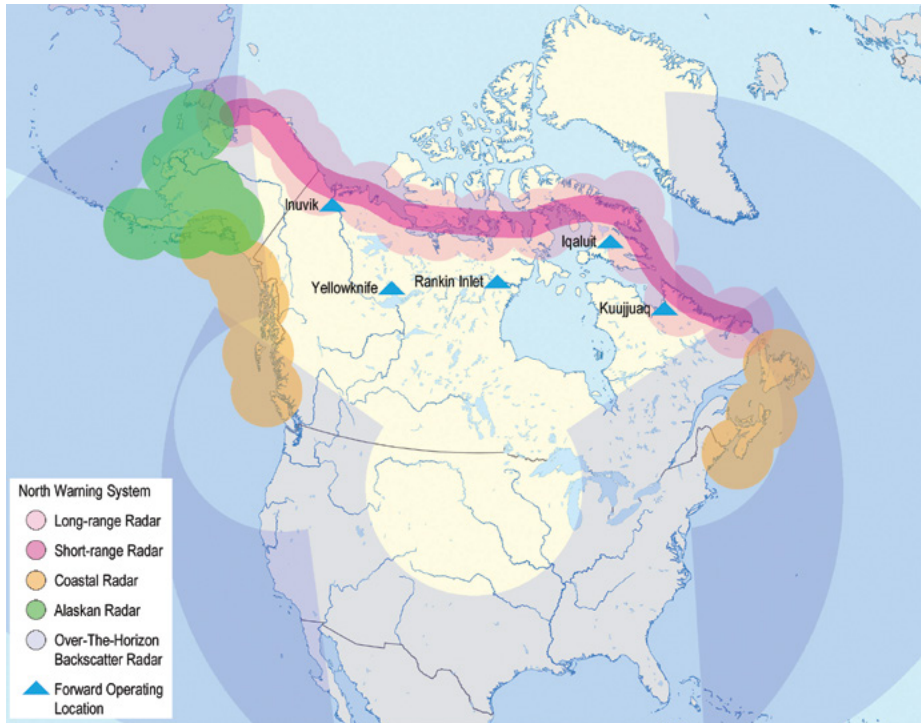
"What Trump is saying, is that we were always taking advantage of the United States. And the partnership actually is that Canada supported the United States.

"In what major conflict did America ever protect Canada? Zero."



"Operation Noble Defender" by The National Guard is licensed under CC BY 2.0.

A B-52 Stratofortress, from the 5th Bomb Wing, Minot, North Dakota, an F-16 Fighting Falcon from the 140th Wing, Colorado Air National Guard, Buckley Air Force Base, Colorado, and two Royal Canadian Air Force CF-18 fighter aircraft, join together on an air intercept mission during Operation Noble Defender, a NORAD Arctic Air Defense operation, on September 20, 2020, at 5 Wing, Goose Bay, Newfoundland & Labrador. North American Aerospace Defense Command is conducting a dynamic force employment operation in the Arctic Sept. 20-23 to demonstrate NORAD's air capability, readiness and will to defend the United States and Canada from competitors who continue to test our defenses. (U.S. Air National Guard photo by Senior Master Sgt. John Rohrer)



The Canadian-American NORAD North Radar System, as agreed by the two nation in 1987. Source: "Challenge and Commitment - A Defence Policy for Canada", page 57, published by the Ministry of Defence of Canada / Noclador, CC BY-SA 4.0

Da Prat is correct: In a war between the US and Russia, Canada would have been the battleground and I can offer proof, dredged up from semi-forgotten memories of long ago ...

Back in the middle of the last century, for a brief time, I was a member of a local Canadian Armed Forces regiment. We were called militia members back then -- a loaded term these days -- really, weekend warriors now referred to as Reserves. And what we -- a naïve bunch of teenagers, for the most part -- were told by a visiting General, a member of the senior staff of the Canadian Military, about the seemingly unavoidable coming nuclear holocaust and our role in it would curl your hair and mine too, if I had any.

Here is what that General said to his increasingly nervous young audience:

When - not if - there is a nuclear war between Russia and the United States, it will be fought in Canada, using tactical nuclear weapons. Canada lies between Russia and the US and so the war will be fought here because neither of those countries wants to destroy their own lands. They'll destroy ours instead.

Yeh, those were the days ...

How does that oft-forgotten quote from Winston Churchill go: *Those who fail to learn from history are doomed to repeat it.*

Yeh, these are the days ...

Pax Ukraine and perhaps Canada.

And here's some more happy Nuclear Annihilation Day news ...

[According to a recent editorial in Nature \(July 17 2025\)](#), there are currently only 12,000 or so nuclear warheads in existence. The rise of artificial intelligence and the rampant spread of misinformation can disrupt the delicate balance of nuclear deterrence and increase the odds of a hair-trigger attack. Scientists must draw wider attention to these emerging dangers.

Let's try to avoid an OOPSIE, shall we. 🎯

Housing Developments

What's happening in housing here, there and elsewhere

By Mike O'Dwyer

FOR SALE

HERE

[Ontario home prices stabilize as U.S. tariff threats loom](#)

As reported by Patrick Cain, Village Report July 15, 2025:

Single-family home prices in Ontario continued to stabilize in June after several months of steady decline, according to [statistics](#) released Tuesday by the Canadian Real Estate Association (CREA).

The average price of a single-family home in Ontario fell year-over-year from \$944,400 in June 2024 to \$880,700 last month, about a 6.7 per cent dip.

Condo prices in the province were down 8.6 per cent in the same period, from \$581,400 in June 2024 to \$531,300 last month, while the price of townhouses declined 7.8 per cent, from \$688,800 last year to \$634,900 this June.

The price data uses seasonally adjusted numbers without accounting for inflation, which rose [1.9 per cent](#) nationally this month.

"At the national level, June was pretty close to a carbon copy of May, with sales up about three per cent on a month-over-month basis and prices once again holding steady," CREA senior economist Shaun Cathcart said in a statement.

"It's another month of data suggesting the anticipated rebound in Canadian housing markets may have only been delayed by a few months, following a chaotic start to the year; although with the latest 35 per cent tariff threat, we're not out of the woods yet," he added.

CREA Residential Market Forecast:

Sales activity forecast	2024	2024 Annual percentage change	2025	2025 Annual percentage change	2026	2026 Annual percentage change
Canada	483,847	7.1	469,503	-3.0	499,081	6.3
British Columbia	74,434	2.1	70,321	-5.5	76,981	9.5
Alberta	83,476	9.2	77,853	-6.7	83,125	6.8
Saskatchewan	16,283	8.8	16,513	1.4	16,798	1.7
Manitoba	15,762	11.4	16,570	5.1	16,870	1.8
Ontario	174,648	2.7	159,334	-8.8	171,234	7.5
Quebec	90,168	18.8	98,550	9.3	102,564	4.1
New Brunswick	9,480	4.4	9,657	1.9	9,979	3.3
Nova Scotia	11,080	7.8	11,572	4.4	12,056	4.2
Prince Edward Island	2,025	8.5	2,282	12.7	2,464	8.0
Newfoundland	5,686	6.1	6,002	5.6	6,110	1.8

Average price forecast	2024	2024 Annual percentage change	2025	2025 Annual percentage change	2026	2026 Annual percentage change
Canada	\$688,840	0.9	\$677,368	-1.7	\$697,929	3.0
British Columbia	\$981,766	1.0	\$958,168	-2.4	\$981,066	2.4
Alberta	\$494,031	9.6	\$517,021	4.7	\$518,878	0.4
Saskatchewan	\$320,962	6.1	\$347,101	8.1	\$357,288	2.9
Manitoba	\$369,297	5.9	\$394,138	6.7	\$407,923	3.5
Ontario	\$869,045	-0.6	\$844,171	-2.9	\$869,832	3.0
Quebec	\$522,828	7.3	\$545,157	4.3	\$558,538	2.5
New Brunswick	\$326,321	9.7	\$344,363	5.5	\$354,856	3.0
Nova Scotia	\$447,907	5.9	\$465,333	3.9	\$475,402	2.2
Prince Edward Island	\$389,132	2.0	\$403,132	3.6	\$408,654	1.4
Newfoundland	\$319,619	8.9	\$344,739	7.9	\$356,165	3.3

Toronto Housing Market Report Summary

(Note- access link to see latest available statistics)

According to Wowo.ca: Toronto Market Housing Report for June 2025:

- The Greater Toronto Area's benchmark home price for June 2025 was \$995,100, down 5.5% year-over-year.
- The average home sold price in the GTA decreased 5.2% year-over-year to \$1,101,691 for June 2025.
- Detached home average price decreased by 6% year-over-year to \$1.39M.
- Semi-detached home average price decreased by 1.2% year-over-year to \$1.09M.
- Freehold townhouse average price decreased by 5.5% year-over-year to \$966k.
- Condo apartment average price decreased by 4.3% year-over-year to \$696k.

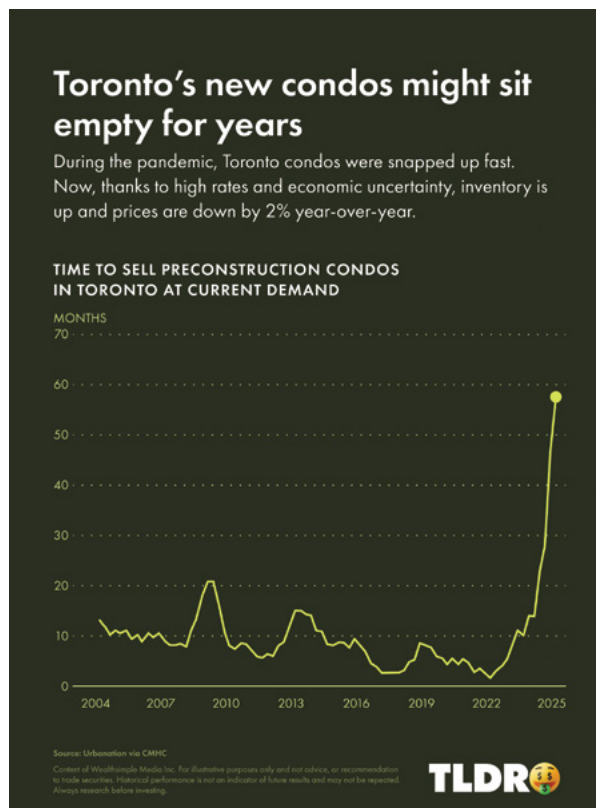
Ontario housing start projections fall again as 1.5 million goal gets further away

As reported by Isaac Callan and Colin D'Mello , Global News, May 15, 2025

Ontario is slipping further from its goal of building 1.5 million homes by 2031, according to new data released as part of the province's annual budget, which shows the province will start building less than half the number of units required this year.

The latest housing starts data, based on private-sector analysis, revises down already grim estimates from previous budgets, which have consistently shown Ontario will not be able to meet its self-imposed target.

Toronto Condos in the doldrums – TLDR



Since the 2022 election, when a government housing task force found the province would need 1.5 million new homes within the decade, Premier Doug Ford and his cabinet have made that their official goal.

The latest budget projections show Ontario is on course to build less than half of the ideal 150,000 number in 2025. This year, Ontario is expected to begin building 71,800 housing units, with 74,800 next year and 82,500 in 2027.

And this ...

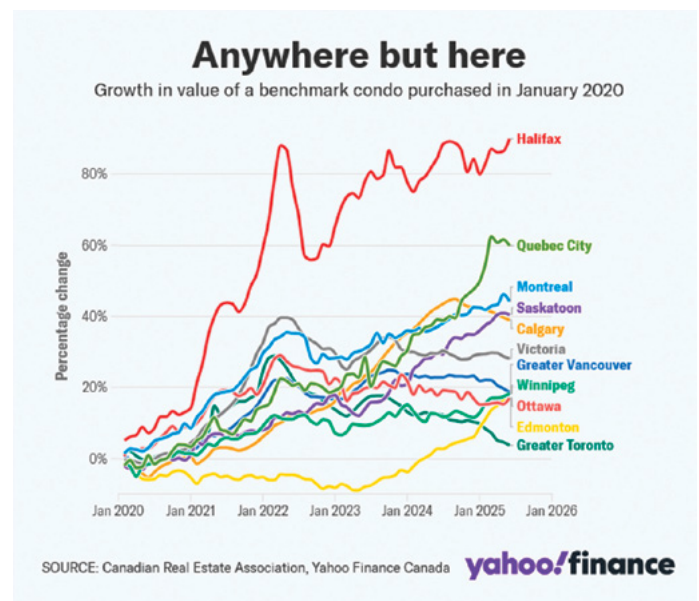
Bought a condo in 2020? If it's in Toronto, it likely underperformed your savings account

As reported by John MacFarlane, yahoo/finance July 22, 2025:

For the past five years, a high-interest savings account has been a better bet than a Toronto condominium. While condo values have soared in every other major Canadian city since 2020, Toronto's market has slumped, delivering returns that barely break even and leaving it as the undisputed laggard of the national housing market.

