



Canadian  
Hydrogen  
Association

Association  
Canadienne de  
L'hydrogène

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## Federal Hydrogen Roundtable

Canadian Hydrogen Association

June 25, 2026 — 1-4PM ET

Location: Fasken's Office (Ottawa — 55 Metcalfe St. 16th Floor)

| Time         | Agenda Item                                                                           | Lead / Participants                                                              | Key Points / Objectives                                                                                                               |
|--------------|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| 1:00–1:05 PM | <b>Welcome and Roundtable</b>                                                         | David Billedeau<br>(President and CEO;<br>CHA)                                   | Opening remarks; confirm meeting objectives and agenda; quick participant roundtable.                                                 |
| 1:05–1:15 PM | <b>Canadian Hydrogen Association</b><br>— <i>Update</i>                               | David Billedeau                                                                  | Provide CHA update; highlight current priorities, advocacy work, and sector developments.                                             |
| 1:15–1:45 PM | <b>Canadian Armed Forces</b><br>— <i>Update</i>                                       | Capt. Besmir Shurda<br>(Project Director,<br>Armoured Combat<br>Support Vehicle) | Update on Innovation for Defence Excellence and Security (IDEaS) program.                                                             |
| 1:45–2:15 PM | <b>Natural Resources Canada</b><br>— <i>Hydrogen Strategy Update</i>                  | Amandeep Garcha<br>(Deputy Director,<br>Hydrogen and Natural<br>Gas Division)    | Share hydrogen strategy updates; identify policy/investment implications and coordination opportunities.                              |
| 2:15–2:45 PM | <b>MAX Power Mining</b><br>— <i>Scaling Natural Hydrogen</i>                          | Rob Norris<br>(Director)                                                         | Table recommendations to advance domestic natural hydrogen production (Critical Minerals List + flow through shares).                 |
| 2:45–3:00 PM | Break                                                                                 |                                                                                  |                                                                                                                                       |
| 3:00–3:30 PM | <b>Solum Energy + Sea to Sky (SSES)</b><br>— <i>Hydrogen Contracts for Difference</i> | Tom Moise<br>(CEO)<br><br>Cora Moffat<br>(Research and<br>Development Engineer)  | Discuss hydrogen CfD design, market-support mechanisms, and how contract structures can improve bankability and investment certainty. |
| 3:30–4:00 PM | <b>Transition Accelerator</b><br>— <i>Foreign Direct Investment Report</i>            | Prachi Jangid<br>(Director of Low Carbon<br>Fuels)                               | Present foreign direct investment research; discuss implications for hydrogen projects and regional development.                      |

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## Government Participants:

| <u>Department</u>                            | <u>Stakeholder</u>                                                          | <u>Title</u>                                                                                                                                                                              |
|----------------------------------------------|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Canadian Armed Forces                        | Capt. Besmir Shurdha*                                                       | Project Director, Armoured Combat Support Vehicle                                                                                                                                         |
| Canada Infrastructure Bank                   | Cindy Xin                                                                   | Director, Asset Management                                                                                                                                                                |
| Canada Revenue Agency                        | Michael Sims                                                                | A/Industry Sector Specialist                                                                                                                                                              |
| Environment and Climate Change               | Jeff Heynen#<br>Mike Brophy#                                                | Executive Director, Cross Sectoral Energy Division<br>Project Engineer, Cross Sectoral Energy Division                                                                                    |
| Global Affairs Canada                        | Derek MacInnis<br>Ian Williams<br>Stefan Calimanu                           | Trade Commissioner - IPS Cleantech Demonstrations<br>D/ Director; Trade Commissioner - Clean Technology<br>Investment Officer                                                             |
| Innovation, Science and Economic Development | Eric Barker*<br>Isabelle Turcotte#<br>Nicholas Harrison#<br>Olivier Quirion | Manager, Hydrogen and Clean Energy Technologies<br>A/Director, Industrial Decarbonization<br>Policy Analyst, Industrial Decarbonization<br>Director, Automotive and Battery Supply Chains |
| National Research Council                    | Martin Tyrawskyj*                                                           | A/ Program Director, Materials for Clean Fuels Challenge Program                                                                                                                          |
| Natural Resources Canada                     | Amandeep Garcha*<br>Adrian Manlagnit<br>John Stronach<br>Maygan McGuire#    | Senior Manager, Natural Gas and Hydrogen Division<br>D/Director, Energy Innovation and Clean Technology<br>Senior Advisor, Hydrogen<br>Director of Engineering – Fuels Sector             |
| Treasury Board Secretariat                   | Kendra Todd*<br>Siobhan Mehrotra<br>Yves Madore                             | Senior Policy Analyst<br>Junior Analyst, Centre for Greening Government<br>Lead Advisor, Centre for Greening Government                                                                   |
| Transport Canada                             | Aaron Hoskin#                                                               | Deputy Director, Horizontal Initiatives                                                                                                                                                   |

## Industry Participants:

| <u>Company</u>                | <u>Stakeholder</u>                                                      | <u>Title</u>                                                                                                               |
|-------------------------------|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Canadian Hydrogen Association | David Billedeau<br>Maike Althaus<br>Nicolas Hilario*<br>Quinten Barker* | President and CEO<br>VP, Government Relations & Public Affairs<br>VP, Operations & Member Engagement<br>Policy Coordinator |
| Atlantic Hydrogen Alliance    | Derek Estabrook                                                         | Executive Director                                                                                                         |
| Ekona Power                   | Rachel Paterson*                                                        | Director, Government Relations                                                                                             |
| Fasken                        | Dan Brock                                                               | Lawyer; Chair, Government Relations & Strategy                                                                             |
| HTEC                          | Colin Armstrong<br>Terry Howe*                                          | President and CEO<br>VP, Commercial Development                                                                            |
| Hydrogen in Motion Inc.       | Grace Quan                                                              | Chief Executive Officer                                                                                                    |
| Hydrogène Québec              | Michèle Landry                                                          | Directrice Générale                                                                                                        |
| Linde                         | Michael Ashton*                                                         | Manager, Government Affairs                                                                                                |
| MAX Power Mining              | Alyssa Shivak<br>Janis Nett<br>Hon. Rob Norris                          | Manager, CEO Operations<br>Special Advisor to the CEO<br>Director                                                          |
| Ontario Power Generation      | Rhys Dumond                                                             | Senior Manager, Federal Government Relations                                                                               |
| Sea to Sky Energy Solutions   | Cora Moffat*                                                            | Project Engineer                                                                                                           |
| Solum Energy                  | Tom Moise*                                                              | Chief Executive Officer                                                                                                    |
| StormFisher Hydrogen          | Amelia Stastney<br>Matthew Small                                        | Manager, Policy & Advocacy<br>Senior Director, Technology & Policy                                                         |
| Transition Accelerator        | Prachi Jangid                                                           | Director, Low Carbon Fuels                                                                                                 |
| VOGTECH Renewables            | Gabriel Fono                                                            | Chief Executive Officer                                                                                                    |
| Yottawatt Energy Consulting   | Mike Zajmalowski                                                        | Principal Consultant                                                                                                       |

## **Canadian Hydrogen Association Federal Hydrogen Roundtable – Readout** **June 25, 2026 | Ottawa**

*Hosted by the Canadian Hydrogen Association (CHA)*

The Canadian Hydrogen Association convened its Federal Hydrogen Roundtable on June 25, 2026, bringing together representatives from federal departments, industry, research organizations, and the investment community to discuss the current state of Canada's hydrogen sector, emerging policy priorities, and opportunities to strengthen domestic market development. Discussions focused on defence applications, the federal Hydrogen Strategy, natural hydrogen, market creation mechanisms, and attracting investment into the Canadian hydrogen economy.

### **Canadian Armed Forces: Hydrogen for Defence and Energy Security**

Capt. Besmir Shurdha provided an update on the Canadian Armed Forces' hydrogen initiatives, emphasizing that hydrogen is being pursued as a strategic capability to enhance NATO's long-term competitive advantage and reduce dependence on conventional fuel supply chains.

Significant progress has been made over the past year. The IDEaS Challenge for solid-state hydrogen storage has selected eleven proposals, while the National Research Council has completed a feasibility study confirming the viability of hydrogen-powered light armoured vehicles, and the Canadian Army is now seeking funding to develop a TRL-6 vehicle demonstrator. The CAF is also collaborating with the Canadian Coast Guard on decarbonization initiatives and is participating in NATO's Energy Supply Chain Resilience collaboration. A workshop related to the IDEaS Challenge will take place on July 14.

Participants noted that while the Canadian Army has innovation funding available to advance successful technologies, broader federal policy support will be required as projects mature. Key needs identified included federal funding for large-scale hydrogen production, continued support for promising technologies, and stronger engagement with industry to enable commercialization and manufacturing at scale. It was also noted that current academic research regarding solid state hydrogen focuses on hydrogen pellets or thermally activated storage systems, while comparatively little work is being undertaken on solid-state hydrogen storage—an area considered particularly important for defence applications. Given operational requirements, the CAF can generally only work with technologies that have reached TRL 6 or higher.

### **Natural Resources Canada: Hydrogen Strategy Progress Report**

Natural Resources Canada provided an update on the federal Hydrogen Strategy. It was noted that NRCAN will not be releasing a fully revised strategy. However, NRCan continues to track progress across all Hydrogen Strategy pillars and recommendations, as well as developments in changing market conditions and lessons learned since the original strategy was released, that could form the basis for reporting on progress in the future. The discussion highlighted an increased emphasis on domestic hydrogen deployment alongside export opportunities, reflecting current market realities.

Officials acknowledged that hydrogen market development has progressed more slowly than originally anticipated. Hydrogen production costs have not declined as quickly as expected, project development has slowed, and demand growth remains below earlier projections. Limited infrastructure continues to constrain new production projects, while insufficient demand remains the principal challenge facing the sector.

NRCan also noted that geopolitical developments, including instability in the Middle East, have renewed interest in alternative fuels and energy security. Canada continues to monitor international policy developments, including the execution of international H2Global auctions and Germany's implementation of the Renewable Fuels of Non-Biological Origin (RFNBO) framework, before determining future policy directions.

Discussion focused on the continued "chicken-and-egg" challenge facing the sector. NRCan indicated that the federal government is seeking to avoid creating stranded assets by ensuring sufficient long-term market conditions exist before supporting large-scale deployment.

