Ecosystem 17

RXN REACTION HUB

Mapping Canada's Cleantech Pathway

Opportunities in Singapore and Indonesia

OCTOBER 2025

Executive Summary

The 2025 Cleantech Industry Survey by Natural Resources Canada (NRCan), covering 600+ companies, found “securing commercialization capital” as the top industry challenge, with ‘industry connections’ and ‘international market access knowledge’ as the main export barriers.

To address the challenges, **Ecosystem17** and **RXN Hub** launched the ***“Cleantech Market Access Series”*** to explore capital and market opportunities abroad. The 1st Report in this series focused on Japan - unpacking Japanese CVC’s investments in Canadian Cleantech and the engagement pathways. In this 2nd Report, we shift to Southeast Asia, one of the world’s fastest-growing green economies. Key numbers in the Report:

32
Historical SEA Investment in Canadian Cleantech (2015-2025)

2
Emerging Sectors to Explore in Singapore and Indonesia

16
Ecosystem Players to Engage for SEA Capital Access & Partnerships

Structure

Part 1: Historical SEA Investments in Canadian Cleantech (2015–2025)

32 cases were mapped where Southeast Asia invested in or engaged with Canadian cleantech SMEs over the past decade, analyzing the who are the investors, and their investment behaviors.

Part 2: Singapore and Indonesia as Strategic Entry Points

We analyze why Singapore and Indonesia stand out in SEA as strategic entry points, through country snapshots, climate policy frameworks, green finance mechanisms, and cleantech sectoral priorities.

Part 3: Two Emerging Sectors to Explore in Singapore and Indonesia

- Modern Bioenergy, potentially BECCS
- Data Centre Energy Efficiency

We look at 1) market potential and domestic challenges of the sectors; 2) the value chain; 3) where Canadian technology can bridge the gap, and examples of Canadian players with potential to pioneer market entry..

Part 4. Ecosystem Players to Engage for SEA Capital Access & Partnerships

16 key ecosystem players were mapped, including sovereign funds and private VCs with the capacity to invest beyond SEA, government agencies that support market entry, and annual conferences with a dedicated cleantech focus. 3 of them are highlighted for further analysis.

TABLE OF CONTENT

INTRODUCTION

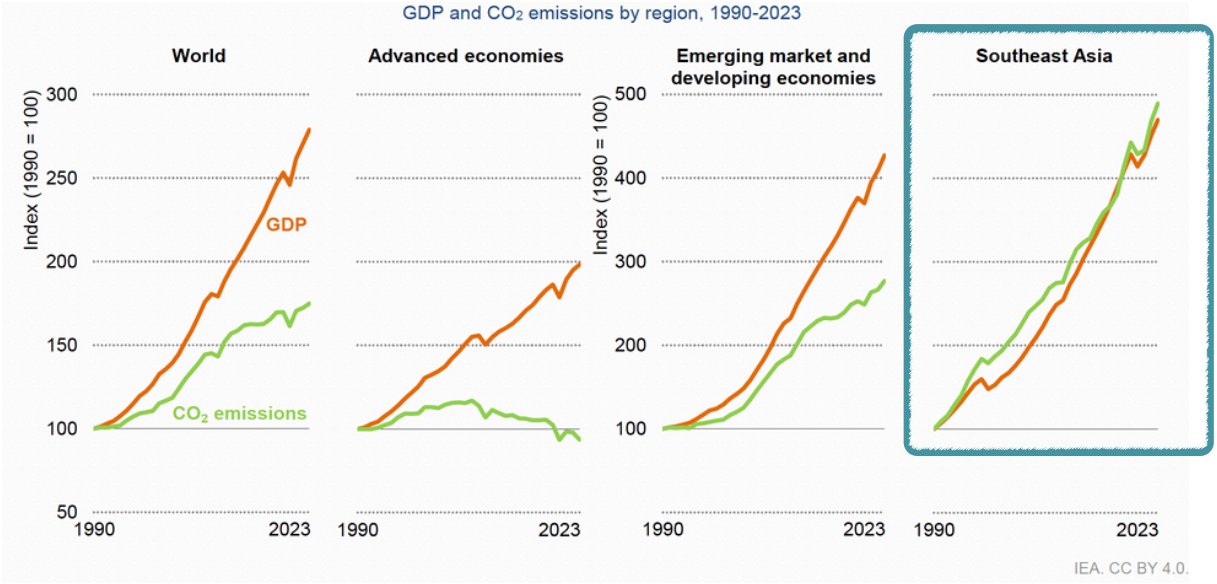
Why Southest Asia for Canadian Cleantech? Why Now?

"With low hanging fruits in North America, why go all the way to SEA?"

Some investors argue that SEA is far from a realistic market: historical engagement in cleantech with SEA has been limited; ASEAN has entrenched relationships with Japan and China; and the region's market entry complexity is daunting - the 10 ASEAN members have different level of regulatory maturity, different investment behaviour, infrastructure readiness, let alone barriers in languages, cultures and distances.

However, the market opportunity is undeniable.

- SEA is racing to balance economic growth outpacing the global average with lagging decarbonization progress. The largest SEA economy, Indonesia, has a US$1.4 trillion GDP in 2024, yet it is also the region's largest emitter, driven by over 60% coal reliance. Unlike other regions where emissions decoupled from growth. SEA's rapid economic expansion is still tightly tied to fossil fuel use.



Source: Southeast Asia Energy Outlook 2024, IEA[1]

- Energy demand in Southeast Asia is projected to rise 42% by 2030. In Singapore, data centre energy demand reached 2.1 GW in 2024, growing at 19% annually[2] and accelerating with the global AI race, yet 95% of the country's electricity still comes from imported natural gas.[3]

- Green finance mechanisms are accelerating across ASEAN countries. Since 2023, Indonesia has been mobilizing US$20 billion and Vietnam US$15.5 billion over 3–5 years under the G7-backed JETP for energy transition. However, the progress and project deployment remain slow.

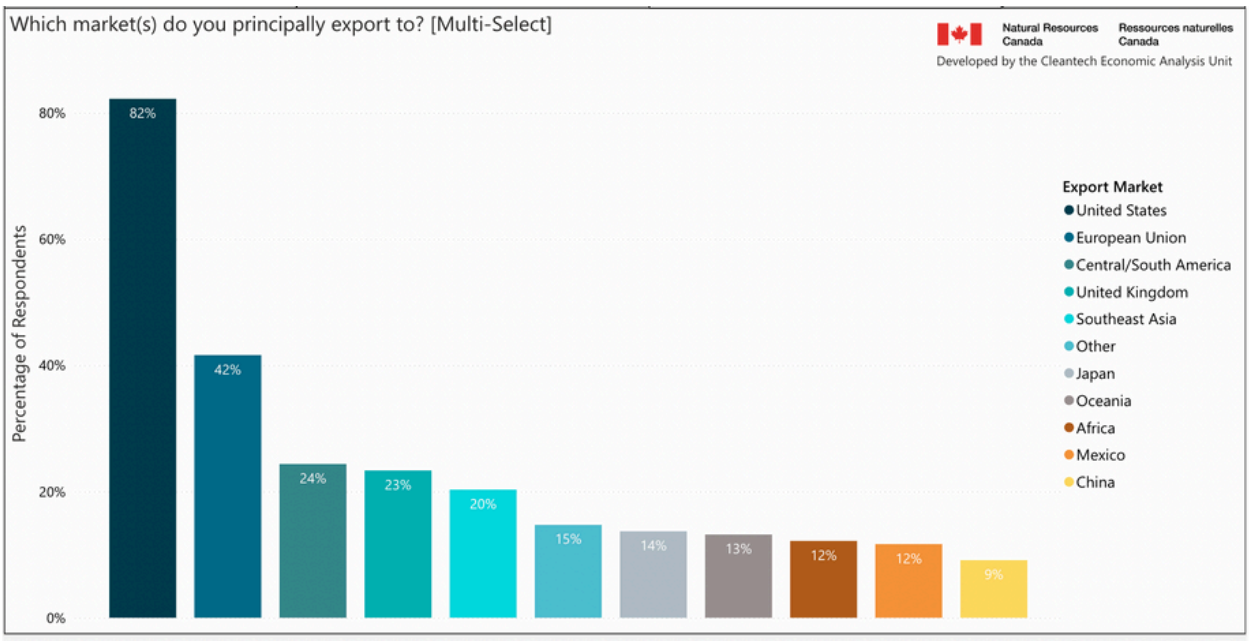
Just Energy Transition Partnership (JETP) *is a financing mechanism led by a group of developed countries, including Canada, to help 4 coal-dependent emerging economies make a just energy transition. The 4 selected countries are Indonesia, Vietnam, South Africa, and Senegal, with JETP Indonesia marks the largest energy transition financing package (US$20B) in the world to date.*