Benchmark pricing data from the Canadian Real Estate Association (CREA) show a condo purchased in Toronto at the start of 2020 is now worth around 3.75 per cent more than it was five years ago.

Over the same time period, condos in other major Canadian cities have gone up 16 per cent or more.



Toronto rent still unaffordable despite slower price growth: CMHC

As reported by Daniel Ramos, The Trillium, July 8, 2025

Toronto's rents remain unaffordable for many despite an easing growth in prices, according to a new mid-year housing market report.

Advertised rent prices have also declined since October 2024 due to an increased market supply, the report from Canada Mortgage and Housing Corporation (CMHC) said.

This is part of a trend that has seen Toronto-area landlords desperate to secure [tenants](#), resorting to offering rent-free months, complimentary Wi-Fi and gift cards.

However, even with the easing rent growth and increased supply, affordability still isn't improving in Canada's major cities like Toronto and Vancouver, due to rising rent-to income ratios, according to the report.

Turnover rate has also contributed to higher rent prices, and the report said the drop in advertised rent prices has not translated into lower rents paid by tenants overall.

The number of vacant units is also expected to continue growing in the rental market over the rest of the year.

The report said the market could be influenced by slower population growth and changing employment conditions.

Less international migration and a "sluggish" labour market have contributed to lower demands.

[Homebuilders navigate higher material costs, uncertain supply chains amid trade war](#)

As reported by Sammy Hudes, The Canadian Press, July 27, 2025

As a tariff storm blew in from south of the border earlier this year, many industries in Canada, including the home building sector, feared the unknown ahead of them.

With stakeholders already keenly aware of the need to rapidly scale up housing supply and improve Canada's housing affordability gap, blanket tariffs and more targeted material-specific levies meant additional unwelcome obstacles to overcome.

That included a potential need to slow down the pace of construction as supply chains shifted and key construction parts became more expensive.

About six months after U.S. President Donald Trump's return to the White House, many in the home construction sector say unpredictability persists around the cost and timing of obtaining the materials they need.

Among products hit hardest by the trade war, Canadian Home Builders' Association CEO Kevin Lee highlighted appliances, interior doors and carpeting.

THERE

United States

[Unsold Homes Surge Nationwide As Housing Market Stalls](#)

As reported by Newsweek. July 12, 2025:

Thousands of unsold homes are piling up in the U.S. housing market as Americans—facing climbing prices, historically high mortgage rates and growing economic uncertainty—buy fewer homes, according to the latest figures.

This year was supposed to [bring a rebound of the U.S. housing market](#), experts said in 2024. Instead, the market has come to a standstill as buyers retreat to the sidelines but prices refuse to budge.

On the other hand, there are parts of the country and parts of individual local markets that are faring better than others and where buyers still maintain more power over buyers.

[Warren Buffett's Berkshire Hathaway predicts major housing market shift soon](#)

As reported by Caitlin Cahalan, TheStreet, July 20, 2025

Now that the majority of Baby Boomers are approaching retirement and considering selling their homes to relocate, experts note it could up-end the housing market.

Berkshire Hathaway HomeServices predicts that retired homeowners looking to downsize will compete with first-time homebuyers for smaller and more affordable homes.

(According to Berkshire Hathaway HomeServices) "What boomers will leave behind as they vacate their homes, whether for alternative lifestyles such as assisted living, long-term care homes, and multigenerational living, or through loss of life, is a growing inventory of unoccupied homes and homes for sale."

As affordability deteriorates and expensive home listings sit idle, housing experts worry that widespread surplus could implode market pricing.

But then, there's this ...

[New home construction rebounded in the U.S. in June after hitting a five-year low in May. Driven entirely by new apartment builds, single-family home construction continued its decline.](#)

(July 2025) The U.S. Census Bureau and the U.S. Department of Housing and Urban Development jointly announced the following new residential construction statistics for June 2025:

Building Permits

- 1,397,000 – 0.2 percent above the May rate but 4.4 percent below the June 2024 rate.
- 866,000 – rate of single-family permits is 3.7 percent below the June 2024 rate.
- 478,000 – rate for buildings with five or more units.

Housing Starts

- 1,321,000 – 14.7 percent above the May rate but 0.5 percent below the June 2024 rate.
- 883,000 – rate of single-family permits is 4.6 percent below the May rate.
- 414,000 – rate for buildings with five or more units.

Housing Completions

- 1,314,000 – 14.7 percent below the May rate and 24.1 percent below the June 2024 rate.
- 908,000 – rate of single-family completions is 12.5 percent below the May rate.
- 383,000 – rate for buildings with five or more units.

And this ...

[Trump drives up housing costs, liberal group says](#)

As reported by Eleanor Mueller, Semafor, July 21, 2025:

The progressive think tank Groundwork Collaborative (released) a new analysis ... that lays out how Trump's tariff policies, funding cuts, and privatization ideas are making it more expensive to rent, buy, and build housing.

It includes new polling that finds six in 10 voters believe the administration's actions will raise housing costs.

ELSEWHERE

[Seoul searching](#)

Seoul's only planned city should be an urbanist's dream, but it's turned into a nightmare for residents. Wirye New Town was built starting in 2008 as the first planned development created from scratch within city limits — it features glitzy high rises, car-free promenades, lakeside paths, and ample green space. But more than 10 years after the first move-ins, the government has yet to build a direct train connection to Wirye, and while home values initially surged, they have since dropped due to speculative real estate dynamics. Frustrated owners have sued the city and held near-weekly protests.

The debacle holds lessons for the rest of the world, as developers from California to Saudi Arabia eye planned cities. It shows how rail transit is especially crucial for new population centers located near big cities — and how speculative real estate markets can leave homeowners vulnerable.

[Hear that? Dome building is better](#)

As reported by Isha Chaudhary, parametric-architecture.ca, July 21 2025

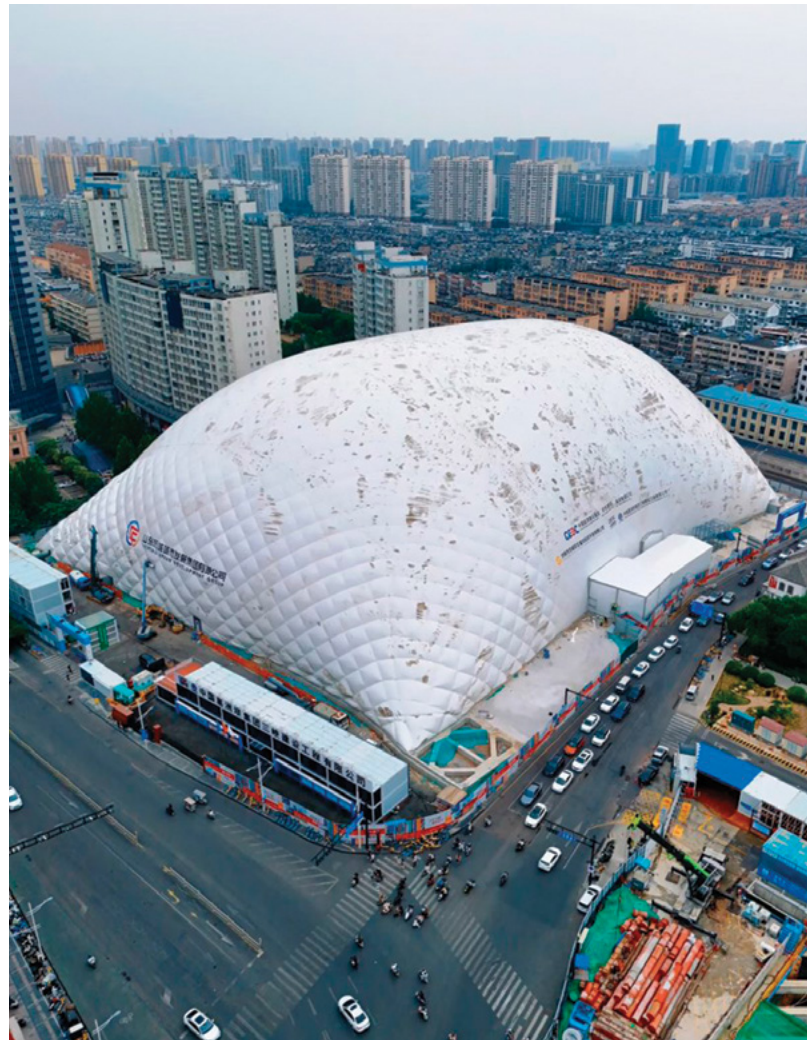
In a landmark move toward cleaner urban development, China has unveiled the world's largest inflatable dome over a construction site in Jinan, the capital of Shandong province. Standing 50 meters tall and spanning 20,000 square meters, the dome is designed to contain dust and reduce noise pollution, setting a new standard for environmentally responsible construction in densely populated cities.

The dome serves as a full enclosure for active construction zones. It functions as both a dust barrier and a soundproof shield, helping to protect nearby communities from the harmful side effects of large-scale construction. Equipped with negative pressure systems and advanced air filtration technology, the dome traps airborne particles inside, preventing them from spreading into surrounding areas and compromising air quality.

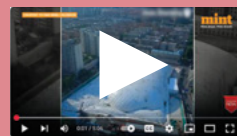
Beyond dust control, the structure also absorbs and dampens the noise generated by heavy machinery, an ongoing concern for residents living near major building sites.

Built from high-strength, weather-resistant materials, the dome is supported entirely by air pressure, eliminating the need for internal beams or support columns. This allows for fast assembly and disassembly, making it a practical and mobile solution for various construction projects. Transparent sections of the material allow natural sunlight to enter, reducing reliance on artificial lighting and lowering energy use during daytime operations.

Importantly, the dome creates a controlled, all-weather workspace, allowing construction crews to work year-round without delays caused by wind, rain, or extreme temperatures. Inside, a network of ventilation systems ensures that workers have safe, breathable air while maintaining the integrity of the sealed environment.



Inflatable dome over construction site in Jinan, China.



[Watch Video](#)
[about the Dome](#)

THE WORLD OF MINING, MINERALS AND GASEOUS SUBSTANCES – AND WHAT IT MEANS FOR ONTARIO

By Mike O'Dwyer

"Native copper-replaced cross-bedded sedimentary rocks (Nonesuch Shale, Mesoproterozoic, White Pine Mine, Upper Peninsula of Michigan, USA) 2" by James St. John, CC BY 2.0

Is the Canadian mining industry (and our national security) being left in the economic dust?

According to concerned Canadian mining and national security experts, the answer is a resounding yes.

The following is a compendium of recent news and opinion items on mining industry activities in Canada and around the world with an effect on our national security and economic future, beginning with this story by two concerned mining and national security experts, writing in the Globe and Mail ...

[Make no mistake, there's an economic war happening, and the West is losing](#)

George Salamis, Mike St-Pierre, The Globe and Mail , May 23,2024

A global race is under way to secure critical minerals essential to power the next generation of civilian and military technology and to electrify the future. Control of global supply chains has become the new strategic centre of gravity, where access to minerals and metals are strategic weapons. The West is losing the resource war that targets our core social and political values. At stake is the national security of the West.

In this war Canada is uniquely capable of turning the tide, but we are not even competing. Our country is awash in bureaucracy and red tape, and content in a state of apathetic stagnation. Canada

must compete to win with our greatest weapon: our natural resources

It takes 10 to 15 years to obtain a permit and build a new mine in Canada or the United States, if it gets permitted at all. The barriers to success are almost insurmountable.

Investment has all but dried up in early-stage exploration.

We must expedite the responsible development of our abundant resources to fuel democratic growth and not abandon our supply chain – and our national security – to our adversaries.

We need ambitious targets to streamline mine permitting, while maintaining world-leading environmental standards and smart regulation.

The democratic world needs more Canada – our critical metals, our world-class geologists and our responsible miners. Canada must champion its natural resources as a bulwark in this economic war, for without it the future is neither democratic, electric, nor free

George Salamis, Lieutenant-Colonel (Hon) of the Royal Westminster Regiment, is executive chair of Integra Resources, a Canadian-based mining company that develops gold and silver mines in Canada and the U.S. Mike St-Pierre is a Lieutenant Commander in the Royal Canadian Navy.

