



**CANADA-IN-ASIA  
CONFÉRENCE  
CANADA-EN-ASIE**  
Singapore 2026 Singapour

## KEY TAKEAWAYS

### AI is an energy and infrastructure challenge, not just a computing challenge

A real bottleneck for AI adoption is electricity availability and grid capacity. While data centres can be built within two years, power infrastructure may take close to a decade, creating major investment and planning mismatches across the AI ecosystem.

### Recasting AI collaboration through 'variable geometry' partnerships

Economies like Canada and ASEAN members could increase their contributions to and relevance in AI ecosystems by focusing on targeted capability-specific coalitions that they can leverage within interdependent systems. By identifying strategic strengths within AI value chains — from energy systems to AI governance — middle powers can collectively increase leverage and resilience in a fragmented geopolitical environment.

### Green data centres can become catalysts for broader energy transition efforts

Data centres are being positioned as anchor customers for renewable energy projects across Asia. By linking digital infrastructure expansion with renewable power generation, governments and financiers can accelerate grid modernization, improve energy efficiency, and unlock new sustainable investment opportunities.

### AI itself may help solve future infrastructure and energy efficiency problems

Advanced AI systems are already improving predictive maintenance, cooling optimization, and operational efficiency inside data centres. AI could contribute to breakthroughs in energy systems and grid optimization, potentially helping resolve some of the very constraints currently limiting AI expansion.

### Data sovereignty, infrastructure inequality remain major unresolved global issues

AI competitiveness is hindered by concerns around cloud access, national data control, and uneven digital infrastructure capacity, particularly in developing economies. The discussion underscored the importance of building trusted, locally relevant infrastructure in addition to developing data sovereignty frameworks that promote balanced independence and co-operation.

# The AI-Compute Conundrum:

## POWERING THE AI REVOLUTION

01

## SPEAKERS

Moderator



**Jan De Silva**  
Canada Co-Chair,  
Canada-ASEAN Business  
Council, Canada-based



**Abieta Billy**  
Vice-President Market  
Development and Sales  
Strategy, DCI Indonesia,  
Indonesia-based



**Mark Daley**  
Chief AI Officer and  
Professor, Department  
of Computer Science,  
Western University,  
Canada-based



**Yoonee Jeong**  
Senior Digital  
Technology Specialist  
(Digital Infrastructure  
and Economy), Asian  
Development Bank,  
Philippines-based

## EXECUTIVE SUMMARY

At the Canada-in-Asia Conference 2026, the panel "The AI-Compute Conundrum: Powering the AI Revolution" explored one of the defining challenges of the digital era: whether the world can generate enough energy and infrastructure to sustain the explosive growth of artificial intelligence (AI). Moderated by Jan De Silva, the discussion framed AI as a complex industrial, geopolitical, and energy transformation.

Panellists highlighted a widening mismatch between the speed of AI deployment and the slower timelines required to build and upgrade power grids, substations, transmission systems, and other energy infrastructure. Abieta Billy of DCI Indonesia described how demand for AI-ready data centres has accelerated from megawatt-scale projects to gigawatt-scale ambitions almost overnight, creating enormous pressure on utilities, regulators, and investors, all while there are timeline and risk tolerance mismatches among actors across the interlinked AI, energy, and infrastructure value chains. Mark Daley of Western University argued that AI should be viewed as a layered 'stack' of interdependent systems — including electrical power, chips, fabrication, software, and applications — each creating new geopolitical leverage points and opportunities, including for middle powers such as Canada and ASEAN economies.

Yoonee Jeong of the Asian Development Bank emphasized that Asia's development institutions are already mobilizing financing, green data centre initiatives, and regional planning

mechanisms such as for the ASEAN Power Grid to bridge digital and energy infrastructure gaps. Speakers stressed that the evolution of AI value chains will depend on technological breakthroughs — but perhaps more importantly for middle powers that participate in these value chains but do not lead them — on smarter collaboration across governments, utilities, financial institutions, and private industry. The discussion positioned Canada-Asia co-operation in AI value chains — particularly in clean energy, nuclear innovation, digital infrastructure, and AI governance — as an important component of an interdependent system in which participants can influence others toward positive collaborations to move toward an international AI system that is sustainable, secure, and inclusive.



**"If you collaborate with like-minded partners, that gives you power across the AI stack because you have the ability to compel good behaviour. It might be power. It might be chips. It might be system software. Collectively, we could influence the direction of the AI stack in a way that no one single nation could."**

– Mark Daley, Chief AI Officer and Professor, Department of Computer Science, Western University

FEBRUARY 10-11, 2026 | SINGAPORE

Where Canada and Asia Meet:

**Ideas, Investment, Impact**



**Note:** This session took place before the Middle East conflict started on February 28, 2026.



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## KEY TAKEAWAYS

### Canada brings multiple strengths to global mining value chains

Canada's role in the critical minerals economy extends far beyond resource extraction. Speakers highlighted Canada's strengths in mining finance, ESG governance, research commercialization, and clean energy infrastructure. The Toronto Stock Exchange's leadership in mining finance and Canada's globally respected regulatory expertise position the country as a key partner for Asian economies seeking diversified and sustainable supply chains.