The drastic demand in clean technology, backed by massive catalytic capital but constrained by a deployment gap, creates opportunities for solution providers in critical areas such as solar, geothermal, agricultural waste-to-energy, and building energy efficiency - many of which align with Canada's cleantech strengths

"Why Now?"

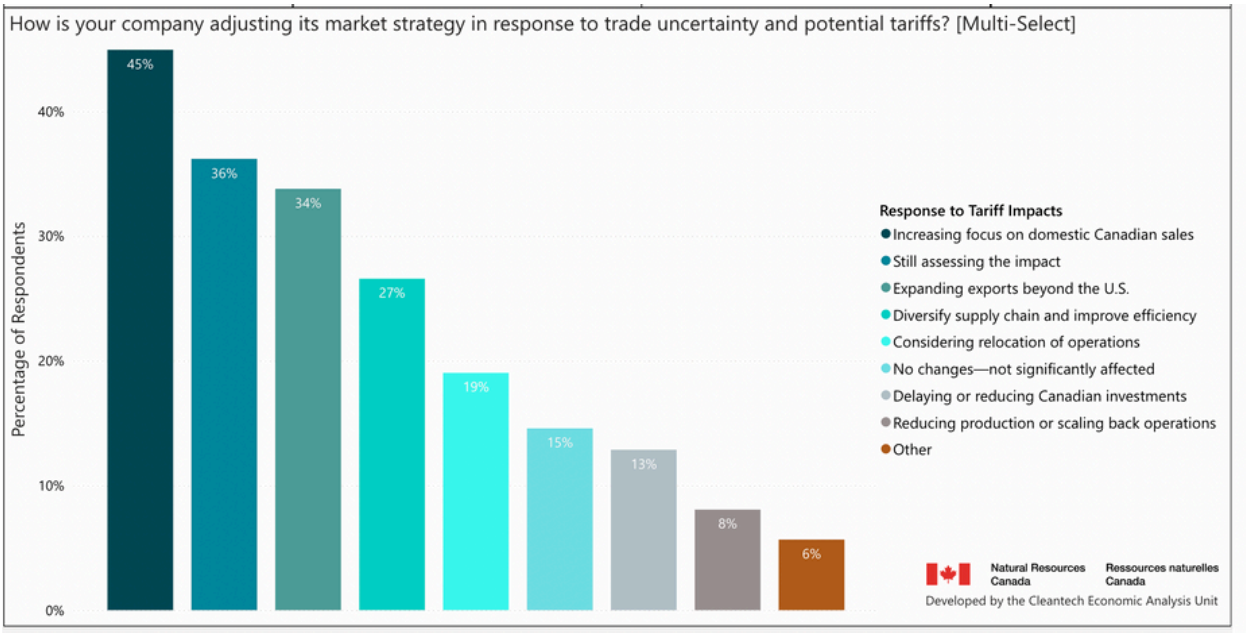
The 2025 trade turmoil is a wake-up call for Canada to reduce its reliance on the U.S. and take bolder steps toward Asia-Pacific for capital, markets, and supply chains.

- Based on the 2025 Cleantech Industry Survey by Natural Resources Canada (NRCan), over 80% surveyed firms have the U.S. as main export market, only 20% prioritize Southeast Asia and 14% Japan. [4]



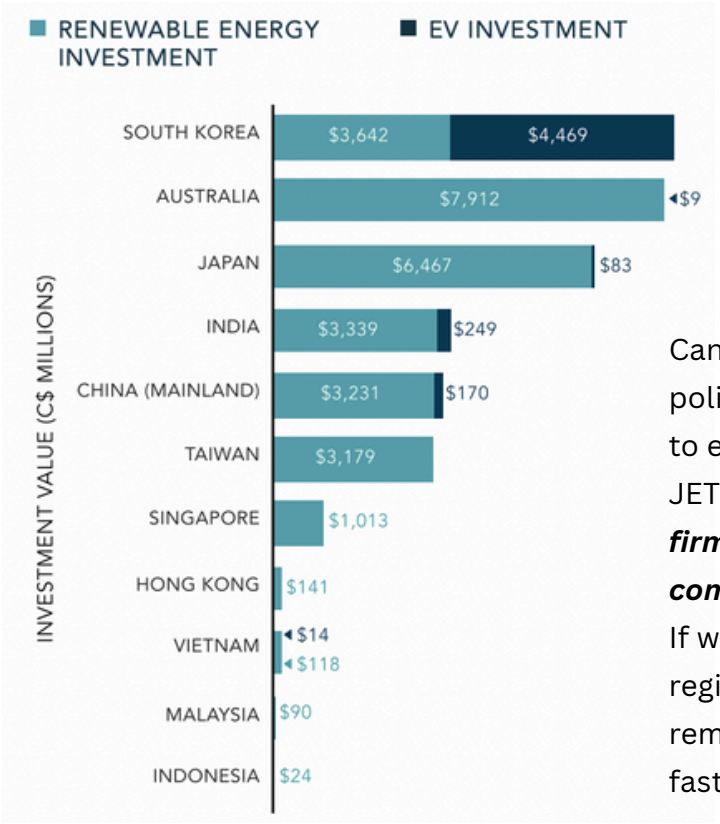
Source: NRCan 2025 Cleantech industry Survey

- In response to trade uncertainty and potential tariffs, only 34% of cleantech firms are expanding exports beyond the U.S., most increase focus on domestic market or are still assessing the impact. [5]



Source: NRCan 2025 Cleantech industry Survey

Canada's Top APAC Partners in RE and EV, 2003-2022 [6]



Source: Asia Pacific Foundation of Canada

- While US, China and Japan are actively working with ASEAN in cleantech sector, out of Canada's two-way investment partners renewable energy and EV, SEA is still largely untapped.

Canada has being gradually setting up policy framework and financial mechanism to engage with SEA's via CEPA, CPTPP and JETP, but ***clear pathways for cleantech firms to benefit from these overseas commitments remain largely unexplored***. If we don't start proactively exploring the region, Canada's cleantech sector will remain an outlier in one of the world's fastest-growing green economies.