[Toronto exchange's mining dominance under threat as explorers exit](#)

According to an article by Jacob Lorinc, Bloomberg News, March 3, 2025:

Toronto's claim as the world's top mining hub is under threat as exploration companies leave Canada and listings dwindle on the nation's resource-heavy stock exchange.

Canada's once-thriving mining industry is facing challenges to its decades-old model, in which explorers and developers woo investors with promises of mining breakthroughs and established producers feed on their success, swallowing them in lucrative takeovers. Industry consolidation has reduced head offices and eliminated listings, companies find it harder to attract investors, and government rules on foreign investment have become more restrictive.

"The industry that has fueled most of the great Canadian minerals discoveries over the past 50 years is but a skeleton of itself," said mining financier Pierre Lassonde, who co-founded Franco-Nevada Corp. "We should be extremely concerned."

"If the government keeps making it harder for companies to access global capital, it could impact Canada's overall health in the medium to long term," said Dean McPherson, TMX Group's global mining head. "It means a loss of potential revenue and a loss of strength for Canada as a global destination for mining companies to be domiciled."

[Canada extends tax credit for investors in critical mineral exploration](#)

As reported by Justin Tang, Canadian Press March 2, 2025

The federal government is extending a tax break for those investing in critical mineral exploration.

[Then] Natural Resources Minister Jonathan Wilkinson made the announcement (...) at the Prospectors and Developers Association of Canada convention in Toronto.

The 15 per cent tax cut is being extended for two more years and is expected to free up \$110-million to help develop mining sites, primarily in the North.



Clarabelle Mill of Vale (formerly INCO), Copper Cliff, Ontario, Canada by By P199 - Own work, CC BY-SA 3.0

Critical minerals have become a leading political issue in recent weeks, thanks to U.S. President Donald Trump's repeated calls for Canada to be absorbed by the United States.

[Then] Prime Minister Justin Trudeau was caught on a hot mic last month saying Trump's threat was "a real thing" tied to his administration's desire to access Canada's critical minerals.

Canada is a key supplier of 13 of the 35 minerals on the United States' critical list.

RING OF FIRE FLAMING OUT? LOST IN A WORLD OF MINERALS

Where does the Ring of Fire stand in a world where rare earth and other essential minerals are becoming ever more critical for the rapidly expanding high-tech economy? So far, no where. Here's why ...

[Stay on schedule, show some cash, says Ring of Fire miner and province to Ottawa](#)

As reported by Ian Ross, Northern Ontario Business, January 27, 2025.

The launch of a federal Regional Assessment of the Ring of Fire has the backing of the region's leading mine developer and a government in Queen's Park that's bullish on resource extraction.

But Wyloo Canada and Ontario's mines ministry want the assessment process to stay on schedule and expect Ottawa to show a real financial commitment toward development.

The Regional Assessment has moved at a snail's pace since former federal environment minister Jonathan Wilkinson first called for one in February 2020.

Nickel and chromite were first discovered in the area known as the Ring of Fire in 2007-2008.

The story thus far is one of exasperation and inaction to mine one of the promising mineral belts in the world and frustration by some area First Nations to have a voice on what activity takes place on their traditional lands.

Over the years, both Ottawa and Queen's Park have lauded the vast untapped mineral wealth in the James Bay region, but neither branch has gotten on the same page on the regulatory and funding front to make any tangible progress.

For Ontario Premier Doug Ford, developing the Ring of Fire is a key cog in his government's critical minerals strategy.

Ford recommitted to a \$1-billion promise made by the previous Wynne government back in 2014 to fund a Ring of Fire industrial and community access road network.

But convincing Ottawa to get on board to [match those funds has been a struggle](#) dating back more than a decade, regardless of party stripe.

Meanwhile, Ring of Fire's mineral wealth stays in the ground and Ontario and Canada fall further behind in the global race to bring rare earth minerals to eager markets.

[Ring of Fire access roads may not be complete until 2040](#)

As reported by Alan S. Hale, Toronto Today, March 2, 2025

Two of the three Indigenous-led environmental assessments of the access roads to the Ring of Fire are nearly complete, but the third is expected to take three more years — followed by a decade of construction

Despite the Progressive Conservative government's promises to fast-track the building of roads to the proposed Ring of Fire mining development in northwestern Ontario as a way to build "Fortress Am-Can" with the United States, current estimates suggest the final leg of the all-season road to the project site won't be completed until sometime between 2035 and 2040.

At the same time, significant progress is being made on all three access roads needed to connect the Ring of Fire, Marten Falls First Nation and Webequie First Nation with the TransCanada Highway.

The PC government put Marten Falls and Webequie in charge of running the provincial environmental assessment (EA) of the access roads. At the Prospectors and Developers Association of Canada (PDAC) conference in Toronto Sunday, the two First Nations, along with their consultants, announced the EAs of two of the three access roads are nearly complete — along with the federal regional impact assessment.

On the other hand ...

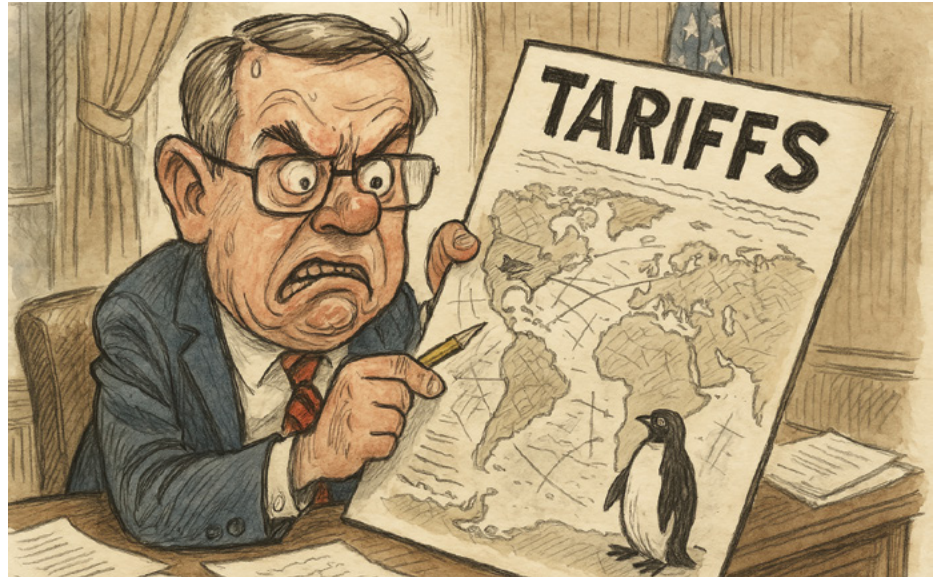
[With tariffs coming, Doug Ford is on fire to get moving on Ring of Fire](#)

As reported by Village Media, March 3, 2025:

Fresh off a provincial election win, Premier Ford said [he's ready to pick a fight with the feds](#) in order to expedite critical minerals production in the face of a looming trade war with the U.S.

Saying Ontario is in a pandemic-like "survival mode," Ford said it's time to "do more and act faster" in order to use the Ring of Fire as leverage against the Trump administration's tariffs on Canadian goods.

But actually building the roads necessary to reach the massive mineral deposit is still years away — maybe as late as 2040.



"Trump's 'Liberation Day': Global Trade Goes Off the Rails" by Mike Goad, Public Domain Mark

[Doug Ford pledges to fast-track mining and resource development](#)

As reported by Matt Prokopchuk, Village Report, February 22, 2025

Expanding a provincial financing program that guarantees loans to Indigenous-owned resource projects, putting millions into training First Nations workers and a plan to designate mineral-rich regions of the province as areas of "strategic importance" were several pledges Conservative leader Doug Ford made while in Thunder Bay (on a campaign stop).

Among Ford's campaign pledges was a promise to launch a new First Nations Opportunities Financing Program, which would effectively triple an existing \$1 billion provincial program called the Aboriginal Loan Guarantee Program. That initiative provides provincial guarantees for loans to Indigenous-owned entities for energy projects.

Ford said his revamp would expand eligible projects to include those in resource extraction and development.

Ford focused heavily on northern Ontario's mineral deposits, specifically the Ring of Fire, and how "northern Ontario's critical minerals are a global game changer."

Additionally, he said his government would "designate regions where multiple critical deposits are present or likely to be present," as "regions of strategic importance."

In order to speed up project approvals, Ford also said he would urge the Federal government to scrap their impact assessment process, calling it redundant and "wrongheaded."

[Ford sends message to Ottawa on Ring of Fire: Get out of our way](#)

According to this article by Ian Ross, Northern Ontario Business, March 3, 2025:

Premier Doug Ford is ready to shove Ottawa out of the way to make progress in the Ring of Fire.

Fresh off last week's provincial election win and armed with a strong majority, an emboldened Ford appeared at the PDAC mining show in Toronto, March 3, ready to pick a fight with the feds in order to expedite critical minerals production in the face of a looming trade war with the U.S.

Calling Ontario as being in a pandemic-like "survival mode," Ford said he's taking bold policy steps, backed by investments, to build a resilient economy and to use critical minerals production as leverage against the Trump administration's expected tariffs on Canadian goods.

Though no mining is taking place in the Ring of Fire and road construction may be years away from starting, Ford contends "major progress" has been made with First Nations, business and labour over the last seven years to unlock the mineral potential in the James Bay region.

"But now we need to do more and act faster," Ford said, to bolster the mining sector, which contributes \$7.7 billion to Ontario's GDP and employs 35,000.

Development in the Ring of Fire has been stalled for decades due to apathy and inaction by both levels of government to achieve consent with First Nations, and its failure to invest in upfront community and industry infrastructure in the Far North.

The Ford government has been generous in supporting electric vehicle battery manufacturing plants, but has been noticeably AWOL in investments to mid-level processing companies in Northern Ontario, which are key to his made-in-Ontario electric vehicle manufacturing strategy.

A cobalt refinery company desperately [needs government support](#) to finish its processing plant in Temiskaming and a handful of major lithium players with processing plans for Thunder Bay and Red Rock have long been calling on Queen's Park and Ottawa for support.

Ford said his government will step up to avoid these raw materials from being shipped overseas to be refined by establishing a \$500-million Critical Minerals Processing Fund to support these companies and help attract private investment.

On the third hand ...

[Mark Carney pledges to scrap federal review of major infrastructure and mining projects](#), permit projects with provincial and territorial approval alone. Also says he [wants to create a process for the feds to support nation-building projects](#), with the Ring of Fire being one option.

[Carney also pledges to make Canada an energy superpower by, among other promises, establishing a 'first and last mile fund'](#) to connect critical mineral projects, especially minerals essential for renewable energy technologies to supply chains and, hence, to markets faster.

He also said that his proposed 'faster project review' will uphold environmental standards and Indigenous consultation.

So then Ford and Carney did this ...

[Ford's government recently passed legislation, known as Bill 5, that creates so-called special economic zones where provincial and municipal laws can be suspended for certain projects.](#)

As reported by Liam Casey, the Canadian Press, July 7, 2025:

Ford has said the province will name the Ring of Fire as the first such zone.

Prime Minister Mark Carney's government recently passed similar legislation designed to fast track "nation building" projects. But the two new laws have sparked outrage from First Nations who say they weren't properly consulted about the legislation and their concerns are being ignored.

First Nations have threatened blockades of highways, railways and mines in response.

Ontario is also looking for support from the federal government

to build a deep sea port in James Bay to get its critical minerals and Alberta's oil and gas to Atlantic Canada and overseas.

(Editorial Note: Ring of Fire c'mon down! Airships get on up?)

On the fourth hand ...

Ring of Fire news keeps on truckin'. What doesn't keep on truckin' is much-in-demand rare earth minerals coming out of this potentially mineral-rich area - that's because there are still no roads nor prospects of having any until 2040.

But there's this ...

Ontario Premier Doug Ford pitches railway to Ring of Fire, Alberta is on board

Ontario signed an agreement with Alberta to build infrastructure and energy corridors that include a possible railway to the mineral-rich Ring of Fire region, the premiers of both provinces announced early in July.

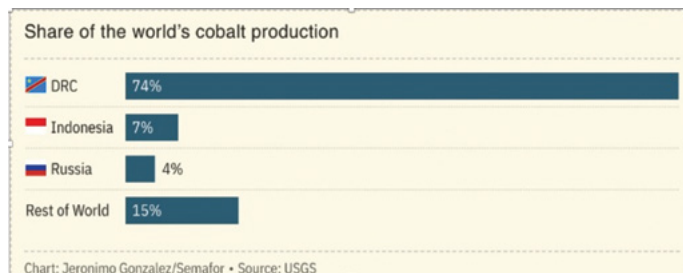
"New rail lines would connect Ontario's Ring of Fire region, critical mineral mining projects and processing facilities to western Canadian ports as we build an end-to-end critical mineral supply chain," Ford said.