### Diversification of critical minerals supply is an imperative

Supply chain resilience has become a strategic imperative as geopolitical tensions expose vulnerabilities in concentrated sourcing models. Panellists emphasized that countries and companies can no longer rely on single-source suppliers and will benefit from diversifying east-west partnerships. Canada and Asian economies were encouraged to deepen trade and investment ties to reduce overdependence on dominant players.

### Commercializing mining innovation

Canada's DIGITAL innovation cluster showcased breakthrough technologies including AI-enabled narrow-vein mining, biomining for mine remediation, and earth X-ray imaging systems developed through collaborative consortia between universities, mining firms, and technology companies. Rapidly deploying these technologies internationally will be important for accessing deeper and more complex mineral deposits sustainably.

### Product differentiation in critical minerals value chains

Panellists stressed that future critical minerals competition will increasingly revolve around "the right minerals," not simply larger volumes. Traceability, low-carbon production, environmental safeguards, and responsible governance are becoming market differentiators. Canadian expertise in sustainable mining practices and regulatory systems can be a major opportunity to help Asian partners raise standards while maintaining competitiveness in premium markets such as aerospace, robotics, and advanced manufacturing.

### Speeding critical minerals projects

Financing and policy co-ordination will determine whether critical minerals projects can move quickly enough to meet projected shortages. With copper mine development timelines averaging nearly 20 years, speakers identified advantages in faster permitting and more co-ordinated industrial policy. The Asian Development Bank can be an important partner in supporting commercially viable projects that also meet rigorous environmental and social standards across the region.

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# Critical Minerals and Materials and Strategic Dependencies:

02

## CLEAN TECH SUPPLY CHAINS

### SPEAKERS

Moderator



**Allen Chan**

Director of Energy Transition Consulting, S&P Global, Singapore-based



**Sue Paish**

CEO, DIGITAL, Canada-based



**Heather Exner-Pirot**

Senior Fellow and Director of Energy, Natural Resources and Environment, Macdonald-Laurier Institute, Canada-based



**Prasad Puttagunta**

Vice President, Project Management, Asahi Kasei Battery Separator Canada Corporation, Asahi Kasei, Canada-based



**Claire Alidenes**

Principal Investment Specialist, Asian Development Bank, Philippines-based



**Vinicius Mendes Ferreira**

Executive Advisor, Vale Indonesia, Indonesia-based

### EXECUTIVE SUMMARY

The panel on "Critical Minerals and Materials and Strategic Dependencies: Clean Tech Supply Chains" explored how critical minerals value chains are affected by geopolitics and industrial policy, while Canada-Asia economic co-operation can offer opportunities to expand critical minerals value chain resilience. Speakers emphasized that minerals such as nickel, copper, cobalt, lithium, uranium, and rare earths are now foundational not only for clean energy technologies, batteries, and AI infrastructure, but increasingly for defence and national security. Against a backdrop of accelerating demand growth and looming supply shortages, the discussion highlighted the urgent need for diversified, resilient, and environmentally responsible supply chains.

Panellists positioned Canada as a trusted partner with significant advantages: abundant mineral reserves, world-class mining finance expertise, advanced ESG and regulatory frameworks, clean energy resources, and a respected and expanding ecosystem of innovation in mining technologies. Examples ranged from Saskatchewan's globally significant uranium and potash production to Canadian-developed deep-earth imaging and biomining technologies now being deployed internationally. Speakers repeatedly stressed that because critical minerals and materials value chains are global, future competitiveness will continue to depend not only on resource ownership but the ability to commercialize technology, accelerate permitting timelines, and collaborate across borders.

Discussion underscored widespread concern over China's dominance in many

aspects of critical minerals value chains, especially in the processing and refining of rare earth minerals, with a simultaneous recognition that Chinese participation in mining projects in many parts of the world, including much of the Indo-Pacific, is indispensable for a range of reasons including securing off-take agreements, bringing specific technologies, or project ownership and financing.

“ In the coming commodity cycle, Canada, with its resource endowment, has an ability, maybe working with Australia... to use its resource endowment to resist or constrain the ability of other countries to manipulate commodity prices.”

– Heather Exner-Pirot, Senior Fellow and Director of Energy, Natural Resources and Environment, Macdonald-Laurier Institute

The session framed Canadian advantages in critical minerals value chains in Asia mostly in terms of bringing (and the potential to bring more in the future) serious regulatory and ESG know-how, as well as technological and financing heft. The ESG side was identified as a particular competitive advantage for Canada as producing minerals with lower carbon and smaller environmental footprints allows producers an important element of product differentiation.