### **MAX Power: Scaling Canada's Natural Hydrogen Opportunity**

MAX Power Mining presented an update on its natural hydrogen exploration activities in Saskatchewan. The company now holds approximately 1.3 million acres under permit and is advancing multiple drilling programs, including sites northwest of Moose Jaw and near the Saskatchewan–Montana border. Potential domestic offtake opportunities include fertilizer production, potash operations, and nearby defence facilities. The company has also secured significant private investment, including approximately \$10 million from Vietnamese investors and a recent \$20 million investment from Eric Sprott.

The presentation highlighted Saskatchewan's favourable geology, where impermeable potash and salt formations create conditions suitable for hydrogen accumulation.

Policy discussion focused on ensuring natural hydrogen is recognized within Canada's Clean Hydrogen Investment Tax Credit. Participants emphasized that naturally occurring hydrogen should receive equivalent treatment to manufactured low-carbon hydrogen.

### **Solum Energy and Sea to Sky Energy Solutions: Hydrogen Market Guarantees**

Solum Energy and Sea to Sky Energy Solutions presented potential market support mechanisms designed to address the investment gap facing Canada's hydrogen sector. The discussion emphasized that revenue certainty remains the single largest barrier to project development. Existing international approaches—including the UK's Hydrogen Contracts for Difference, Germany's Carbon Contracts for Difference, the European Hydrogen Bank's fixed-premium auctions, and H2Global's double-sided auction model—were reviewed, highlighting the strengths and limitations of each.

While UK-style Hydrogen Contracts for Difference have provided price certainty for producers, presenters noted they have had limited impact on stimulating demand. Germany's Carbon Contracts for Difference were identified as an effective tool for industrial decarbonization but remain exposed to carbon market volatility. Fixed-premium auctions successfully encourage competition but leave demand risk largely with producers.

The presenters suggested that H2Global's double-sided auction model currently represents the most comprehensive approach because it addresses both supply- and demand-side risk. Building on these lessons, they proposed a Canadian Hydrogen Market Guarantee in which government would act as an intermediary, effectively backstopping the price differential between producers and customers through a dedicated special purpose vehicle. Such a mechanism would provide long-term price certainty for both parties while enabling government support to decline over time as markets mature.

## **Transition Accelerator: Hydrogen FDI and Canadian Market Formation**

The Transition Accelerator presented preliminary findings from its report on Hydrogen Foreign Direct Investment (FDI) and Canadian Market Formation.

The research concludes that Canada has been highly successful in attracting hydrogen-related foreign direct investment and remains well positioned to attract additional international capital. However, investments continue to depend heavily on reliable offtake opportunities and sufficient economies of scale.

The report also found that Canada performs strongly in hydrogen innovation but continues to face challenges commercializing and scaling domestic technologies. Many large hydrogen projects rely heavily on imported technologies, limiting domestic value creation. Joint ventures were identified as an effective pathway for accelerating deployment, although stronger connections between foreign investment and Canadian suppliers will be required to maximize economic benefits.

Participants also discussed the continued importance of hydrogen hubs in supporting early market formation and enabling coordinated supply and demand development. Country assessments examining hydrogen investment opportunities with Japan, South Korea, and Taiwan are expected later this year.

## **Overall Discussion**

Across all presentations, several common themes emerged. Participants agreed that demand creation remains the primary barrier to hydrogen deployment in Canada. While Canada continues to possess strong technology capabilities, abundant resources, and significant investment interest, commercialization will require stronger policy mechanisms that reduce market risk, support domestic deployment, and provide long-term investment certainty.

There was broad consensus that future policy should increasingly focus on market formation rather than production alone. Strategic government support—including demand-side incentives, market guarantee mechanisms, infrastructure investments, and commercialization funding—will be essential to bridge the gap between innovation and large-scale deployment while strengthening Canada's energy security, industrial competitiveness, and economic resilience.

# Canadian Hydrogen Association

## – *Update*

Federal Hydrogen Roundtable



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# Recent Activities

## — Sector Developments Since Our Last Meeting



### Federal Engagement:

- 04-2026 – Pre-Budget Submission to FINA
- 04-2026 – Witness testimony to RNNR on energy exports
- 05-2026 – Fuel Lifecycle Assessment Updates to Grid Electricity
- 05-2026 – Conservative Auto Caucus
- Upcoming:
  - *Ministerial sector brief*
  - *Multi-association letter on Clean Economy ITCs*

### Provincial Engagement:

- 04-2026 – Alberta Advocacy Day
- 03-2026 – British Columbia Advocacy Day
- Ongoing: BC H2 Strategy Refresh Consultations
- Upcoming: Ontario Advocacy Day

### Industry Engagement:

- 03-2026 – H2&FC Expo in Japan
- 04-2026 – Hydrogen East / Smart Energy Conference
- 04-2026 – Canadian Hydrogen Convention
- 05-2026 – CHA Webinar: Unlocking Canada's Hydrogen Export Potential
- 05-2026 – International Hydrogen Development Symposium in Hong Kong
- 06-2026 – Korea-Canada Hydrogen Cooperation Forum

### Industry News:

- 06-2026 – CHARBONE secures Long-Term Hydrogen Supply Contract with Hone Inc.
- 06-2026 – Korea announced #3.1B "Project Beaver"
- 05-2026 – MAX Power Mining Corp secured a \$25 million investment to accelerate drilling, modelling, and commercialization of its natural hydrogen discovery at the Lawson Complex.
- 04-2026 – Hydrogen In Motion Inc. (H2M) selected as one of 150 companies joining the NATO DIANA 2026 Challenge Program Cohort.

### Upcoming Trade Missions and Conferences:

- 09-2026 – Hyvolution Chile
- 09-2026 – Hyvolution Canada
- 09-2026 – Carbon Capture Canada
- 09-2026 – Webinar: Canada's Hydrogen Hubs
- 10-2026 – Energy Taiwan and Net-Zero Taiwan
- 10-2026 – Electricity Transformation Canada
- 11-2026 – Webinar: Investing in Hydrogen
- 11-2026 – World Hydrogen Expo in South Korea
- Q4 – Canada-California Hydrogen Forum

# Federal Policy Priorities

## — *Areas of Focus*

*Ramp Up Production  
via the Clean  
Hydrogen  
Investment Tax  
Credit*

*Build Demand for  
Hydrogen and  
Hydrogen-Enabled  
Mobility*

*Create a Hydrogen  
Innovation,  
Demonstration, and  
Scale Up Fund*

*Strengthen  
Domestic  
Manufacturing*

*Enable Hydrogen  
Export  
Infrastructure  
and Logistics*

# Proposed Updates to Canadian Grid Electricity Metrics

## — Key Concerns

Table 1: CIs for the grid electricity processes

| Data Library Process           | CI in the August 2024 version of the Model (g CO2e/kWh) | Proposed CI for the 2026 version of the Model (g CO2e/kWh) |
|--------------------------------|---------------------------------------------------------|------------------------------------------------------------|
| Electricity, from grid [CA]    | 132.7                                                   | 131.4                                                      |
| Electricity, from grid [CA-AB] | 598.8                                                   | 499.7                                                      |
| Electricity, from grid [CA-BC] | 38.91                                                   | ★ 46.00                                                    |
| Electricity, from grid [CA-MB] | 26.28                                                   | 29.15                                                      |
| Electricity, from grid [CA-NB] | 326.3                                                   | 176.3                                                      |
| Electricity, from grid [CA-NL] | 46.41                                                   | 45.85                                                      |
| Electricity, from grid [CA-NS] | 735.0                                                   | 521.7                                                      |
| Electricity, from grid [CA-NT] | 207.5                                                   | 542.5                                                      |
| Electricity, from grid [CA-NU] | 1044                                                    | 1044                                                       |
| Electricity, from grid [CA-ON] | 42.28                                                   | ★ 78.58                                                    |
| Electricity, from grid [CA-PE] | 4.063                                                   | ★ 231.7                                                    |
| Electricity, from grid [CA-QC] | 16.89                                                   | ★ 23.94                                                    |
| Electricity, from grid [CA-SK] | 785.0                                                   | 648.2                                                      |
| Electricity, from grid [CA-YT] | 99.64                                                   | 95.03                                                      |

- **Reduced Incentives:** Proposed CI increases significantly narrow the pool of projects eligible for top-tier CHITC funding.
- **Regional Inequity:** Previously low-carbon grids (e.g., ON, QC, BC) face disproportionate impacts, limiting hydrogen project viability.
- **Investment Uncertainty:** Higher modelling baselines penalize provinces, reducing sector-wide capital certainty.
- **Competitiveness Gap:** Adoption risks stripping provinces of globally competitive incentive levels, hindering project deployment.