"This is how we diversify our trading partners, this is how we make ourselves less reliant on the United States."

COBALT

[The Democratic Republic of Congo's yearly output of cobalt, accounting for more than 70% of global production.](#) The DRC holds most of the world's cobalt reserves, as well as other metals and minerals key for manufacturing electric-vehicle batteries. Several nations are now vying for control of supplies, although Chinese companies remain by far the biggest players in DRC. In a bid to reduce its reliance on Beijing, the African country has begun courting Saudi investors.

But ... in February, the DRC [announced](#) it would halt cobalt exports for four months to stabilize price declines exacerbated by overproduction.



And ... Washington is exploring a minerals-for-security deal in the conflict-wracked DRC, keen to tap greater sources of the critical minerals essential for advanced technologies such as EVs — with discussions of a similar deal exchanging mineral access for security dominating talks with Ukraine: The US worries that China's control of minerals supply chains worldwide is a security risk.



Pure (99.9 %) [cobalt chips](#), [electrolytically refined](#), as well as a high purity (99.8 % = 2N8) 1 cm³ cobalt cube for comparison. [Cobalt By Alchemist-hp](#) (talk- Own work, FAL, [CC BY-NC-ND 3.0](#))

LITHIUM

[Scientists make 'huge' \\$540 billion discovery](#) at the bottom of The Salton Sea, a giant lake in California

According to study funded by the US Department of Energy, it is believed there are 18 million tons of lithium at the bottom of the lake – enough to create batteries for 382 million electric vehicles and make the US the leading lithium producer in the world, overtaking China.

[Vulcan Energy](#) (ASX:VUL) has begun lithium hydroxide production at the downstream Central Lithium Electrolysis Optimisation Plant in Frankfurt, Germany.

The first lithium hydroxide has been produced from the processing of high-purity lithium chloride that is extracted from brines at the adsorption-type direct lithium extraction optimisation plant.

This represents the first sustainable lithium hydroxide fully domestically produced in Europe, according to the \$948.47 million market capitalisation company.

Phase one aims to supply 24,000 tonnes per year of lithium hydroxide, which is enough for 500,000 EVs per year.

[New lithium discoveries in both the US and China offered the prospect of reshaping the geopolitical race for the mineral](#) which is key to the global green energy transition. One was found along the border between the American states of Nevada and Oregon, [potentially holding](#) as much as 40 million metric tons of lithium, while Chinese state media said the country had found reserves that upped its share of global lithium supplies from 6% to 16.5%.

[China's Ganfeng starts lithium production at Argentina's Mariana project](#), kicking off one of several of its new lithium projects under way in the South American country.

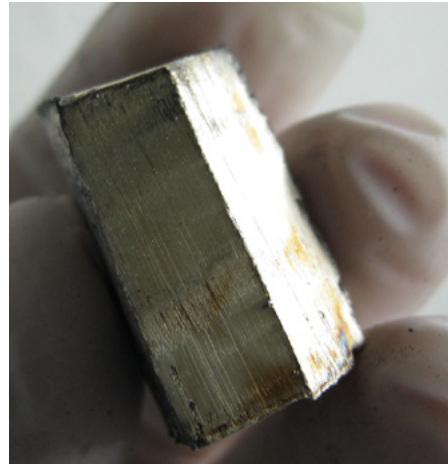
The Mariana plant, in the province of Salta, represents a \$790 million investment and has the capacity to produce 20,000 metric tons of lithium chloride per year from extraction at the Llullaillaco salt flat.

Argentina, along with Chile and Bolivia, comprise Latin America's so-called lithium triangle containing one of the world's biggest reserves of the ultra-light metal.

Ganfeng is one of the world's biggest producers of lithium.

[Lithium production in Nigeria is booming, but much of it comes from illegal mines where child labor is rampant.](#)

The International Labor Organization estimates that [more than a million children work in mines globally, the majority in Africa.](#)



A freshly cut sample of lithium, with some oxides already formed, by Dnn87, [CC BY 3.0](#)

Batter(y) Up!

[A new type of lithium-ion battery](#) could help make electric vehicles cheaper, safer, and more sustainable.

Scientists have developed an innovative iron-based cathode material that could replace pricier and rarer metals like cobalt and nickel, paving the way for EV batteries that are easier on the wallet and the planet.

As the cheapest metal commodity, iron costs a fraction of those indispensable but expensive metals currently used in high-energy lithium-ion batteries.

Next Batter(y) up

[Europe's biggest battery project recently went into commercial operation in the UK](#), as the country tries to balance its renewable operations with demand. The project, at Blackhillock in northeast Scotland, can store enough electricity to power about 2 million homes for two hours, and is set to expand next year. That will be critical because Britain is rapidly expanding wind power. At peak times, surplus electricity often goes unused while during still periods, the country relies on gas as a backup.



World's largest battery site in Blackhillock Scotland

And, of course, China ...

[China imposes new restrictions on battery technology for electric vehicles](#)

As per an article appearing in Gazeta Express on July 20, 2027:

China has imposed restrictions on the export of key technologies for making electric vehicle batteries, in a move to consolidate its dominance in a sector that has helped the country lead the global electric vehicle race.

Several technologies used to produce batteries for electric vehicles and to process lithium, a key mineral for batteries, have been added to the government's export control list.

Inclusion on the list means that transferring these technologies abroad – through trade, investment or technological cooperation – will require a government-issued license.

The new controls mirror similar restrictions introduced just three months ago on certain rare earth elements and their magnets – critical materials used not only in the production of electric vehicles but also in consumer electronics and military equipment such as fighter jets. China's dominance of the rare earth element supply chain has emerged as one of the most powerful tools in a new trade war with the United States.

Manganese

[GM and LG to develop lithium/manganese cells for electric trucks and SUVs](#)

Most lithium batteries use cobalt in their electrodes, but it is expensive, at around \$30,000 a ton, and most comes from the Democratic Republic of Congo, where miners face dangerous conditions. General Motors announced plans to make electric vehicles using manganese-rich batteries, which it says will extend cars' ranges by around 33% while also making EVs more affordable and their supply chains safer: At \$1,000 a ton, manganese is cheap and plentiful.

Liquid Natural Gas (LNG)

[The global gas market is growing exponentially](#)

US exporters are pushing hard to serve [India](#) and other under-developed LNG markets

and the surging demand for powering US data centres.

As the AI race intensifies, Big Tech companies are under pressure to scale up fast. Nuclear energy has been a preferred option but building new nuclear plants is extremely expensive and time-consuming.

LNG-fired turbines can be scaled up more quickly to provide power for data centres. Consequently, LNG companies are rising while nuclear stock prices fall.

More countries buying LNG from the US to avoid Trump tariffs

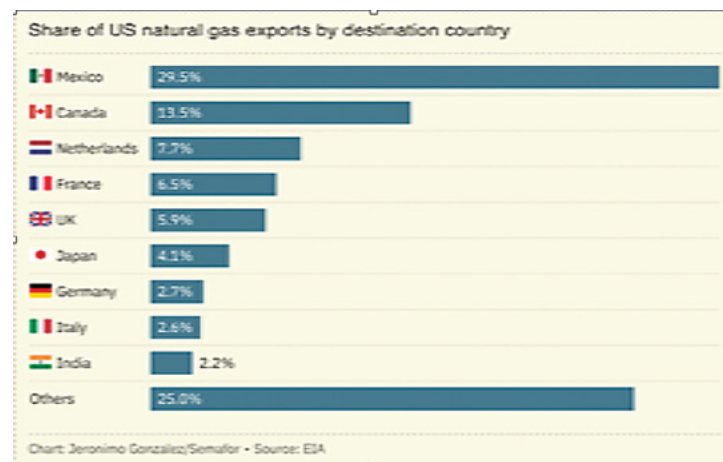
Japanese Prime Minister Shigeru Ishiba announced a deal with Trump to [collaborate on a \\$44 billion LNG export terminal in Alaska](#), specifically citing the country's trade deficit with the US as a main motivation for the deal. But given Alaska's difficult logistics and the project's steep costs, it's unlikely any gas will be exported from there until

the early 2030s. In the meantime, [Taiwan](#), [India](#), [Egypt](#), and [Ukraine](#) are also looking to buy more US LNG — but China's retaliatory tariffs on US gas will cut [exporters off from what had been one of the most promising markets](#)

Europe's LNG prices [hit their highest point in two years](#) due to cold weather and the cutoff of Russian pipeline gas through Ukraine.

[Turkey, Turkmenistan agree gas supply deal](#) for 2 billion cubic metres (bcm) of gas per year potentially via a proposed undersea pipeline from Turkmenistan to Azerbaijan.

[Mozambique: The construction of a multibillion-dollar liquefied natural gas plant](#) in Mozambique is set to resume after the administration of US President Donald Trump approved a US\$4.7 billion loan in a move to bolster American companies against their Chinese competitors in Africa.



Gas storage tanks at LNG terminal - [geograph.org.uk](#). By Robin Lucas, [CC BY-SA 2.0](#)

Compressed Natural Gas (CNG) and Liquefied Petroleum Gas (LPG)

[African governments opt for gas-run cars over EVs to drive down transport emissions](#)

Countries like Nigeria, Egypt and Tanzania are promoting CNG a cheaper, cleaner fuel than petrol – but using gas could hold back a green transition.

(The) the African market for vehicles powered by CNG and is expected to grow 7% a year between 2025 and 2030, with most of the growth in CNG.

The European Union will announce plans to end its reliance on Russian gas by the end of 2027, as it renews pressure on Moscow over its war in Ukraine

The proposals will reportedly include [banning new gas import deals](#) and may also see the bloc seek to break existing contracts with Russia. European leaders have stepped up efforts to support Kyiv in recent months as US support has waned: Estonia's foreign minister is in Washington today hoping to convince lawmakers in both parties to work with Europe to [push Moscow "to the corner,"](#) he told Semafor, arguing that Russia had shown itself to be unserious about US-sponsored peace talks.

Uranium

Deposits limited?

Known uranium deposits will run out by 2080 if demand for nuclear energy continues to grow. Several countries have [pledged to triple nuclear capacity by 2050](#), tech firms view the once-controversial technology as a clean way to power data centers, and it is increasingly seen as a reliable source of low-carbon energy. But it takes [10-15 years](#) to get a new mine running, uranium firms warn, and reserves are concentrated.

The West also has reason for concern because Russia's Rosatom [commands a significant share of the global nuclear market](#) and is responsible for more than half of reactors under construction worldwide.

Is Trump (inadvertently) helping North American uranium mining companies – while hurting U.S. power consumers?

[Trump's threat to impose new energy-related sanctions on Russia could backfire by hurting American electricity consumers.](#)

The main target of sanctions— which Trump said this week he could support if Moscow doesn't make progress on a peace deal with Kyiv in the next 50 days — is buyers of Russian crude oil, primarily China and India.

But the legislation also targets nuclear fuel, of which Russia is the world's leading exporter. prohibiting the import of Russian uranium into the US, which would have "underappreciated repercussions" for the US power sector, according to analysts at the research firm Capstone. While the move could help North American uranium mining companies, it would likely lead to higher power prices from nuclear-reliant U.S. utilities.

Spent but saved?

Spent nuclear fuel is stored in about 80 locations around the United States, currently the only solution for long-term nuclear waste storage. Nuclear waste recycling was banned in the US in 1997 and, even though that ban was lifted in 1981, commercial repurposing remained problematic.

It has been proven that nuclear waste could definitely be reprocessed into usable fuel and that there's enough energy in the currently stored stockpile to power US electricity needs for a century.

But the costs of recovering spent waste have been prohibitive. Until now: [The French state-owned nuclear fuel company Orano \(which runs Europe's top nuclear recycling plant\) is partnering up with American startup Curio LV to buy reprocessed uranium and make fresh fuel in the US.](#)



"sample1_Pribram_Uranium_Mine_No5_QQ1Z" by Jan Helebrant, CC BY-SA 2.0

GUNS 'N POSES: MINERALS, POLITICS AND CONFLICTS

UKRAINE'S MINERALS – WHAT'S HAPPENING?