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# Global Investment to Meet Asia's Energy Future:

03

MAPPING DEMAND AND OPPORTUNITY

## KEY TAKEAWAYS

### Asia's energy demand growth creates a generational opportunity for Canada

Asia's rapidly growing energy needs — driven by AI, manufacturing and urbanization — will require a broad mix of energy sources for decades to come. Canada's strengths in LNG, nuclear technology, critical minerals, and clean energy innovation position it as a trusted long-term partner for Indo-Pacific economies seeking reliable and diversified supply chains.

### LNG is a strategic bridge fuel for Asia's transition

Industry leaders emphasized that LNG remains essential for replacing coal, stabilizing grids, and complementing intermittent renewable energy. LNG projects that export from Canada's Pacific Coast offer geographic and shipping advantages for Asian markets. However, panellists cautioned that high capital costs, permitting delays, and competition — especially from the United States — threaten Canada's ability to fully capitalize on the opportunity.

### Nuclear energy is gaining momentum, requires long-term commitment and public trust

Ontario's experience with CANDU reactors and small modular reactor development is drawing strong interest from Asian economies. Speakers stressed that nuclear deployment is not a short-term solution; it requires years of regulatory preparation, workforce development, governance alignment, and community engagement. Canada's expertise in these areas is a major exportable advantage for ASEAN and Indo-Pacific partners exploring nuclear pathways.

### ASEAN's energy transition will be diverse, decentralized, and highly collaborative

Southeast Asia is not pursuing a one-size-fits-all energy transition strategy. Different economies possess varying resource endowments, infrastructure realities, and affordability constraints. This creates opportunities for cross-border collaboration through the ASEAN Power Grid, regional energy integration, shared innovation, and coordinated investment. Canada was encouraged to engage more deeply and consistently with ASEAN institutions and subsector networks.

### Geopolitics and supply chain resilience are reshaping investment decisions

Participants noted that trade tensions, energy security concerns, and shifting geopolitical alliances are influencing long-term energy planning across Asia. Countries are seeking resilient and diversified supply relationships while balancing economic and strategic interests. Canada was repeatedly described as a stable, credible partner capable of helping Asian economies reduce vulnerabilities through trusted trade, integrated supply chains, and collaborative technology development.

## SPEAKERS

Moderator



**Sara Wilshaw**  
Senior Assistant Deputy Minister, International Trade and Chief Trade Commissioner, Global Affairs Canada, Canada-based



**Youn-Kyoo Kim**  
Dean, Korea-Canada Centre for Sustainable Energy Security (KCCSES) at Hanyang University, South Korea-based



**Joshua Lim**  
Vice President, Global Head of LNG Trading, Shell, Singapore-based



**Bernie Derible**  
Agent General, Southeast Asia, Province of Ontario, Thailand-based



**Selena Basi**  
Vice-President, Corporate Relations, Woodfibre LNG, Canada-based



**Felix William B. Fuentesbella**  
Undersecretary of Energy, Government of the Philippines, Philippines-based

## EXECUTIVE SUMMARY

The panel "Global Investment to Meet Asia's Energy Future: Mapping Demand and Opportunity" at the Canada-in-Asia Conference 2026 explored how Canada and Asian economies can align long-term investment, energy security, and decarbonization strategies in a period of geopolitical uncertainty and surging demand. Speakers emphasized that Asia will remain the epicentre of global energy consumption growth, driven by industrialization, electrification, AI data centres, and expanding middle classes. At the same time, economies across the Indo-Pacific are pursuing diverse energy pathways shaped by geography, affordability, resilience needs, and political realities.

Canadian participants highlighted the country's emerging role as a reliable long-term energy partner for Asia through LNG exports, nuclear expertise, critical minerals, and clean technology collaboration. The discussion showcased major milestones already established, including LNG exports to Asia from the LNG Canada facility in Kitimat, British Columbia, and Korean imports of Alberta oil. Industry representatives from Shell and Woodfibre LNG stressed that LNG remains a practical transition fuel for Asia, complementing renewables while supporting energy affordability and grid stability.

Panellists also underscored that the energy transition will not follow a single model across Asia. ASEAN economies, in particular, require flexible and locally tailored approaches that combine

renewables, natural gas, storage, and regional grid integration, with many also exploring nuclear. The Philippines highlighted its ambitious renewable and nuclear targets alongside efforts to strengthen the ASEAN Power Grid and improve energy access across island communities.

“Canada has this opportunity not only to export energy but to co-build Asia's energy future. It will be anchored in co-operation... on reliability, affordability and integration. So, our strategy is not to divide markets, but we'll connect them. We'll develop them with you.”

– Felix William B. Fuentesbella, Undersecretary of Energy, Government of the Philippines

Throughout the discussion, speakers repeatedly returned to a central message: Canada must move from concept to execution. To seize this historic opportunity, Canada needs faster project approvals, stronger market promotion, deeper partnerships with Asian governments and investors, and greater capacity in presenting itself as a stable energy superpower capable of supporting Asia's long-term growth and resilience.

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