CANADIAN  
**ARMY**



**ARMÉE**  
CANADIENNE

# CAF Hydrogen Update

Capt Besmir Shurdha

CHA Federal Hydrogen Roundtable

26 June 2026

**STRONG. PROUD. READY.**

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Défense  
nationale

CANADIAN  
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Canada

# Agenda

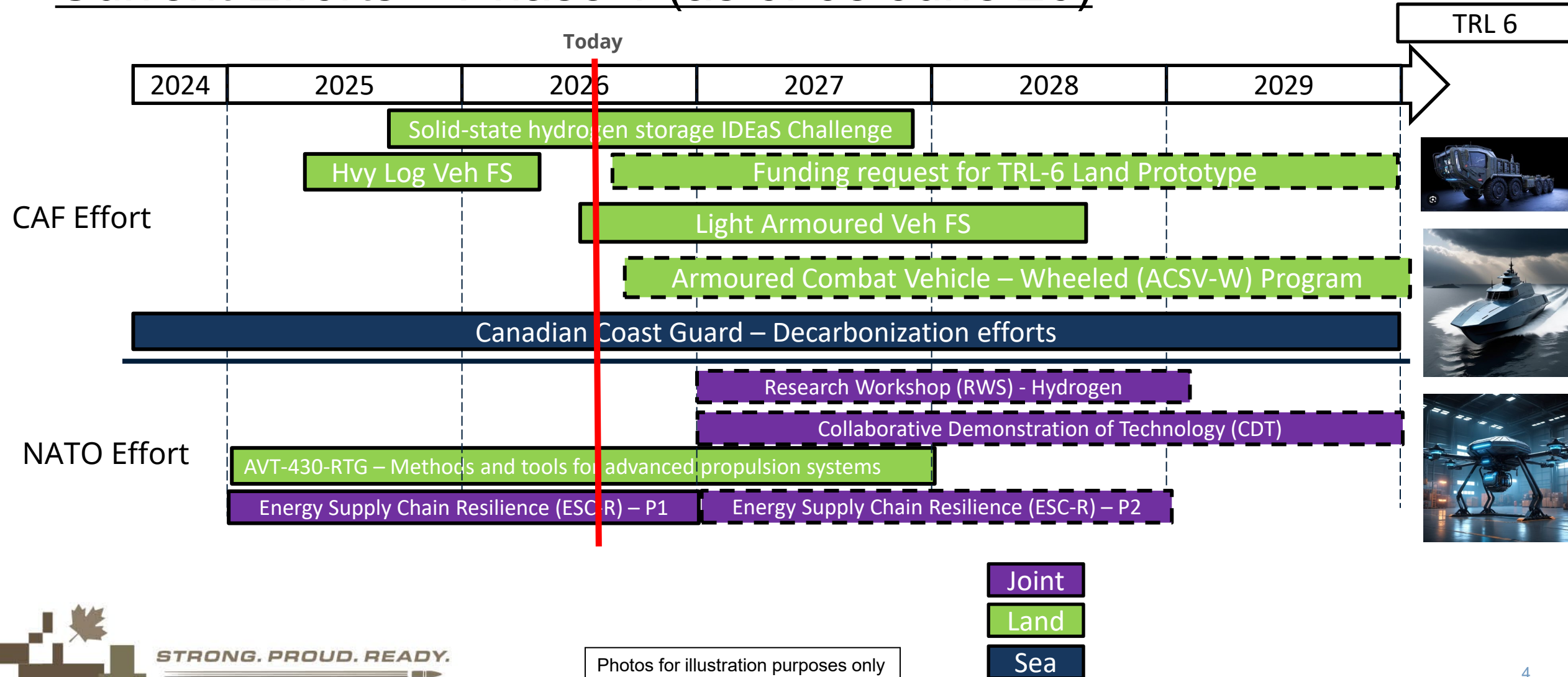
- » BLUF
- » Road Map
- » Updates
- » Conclusion
- » Questions

# Bottom Line Up Front

1. **Mission:** Replace fossil fuels with hydrogen to achieve **NATO competitive advantage over peer adversaries** NLT 2050.
2. **Intent:** Use hydrogen as a single molecule to replace the mix of fossil fuels. Hydrogen to act as a logistics vector to transport energy and water. Need to solve production, storage, and end use problems.
3. **Execution:** 3 Phases
  1. Phase 1 – Find a solid-state hydrogen storage system and develop TRL-6 prototypes.
  2. Phase 2 – Develop a hydrogen ecosystem that connects production, storage, transportation, and end use.
  3. Phase 3 – Design, procure, and field hydrogen powered platforms for land, sea, air and infrastructure.
4. **Main effort:** Demonstrating the viability of the hydrogen ecosystem.
5. **End-state:** When hydrogen has completely replaced fossil fuels for NATO.

# Road Map

## Current Efforts – Phase 1 (as of 08 June 26)



# Updates

1. **IDEaS challenge.** [Powering the future: Solid-state hydrogen storage for military platforms - Canada.ca](#). 11 proposals selected. 9 at TRL1-3 and 2 at TRL 4-5.
2. **Logistics Vehicle Feasibility Study:** Completed. [Low to zero-emission heavy logistics vehicle feasibility report - NRC Publications Archive - Canada.ca](#). Hydrogen is feasible for a military mission profile.
3. **LAV Feasibility study:** RFP published on Canada Buys. Start date 1 September. End March 2028.
4. **Logistics Vehicle TRL-6 Demonstrator:** Funding requested through the Canadian Army Experimentation and Innovation team. TBC. Joining the team as of 10 Aug.
5. **Hyundai Corporation:** Interested in collaborating and entering the Canadian Defence Market. Discussion during CANSEC.

# Conclusion

- » IDEaS announcement is the starting gun for the race to find the next gen solid-state hydrogen storage.
- » CA has innovation funding that will be lined up to support the proposals that deliver results.
- » Need federal hydrogen policy and funding to be ready to support promising technologies.
- » Need to engage with finance and large businesses to support mass production.
- » Start the communication and change management effort right now. Counter-messaging has already started.

# Final Thoughts



**We are here**

Sapere Aude!

## Contact Info

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HYDROGEN

**Lawson Discovery**  
*Genesis Trend, Saskatchewan*

Ran Narayanasamy, CEO

**New Nation-Building Clean Energy Project  
Next to World's Largest Potash Mines**

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***Canada's Leader in Natural  
Hydrogen Exploration &  
Development***



**natural**  
HYDROGEN

# MAX Power's Leadership Team



**Ran Narayanasamy, P.Eng., MEng, MBA, CEO**

Nearly 2 decades at SaskPower and 4 years as CEO of Petroleum Technology Research Centre (PTRC)



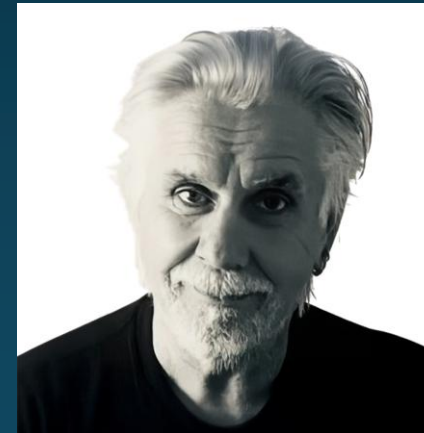
**Neil McMillan, Chairman of the Board**

Former Chairman of the Board at Cameco, world's most valuable Uranium company at \$72 billion



**Hon. Rob Norris, M.A., E.C.S., Director**

MLA & Senior Cabinet Minister, Brad Wall Govt. (2007-2016)



**Steve Halabura, Chief Geoscientist**

One of Saskatchewan's foremost geological experts

# Why MAX Power?

- The right team, highly favourable geology, unmatched scale of opportunity, powerful momentum
- Compelling early results: **Canada's first-ever drilling discovery of a Natural Hydrogen system** with basin-scale continuity potential \*
- Saskatchewan features Canada's most advanced policy framework for Natural Hydrogen exploration and development
- MAX Power's Natural Hydrogen success has delivered the first major investment into Saskatchewan from Vietnam (Bitexco Group)
- Eric Sprott, one of the world's most famous and respected precious metal investors, has made MAX Power his first investment in Natural Hydrogen and the broader clean energy sector

\*Achieving these results on an initial well in an area with no previously recorded Natural Hydrogen occurrences is statistically improbable — in the absence of a well-developed and actively charged system. This suggests Lawson is part of a larger, functioning Natural Hydrogen accumulation rather than an isolated occurrence.

# Project Milestones Achieved

- **Drilling confirmation** of Canada's first-ever Natural Hydrogen system on Genesis Trend in Saskatchewan
- **Free gas flow to surface**, robust initial pressures, strong reservoir drive, hydrogen concentrations up to 286,000 ppm, and potential for value-added Helium
- **Extension of the Genesis Trend** to 475 km and identification to date of 80+ target areas - many with similar features to Lawson
- **Additional trends** and multiple "play concepts" developed across the province where MAX Power has assembled 1.3 million permitted acres with another 5.7 million acres under application
- **Second well** at Bracken in southwest corner of province now underway as MAX accelerates a multi-well drill program
- **Development of the AI-assisted MAXX LEMI model**, a proprietary targeting tool for Natural Hydrogen discoveries not only in Saskatchewan but across Canada and the world
- **Discussions with multiple potential strategic partners** and end users, including Indigenous groups
- **Proven leadership team** that has created the world's most valuable publicly-traded Natural Hydrogen company, generating jobs and new resource wealth for Saskatchewan and Canada

***MAX Power is Making Canada a Superpower in Natural Hydrogen***

# Genesis Trend 475 km

Lucky Lake Target Area

Lawson  
Discovery

Industrial Corridor  
*Proposed Hydrogen Hub*

Regina

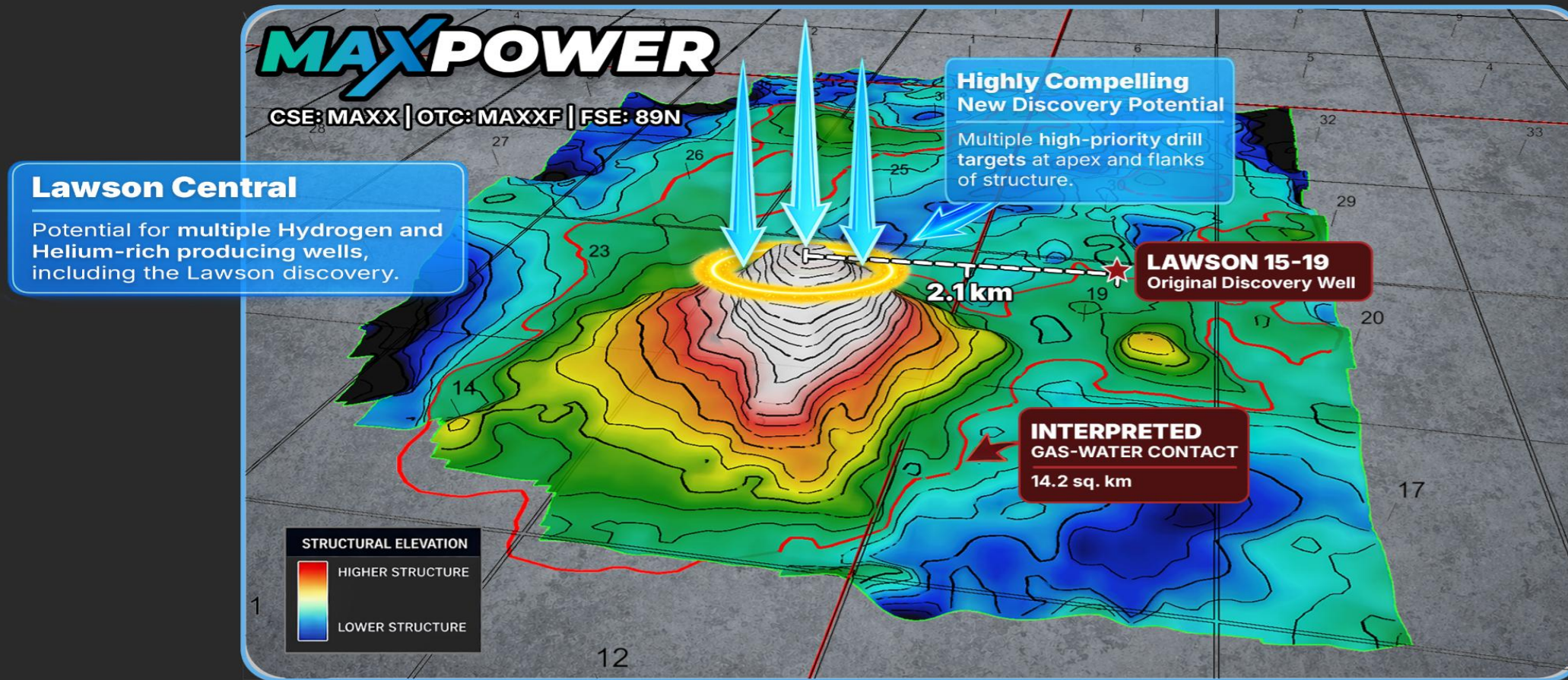
*Original 200-km-long Genesis Trend now extends a further 275 km to SE to new Radville focus area for a total length of 475 km as per Nov. 3, 2025 NR.*