[Donald Trump's Hunt for Ukraine Minerals Faces a Russia Problem](#)

As reported in Newsweek, February 4, 2025

Ukraine holds trillions of dollars worth of rare earth elements, which are critical for the modern high-tech economy. President Volodymyr Zelensky offered his Western allies access to the materials as part of his five point "Victory Plan" unveiled in October 2024.

[However]) Russia is in control of a large portion of Ukraine's rare earth minerals which President Donald Trump said he wants access to in exchange for continuing U.S. support for Kyiv to defend against aggression from Moscow.

But Ukraine's first lithium mine, far from the front line, has been in the works since 2017. It has cost at least \$10 million so far and needs at least another \$350 million and another half-decade to begin production. As well, any new mines initiated while Trump is in office won't open until nearly 2040.

Discussions on allowing American mining companies and investors to access them have been ongoing for years. But more research is needed to verify Soviet-era geologic surveys, and foreign investment is still held back by inadequate insurance, bureaucracy, and lack of military defense.

Update ...

[The US and Ukraine have signed an agreement to allow American access to Ukraine's natural resources.](#) It comes as ceasefire talks over the three-year war founder, with US President Donald Trump voicing growing frustration with Moscow's apparent slow-walking. The US may not be getting as good a deal as it thinks when it comes to the deal with Kyiv, though: "Ukraine's government [essentially invented its mineral riches](#) to give itself a card to deal with Trump," one expert said in The Strategist.

A dissenting opinion – don't look over here, look over there ...

[Forget Ukraine. America's real rare earth gamble is in Central Asia.](#)

FIELD NOTES

Alexander C. Kaufman – award-winning reporter covering energy, climate change, security, geopolitics, business, policy and science. March 3, 2025

China controls the overwhelming majority of the world's supply of metals like lithium and rare earths, and Beijing looks increasingly willing to cut off shipments to its geopolitical foes. Mining more in the U.S. is proving difficult. Getting mines going in Europe is even harder. President Donald Trump's deal for a cut of Ukraine's minerals – few of which are accessible, and even fewer are actually rare earths – is [looking more like](#) political [kayfabe](#) than a real plan to secure America's supply of metals.

Luckily, Washington's efforts to obtain minerals from another part of the former Soviet Union are, in fact, panning out.

Less than two years after the Biden administration brokered an agreement to tap five Central Asian nations' mineral riches, a New York-based mining investor is poised to become the first U.S. company to start extracting badly-needed rare earths from Kazakhstan.

Greenland has attracted global interest in mining for its valuable rare earth minerals (C'mon down, D. Trump!) but ...

Greenland has just two active mines; because of its sparse infrastructure, tough terrain, and cold weather, logistics are complex, a deterrent to investors. China has put money into some Greenland ventures that have stalled due to production or financial barriers.



"Drift of Harrachov Mine" by Jakub Friedl, CC BY-SA 2.0

China's interest is central to US President Donald Trump's desire to acquire the Danish territory. Climate change melting ice in Greenland potentially making mining for critical resources easier

Will what worked (!?!) for Ukraine also work for the DRC?

[Democratic Republic Of The Congo Offers Resources In Exchange For Security Support](#)

The President of the Democratic Republic of the Congo has offered the United States and the European Union access to its mineral deposits in exchange for security support to deter the aggression of the Rwandan-backed March 23 Movement militants, who are increasingly advancing in the east of the country.

China now has far more access to Congo's mineral wealth than the United States, while the European Union has negotiated with Rwanda, agreeing to provide it with about \$935 million in exchange for access to minerals such as tin, tungsten and gold.

Then this ...

The Democratic Republic of Congo and the M23 rebels signed a US-brokered ceasefire to end fighting that has displaced millions and left thousands dead

Fighting had escalated in recent months as the Rwanda-backed M23 took control of cities across the gold-rich eastern DRC. The US has sought an end to hostilities in the country as it eyes control of some

of the world's richest reserves of cobalt, lithium, and other minerals essential for new technologies.

And ...

In July, KoBold Metals, a firm backed by Jeff Bezos and Bill Gates, signed a \$1 billion investment agreement with The DRC to explore [critical mineral resources across the country](#).

Most lithium batteries use cobalt in their electrodes, but it is expensive, at around \$30,000 a ton, and most comes from the Democratic Republic of Congo, where miners face dangerous conditions. General Motors announced plans to make electric vehicles using **manganese-rich** batteries, which it says will extend cars' ranges by around 33% while also making EVs more affordable and their supply chains safer: Manganese is cheap and plentiful. [Manganese-rich batteries are also more energy-dense](#). The Verge reported, permitting EV ranges of up to 400 miles, although there are concerns that they could degrade faster than traditional lithium-ion batteries.

Yeh, but what does this mean ...

US (aka D. Trump) seeks control of global minerals

The US is close to a deal with the Democratic Republic of Congo that would see American companies receive [greater access to lithium](#) and other resources in exchange for backing the Kinshasa

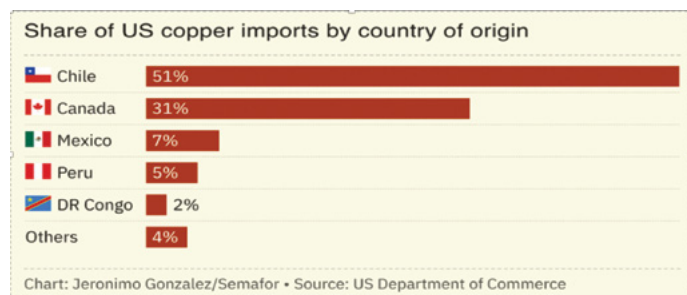
government against rebels, following efforts to [gain access to minerals in Greenland and Ukraine](#).

And now Somaliland is trying to pull a DRC

The breakaway region of Somaliland offered the US a critical minerals deal [in exchange for diplomatic recognition](#), becoming the latest territory to leverage resources for favorable treatment from Washington. This month, various camps in Myanmar's internecine conflict pitched Washington on a plan to [divert the country's rare earths exports](#) from China in exchange for eased sanctions.

Copper prices surge on another Trump terrible tariff tiff

US President Donald Trump said he will impose a 50% tariff on all copper imports, a plan that could lead to sharply higher energy prices. Copper prices hit a record high (when the announcement was made on July 9th) as manufacturers of almost any product using electronics rushed to stockpile the metal.



The ostensible aim of the tariffs — for the US to quickly ramp up its own copper mining and refining capacity — [will be nearly impossible to achieve](#), analysts believe. And so, because the US remains highly reliant on copper imports, especially from Chile, essential hardware for solving what Trump has identified as an energy “emergency” — including transmission cables, batteries, and renewables — will become much more expensive, raising power costs for households, data centers, and other consumers. Copper prices are also set to rise because of climate change, a PwC report warns, as [droughts dry up the necessary water resources for mining](#)

Rare Earth Minerals News

[Canada poised to fill some of rare earths void as China curbs U.S. exports in retaliation to Trump tariffs](#)

As reported by Niall McGee Mining Reporter, Globe and Mail April 4, 2025:

China is the dominant global supplier of rare earths while the U.S. is a bit player, so the export restrictions put some American industries at risk of supply shortfalls.

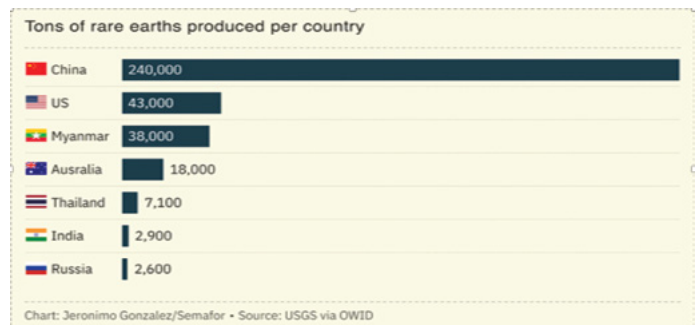
For some of the rare earths targeted by the new Chinese restrictions, the U.S. has other potential suppliers ... and Canada could become a key supplier.

But ...

China has maintained its dominance over critical minerals despite Western nations' efforts to diversify supply chains

The sector is [becoming more concentrated](#), according to the International Energy Agency. For copper, lithium, nickel, and other

metals, the average market share of the world's top three producers reached 86% in 2024, up from 82% in 2020. [“Almost all supply growth”](#) came from a single source, the IEA said: Indonesia for nickel, and China for everything else.



More concerns over China rare earth curbs

Executives and diplomats are increasingly concerned that China's curbs on rare earth exports are causing critical shortages. A German automotive lobby group warned [car production could halt](#) because of the restrictions, while officials from [Japan and India](#) are urgently seeking meetings with Beijing to push for faster export approvals of rare earth magnets. American car companies are also [facing possible shortages](#), The New York Times reported. China halted exports for a wide range of critical minerals and magnets in April as trade tensions with the US escalated, requiring exporters to obtain licenses: The global ripple effects underscore Beijing's dominance in the sector, and threaten to [imperil the US-China trade truce](#), The Wall Street Journal reported.

But this ...

[China rare earth exports to the US surge 660% after trade agreement](#)

China exported more rare earth elements in June, with shipments to the US rising by 660% on a monthly basis, according to Beijing's General Administration of Customs.

Even so, June's total was still 38% lower than the same month in 2024.

During the first half of 2025, exports of rare earth magnets also fell 18.9% on the year to 22,319 tons.

Total shipments to the US, meanwhile, rose to 353 tons in June, a boost that came after Beijing and Washington managed to secure a trade framework last month.

Building upon commitments made in May, when both nations agreed to reduce tariffs on each other for 90 days, the trade agreement involves a commitment from China to deliver more rare earths.

In response to steep tariffs from the US administration, the Chinese government had imposed export restrictions on seven rare earth elements and magnets earlier this year.

The move threatened to derail global supply chains, with more than 70% of rare earth production based in China. More than 90% of the processing also takes place in China.

Despite their name, rare earths aren't actually scarce, although they

are particularly difficult to mine and process. China's export curbs didn't just hit the US, but they also forced some auto part suppliers in Europe to halt production.

In June, the US was the second-largest destination for China's rare-earth magnets, after Germany, and ahead of Vietnam, South Korea, and Thailand — in descending order.

And this ...

[EU and China reach narrow rare earth deal](#)

China and the European Union reached a narrow agreement on rare earth exports during a summit in Beijing in late July but left larger points of contention on trade unresolved. China agreed to emergency export procedures for critical metals and magnets to European factories facing shortages, though the deal falls short of what the bloc's businesses — desperate to build up their rare earth inventories — were hoping for. Brussels is increasingly worried China could use its dominance in the sector to [turn the screws on Europe](#), just like Beijing extracted tariff concessions from Washington in exchange for resuming rare earth exports in May. And while the EU wants to diversify its supply chain, it likely [can't meet its climate goals](#) without China.

When you can't lose for winning ...

[China: rare earth minerals now not so rare](#)

The China Geological Survey has confirmed the discovery of what could be the largest rare earth deposit in the world. This deposit would advance China's already robust lead in the rare-earth element space. The site is in Yunnan, which also contains large deposits of aluminum, zinc and tin. China already controls 60 percent of rare earth production and 85 percent of processing capacity. This deposit could contain **1.15 million tons** of key elements such as praseodymium, neodymium, dysprosium and terbium, and could yield 470,000 tonnes of the materials.

[Kazakhstan discovers massive rare earth metal deposit](#)

A significant deposit of rare earth metals has been discovered in Kazakhstan's Karaganda region, with reported reserves of 1 million tons and total anticipated resources estimated at over 20 million tons.

And ...

A New York-based mining investor is poised to become the first US company to start extracting badly-needed rare earths from Kazakhstan.

[Cove Capital has announced a joint venture with Kazakhstan's state-owned mining company, Qazgeology](#), to start digging hundreds of thousands of tons of rare earths out of the ground as early as next year.

The goal is to mine a site believed to contain at least 380,000 tons of rare earth metals, including neodymium and praseodymium.

[Meanwhile, a rare U.S. rare earths investment by the Pentagon](#)

(July 2025) The U.S. Defence Department buys \$400 million of preferred stock in MP Materials, owner of the only operational

rare earth mine in the U.S. at Mountain Pass, California. MP's stock immediately surged 50%.

The company will build a second magnet manufacturing facility in the U.S. with Pentagon support.

Rare earths are key components in many military weapons systems.

India goes Latam

[India is ramping up its Latin America presence](#) to tap the region's vast mineral reserves. New Delhi's green targets have fed a push for greater access to key minerals such as copper and lithium, used in renewables technologies, with Chile a particular target. (Latin America has the world's largest lithium reserves.) The moves reflect a growing awareness that securing access to critical minerals is a strategic imperative. However, New Delhi will face competition from Beijing and Washington, the biggest trading partners for almost all the region.