PART 1

Historical Engagement: 32 SEA Investments in Canadian Cleantech (2015–2025)

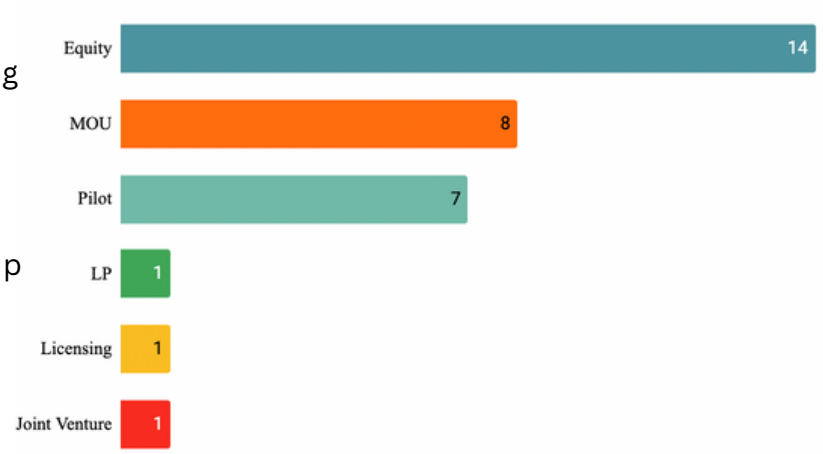
PART 1

Historical Engagement: 32 SEA Investments in Canadian Cleantech (2015–2025)

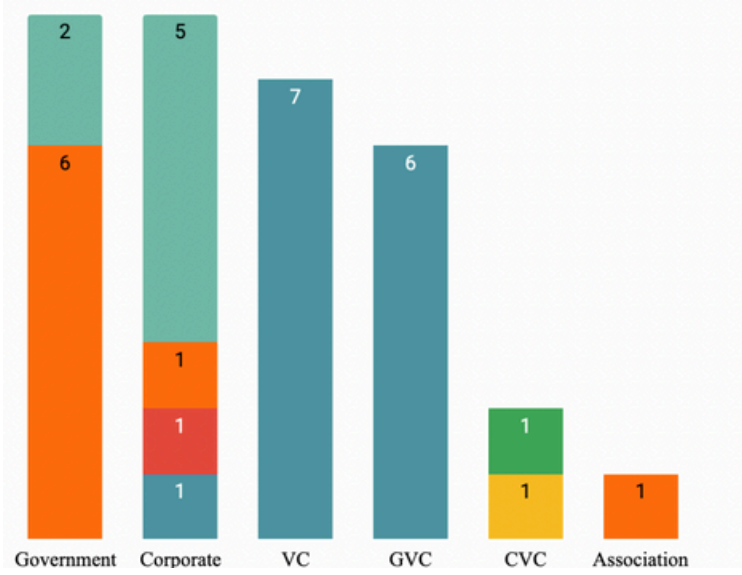
We mapped 32 cases (see Appendix) where Southeast Asia has invested in or engaged with Canadian cleantech SMEs over the past 10 years - via equity, technology adoption, joint ventures, and MOUs. Unlike our previous research on Japan, where corporate venture capital (CVC) dominates Canadian cleantech deals, Southeast Asia presents a more complex investment landscape. Although historical engagement has been limited, it is encouraging that most of these deals have taken place in the recent 5 years, showing a rising interest in Canadian cleantech from the region.

- Government-backed funds (GVCs), such as the sovereign wealth fund **Temasek**, lead growth equity investments, notable deals including 2025 Series C lead investment in Canada's climate data intelligence platform **Orennia**, an earlier equity stake in Alberta's geothermal startup **Eavor**, Series D investment in CCUS company **Svante**, and Series E lead investment in **General Fusion**.

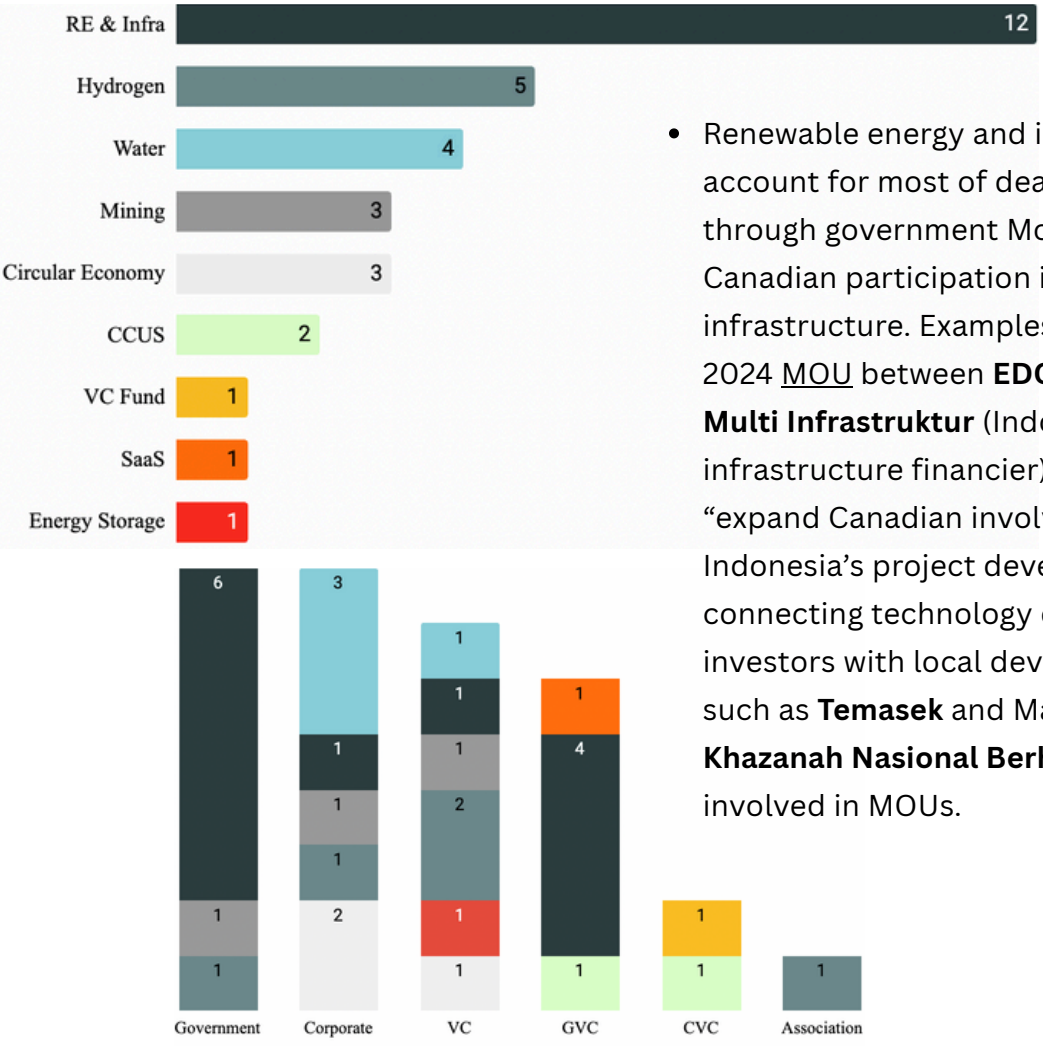
32 Deals by Type and Investor



- On the private VC side, Singapore's **Antares Ventures** stands out as the most active early-stage VC in Canadian cleantech, backing 5 Canadian startups between 2020-2025: **Ayrton Energy** (hydrogen storage and transport), **Summit Nanotech** (lithium mining), **Genecis** (sustainable materials), **Open Ocean Robotics** (ocean monitoring robotics), and most recently, lead Seed in Quebec's iron-based energy storage startup **FeX Energy** in September 2025.