200 km

Natural Hydrogen Prospect Leads

# MAX POWER DEFINES LARGE-SCALE STRUCTURAL UPSIDE AT LAWSON

3D seismic confirms a 14.2 sq. km structurally elevated target with 80-100m of relief above Lawson 15-19



## POTENTIAL LARGE-SCALE EXPANSION OF CANADA'S FIRST SUBSURFACE NATURAL HYDROGEN SYSTEM

Map illustrating the expanded Lawson Central structure, with a 14.2 sq. km closure, multiple high-priority drill targets, and the original Lawson discovery, all within the broader 28 sq. km Lawson Complex.

# Technology (AI) Advantage

**MAX Power has developed MAXX LEMI, a proprietary, AI-powered Large Earth Model Integration**

MAXX LEMI integrates massive amounts of subsurface and geologic data to systematically identify and de-risk Natural Hydrogen targets with potential for global application

# ITC Clean H2 Tax Credits

**Natural (or white) hydrogen is not included in the Clean Hydrogen Investment Tax Credit (ITC).**

**The Canadian Clean Hydrogen ITC only applies to manufactured hydrogen produced through specific approved pathways that require significant capital-intensive processing and emissions abatement equipment.**

**While FTS is fundamentally a federal tax structure, provincial matching credits make them highly lucrative to retail investors. Target energy-friendly jurisdictions like Saskatchewan and Quebec, where companies like MAX Power Mining and others are actively setting up exploration footprints.**



CSE: **MAXX** • OTC: **MAXXF** • FRA: **89N**

***Canada's Leader in Natural  
Hydrogen Exploration &  
Development***

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**natural**  
HYDROGEN

***Thank you! Questions?***

# Hydrogen Market Guarantees

## — Agenda



1. The problem: the FID gap
2. The solar precedent: operational subsidies work.
3. Where it is working: global offtake mechanisms.
4. The proposal: Hydrogen Market Guarantees.
5. Key themes and project-level impact.



# Hydrogen Market Guarantees

## — *The Problem*



Clean hydrogen supply exists but the bottleneck is the absence of bankable, committed offtake

### Projects are willing and able to supply

- Technology is proven with electrolyzers, SMR+CCS, gasification all at commercial scale
- Capital is available where revenue certainty exists
- Canadian project pipelines are large but stalled
- New market with new players and complex value chains do not have provide the bankability required from users to invest to switch

### The missing piece: a bankable offtaker

- Lenders require predictable 10–20 year contracted revenue before financing a project
- Industrial buyers won't sign long-term contracts without price protection
- Without both sides committed, FID cannot be reached, i.e. the chicken-and-egg problem

# 3.5 kt

clean hydrogen deployed in Canada  
vs. 5+ Mt under development

Project are ready to enter into production and use applications but lack of certainty in length and pricing of offtake contracts is missing

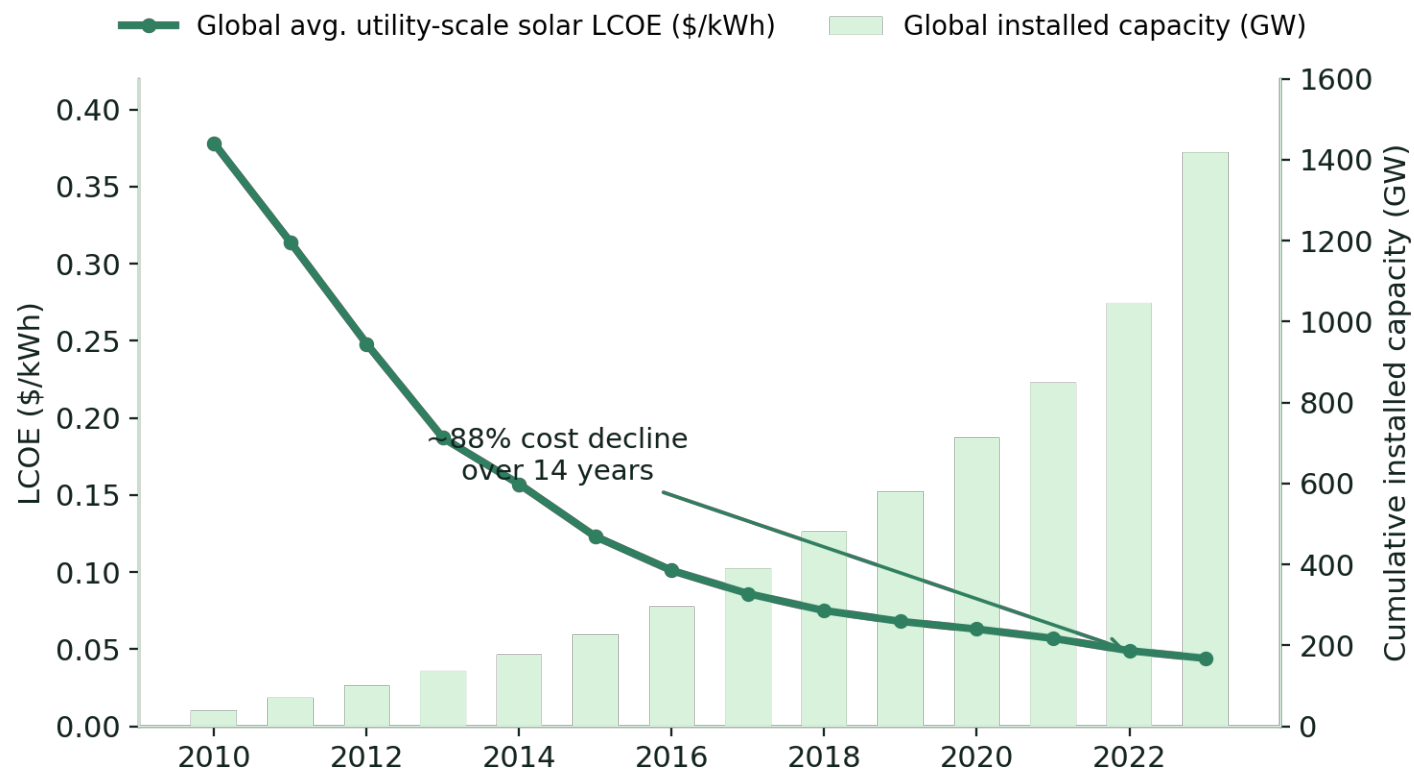
The FID gap is not a technology problem or a cost problem, it is a market structure problem. Government has a direct role in solving it.

# Hydrogen Market Guarantees

## — *The Solar Precedent*



Operational subsidies are the key tools to grow the market  
Feed-in tariffs gave investors revenue certainty → costs fell 88% in 14 years



### What feed-in tariffs did

- Guaranteed a fixed revenue per kWh for 15–20 years
- Removed price risk for lenders — projects could be financed
- Costs fell ~88% in 14 years as production scaled

### Why hydrogen is different

- Solar's demand was already there, electricity grids are large, willing buyers and single point of sale.
- Hydrogen has no equivalent guaranteed offtaker, industrial customers need their own price protection
- A supply-only guarantee is not enough: both sides need certainty

The policy lesson: an instrument that fixes the price gap, not the technology, and lets the market do the cost reduction. Hydrogen needs the same logic applied to both producer AND customer.

# Hydrogen Market Guarantees

## — Global Offtake Mechanisms



Five+ approaches are in use globally: each addresses a different part of the cost gap

| Framework                   | Example                                    | Risk addressed                 | Maturity      |
|-----------------------------|--------------------------------------------|--------------------------------|---------------|
| Two-way production CfD      | UK Hydrogen Allocation Rounds              | Supply (producer revenue)      | Moderate      |
| Carbon CfD (CCfD)           | Germany industrial fuel-switching auctions | Demand (industrial offtake)    | Early         |
| Fixed-premium auction       | EU Hydrogen Bank                           | Supply (per-kg output)         | Growing       |
| Double-auction intermediary | H2Global                                   | Supply + demand (cross-border) | Best to date  |
| Production tax credit       | US IRA Section 45V                         | Supply (investment signal)     | Strong uptake |

Main Goal

Provide market and pricing certainty → Fix the demand risk



# Hydrogen Market Guarantees

## — *Strengths and Gaps*

Each model trades off investor certainty, fiscal cost, and demand creation



### Two-way production CfD (UK HAR)

- + Strong investor revenue certainty
- + Government recaptures upside
- Does not create demand
- Cost-reduction record weaker than power CfDs

### Carbon CfD (Germany)

- + Directly stimulates industrial offtake
- + Subsidy self-tapers with carbon price
- Only works inside ETS sectors
- Exposed to carbon market volatility

### Fixed-premium auction (EU Hydrogen Bank)

- + Competitive price discovery
- + Pays only for certified output
- Demand risk stays with producer
- No reference market price yet

### Double-auction (H2Global)

- + Covers supply and demand risk
- + Enables cross-border trade
- High fiscal cost to government
- Complex governance, intermediary dependent

Key  
Message

No system is perfect but the opportunity to learn from each is prime



# Hydrogen Market Guarantees

## — *The Proposal*



One agreement, three parties where the government acts as a clearing house between two payment flows



Producer repays surplus above strike → Government SPV → covers customer's green premium vs. grey

### Fulfilling the value chain needs:

#### Producer

- Offtake contract 10+ years
- Predictable long-term revenue backed by government.