And Africa, too

[\(July\) Indian Prime Minister Narendra Modi recently visited Namibia](#) in a bid to strengthen ties with the resource-rich nation. The visit is seen "as being seen as [pivotal in India's quest for critical minerals](#) essential to new-age technologies and electric vehicles," reported The Times of India.

[Mali grabs Canadian-owned gold](#)

(July) A Malian military helicopter airlifted more than \$100 million in gold from the country's biggest mine, allegedly to fund government operations. The mine is part of dispute between the Canadian owned, Barrick Loul-Gounkoto mining complex and Malian authorities, and comes as the soaring price of gold, which investors have flocked to amid a global trade war, has driven a scramble for control of the metal across Africa. in West Africa.

Africa has a wealth of critical minerals but has not realized their full value – should the Canadian government take notice as we seek to develop our mineral wealth?

In a recent story on a United Nations website, Maxwell Gomera, a United Nations Development Programme Resident Representative, makes the case for African nations capturing the full value of their mineral resources to break their dependency on handouts from other nations, especially the U.S. It might be pushing the envelope a bit, but are there lessons in Gomer's piece that Canadian governments can learn from?

Check it out for yourself in these excerpts from Bomera's article:

[Africa doesn't need aid. It needs control over its critical minerals](#)

24 April 2025

African countries can break aid dependency by simply capturing the full value of their mineral resources.

The decision of US President Donald Trump's administration to suspend foreign aid and shut down the USAID agency has sent shockwaves across the development industry. In 2024, nearly a third of the \$41bn in US foreign aid went to Africa, helping support various sectors from healthcare to education and sanitation.

But as aid organisations sound alarm bells and government officials wring their hands over suspended programmes, we are missing the bigger picture: Africa's continued dependence on foreign aid is a choice, not a necessity. Our continent sits atop some of the world's largest reserves of the very minerals that will power the future, yet we remain trapped in cycles of aid dependency. It is time to change that.

Let us be clear about what is at stake. The Democratic Republic of the Congo supplies 70 percent of the world's cobalt – the essential ingredient in electric vehicle batteries. South Africa produces 75 percent of the world's platinum and 50 percent of palladium. Mozambique and Madagascar possess some of the largest graphite deposits globally. Zimbabwe has the largest deposits of caesium, a critical metal used in GPS and 5G systems.

More than just rocks and metals, these are the keys to the global clean energy transition. Every electric vehicle, solar panel, and wind turbine depends on minerals that Africa has in abundance.

Clearly, Africa's mineral riches represent the greatest economic opportunity of our generation. But instead of positioning ourselves to capture this value, we are debating how to patch the holes left by suspended aid programmes.

The solution is not complicated, though it is challenging. We need to build processing facilities, not just extraction sites. We need to establish special economic zones focused on mineral beneficiation, not merely export terminals. We need to invest in research and development facilities that can adapt and improve processing technologies. Most importantly, we need to think and act regionally.

It's time for Africa to transform from the world's raw materials store into its manufacturing powerhouse. By turning our mineral wealth into lasting prosperity, we can make foreign aid what it should have been all along: unnecessary. 🌱



Association of
Ontario Land Economists

WHAT IS AOLE?

YOUR MEMBERSHIP TO OVER

\$50 BILLION

IN NEW DEVELOPMENTS

The Association of Ontario Land Economists (AOLE) is a membership based group of real estate professionals that offers the opportunity to connect with other professionals in related fields, share knowledge, learn and network with potential clients, partners, mentors and more. Currently the group proudly represents most of the significant developments in Southern Ontario and its members are active in many various roles across the vast real estate industries.

You can make a difference today by joining AOLE. Members have the benefit of broadening and enriching their professional development ensuring high-ethical work standards and making submissions to the government for improvements in both the law and public administration in relation to land economics. This year, our members will be involved in over \$50 billion dollars in Ontario real estate initiatives.

[Read about membership qualifications](#)

[Apply for Membership](#)

What careers are represented within AOLE? To get an idea of the professionals that are members of AOLE, we have compiled a list of some of the most strongly represented professionals.

If you need more information email us at admin@aole.org.

Safeguarding the Public Interest: The Role and Responsibilities of the Association of Ontario Land Surveyors.



Submitted by Michael Cane

Editor's Note:

The Association of Ontario Land Economists comprises members from a variety of professional organizations associated with Land Economy.

We will be providing a brief profile of each member association from time to time so that members can appreciate the extent of our Association.

Profiled below is the Association of Ontario Land Surveyors:

Established in 1892, the [Association of Ontario Land Surveyors](#) (AOLS) serves as the self-regulating body responsible for licensing and governing professional land surveyors in Ontario. Operating under the authority of the Surveyors Act, the AOLS is mandated to uphold the public interest by ensuring the integrity and competence of its members.

Governance and Structure

The AOLS is governed by a Council comprising nine elected Ontario Land Surveyors, the Surveyor General of Ontario, and three to five public appointees—one of whom must be a licensed barrister and solicitor. Notably, AOLS staff are not members of Council.

Operational responsibilities are managed by a dedicated team, including an Executive Director, Registrar, Deputy Registrar, Survey Review Department Manager, and support personnel.

Upholding Professional Standards

Members of the AOLS are bound by a Code of Ethics and Standards of Practice, as prescribed by the Surveyors Act. In addition, the Association has developed Standards and Guidelines for Surveys to ensure consistency, accuracy, and reliability in the services provided to the public.



The Toronto firm of Marshall Macklin Monaghan played a significant role in the surveying and engineering of the CN Tower

The Scope of Surveying in Ontario

Surveyors play a foundational role in society. From enabling housing development to underpinning infrastructure projects and protecting property rights, their work brings clarity, stability, and security to Ontario's legal and physical landscape. Far from being replaced by technology, today's land surveyors are embracing it—leveraging artificial intelligence (AI), global positioning systems (GPS), unmanned aerial vehicles (UAVs), and advanced spatial data tools to deliver increasingly precise, efficient, and innovative results.

Surveying in Ontario encompasses the following disciplines:

- [Cadastral Surveying](#)
- [Photogrammetry](#)
- [Geodesy](#)
- [Hydrography](#)
- [Geographic Information Management](#)

Among these, Cadastral Surveying—the establishment or re-establishment of property boundaries—is a protected practice. Only individuals licensed by the AOLS may perform this work and use the professional designation “O.L.S.” (Ontario Land Surveyor). This exclusivity is akin to the regulatory frameworks governing lawyers, architects, and engineers.

National Mobility and Jurisdictional Expertise

Each Canadian province and territory maintains its own regulatory body for land surveying. A mutual recognition agreement among these regulators facilitates interprovincial mobility. Surveyors seeking licensure in another jurisdiction must be in good standing and pass a jurisdictional examination to demonstrate knowledge of local laws and practices.



George Kirkpatrick— a force in the founding of AOLS



Land Surveyor John W. Pierce was hired in 1921 to conduct the first Ontario-Manitoba boundary survey.



Circa 1910 Land Survey Crew working at Lake of the Woods.



Brian Maloney, was the first Errindale College grad to become Surveyor-General of Ontario (1998-2010)

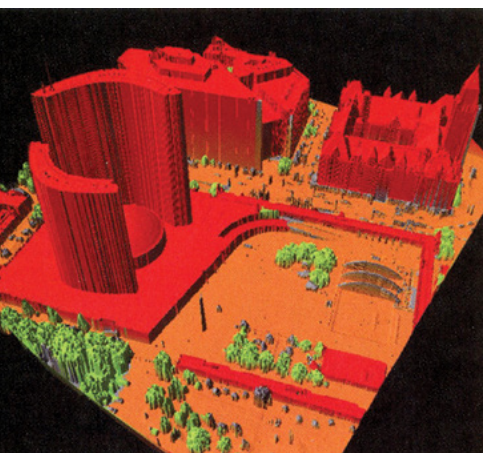
Surveying practices, legal frameworks, and land registration systems have evolved differently across provinces. As a result, each jurisdiction requires specialized knowledge to ensure accurate and legally defensible boundary determinations. In Ontario, this includes a thorough understanding of provincial statutes, case law, and historical land systems.

Looking Ahead: Challenges and Opportunities

Currently, Ontario has fewer than 500 licensed surveyors and 18 registered members. With a significant portion of the membership nearing retirement—most being over the age of 60—the profession faces a looming demographic challenge. The AOLS licenses approximately 10 new members annually and is actively working to attract new entrants through public awareness campaigns and outreach initiatives.



Dr. Alex McEwen had an extraordinary career in surveying, working in 25 countries and in several U.S. states and Canadian provinces. He is seen here operating a microwave distance measuring MRA3 tellurometer.



LiDar scan of Toronto's new and old city halls

Surveying offers a rewarding and intellectually stimulating career path, blending technical precision with legal acumen. As Ontario continues to grow and evolve, the role of land surveyors in shaping its physical and legal landscape remains as vital as ever.

Examples of Major Projects Involving Ontario Land Surveyors

Gordie Howe International Bridge (Windsor-Detroit)

Ontario Land Surveyors were deeply involved in the planning and construction of the Gordie Howe International Bridge, a major infrastructure project connecting Windsor, Ontario to Detroit, Michigan. Their work included:

- Precise boundary and topographic surveys of the site.
- Assisting in land acquisition and resolving property line issues.
- Providing critical data for engineers to design roadways, foundations and border facilities.
- Ensuring alignment of the bridge matched legal and international boundaries.

Their contribution was vital in keeping the massive binational project accurate, legal and on schedule. (See article: "The Essential Role of Land Surveyors in the Gordie Howe International Bridge Project" [The Land Economist; Vol 55-1 Spring issue](#))

Ontario Line (Toronto)

Role of surveyors: Conducting pre-construction surveys, monitoring land deformation and contributing to engineering designs for the new subway line.

Highway 407 East Extension

Role of Surveyors: Route planning surveys, land subdivision for new interchanges and ongoing construction layout report.

Waterfront Toronto Revitalization Projects

Role of Surveyors: Redevelopment surveys, elevation studies for flood mitigation and mapping of contaminated sites for cleanup.

Nuclear Power Facility Upgrades (Bruce Power & Darlington)

Role of Surveyors: Detailed site surveys, layout for new infrastructure and geospatial monitoring around sensitive zones. ➤

ASSOCIATION NEWS

AOLE Annual General Meeting For the Year Ended March 31, 2024 Highlights

AOLE's Annual General Meeting was held June 12th, 2025 at Deloitte's Office at the Bay Adelaide Centre and was presided over by Treasurer Stefan Krzeczunowicz who is also the Past President of the Organization.

Amongst Stefan's opening remarks was this shout-out to the Board: "I also want to take a moment to recognize your Board of Directors. The Board is all volunteers, and I am privileged to serve with such a collegial and committed team." He then introduced each Board member and asked the audience to "please join me in thanking your Board". He added, "I want also to thank Robyn Brown and Nazreen Ali, who are stepping down from the Board. Robyn was a wonderful modernizing influence on our organization, and helped us with social media and program matters over the last few years. Nazreen gave us important insights into sponsorship opportunities and strategic planning. Both will be missed."



AOLE Treasurer Stefan Krzeczunowicz speaking at the AGM on June 12, 2025



AOLE members and guests listening to the AGM meeting at Deloitte's Office in the Bay Adelaide Centre on June 12, 2025

Treasurer's Report

Stefan then gave his Treasurer's Report and remarked that he was "happy to report that the organization continues to be in very good financial health. This is despite us running a deficit in the 2023-2024 fiscal year, due to our 60th Anniversary AGM and some hefty Journal expenses that year. I fully expect that with the increase in our Membership and a fee rate increase in March 2024, our fund balance will improve in this last fiscal year. Members can be assured that we continue to strive to operate on a balanced budget and are committed to continuing to charge affordable membership dues, while delivering high quality speaker events and our magazine on a regular basis."



Registrar & Membership Chair Jameson Chee-Hing giving his report at the AGM, Stefan Krzeczunowicz

Membership Report

Registrar & Membership Chair Jameson Chee-Hing reported that "as of June 2025 we have 317 members. Our membership continues to grow.

Diversity is very much our strength. Our members come from fields of endeavour all directly related to the practice of land economics. We have planners, land developers, appraisers, real estate professionals, engineers, architects and economists from both the private and public sectors within our ranks. And we have made huge efforts to reach out to young professionals in the field and encourage them to become members."