32 Deals by Sector and Investor



- Renewable energy and infrastructure account for most of deals, mainly through government MoUs to deepen Canadian participation in SEA's energy infrastructure. Examples include the 2024 MOU between **EDC** and **PT Sarana Multi Infrastruktur** (Indonesia's state infrastructure financier), aiming to "expand Canadian involvement in Indonesia's project development while connecting technology experts and investors with local developers." GVC such as **Temasek** and Malaysia's **Khazanah Nasional Berhad** are also involved in MOUs.

- Pilots are scattered across different sectors and countries, though dataset is limited enough to draw meaningful trends. Notable deals include **CarbonCure**'s licensing partnership with Singapore's **Pan-United** to bring its CO_2 recycling technology for concrete manufacturing to Asian markets.

- Strategic LP capital is a new pathway: In 2024, **GC Ventures**, the CVC arm of **PTT Global Chemicals** (Thailand's largest petrochemical group) committed as an LP to Vancouver's **Pangaea Ventures** Fund IV. Pangaea already secured multiple Japanese corporates as LPs (highlighted in our Japan report), and this Thai participation broadens its Asia-Pacific base. This shows ASEAN corporates' early interest in Canada's innovation pipeline by investing in Canadian cleantech VCs.

While historical engagement in Canadian cleantech from SEA has been limited, future outlook is promising with more mature policy frameworks and financial mechanisms to derisk and incentivize cleantech in region, and strong sectoral alignments between Canada strengths and SEA's market needs. Part 2 and 3 will explore these trends.

PART 2

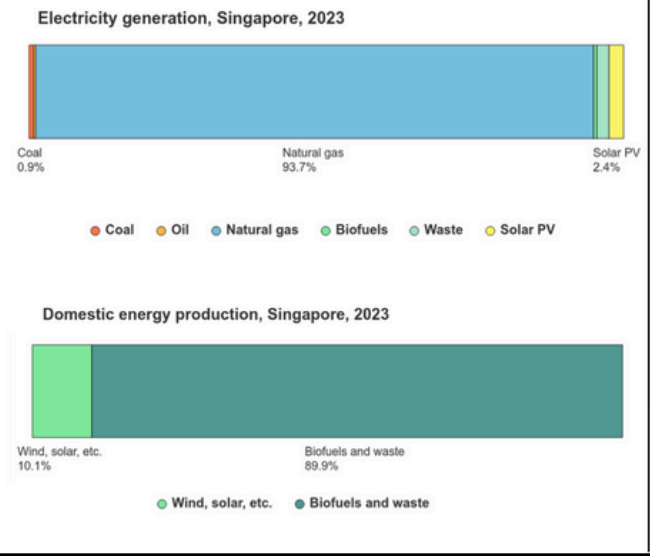
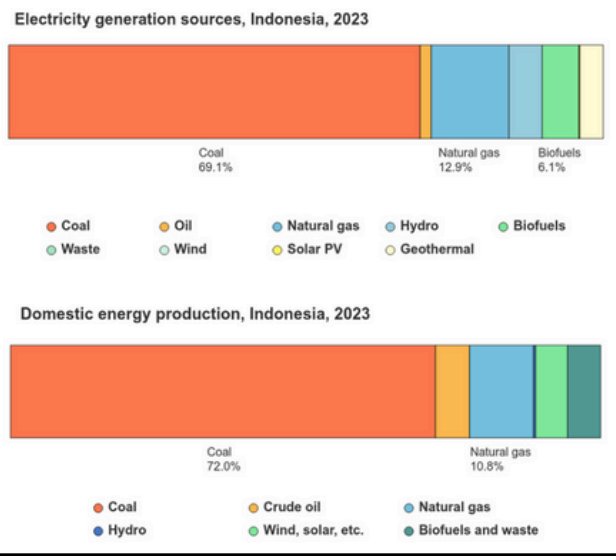
Singapore and Indonesia as Strategic Entry Points

PART 2

Singapore and Indonesia as Strategic Entry Points

While the 10 ASEAN countries are working more collectively towards energy transition, they have different stages of decarbonization, policy maturity, sectoral priorities, and infrastructure readiness. This report highlights Singapore and Indonesia as 2 ideal entry points for Canadian cleantech, through a review of their country snapshots, policy framework, financial mechanism, and cleantech sectoral priorities.

2.1 A Snapshot

Singapore	Indonesia
• The smallest country in SEA (about Toronto's size) with scarce natural resources and heavy reliance on energy import. • SEA's Hub for finance, technology, trade, and MNC headquarters, world's most business-friendly environment for 15 consecutive years.[7] • 2050 Net-Zero Goal, yet 95% of electricity from imported natural gas. This mix of global hub strength and extreme local energy vulnerability is pushing Singapore to become a testbed for new cleantech and carbon market solutions.	• The largest country in SEA, spread across a vast archipelago with abundant biomass, geothermal and mineral resources. • The largest economy (~US$1.4 trillion GDP in 2024) and most populous country (~300 million people) in SEA, also the region's top emitter. • 2060 Net-Zero Goal, yet coal still supplies nearly 70% of its electricity mix.[8] This mix of economic scale, resource abundance, coupled with coal reliance and top-emitter status, marks Indonesia as SEA's most critical and promising climate market.
	

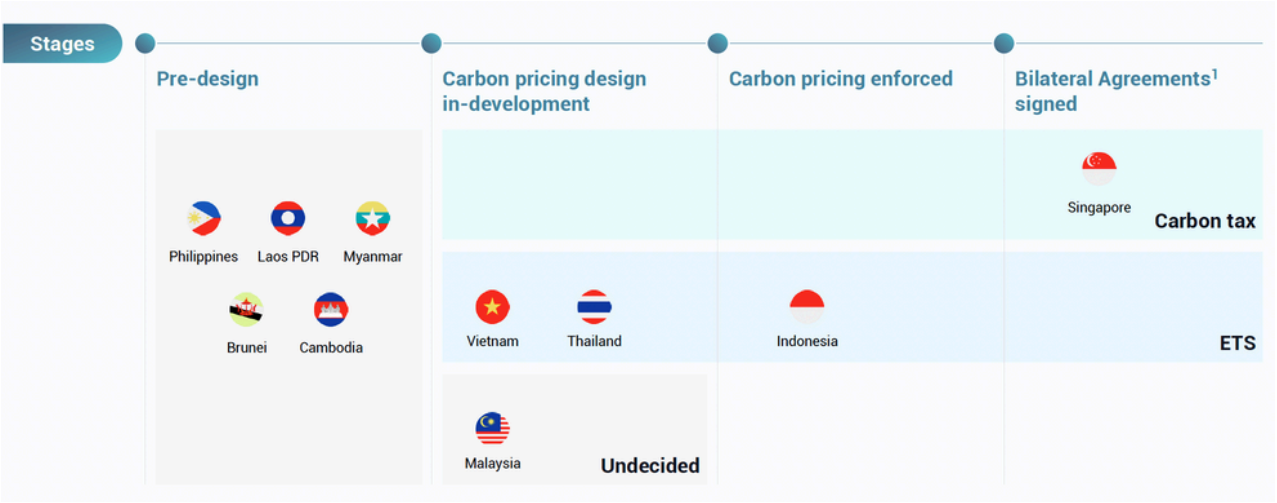
Source: International Energy Agency (IEA)