#### Government SPV

- Energy security and diversification
- Hydrogen strategy targets met and investment attraction
- Repayable model that allows for market growth and repayments once reached

#### Customer

- Fossil fuel benchmark and parity to remain competitive in their sector.
- Price certainty
- Security of supply allowing for CAPEX investment for switching

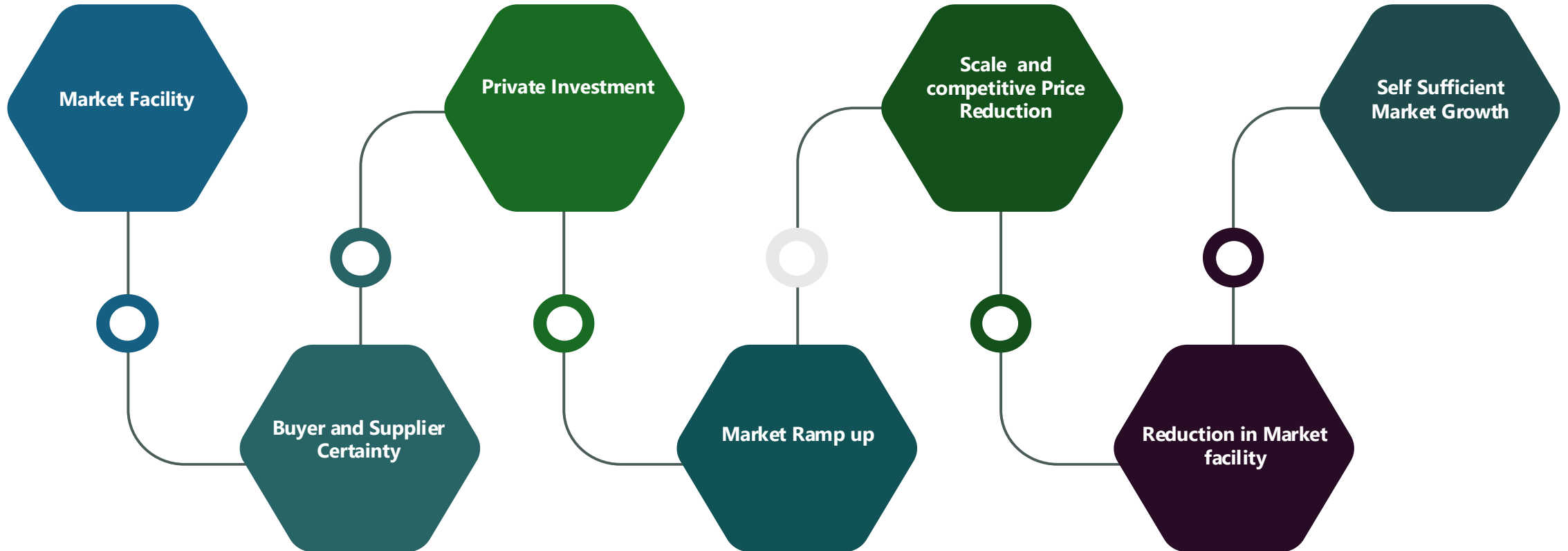
Backstop and cost netting framework satisfying long term certainty and risk between all parties

# Hydrogen Market Guarantees

## — *Market Growth*



Creating a self-sustaining market starts with sufficient certainty to ramp up



Other Markets have done it successfully. Canada needs to step up or will fall behind like it did in 2021 with investments to the USA under IRA or with LNG



# Hydrogen Market Guarantees

— *Thank-You*



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# HYDROGEN FDI AND CANADIAN MARKET FORMATION



May 2026

# Hydrogen FDI and Canadian Market Formation

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The team would like to thank David Billedeau and Nicolas Hilario from the CHA for their contributions throughout the report. The authors would like to thank CHA members and regional hydrogen hub leads across Canada for their critical inputs to this FDI study. This project is funded in part by the Government of Canada through the CanExport Community Investments program.

## About The Transition Accelerator

### Our Objective

The energy transition is disrupting global power. The Transition Accelerator is here to help Canada win — **economically** and **geopolitically**.

### Our Work

The Transition Accelerator drives projects, partnerships, and strategies to ensure Canada is competitive in a carbon-neutral world. We're harnessing the global shift towards clean growth to secure permanent jobs, abundant energy, and strong regional economies across the country.

We work with 300+ partner organizations to build out pathways to a prosperous low-carbon economy and avoid costly dead-ends along the way. By connecting systems-level thinking with real-world analysis, we're enabling a more affordable, competitive, and resilient future for all Canadians.

### Our Unique Approach

- › We **understand the current system in practice**, not just in theory, identifying barriers to innovation and opportunities for change.
- › We bring together industry, labour, government, Indigenous and other leaders to **define shared visions of success** for their sectors, regions, or communities.
- › We mobilize partners to **develop pathways to get there**, understanding and refining them to ensure they are credible, capable, and compelling.
- › We turn ideas into action and **take steps down those pathways** by launching projects and partnerships to build a more competitive future.

For more information or interview opportunities please contact [communications@transitionaccelerator.ca](mailto:communications@transitionaccelerator.ca)

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# Executive Summary

Canada is well positioned in parts of the emerging hydrogen economy, but investment conditions remain uneven across technologies, markets and project types. Canada already has a sizeable hydrogen production base and ranks among the larger producers globally, with output of roughly 4 million tonnes per year.<sup>1</sup> For now, most of that production still comes from conventional pathways, and virtually all H<sub>2</sub> is used as an industrial feedstock for the petroleum and chemical industries, not as an energy carrier serving end-use markets.

At the same time, the global market for low-carbon hydrogen remains at an early stage of commercial development. Low-carbon hydrogen accounts for less than 1% of global production.<sup>2</sup> Production remains largely co-located with industrial demand. This reflects an important distinction in hydrogen use: as an industrial feedstock, it is typically produced and consumed on-site or near demand; as an energy carrier to displace fossil fuels such as diesel, natural gas, or gasoline, uptake depends not only on production cost but also on the cost of purification, transport, storage, and delivery. International trade is still limited, and only a small share of announced projects has reached final investment decision.

Foreign direct investment (FDI) is part of this story, but its role in Canada's hydrogen sector needs to be assessed carefully. To date, Canada has attracted a notable share of global hydrogen FDI, but that investment has been concentrated in a small number of large projects based on autothermal reforming with carbon capture and storage. At the same time, much of the hydrogen investment that has advanced globally has been financed domestically for domestic projects. This raises a more practical question for Canada: **where can foreign participation materially support hydrogen market development, and where are other barriers more decisive?**

This report examines cross-border hydrogen FDI patterns, using the IEA's Hydrogen Production and Infrastructure Projects Database,<sup>3</sup> and considers what these patterns suggest about investable opportunities in Canada's hydrogen sector, with a brief discussion of implications for FDI attraction and selected CHA 2026 trade mission markets. **Drawing on a scan of global hydrogen FDI activity, survey responses from 28 CHA members and seven hydrogen hub or hub-like entities, and detailed interviews with 13 CHA members,** it examines where foreign investment is valuable in advancing Canada's hydrogen sector, or where the more fundamental challenge is the weak connection between Canadian technology innovation, domestic deployment, and market formation.



## Key Findings

### Key Finding 1:

#### **Canada stands out for the amount of inbound hydrogen FDI**

Roughly one-fifth of global hydrogen investment is cross-border, with the larger pattern being domestic capital investing in domestic projects. Canada ranks as the 2nd largest recipient in attracting a share of hydrogen FDI, but inflows are concentrated in a small number of large projects, primarily in blue hydrogen, rather than flowing broadly across the value chain or supporting domestic market development.

### Key Finding 2:

#### **Hydrogen investments need offtake economies of scale**

The absence of reliable offtake was consistently identified as the main constraint on investment. The most credible demand base today is domestic industrial offtake in co-located applications, while exports and transport demand remains uncertain. Transport investment is further hindered by limited incentives for distribution infrastructure, such as liquefaction, and by the expiration of demand-side supports that are out of sync with existing supply-side policies.

### Key Finding 3:

#### **There is a misconnect between domestic technology suppliers and deployment.**

Canada is strong in hydrogen innovation in specific technology areas but has trouble scaling up firms and translating that innovation into domestic deployment. Hydrogen projects in Canada often deploy or plan to rely significantly on non-Canadian technology, and linkages between investment, deployment, and domestic supplier development remain weak, limiting domestic value capture.

If Canada wants foreign direct investment to matter for domestic market formation, it needs to do more than attract capital into isolated projects. It needs to create the conditions under which domestic capital moves earlier, foreign capital follows as projects advance, domestic industrial offtake provides demand certainty, and deployment creates customers for Canadian technology suppliers rather than bypassing them.

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# Hydrogen FDI and Canadian Market Formation

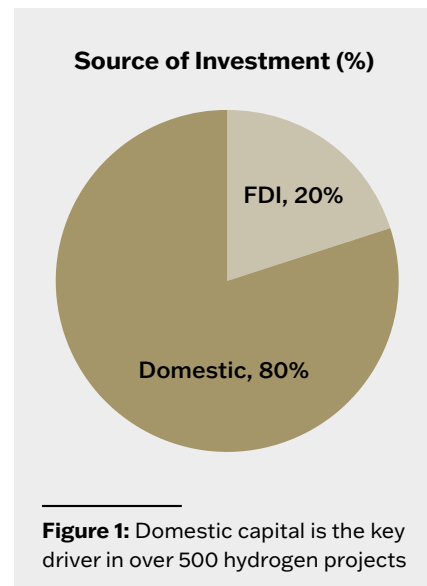
This section presents the three key findings from our analysis of hydrogen investment in Canada, highlighting where foreign direct investment (FDI) has been successful, the conditions needed to support broader market formation, and the role of domestic technology deployment. It also summarizes the factors shaping investment and includes select survey responses in the appendices.