Board Changes

All of the past year Board Members other than the two aforementioned retiring Members agreed to stand for nomination and were elected for one year effective June 12 2025. Our President, Christina Kalt added Secretary to her Board role. Bonnie Bowerman took on the added responsibility of Program Chair to her Nomination Chair duties. Peter McCallion joins the Board as a Member at Large.

Infrastructure and Development Panel Tackles Housing Crisis at AOLE Annual General Meeting

By Robyn Brown MA, MPL, MSc. PLE

On a warm evening on June 12th, 2025, the Association of Ontario Land Economists (AOLE) convened its Annual General Meeting, welcoming members, guests, and an esteemed panel to discuss pressing issues in infrastructure and development. The panel, moderated by Aidan Grove-White of Strategy Corporation, consisted of Ana Bailão, a former City Councillor and Deputy Mayor, mayoral candidate, and now head of affordable housing and public affairs for Dream Unlimited Corp. and Heather Grey-Wolf, Director of Development at Infrastructure Ontario. Together, they engaged in an insightful discussion spanning topics such as affordable housing, innovation, infrastructure, and the role of government in addressing development challenges across the GTA.

Exploring Political Influence on Development

Aidan Grove-White opened the session with an overview of recent federal housing initiatives, including the expansion of the Federal Housing Accelerator Fund, Build Canada Homes and other potential federal infrastructure investments. At the provincial level, new legislation such as Bill 17 and deferrals on development charges have also sought to foster housing development through structural reforms.



Ana Bailão, Heather Grey-Wolf, Aidan Grove-White, Robyn Brown.

After the introduction, the panel examined the ways political decision-making and governance structures are shaping land and infrastructure development, with a particular focus on the housing crisis impacting the Greater Toronto and Hamilton Area. The discussion highlighted productive policy shifts, including new legislation seeking to reduce delays in applications, political obstacles, and the realities faced by governments at all levels as they navigate planning, investment, and public-private partnerships.

No Single Solution to Affordable Housing

The panelists agreed that there is no silver bullet for the housing crisis. While each level of government plays a critical role, measures such as development charge rebates and reductions and the contribution of surplus land are important tools to encourage affordable housing.

Ana Bailão emphasized the need for greater innovation within the construction industry, suggesting that outdated approaches to building are a factor in the slow delivery of much-needed homes. She proposed investments in cutting-edge technology and training could reduce costs and accelerate construction timelines. Additionally, Bailão raised the question: whether AI technologies could help streamline building approvals

and permit reviews, thereby expediting development processes?

Reforming Finance and Taxation in Housing

Befitting to a meeting of land economists, the panelists acknowledged the need to rethink the financial and taxation structures underpinning housing development. Beyond grants and subsidies, they concluded that the housing crisis cannot be resolved solely through government funding. Instead, reforms must create a functional housing market.

Heather Grey-Wolf underscored this point with a stark example: even if the government were to allocate \$50 billion for housing, at an average cost of \$500,000 per unit, it would result in just 100,000 units—far from sufficient to meet the growing demand. With over 200,000 individuals already waiting for social housing, Grey-Wolf argued that incremental solutions are inadequate. While the panel agreed that the public sector alone cannot meet the demand for social housing, they emphasized the need for bold, transformative approaches to address the crisis. A worthy challenge for members of AOLE.

Ana Bailão, Heather Grey-Wolf, Aidan Grove-White, Robyn Brown



Robyn Brown MA, MPL, MSc. PLE

Principal – Practice Group Manager – Placemaking – Canada East
Arcadis IBI Group

Memberships

ULI Toronto
ULI Europe
Toronto CREW (Commercial Real Estate Women)
Ontario Professional Planners Institute (OPPI)
Buildings Industry and Land Development Association (BILD)
Lambda Alpha International (Land Economics Society)
Association of Ontario Land Economists

Robyn Brown is an Urban Planner and Professional Land Economist, known for her two decades of transformative experience in planning, economics, development, and real estate across North America. As Principal of Arcadis' Canada East Placemaking Group, Robyn leads a multidisciplinary team of planners, urban designers, economists, and GIS specialists, delivering innovative solutions to complex planning and real estate challenges for both public and private sector clients.

Prior to joining Arcadis, Robyn worked in the commercial real estate field, specializing in surplus property disposition and strategic portfolio analysis. Her expertise has consistently driven successful outcomes for high-profile projects and clients.

Robyn's reputation as a thought leader is reflected in her extensive industry involvement. She currently serves on the Executive Board of ULI's Women's Leadership Initiative (Americas), the Board of Lambda

Alpha (Simcoe Chapter), and is Past-President of Toronto CREW (Commercial Real Estate Women). Her leadership extends to previous roles on the Board of Directors of the Association of Ontario Land Economists and the Management Board of ULI Toronto, where she chaired the Women's Leadership Initiative.

A lifelong learner committed to advancing the profession, Robyn recently completed her MSc in Cities from the prestigious London School of Economics, focusing her research on developing sustainable funding models for Community Hubs in Ontario.

Robyn is a passionate advocate for diversity, equity, and inclusion in real estate and development. She actively mentors emerging professionals and champions DEI initiatives, shaping a more equitable industry for future generations.

Association of Ontario Land Economists Award

AOLE established an award to provide financial assistance to Seneca Polytechnic students which is awarded to full-time graduating students in the Real Property Administration or Real Property Administration Accelerated program. The recipient will have high academic standing in the Microeconomics course, along with making valuable contributions to the classroom environment. The recipient will be recommended by faculty.

The 2024-2025 Recipient of the award is Furong Hao. In May AOLE's Treasurer Stefan Krzczunowicz received a letter from Katie Colvin, Seneca Polytechnic's Development Officer (Awards and Leadership Giving) announcing this year's award winner and wrote "From all of us at Seneca, thank you for believing in our students. You have made a lasting impact on their lives. Your support not only alleviates financial burdens but also promotes your organization's name and invests in future industry talent."

AOLE Annual General Meeting

Keynote Address With Ontario Premier Doug Ford Protecting Ontario in Challenging Times

Wednesday Sept 24, 2025,
5:45 PM to 9:00 PM

Royal Canadian Yacht Club Island Clubhouse

Join us for an engaging discussion at the Island Clubhouse with the Honourable Doug Ford, Premier of Ontario, on protecting Ontario during challenging times.

Agenda

5:45 PM - 6:00 PM Launch

6:00 PM - 7:00 PM Networking

7:00 PM - 7:20 PM Keynote Address

7:20 PM - 7:30 PM AGM

7:30 PM - 9:00 PM Dinner

Register



AOLE News!



New AOLE Recruiting Brochure

The Marketing Committee recently commissioned a new recruitment brochure to attract new members which has now been printed and will be distributed to target companies and organizations. We are proud to show it to you below.



AOLE Board

President & Secretary

Christina Kalt
Kalt Studio
christina.kalt@kaltstudio.com

Past President & Treasurer

Stefan Krzeczunowicz
Hemson Consulting
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Executive Vice President

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Vice President & Journal Chair

CRU Communications
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Program Chair & Nominations Chair

Bonnie Bowerman
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Registrar & Membership Chair

Jameson Chee-Hing
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Marketing Chair

Michael Cane
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Legislative Chair

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Internet Chair

Matthew Cory
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Ian Ellingham
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Prakash Venkat
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Welcome New Members

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Thomas Janzen
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Principal
CVLNS LP
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New Board Member



Peter McCallion, Member At Large, PLE

Peter McCallion is a Senior Real Estate Executive with 40 years of diversified experience who understands the real estate development and approvals process in the Province of Ontario. Peter can devise creative solutions and broker relationships that enable any organization to realize a sustainable and affordable

development pipeline leveraging his significant personal knowledge of land acquisition, deal structuring and the full development/construction cycle. He has worked in partnership with the CEO's, CFO's, and Senior Construction Managers at multiple corporations and in various asset classes.

AOLE

June 12, 2025 Annual General Meeting Photos

Photos by Rowena Moyes and John Blackburn



Robyn Brown, Prakash Venkat



Prakash Venkat, Bonnie Bowerman, Christina Kalt, Stefan Krzczunowicz, Nazreen Ali



Christina Kalt, Philip Smith



Networking on the Terrace



Stefan Krzczunowicz, Aidan Grove-White, Brian Bridgeman, Jameson Chee-Hing, Audrey Jacob, Ed Sajecki



David Atlin, Jamie Tate



Michael de Lint, Cameron Martin, Peter Norman



Tywen Thomas, Bohan Li, Jack Ternesy, Kevin Yaraskavitch, Nick Kazakoff



John Blackburn, Joseph Shaw, Michael Cane, Ian Heerdegen



Nick Kazakoff, Hartley Rogers, Rowan Faludi



Robyn Brown, Megan Fletcher, Jamie Tate



Stefan Krzeczunowicz, Ed Sajecki, Andy Manahan, Philip Smith, Jameson Chee-Hing, Prakash Venkat, Robyn Brown, Nazreen Ali, John Blackburn, Andréa Callà, Michael Cane, Christina Kalt, Peter McCallion



Kevin Villeneuve, Rick Van Andel, Tywen Thomas, Diana Petramala, Kevin Yaraskavitch, Jameson Chee-Hing



Aidan Grove-White, Christina Kalt, Ana Bailão



Ian Ellingham, Bonnie Bowerman



Jack Neal, Matthew Heather



Mark Zemel, Andréa Callà



John Blackburn, Peter McCallion



Kevin Villeneuve, Craig Ferguson, Sameer Patel



Michael, de Lint Jack Neal, Matthew Heather, Jamie Tate, Peter Norman, Michael Cane, Ian Heerdegen



Rick Van Andel, Bonnie Bowerman, Hartley Rogers, Ian Ellingham, Margie Carlson, David Atlin, Ed Sajecki



Ana Bailão, Heather Grey-Wolf, Aidan Grove-White, Robyn Brown, Audrey Jacob, Stefan Krzczunowicz, Prakash Venkat, Christina Kalt



Kevin Villeneuve, Craig Ferguson, Sameer Patel, Samuel Linds, Joseph Shaw, Philip Smith, Nazreen Ali, John Blackburn



Tywen Thomas, Nick Kazakoff, Bohan Li, Rosanna Bullock, Rowan Faludi, Megan Fletcher



Jack Temesy, Gary Muller, Peter McCallion, Andy Manahan, John McDermott, Diana Petramala, Cameron Martin, Kevin Yaraskavitch



Ian Ellingham, Michael Cane, Ed Sajecki



Stefan Krzczunowicz, Andréa Callà



NEWS BLASTS

Researched by **John Blackburn**, AIHM, PLE

Alex Nordstrom/Wikimedia Commons, License: CC-BY-SA

MUST WATCH PMA | CIBC Summit - HEAR IT STRAIGHT FROM THE SOURCE-TALKING BILL #17 WITH ONTARIO'S MINISTER OF MUNICIPAL AFFAIRS AND HOUSING

Webinar recorded on July 24, 2025

[Watch Video](#)

Canadian "Andersen Brethour Report- July Issue

A comprehensive, review of the state of Canada's economy and its impact on the Housing Market published monthly by Dr. Peter Andersen and Andrew Brethour.

[Download A Free Copy](#)

Building Faster: Streamlining Housing Delivery and Strengthening the City's Development Capacity

To meet the complex and evolving housing needs of its residents, the City is adopting a more proactive and hands-on approach to housing development. Structural and policy innovations—such as the establishment of the Housing Development Office and the implementation of the Toronto Builds Policy Framework—are pivotal to this strategy.

[Read Report](#)

CMHC Is Quietly Becoming A Rental Housing Powerhouse

[Read Article](#)

STOREYS July 25, 2025 Newsletter Reported The Following Interesting Statistics About The Housing Market:

19

—

Months of new home inventory in the GTA — the highest level seen to date, according to the Building Industry and Land Development Association (BILD).

[Read Article](#)

0.2%

—

The percentage decline in the national new housing price index in June — the third consecutive month to see a decline.

[Read Report](#)

0. 44%

—

The share of Canadians who think high housing costs are the "main impediment" to the BoC controlling inflation, behind domestic spending and tax policy (11.75%) and tariffs and trade barriers (32.42%)

[Read Report](#)

40%

—

The amount the median sale price of a single-family home fell over three years across 10 GTA neighbourhoods.

[Read Article](#)

\$45K

—

The yearly income needed to purchase a property in Canada's most affordable vacation destination: Cape Breton, NS.

[Read Article](#)

\$15M

—

The amount awarded by CMHC to four companies and organizations advancing innovative solutions for Canada's housing challenges.