2.2 Green Policy Framework & Financial Mechanism

Singapore	Indonesia
Policy Roadmap • Green Plan 2030 – national sustainability roadmap towards net-zero 2050 • Singapore Green Data Centre Roadmap **Recent Funding** • Financing Asia's Transition Partnership (FAST-P) – A blended finance initiative mobilizing US$5 billion for energy transition. 2023. • Future Energy Fund – US$10 billion for energy transion infra. 2024 **Carbon Pricing:** [9] • Carbon Tax – 1st in SEA (introduced 2019); rising from S$25/$tCO_2e$ in 2024 to S$50–80 by 2030 • International Carbon Credit (ICC) Framework - enable the use of high-quality overseas carbon credits • The Transition Credits Coalition (Traction) – piloting "transition credits" generated from early CFPP retirements **Private Green Investment** [10] • 2023 total private green investments of $913M, 21% drop from 2022 due to smaller deal size, accounting for ~14% of 2023 SEA total • Increase in transport and building sectors **Canada Trade Agreement** • Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP)	**Policy Roadmap** • Comprehensive Investment and Policy Plan (CIPP) – the framework for Indonesia's JETP that identifies priority technologies, sectors, and projects. • Mandatory B40 Biodiesel Program - mandates a blend of 40% palm oil-based biodiesel with conventional diesel **Recent Funding** • JETP (Just Energy Transition Partnerships), an agreement led by G7 countries (US withdrew) to mobilize USD 20 billion for Indonesia's energy transition. It will be on a 50/50 public and private funding structure, delivered through a blend of grants, concessional loans, and market-rate investments. 2022. **Carbon Pricing:** [9] • Compliance Emissions Trading System (ETS) - 1st in SEA to launch a mandatory ETS in 2024 **Private Green Investment** [10] • Steady increase, in 2023 - $1,594M, 28% increase from 2022, accounting for ~25% of 2023 SEA total • Major investments seen under fuel substitution and agriculture productivity. **Canada Trade Agreement** • Canada - Indonesia Comprehensive Economic Partnership Agreement (CEPA) signed in Sep 2025, first-ever bilateral trade agreement with an ASEAN country.

Carbon Pricing Progress in SEA

As of October 2024, only two countries in Southeast Asia – Singapore and Indonesia – have adopted carbon pricing instruments.[11]



Source: Southeast Asia's Green Economy 2024, Moving the Needle

2.3 Cleantech Sectoral Priority

Singapore	Indonesia
"4 Switches" outlined by Singapore Energy Market Authority [12] • Deploy 2GWp Solar supported by ESS by 2030. • Diversify natural gas source and build Hydrogen ready plants • Import low carbon electricity (solar, hydro, wind) • Investing in low carbon alternatives (CCUS, Hydrogen, Geothermal, Nuclear) Energy Efficiency for Data Centre (based on SG Green DC Roadmap)	5 Investment Focus Areas identified by Indonesia CIPP.[13] • Grid transmission networks • Early CFPP retirement • Dispatchable renewable energy (especially geothermal and bioenergy) • Variable renewable energy (especially solar and wind) • Renewable energy supply chains

Compared with other Southeast Asian countries, Singapore and Indonesia have more mature policy frameworks, financial mechanisms for decarbonization. Free trade agreements have reduced tariffs and barriers for Canadian cleantech SMEs to explore partnerships in SEA. In Part 3, we will dive deeper into key sectors where SEA's decarbonization needs align closely with Canada's cleantech strengths.

PART 3

Two Emerging Sectors to Explore in Singapore and Indonesia

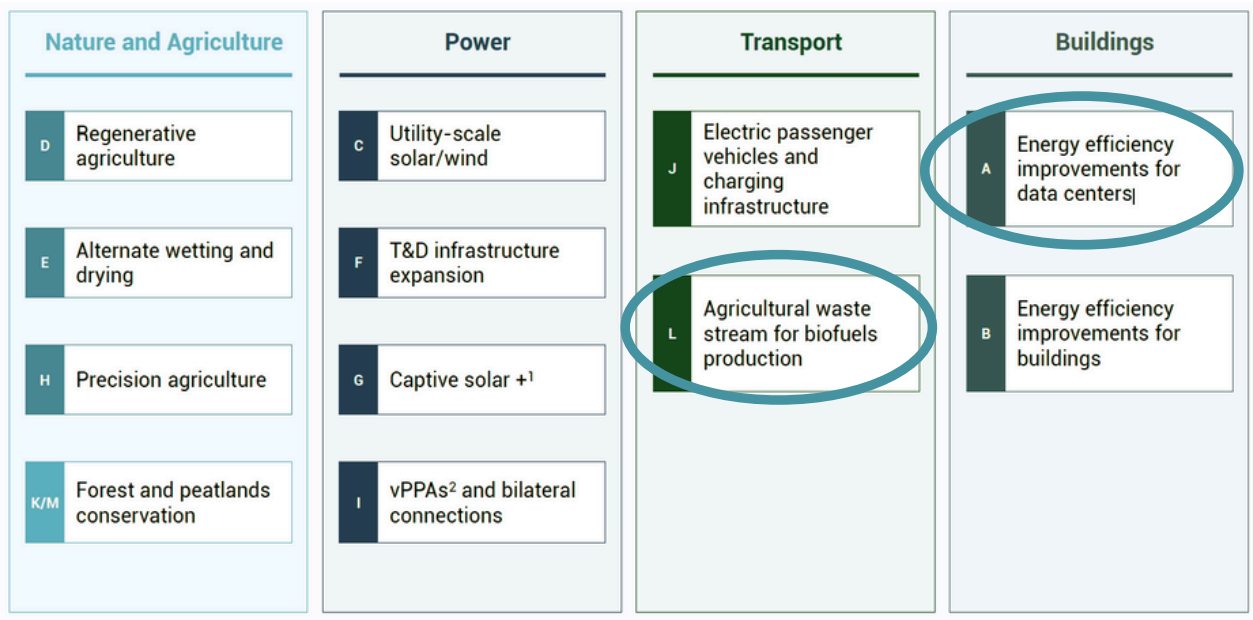
PART 3

Two Emerging Sectors to Explore in Singapore and Indonesia

2 Emerging Sectors Among SEA's "13 Investible Ideas"

Temasek and Bain evaluated over 100 investible ideas and shortlisted 13 in their 2024 Green Economy Report. Similar to Japan's "14 Growth Sectors" discussed in our previous report, SEA's "13 Investible Ideas"[14] are both impactful and technically feasible in the near term. Many align with Canada's technology strengths.

While sectors like solar, wind, and EVs are widely discussed and highly saturated with competitors from neighbouring countries, this report explores 2 emerging sectors out of 13 that could uniquely position Canada for future SEA capital and market access.