## Key Finding 1:

### Canada stands out for the amount of inbound hydrogen FDI

**Canada has done relatively well in attracting a small share of global hydrogen FDI, but that success is concentrated in a narrow set of projects and does not yet amount to broad domestic market formation.**

**a. Most global hydrogen investment is domestic capital investing in domestic projects.** Most recent estimates state that \$110 billion USD<sup>4</sup> in hydrogen production investments had cleared the final investment decision stage (FID) as of late 2025, covering more than 500 projects. Review of the top 100 projects, which account for roughly 95 percent of projected capacity, suggests that only about \$20.7 billion USD of that total is cross-border investment (see Figure 1). In other words, roughly one-fifth of global hydrogen investment is FDI, but the larger pattern is still domestic capital investing in domestic projects.



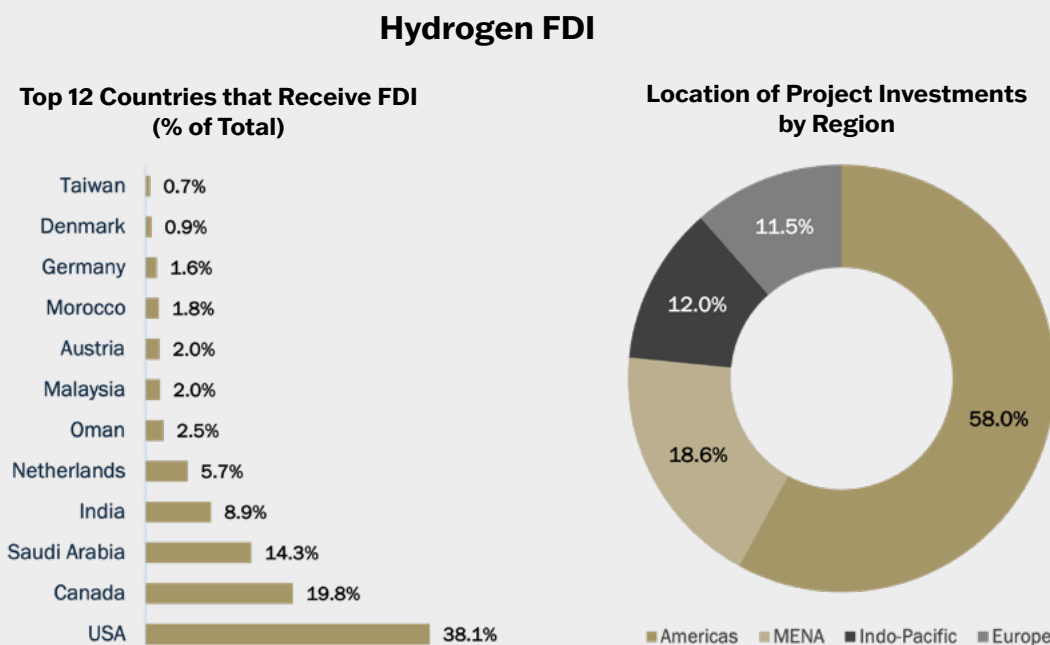
**b. The global pattern is uneven across regions.** Of the \$110 billion that has cleared FID, roughly \$33 billion has been committed by China, \$23 billion by North America, and \$19 billion by Europe. The near totality of hydrogen investment in China appears to come from Chinese domestic capital. Europe shows greater cross-border investment flows, though significant amounts of capital still remain invested within national origin. North American firms invest abroad, but many domestic hydrogen projects in North America are also financed with domestic capital.

The largest sources of hydrogen FDI globally are the United States, followed by the UK/Ireland, Japan, Australia, and the UAE. This does not mean these countries are the largest investors in hydrogen globally. Most of China's investment and much of the Gulf's clean hydrogen investment comes from

domestic capital. These five countries are simply the top sources of foreign investment. The prominence of the US and UK/Ireland reflects the global leadership of companies such as Linde and Air Products, which have successfully developed major industrial offtake projects around the world. The UAE has also played an important role in supporting large green hydrogen projects in India, Oman, and Austria, contributing to the growth of the global hydrogen economy.

**c. Canada does well going after this relatively small pool of hydrogen FDI.**

Canada ranks highly as the 2nd largest recipient for FDI in hydrogen, but the inflows are narrow and concentrated (see Figure 2). Investments have primarily gone to a small number of large-scale blue hydrogen projects, particularly in petrochemicals and refining where it substitutes for existing process hydrogen use, rather than to broad-based market formation for hydrogen as an energy carrier across end-use sectors and for domestic technology deployment.

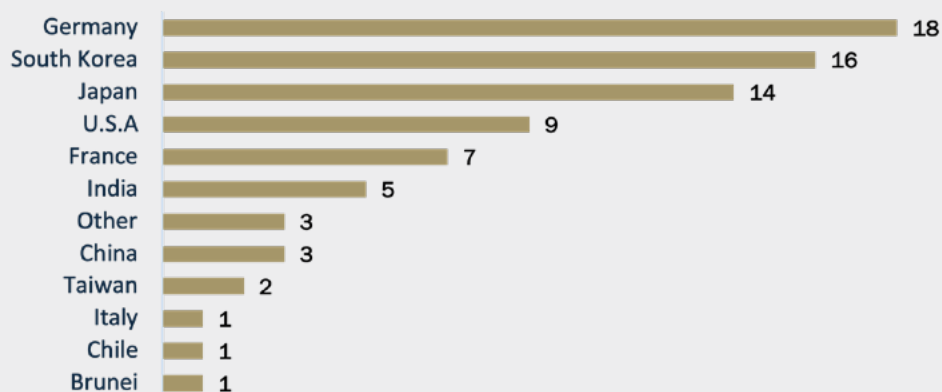


**Figure 2:** Top countries receiving hydrogen FDI and location of project investments by region

**d. Expectations for future inbound FDI are concentrated in a small number of strategic partner markets.**

Survey respondents identified Germany, South Korea, Japan, and the United States as the most promising source countries for inbound hydrogen investment into Canada over the next 3–5 years (see Figure 3). This expectation is also consistent with recent developments: in January 2026, the Canada-Germany H2Global auction cleared a major regulatory milestone with EU approval for Germany’s €200 million contribution to a joint auction for Canadian renewable hydrogen and derivatives.<sup>5</sup> In March 2026, Canada and Japan launched a new Comprehensive Strategic Partnership and Roadmap that includes energy security, trade, investment, and supply-chain cooperation.<sup>6</sup> Similarly, South Korea recently deepened industrial cooperation with Canada with Hyundai signaling openness to strategic hydrogen partnerships in Canada.<sup>7</sup>

### Respondent ranking of the most promising source countries for inbound hydrogen investment



**Figure 3:** Most promising source countries for inbound hydrogen investment into Canada over the next 3–5 years

**e. Canada is not yet seeing FDI flow broadly across the different hydrogen value chains.** Instead, it has concentrated primarily in blue hydrogen and other projects where risks are already lower because of very low-cost natural gas, favourable carbon management conditions including storage capacity and an established and supportive regulatory regime, public financial support, and project scale.

**f. Several interviewees suggested that too much focus on foreign versus domestic capital can be a mistake, particularly at the early stages of project development.** Their view was that domestic capital is often better placed to absorb Canadian regulatory, policy, and offtake risk, while foreign capital becomes more relevant once those conditions are clarified.

Canada has shown that it can attract major private investment into complex, industrially anchored hydrogen projects...The next question is whether [it] can build on these successes to support wider hydrogen market formation.



**Figure 4:** Path2Zero: A world-scale C\$10.1B net-zero integrated facility in Fort Saskatchewan, expected to produce 3.2 million metric tonnes of polyethylene and ethylene derivatives annually. Source: Dow/Linde.

## Key Finding 2:

### Hydrogen investments need offtake economies of scale

#### At scale: Industry

Currently, the most credible large-scale demand base is domestic industrial offtake anchored in low-carbon hydrogen adoption in established end-use markets such as polyethylene and renewable diesel. These markets share two advantages: they are embedded in existing North American regional fuel and polymer value chains, and they do not require hydrogen to be transported long distances. Instead, through existing processes, hydrogen is converted into an energy-dense fuel or industrial product that is easier to store, ship, and sell through existing distribution channels. Hydrogen projects are complex and capital-intensive, and are difficult to finance unless there is confidence in long-term, large-scale offtake. **Respondents repeatedly said that the absence of reliable offtake is the critical barrier.** Even with ITCs lowering part of the cost of production, hydrogen often remains uncompetitive for end users relative to incumbent fuels. Carbon pricing helps, but many interviewees saw it as insufficient on its own.

Moreover, respondents emphasized that hubs, which concentrate supply, demand, infrastructure, and customers in the same location, are particularly important for supporting nascent fuel-switching markets, including heavy-duty transport. Market development in Canada may be better served, at least in the near term, by spending more time and public support making existing hubs work, rather than moving hydrogen long distances before local market formation is strong enough. This underscores that Canada's current success in a few large projects is not evidence that the wider hydrogen market is forming on its own.



**Figure 5:** Electrolyzer modules at Air Liquide's 20MW green-hydrogen facility in Bécancour, Canada, support battery materials and existing industrial cluster in Quebec. Source: Air Liquide.

## Not at scale: Hydrogen exports and transportation

### Exports

For exports, the economics of shipping hydrogen in ammonia form remains uncertain. On the Atlantic coast, proposed green hydrogen projects aimed at Europe have not yet produced a robust wave of final investment decisions, and Canadian projects would also face future competition from Southern Europe and the MENA region, while the European Commission's hydrogen auctions continue to support a growing mix of domestic and regional supply in Europe. That said, there may still be a modest strategic role for Canada in helping northwest Europe diversify fuel sources and strengthen energy security, if buyers value supplier diversity alongside cost. On the Pacific coast, proposed blue ammonia projects would face a different set of challenges: less the underlying cost of production than the safety and infrastructure requirements of transporting hydrogen or ammonia to the coast for export. Western Canadian exporters would also face competition in East Asian markets from suppliers in Australia and the MENA region.

## Transport

In transport, domestic hydrogen offtake is not yet developing at scale, and the familiar chicken-and-egg problem persists: without reliable demand, infrastructure does not get built; without infrastructure, demand does not emerge. This makes the economics even more challenging when supply and demand develop in small, piecemeal fits rather than a coordinated at-scale build-out. Interviewees argued that policy is not helping much. The end of federal purchase incentives for medium- and heavy-duty zero-emission vehicles is out of sync with the existing supply-side supports, while current investment tax credits do not cover critical distribution equipment such as liquefaction.