[Read CMHC Social and Affordable Housing Survey Results](#)

Ourboro Aims To Level Playing Field For Prospective Home Buyers

[Read Article](#)

Enormous 14-Tower Development To Transform Toronto's Waterfront

[Read Article](#)

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A Year In, Are Mississauga's Free Garden Suite Plans Spurring Development?

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Huge 6-Tower Complex Would Take Over Vast Natural Space In Ontario

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Canada's Second-Tallest Structure Is Being Demolished In Ontario

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Fengate Closes On Transit-Oriented Purpose-Built Rental Site in Etobicoke

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Fengate Asset Management announces that Carolyn Poirier, VP Marketing and Sales has been inducted into the Women's Leadership Initiative (WLI) Toronto Championship Team a prestigious global program by the Urban Land Institute.

[Read Full Announcement](#)

Harvey Kalles, Founder Of Landmark Toronto Brokerage, Dies At 98

Harvey Kalles founded Harvey Kalles Real Estate in 1957. He passed away on Wednesday, July 9.2025

[Read Article](#)

Municipal World Daily Newsletter

Coverage of news from across Canadian municipalities:

[Read April 16 2025 Issue](#)

[Read July 16 2025 Issue](#)

Diverso Energy and Mattamy Homes Announced A Strategic Joint Venture

Under this partnership, Diverso will become the exclusive provider of geothermal services for select Mattamy residential developments across Canada

[Read The Press Release](#)

It's Time for Geothermal to Step Into the Spotlight — But We Need to Get Out of Our Own Way

Tim Weber, Co-Founder and CEO of Diverso, discusses how the biggest barrier

to geothermal adoption isn't technology, regulation, or even awareness. It's mindset.

[Read Article](#)

Newfoundland Offshore Drilling Rig Update

Pat Brennan one of The Land Economist magazine's feature writers brings us the following update to the Argentia Newfoundland Oil rig construction project that he wrote about in the [Fall 2024 Vol 44 no 2](#) issue of the magazine:

ARGENTIA - A 48-storey building in this famous seaport in Newfoundland has left town.

A powerful tug pulled the 225,000-ton structure out into the Atlantic Ocean to start work as a unique oil drilling rig.

The concrete and steel gravity structure (CGS) stands 149 metres tall (the equivalent of 48 storeys) and was built in this town over three years in a drydock created in the harbour.

After it is sunk to the ocean floor, twenty-five metres of the tower will protrude above the water. Later this summer the world's largest ship will pull alongside the tower and lift a 25,000-ton platform up on top of the tower.

The platform will contain a hotel for 150 employees, a helicopter landing pad, a collection of life boats and a wide variety of mechanical apparatus to extract and store 80,000 barrels of crude oil drawn daily from below the ocean floor.

To place the platform on top of the tower Cenovus hired the world's largest ship - the Pioneering Spirit that weighs in at 1 million tons. It's a catamaran-style vessel that combines two large tanker vessels that was built in South Korea. It is owned by Switzerland's Allseas Group and is used mostly in servicing water-based oil drilling rigs.

The Pioneering Spirit had been named the Pieter Schelte Heerema after the offshore pioneer and father of the Allseas' president Edward Heerema. It was renamed when it was revealed Heerema senior was a soldier with the Nazis Waffen-SS during W.W. II.

The CGS is expected to be producing oil by early 2026.

Argentia, a port 131 kilometres southwest of St. John's, was a U.S. Navy Base during W.W. II until 1977 and is now a manufacturing and service provider for offshore wind, oil and gas projects.

See this time lapse video of the construction of the Concrete Gravity Structure.

[Watch Video](#)



John Blackburn, AIHM, PLE

President,

CRU Communications and Broadcast Productions Inc.

John has over 50 years' experience in marketing, sales and public relations, both in the E.U. and North America. Winner of numerous marketing and public relations awards, including BILD's Top Awards, two Grand SAMs, the very prestigious Riley Brethour Award, The Sales and Marketing Manager of the Year Award, the Canadian Home Builders' Association Award of Honour and the Queen Elizabeth II Diamond Jubilee medal, in recognition of contributions to Canada.



The Legislative Beat *Summer Update*

By Andy Manahan, PLE

High polling numbers:

Polling this summer by Abacus Data reveals that the Ontario PCs are at a seven-year high in terms of popularity, according to results that were released in late July,

In response to the question “If a provincial election were held today, which party would you vote for?”, 50 per cent of committed Ontario voters support the PCs, the Liberals are stuck at 28 per cent, the NDP has fallen to 13 per cent and the Greens are at six per cent.

Many media outlets have highlighted the position taken by [David Coletto of Abacus that Premier Ford’s stance against President Trump accounts for the positive poll results](#). Coletto said that when Ford pushes back against Trump, he is “tapping into the emotions people are feeling and it’s further endeared him to much of the province.”

[Martin Regg Cohn of the Toronto Star agrees that the role Ford is playing as Captain Canada is expanding his coalition to the detriment of the other provincial parties](#). He points out that the premier is acting as the ‘bad cop’ to P.M. Carney’s ‘good cop’ and that Ontario’s leader can more readily lambaste the president “without having to face the consequences of overplaying his hand (after burning his own fingers when threatening to cut off electricity to border states, only to back down when unable to take the heat from Trump’s team).”

[In the Abacus summary Coletto provides the following caveat](#): “But as always, conditions can change. Economic pressure points remain. Public patience on housing is not unlimited. And the Liberal convention in September could reshape the conversation, either by clarifying Crombie’s mandate or reopening questions about who should lead the Liberals.”

Skills Development Fund:

All provincial dealings with the U.S. are not in the sound bite category although the premier has used a favourite phrase of his for Trump by writing on X (twitter): “I think the cheese slips off the cracker with this guy.”

The government of Ontario has taken a measured response to Trump’s tariffs by further bolstering the skilled trades through the [SDF training stream](#). At a [recent announcement in Mississauga](#), for example, the premier said that “the investments we are announcing today will help workers get the skills and training they need to succeed and support economic growth.” The SDF aims to prepare workers for good-paying jobs in high-demand sectors such as construction, health care, transportation, manufacturing, and aerospace.

[SDF also has a capital stream](#) which will provide funds to build or renovate training centres. Those eligible to apply include Ontario employers and industry associations, non-profit organizations, including Indigenous band offices, trade unions and their affiliates, municipalities, hospitals and social services administrative boards.

Building Faster:

[In June, Bill 17, the Protect Ontario by Building Faster and Smarter Act, 2025 received Royal Assent](#). This comprehensive legislation seeks to accelerate the building of housing, infrastructure, transit-oriented communities and transit projects.

Rationalizing and reducing the quantum of municipal development charges (DCs) are also linked goals of the legislation. Builder association RESCON acknowledges that DCs were put in place to pay for infrastructure such as roads and water

systems but that over time DCs have grown in scope to cover all manner of “growth-related” services.

In Richard Lyall’s column, a witty opening sets the tone by referring to a Winston Churchill quote: “We contend that for a nation to try to tax itself into prosperity is like a man standing in a bucket and trying to lift himself up by the handle.” [RESCON concludes the rapid escalation of DCs “is self-defeating as new homeowners end up paying exorbitant fees that raise the cost of housing.”](#)

As an aside, Winston Churchill first uttered this bucket joke in 1904 in the context of the merits of free trade. He said that “it is the theory of the Protectionist (tariffs advocate) that imports are an evil. He thinks that if you shut out the foreign imported manufactured goods you will make these goods yourselves, in addition to the goods which you make now, including those goods which we make to exchange for the foreign goods that come in. If a man can believe that he can believe anything.”

Would someone please present this [book](#) to President Trump, or at least read him this [quote](#)?

Regulatory Burden:

While much has been written about ways to streamline the approvals process, I found an article in The Economist to have a useful factoid. Robert Dietz, chief economist of the U.S. National Association of Home Builders, estimates that 15 years ago, 30 per cent of workers in the construction industry were office staff dealing with red tape. Today, that figure is 40 per cent (source: The Economist, Housing. Peak Exodus?: America’s red states could be about to lose their cheap-housing advantage, July 19, 2025, pp. 19-20).

Highways:

The Premier has announced two contracts in preparation for building Hwy. 413. These are for resurfacing Hwy. 10 leading to a new bridge over the 413 and upgrades at the Hwy. 401/407 interchange which will link to Hwy. 413 at its western terminus (will this end up being a congested interchange because of this highway convergence?).

[Opposition leaders have recommended that rather than building a new highway in the northwest part of the GTA, truckers be subsidized for taking Hwy. 407.](#) NDP leader Marit Stiles has called for solutions that bring immediate relief – such as removing tolls for trucks on Highway 407 – and criticized the premier for being “focused on a project that has no timeline, no price tag, and no plans to get people out of traffic.”

[The Premier has pooh poohed this idea and recently said that he spoke with the Ontario Trucking Association and that the OTA responded that too many trucks would be exiting at the same place.](#) Several years ago, the OTA cited the high costs for truckers to travel on the 407 and that thin margins would not allow this alternative route, meaning that the primary east-west corridor remains Hwy. 401.

The Premier further stated that an analysis was conducted by MTO, but he does not reveal the results of this analysis. It would have been helpful to know this, as part of a robust consultation process, to allow more voices to help arrive at useful strategies to address overall congestion. Would the subsidy be just for the provincially owned portion (407 East) or would there be an arrangement with the owners of 407ETR, as exists for backroom functions such as toll calculations? [for background on Hwy. 413, see the Legislative Beat, [Vol. 51, no. 2](#)].

A proper analysis would look at, for example:

- traffic flow based on a range of subsidy levels (e.g., higher tolls during peak periods and lower tolls during off-peak)
- the proportion of truck traffic using key exit points along the entire corridor (e.g., Pearson economic zone), including to be developed employment zones in Durham Region
- the proportion of truck traffic that would want to do a complete bypass (if the ETR portion were at least partially subsidized)

It would also be helpful to determine whether any of the east-west goods movement flow would travel on the 400 to take Hwy. 413 in the future. I suspect not as this would add unnecessary mileage and time for those travelling along the Quebec to Windsor corridor (or to Fort Erie) even if trade with the U.S. returns to normal.

The lack of transparency on many fronts is galling. [According to a Toronto Star article Transportation Minister Prabmeet Sarkaria repeatedly evaded questions about the highway's budget and time frame for completion.](#) We still don't know what the cost will be to build highways such as the Bradford Bypass and 413. Taxpayers deserve to know this, not just a sign that extols a non-inflationary figure from several years ago (\$30 B roads program).

Matti Siemiatycki, director at the University of Toronto's Infrastructure Institute, provides another reason why the secrecy surrounding Ontario highway and other infrastructure projects is problematic. [He says that this will have an impact on the ability of the provincial government to borrow and that uncertainty around costs will “give pause out in the markets.”](#) A prime example given is of the Eglinton Crosstown LRT where the provision of a completion date has been a major embarrassment for provincial agency Metrolinx and for the Ontario government itself.

Highway 401 tunnel proposal:

I wrote about this in the previous issue but this opinion by [John Lorinc is worth a read, as he calls this dream tunnel a high-risk project.](#) When the premier announced in mid-August that new tunnelling technology would be employed he said that there would be three levels under the 401 **with one lane in each direction** (eastbound, westbound, plus a transit level). Having only one lane seemed quite odd as it would result in severe bottlenecks should there be an incident. A few days later, there was a clarification from MTO officials that the premier meant to say one level in each direction.

“Back to office” messaging:

During Covid, many in the office sector worked from home. [In mid-August, Ford announced that Ontario public servants](#)

[would have to work from government offices four days a week starting this fall and then full-time in January.](#) Shortly thereafter, [Ford encouraged municipalities to do the same thing,](#) citing greater productivity and the revitalization of downtowns as key benefits of this move.

While there are many factors to consider, the above CBC article notes that the provincial government's single-largest office space in Toronto, the **Macdonald Block complex**, is undergoing a \$1.5 billion renovation and has been shut down for six years. Searching for more office space on a short timeline will add to the province's budgetary pressures.

While there is certainly merit in a back to the office mandate, there will be additional pressure on our road and transit systems, with worse traffic congestion being a foregone conclusion. Would it not be more sensible to attempt to synchronize the availability of more public transit options (e.g., Eglinton, Finch, Hurontario LRTs) before enacting a return to the office desk mandate?

September 3, 2025



Andy Manahan is President of Manahan Consulting Services and a member of AOLE's Board of Directors



Association of
Ontario Land Economists

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**Ontario Land
Surveyors**

Engineers

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