Source: Southeast Asia's Green Economy 2024, Moving the Needle

Sector 1 Agricultural Waste for bioenergy, potentially BECCS

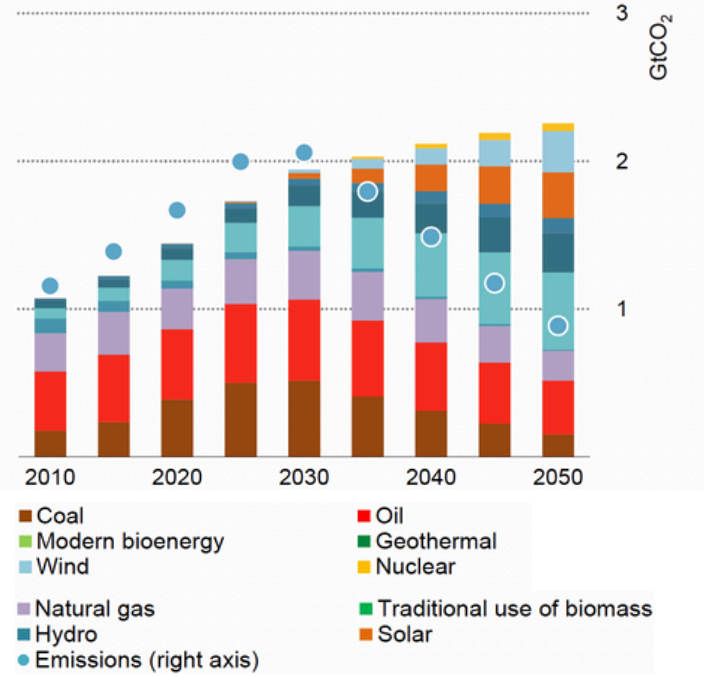
Sector 2 Energy Efficiency improvements for data centers

Sector 1 - Indonesia:
Agricultural Waste to Bioenergy, Potentially BECCS

1.1 Potential VS Challenge - 2G Demand VS 1G Reliance

- According to International Energy Agency (IEA), modern bioenergy (2G bioenergy) is set to be the leading solution to SEA's energy demand, along with solar, wind, geothermal.[15]
- Unlike **traditional (1G) bioenergy** (burning crops like **palm oil**), modern (2G) bioenergy combines sustainable biomass (agricultural and forest residues, used cooking oil, etc) with technologies like biofuel conversion, carbon capture and storage to produce clean energy.
- Indonesia is the largest bioenergy producer in region, with a total of 57 GW of nationwide bioenergy potentials.[16]

Southeast Asia CO_2 emission and energy demand, 2010-2050 (Announced Pledges Scenario)



Source: Southeast Asia Energy Outlook 2024, IEA

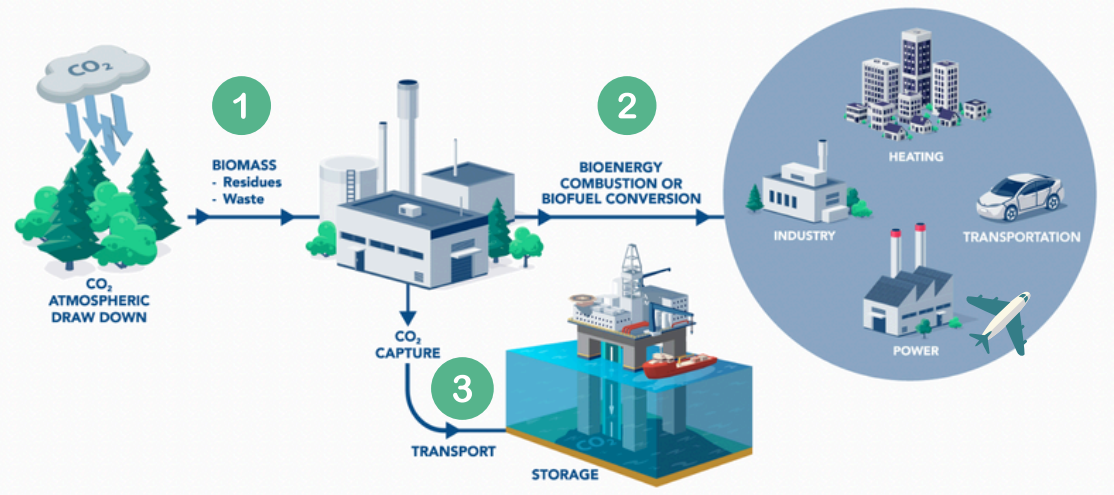
However, to unlock its full potential, Indonesia still faces critical **domestic challenges in ensuring a sustainable biomass supply** for 2G biofuel, despite its resource abundance, which may sounds contradictory:

- ***Most biofuel in Indonesia is from palm oil,*** *which is considered as "conventional" 1G feedstock and leads to deforestation and peatland destruction . In contrast, advanced* ***2G biofuels are produced from non-food crop feedstocks*** *(like agriculture residuals) and do not compete with farmland and forests. The ratio of conventional to advanced liquid biofuels needs to increase from 7:1 to 4:1 2035, and 1:1 in 2050.*[17][18] *However, much of Indonesia's agricultural residues and used cooking oils are scattered across a vast archipelago, making collection and logistics costly and fragmented. This requires better technology in tracing and collecting sustainable biomass.*

- *PLN, Indonesia's state-owned electric monopoly, sets a ceiling price for biomass purchase which is lower than the cap price of coal. However, there is premium buyer of biomass internationally so* ***the supply goes to the export market instead****.*

1.2 The Value Chain

Before we explore how to solve the challenges and where Canadaian cleantech holds a strength, let's first look at the value chain of bioenergy, and if we want to play a wilder card towards 2050 - bioenergy with carbon capture and storage (BECCS).



Source: Babcock & Wilcox [19]

1. **Securing sustainable 2G biomass**: non-food biomass such as agricultural and forestry residues, dedicated energy crops, used cooking oils, etc.
2. **Bioenergy combustion or biofuel conversion** for industry use: biomass is processed into useful energy products like electricity, steam/heat, or low-carbon fuels used in transportation and aviation. For example, governments are introducing **Sustainable Aviation Fuel (SAF)** mandates to increase the share of clean fuels in aviation. Singapore aims for 3–5% SAF blend by 2030. [20]
3. **Carbon capture, transportation and storage**: CO_2 generated in above process is captured, compressed and transported to storage sites, injected into saline aquifers or depleted reservoirs for permanent storage.

Economic value - BECCS projects generate **compliance savings** (in Canada - CCUS ITC, OBPS, CFR) and **carbon removal credits** in voluntary markets, as CO_2 comes from sustainable biomass and is permanent stored. However, it's highly policy dependent.

Market Size & Profit Margin for the Biofuel Value Chain

	Supply of input	Production and harvesting		Distribution	Nature-based solution	Biofuel	
	Higher-value/ yield crops	Precision agriculture	Regenerative agriculture	Farmer service platforms	Conservation, sequestration, etc.	Upstream (e.g., feedstock production)	Downstream (e.g., refining)
Opportunities							
Market size[1] ($ billion, 2030F)	~$4–$6	~$2–$3	~$2–$4	~$3–$4	~$2–$3	~$10	~$30
Indicative profit margin[2]	5%–15%	~10%	~20%	15%–20%	*Highly variable depending on projects*	15%–20%	20%–30%

Source: Southeast Asia's Green Economy 2025: Unlocking Systems for Growth and Impact [21]

1.3 Indonesia's Challange VS Canada's Strengths

A. Secure sustainable biomass - Traceability and Due Diligence Tech

Indonesia is the largest agricultural producer in SEA, and **smallholders** contributes to 40% palm oil, 84% rubber, 96% coffee and 98% cocoa cultivation.[22] There is a huge **traceability and due diligence gap** for them to meet sustainability standards and export regulations.

- In 2022, only 5% oil palm smallholders are RSPO (Roundtable on Sustainable Palm Oil) certified.[23]

This means that smallholders are excluded from major biofuel supply chains and export opportunities.

Feedstock must be certified sustainable to enter major biofuel markets:

- *EU Deforestation Regulation – requires strict traceability of commodities to ensure no deforestation after Dec 2020.*
- *RSPO / CORSIA / ISCC standards – biofuel feedstock must be certified sustainable to ensure no deforestation, peatland destruction, or exploitation of workers and communities enter aviation fuels and EU energy markets.*

Potential Solutions from Canada

SKYWATCH

Use geospatial data to monitor and analyze land use changes, track deforestation, and quantify the impact of human activity on natural resources. Series B backed by BDC ICE Fund. Ontario.