**Rail transport.** CPKC's locomotive program demonstrates Canada's leadership in hydrogen rail innovation, with low-horsepower locomotives already in service and high-horsepower testing now underway. Unlike road transport, where each fleet might experiment with adopting hydrogen incrementally and demand is highly distributed, hydrogen offtake by locomotives occurs in the range of tonnes per day, aligning more closely with the capital-intensive nature of hydrogen production and simplifying coordination of supply and infrastructure.

The partnership between CPKC and CSX is important because it will help validate and scale low-horsepower hydrogen locomotive technology beyond a single operator.<sup>8</sup> A longer-term question for Canada is: If hydrogen locomotive conversion develops into a credible and cost-competitive alternative to purchasing diesel-electric locomotives, how can Canada position itself not only as a technology leader and developer, but also as a location for a greater share of the manufacturing, retrofit, and modernization activity associated with the higher-horsepower platforms in the long run?

**Figure 6:** Hydrogen locomotive program.



### Key Finding 3:

#### Misconnect between domestic technology suppliers and deployment

**Canada may succeed in deploying hydrogen projects without necessarily helping Canadian hydrogen firms scale at home and compete globally.**

- a. We are deploying hydrogen technology that is not Canadian** (for example, imported electrolyzer technology). Several interviewees, including new project developers and hydrogen companies with operating projects, indicated that many key project components and technologies were sourced from outside Canada, with limited reliance on Canadian suppliers. The misconnect between strong innovation and weak deployment uptake of Canadian technology means that even if a rush of investment were to pour into deployment, Canadian technology suppliers might not benefit, including many domestic firms that are active in the hydrogen ecosystem.
- b. Canada's ability to compete with economies of scale in electrolyzer manufacturing remains uncertain**, particularly given the current oversaturated global market. It is unclear whether domestic firms could profitably export electrolyzers at scale. Instead, the more relevant question may be how Canada can strategically position itself: for example, by developing novel electrolyzer IP, supporting Canadian technology leaders, or attracting foreign technology leaders to establish manufacturing locally. A similar question applies on the blue hydrogen side: where key ATR+CCS technologies are not Canadian, domestic technology capture may still be weak even where Canada is strong in project deployment. A broader consideration might be to understand how Canada can balance domestic capability development with leveraging global technology leadership to maximize economic and industrial benefits.



- c. Canada is perceived as well-positioned in specific technology “races,”** particularly blue hydrogen, methane pyrolysis, fuel cell manufacturing, hydrogen bus manufacturing, hydrogen–diesel dual fuel applications, hydrogen locomotives, hydrogen storage, and potentially natural hydrogen. However, Canada currently lacks a clear and targeted industrial strategy for the hydrogen sector that identifies which segments of the value chain to prioritize for technological leadership. Developing such a strategy could help ensure that domestic technology capture generates value by supporting innovation, scale-up, and domestic jobs.

#### **H2M AND SOLID-STATE HYDROGEN STORAGE**

Canadian innovation such as H2M’s solid-state storage can help position Canada in emerging hydrogen transport markets. H2M’s approach uses a solid-state format that stores hydrogen at ambient temperature and low pressure, supporting safer, modular transport and helping reduce infrastructure barriers for containerized hydrogen shipments.

- d. Canada is strong in innovation but has trouble scaling up innovative firms.** Without access to domestic customers via hydrogen deployment, and without domestic investors, often the most viable growth path is foreign acquisition. One of the reasons why foreign equity stake was selected as the most desired form of FDI by interviewees was that this pathway was seen as necessary in an environment of limited domestic capital availability.
- › One example raised by interviewees was a Canadian hydrogen technology firm that, after years of public R&D support to develop leading technology, was acquired by a U.S. company. The concern raised was that this path can result in Canada helping create strategic technology capability, but not necessarily retaining the production base, scale-up pathway, or long-term value capture.
- e. Some interviewees raised concern that parts of the public R&D support system may lean heavily toward patent generation** without sufficient attention to commercialization and scale-up pathways for Canadian firms.
- f. Joint ventures are seen as a pathway to market growth.** However, many OEMs are not making equipment in Canada and are not sourcing from Canadian technology suppliers. This type of FDI is desired by technology suppliers because it can create a route to market, but right now the domestic linkage is weak.

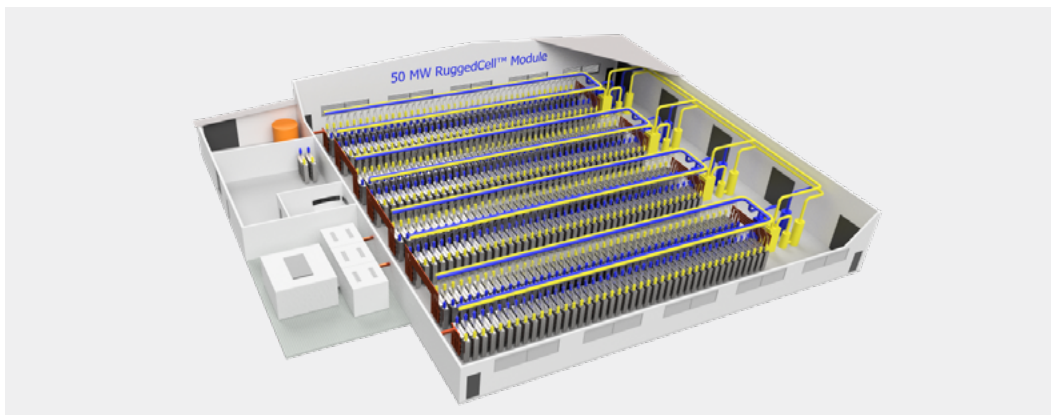
- g. OEM presence can support domestic technology uptake.** One example raised in interviews was that there are no truck OEMs in Canada, which limits the ability of Canadian fuel cell suppliers to participate in that part of the value chain. The position is somewhat better in buses, where bus OEMs with manufacturing operations in Canada, such as New Flyer and Nova Bus provide a more plausible route for domestic technology uptake (see Figure 7).



**Figure 7:** Ballard has a dominant market share in PEM fuel cell engines installed in transit buses currently operating in North America.<sup>9</sup> Image courtesy of Strathcona County.

Policy solutions might therefore need to focus on tying deployment more directly to domestic supplier development. This could mean:

- Attracting FDI from OEMs and hydrogen producers whose projects make use of Canadian technology, thereby creating customers for Canadian suppliers
- Continuing to support the development of novel electrolyzer IP and ensuring that foreign investment helps scale Canadian capabilities while retaining strategic value in Canada.
  - › Hydrogen Optimized is a good example of Canada's electrolysis heritage: the company's RuggedCell electrolyzers build on more than a century of Stuart family leadership in industrial water electrolysis, while its partnership with ABB is an example of how foreign participation can help commercialize and scale differentiated Canadian technology (see Figure 8).
- Attaching Buy Canada conditions to deployment funding; and creating a warranty program to backstop smaller Canadian suppliers and reduce buyer risk.



**Figure 8:** ABB made a strategic investment in Hydrogen Optimized in 2022. RuggedCell's large-scale electrolyzer design is well matched to ABB's high-power rectifier technology to enable large-scale hydrogen production in industrial applications such as steel, ammonia, and synthetic fuels. Source: Hydrogen Optimized.

At the same time, where Canada does not have a credible domestic technology base or a realistic path to build one, the policy objective should not be to force domestic content. In those areas, Canada should actively seek partnerships and import the lowest-cost technology available, while concentrating domestic support on the segments where Canadian firms have a realistic prospect of scaling and competing.

### Conditions needed to move investment

Some respondents noted Canada's challenge is not innovation; it is scale-up, deployment, and execution. Reliable domestic offtake, better coordination across the value chain, mechanisms to scale domestic firms, and alignment of demand-side incentives with supply-side supports can help move investment and strengthen market conditions.

As federal and provincial governments recalibrate their hydrogen strategies, this report can help clarify how the role of foreign direct investment could be articulated within a broader hydrogen industrial strategy.

If Canada wants foreign direct investment to matter for domestic market formation, it needs to do more than attract capital into isolated projects.

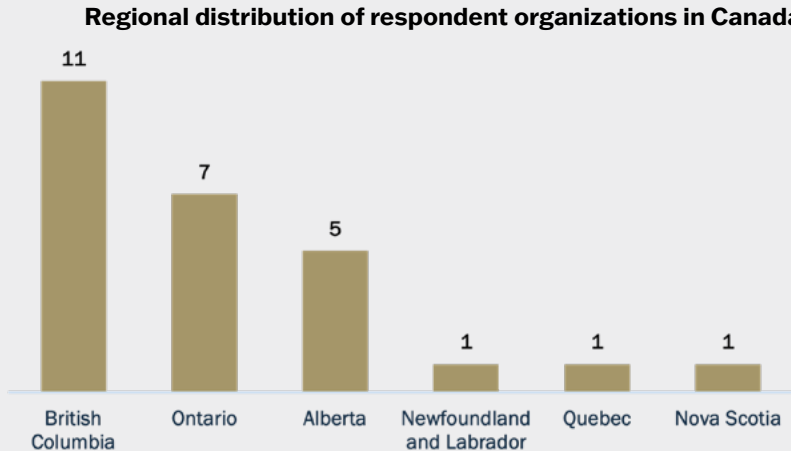
#### **It needs to create the conditions under which:**

- Domestic capital moves earlier,
- Foreign capital is more likely to follow as more projects move through investment stages,
- Domestic industrial offtake provides the demand certainty needed for scale, and
- Deployment creates customers for Canadian technology suppliers rather than bypassing them.

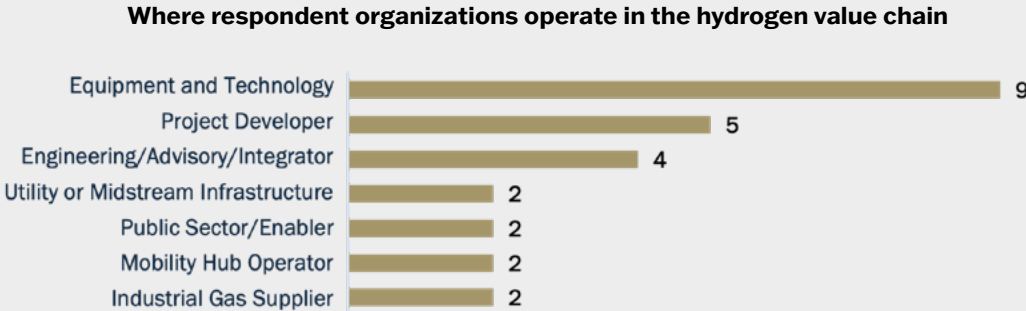
# Appendix A: Survey Responses

Appendix A includes only the survey responses that could be clearly shown in charts or other quantitative formats. The main themes from the qualitative and open-ended responses are already reflected in the report.

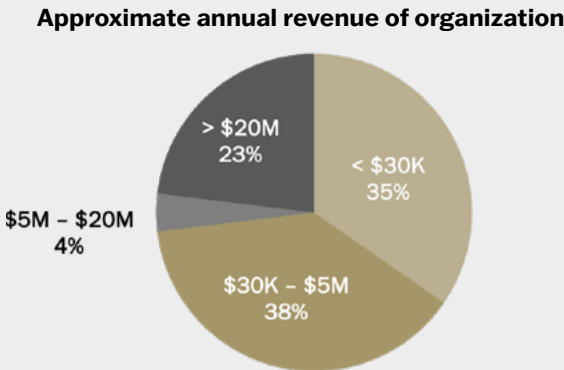
**Question 2:** In which city and Province (or Territory) are you and your organization located?



**Question 3a:** Where does your organization fit within the hydrogen value chain?

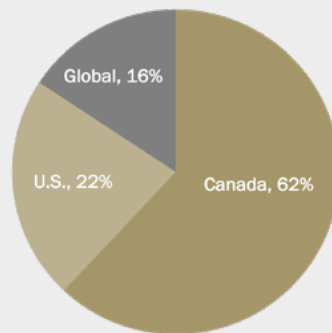


**Question 4a:** For the last fiscal year, what was the approximate annual revenue of your company or organization?



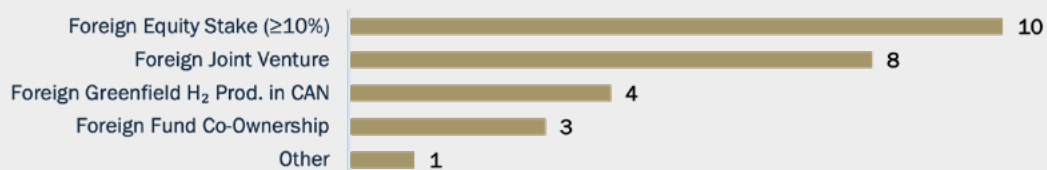
**Question 4b:** Please list roughly what share of your sales comes from the following 3 sources.

**Distribution of sales across domestic, U.S., and international markets**



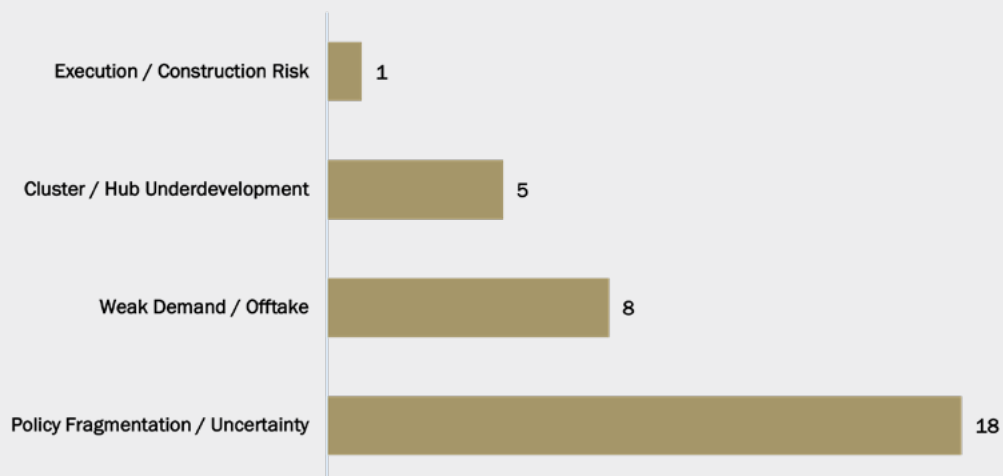
**Question 6a:** If your firm is interested in or actively seeking FDI, what type of foreign direct investment would be most beneficial for your company?

**Type of FDI most beneficial to respondent organization**



**Question 9:** What factors are limiting FDI opportunities?

**Factors Limiting FDI Opportunities**



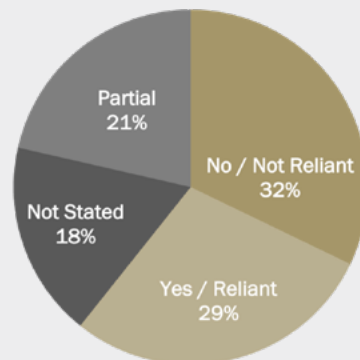
**Question 10:** What factors are helping develop FDI Opportunities?

**Factors Helping Develop FDI Opportunities**

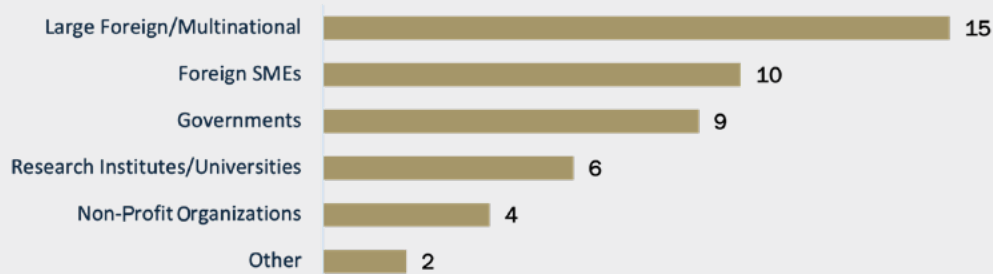


**Question 11:** Are you reliant on foreign companies for access to technology?

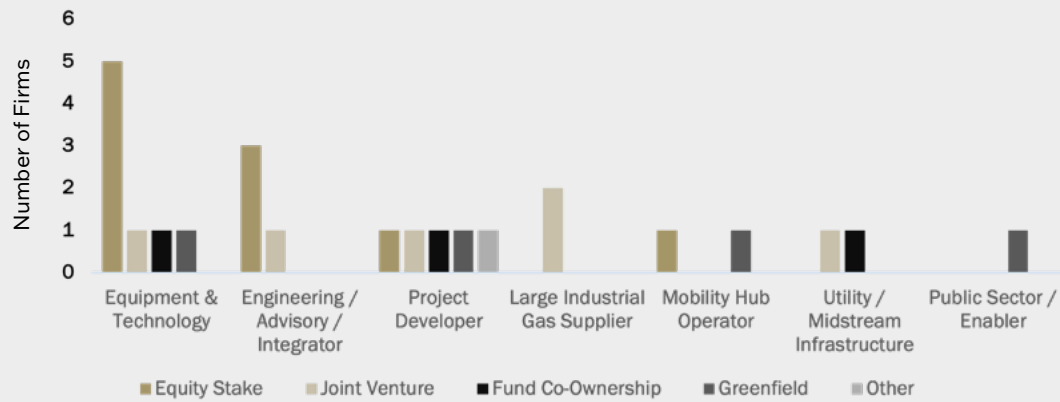
**Reliance on Foreign Companies for Access to Technology**



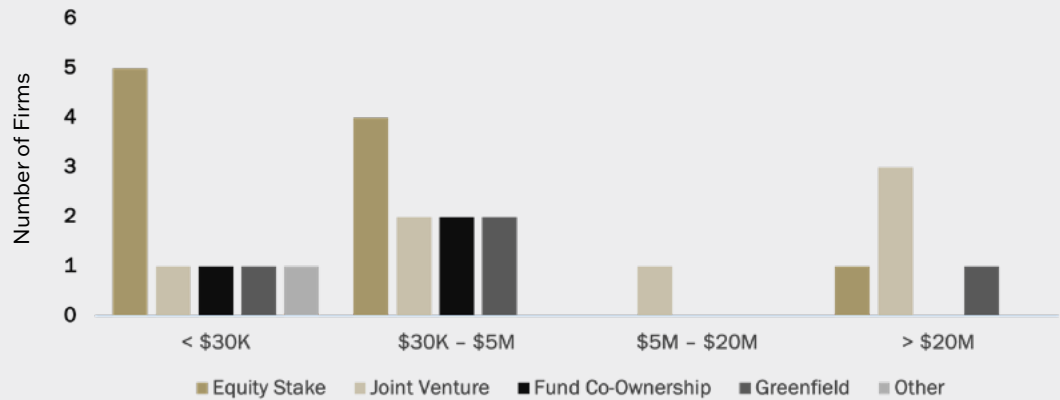
**Question 12a:** Does your organization engage in collaboration with any international organizations/companies?



**FDI Structure Preferences Among Surveyed Firms, by Value Chain Role**



**FDI Structure Preferences Among Surveyed Firms, by Annual Revenue**



# Endnotes

- 1 <https://energy-information.canada.ca/sites/default/files/2025-11/energy-fact-book-2025-2026.pdf>
- 2 <https://www.iea.org/reports/global-hydrogen-review-2025/executive-summary>
- 3 <https://www.iea.org/data-and-statistics/data-product/hydrogen-production-and-infrastructure-projects-database>
- 4 <https://hydrogencouncil.com/en/global-hydrogen-industry-surpasses-usd-110-billion-in-committed-investment-as-500-projects-worldwide-reach-maturity/>
- 5 <https://www.kslaw.com/news-and-insights/canada-germany-joint-400-million-h2global-green-hydrogen-auction-receives-european-commission-state-aid-approval>
- 6 <https://www.pm.gc.ca/en/news/backgrounders/2026/03/06/canada-japan-comprehensive-strategic-roadmap>
- 7 <https://www.canada.ca/en/innovation-science-economic-development/news/2026/01/canada-and-republic-of-korea-strengthen-ties-in-key-industrial-sectors.html>
- 8 <https://www.csx.com/index.cfm/about-us/media/press-releases/cpkc-and-csx-announce-planned-collaboration-to-develop-additional-hydrogen-locomotives/>
- 9 <https://blog.ballard.com/2024-challenges-silver-linings-and-the-road-ahead>