FarmersEdge

Provide a suite of solutions including regenerative agriculture, traceability and due diligence tech, crop insurance, etc. Acquired by Fairfax Financial Holdings. Manitoba.

veritree

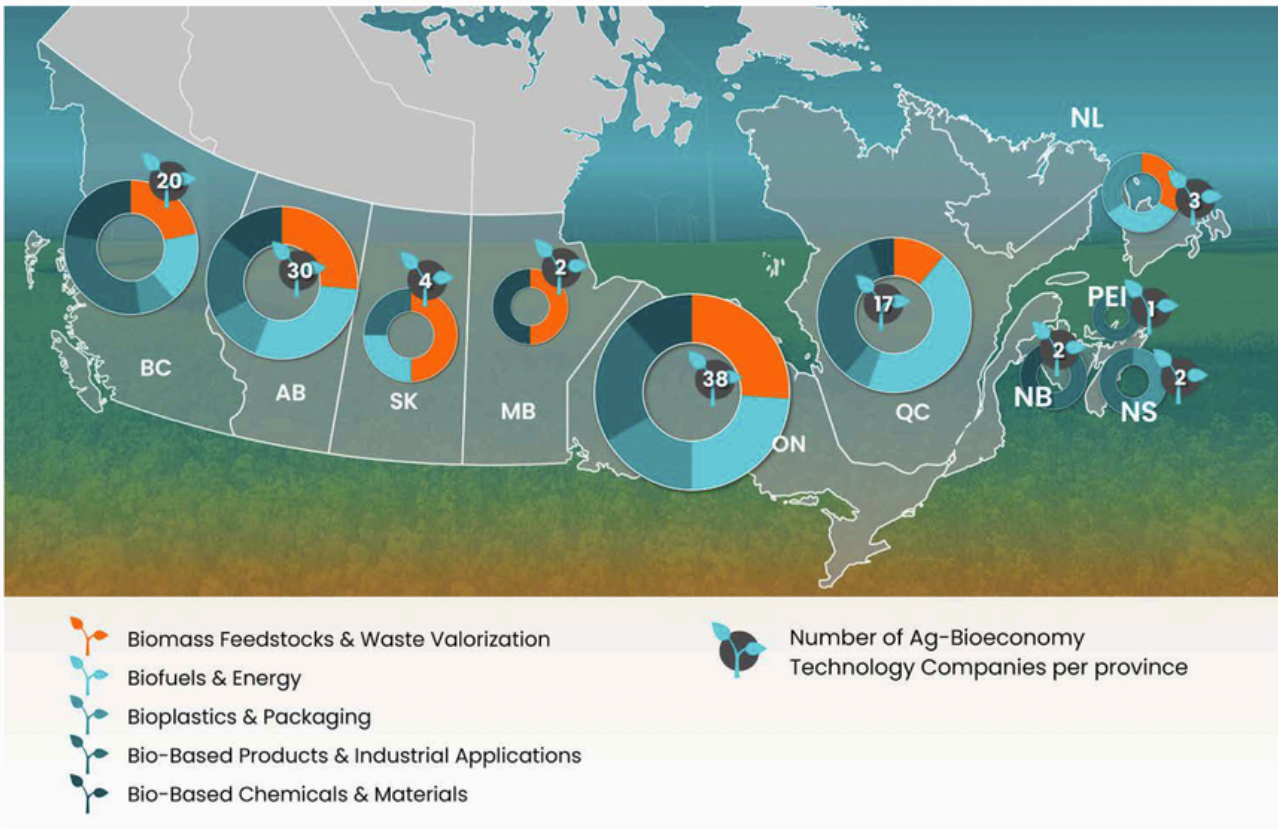
Provide digital traceability, monitoring, reporting, and verification (MRV) for nature-based solutions (NBS) and measure impact for restoration projects. Series A led by Pender Ventures. British Columbia.

Blended Finance and multi-stakeholder collaborations must be in place for **government agencies, corporate adopters** who need a sustainable supply to get smallholders certified For example:

- Partnership for Indonesia's Sustainable Agriculture (PISAgro) - multistakeholder platform dedicated to improve smallholders' efficiency and finance access.[24]

PISAgro

Canadian Companies in the Bioenergy Value Chain



Source: Foresight – Ag Economy Value Chain

Foresignt Canada mapped out 119 bioeconomy companies across Canada.[25]

- **31 companies in the biomass feedstocks & waste valorization sector**, and of these, 7 companies engage with **biochar**, which is widely used as a soil amendment to improve soil fertility and Inhibits degradation.
- **34 in the biofuels sector**, among them 8 companies engage with biodiesel, 6 with hydrogen, 4 with RNG (Renewable Natural Gas), and 4 companies with SAF production.

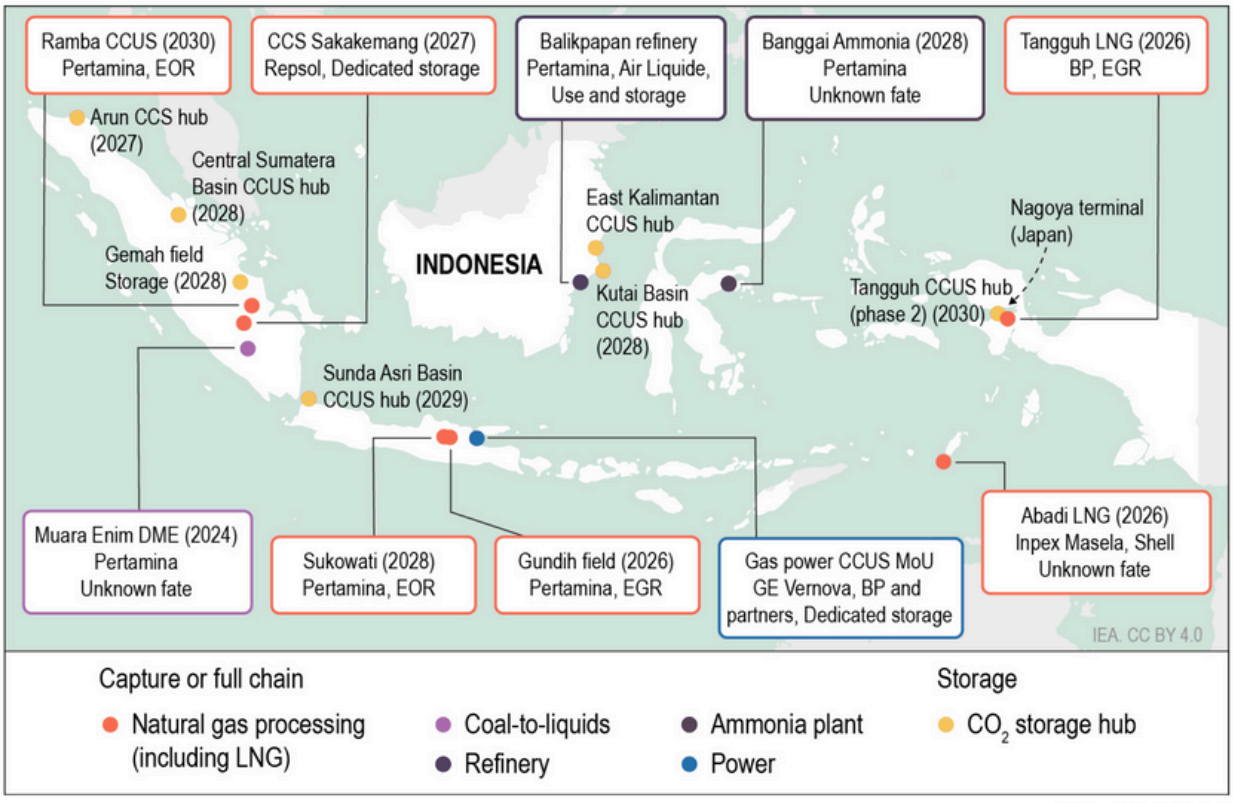
With the newly signed Canada - Indonesia Comprehensive Economic Partnership Agreement (**CEPA**) in September 2025, which prioritizes the cleantech and agriculture sectors, it's more promising for mature Canadian companies in this landscape to explore commercialization, technology licensing, and joint venture opportunities in Indonesia.

B. Carbon Capture, Utilization and Storage (CCUS)

CCUS remains a wild card solution in Southeast Asia, though Indonesia's potential is widely discussed. Its applications extend beyond the oil and gas sector to Indonesia's large cement, and pulp and paper industry. Indonesia stands out as the most idea country for CCUS projects in SEA:

- **Large, concentrated CO_2 sources:** Indonesia targets to introduce biomass co-firing to 52 coal-fired power plants. The country also has major industries like cement, and pulp & paper with concentrated emission source.
- **Strong storage potential**: Indonesia holds the largest CO_2 storage potential in SEA (alongside Malaysia), with ~600 gigatons in deep saline aquifers and ~10 gigatons in oil and gas reservoirs.
- **Clearer CCUS legal framework:** It's the first ASEAN country to establish a dedicated CCUS framework. MEMR Regulation 2/2023 introduced storage licensing for oil and gas, followed by Presidential Regulation 14/2024, expanding Carbon Storage Permit Areas (WIPK) to other sectors. It also allows 30% of storage capacity for imported CO_2.[26]
- **Carbon Pricing**: Indonesia is 1st in SEA to launch a mandatory ETS in 2024
- Currently there are 15 CCUS projects in development. (R20) Indonesia is also working with Japan (Marubeni) in **BECCS feasibility** study for pulp and paper mills.

Map of CCUS projects under development in Indonesia, 2023[27]



Source: Carbon Capture, Utilisation and Storage in Indonesia, Policy Brief, IEA

Potential Solutions from Canada

Svante

Canada's leading CCUS innovator, using solid sorbent filter technology to capture CO_2 directly from industrial flue gas (cement, hydrogen, steel, pulp & paper). Singapore's Temasek led a US$75M Series D in Svante in 2021. British Columbia.

CARBON CURE

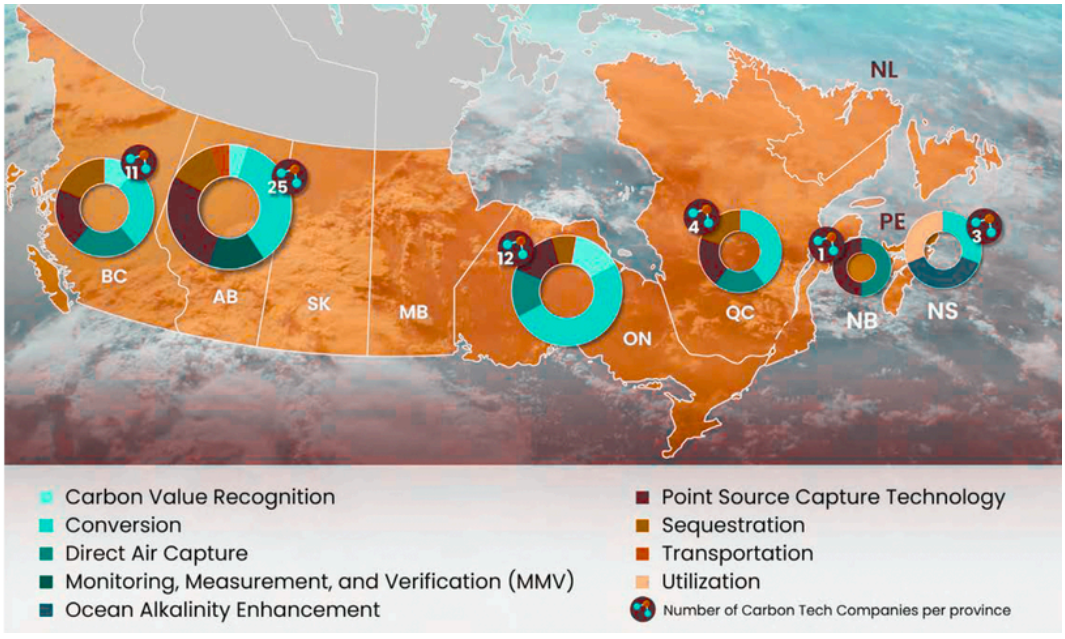
Injects captured CO_2 into concrete during mixing and enhance cement efficiency. For Indonesia, captured CO_2 from extensive biomass co-firing facilities could also help decarbonize its massive cement sector. CarbonCure has entered the SEA market by licensing to Singapore's concrete leaderPan-United in 2018. Nova Scotia.

CO280

CO280 is a large-scale carbon dioxide removal (CDR) project developer, specializing in retrofitting pulp and paper mills with BECCS. It currently operates in North America, with offtake buyers include Microsoft and JPMorgan, leveraging storage sites in Canada and the Gulf Coast. Indonesia may offer a new case for CO280 - large, concentrated emission sources across industries, significant storage capacity, and a clearer CCUS legal framework for storage licensing, combined with the SEA's first ETS, the newly signed CEPA, the rise of blended finance under JETP, and local ecosystem support from EDC Indonesia, the feasibility for BECCS are improving. There could be meaningful potential for CO280 to expand into the region. British Columbia.

Canadian Companies in the CCUS Value Chain

Canada has is a global innovation leader is CCUS. Conversion and point source capture lead the distribution, with a focus on industries like cement and pulp and pape.[28]

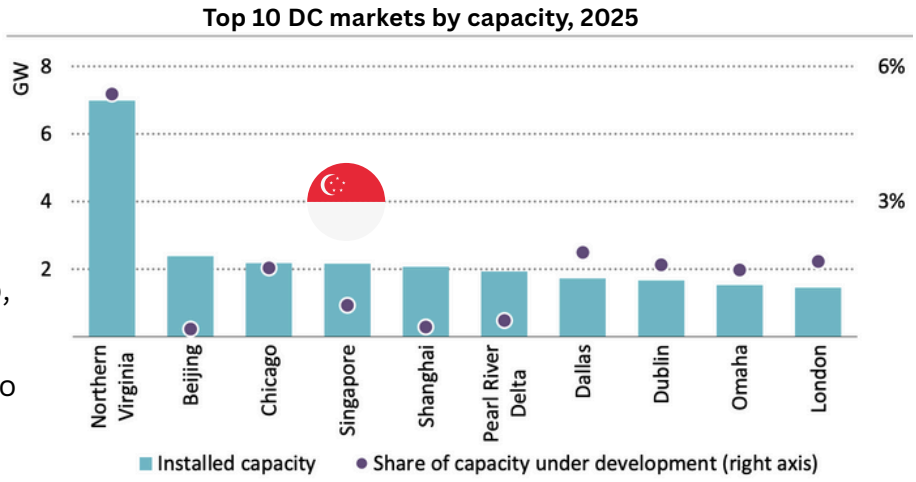


Source: Foresight – CCUS Value Chain

Sector 2 - Singapore: Energy Efficiency for Data Centre

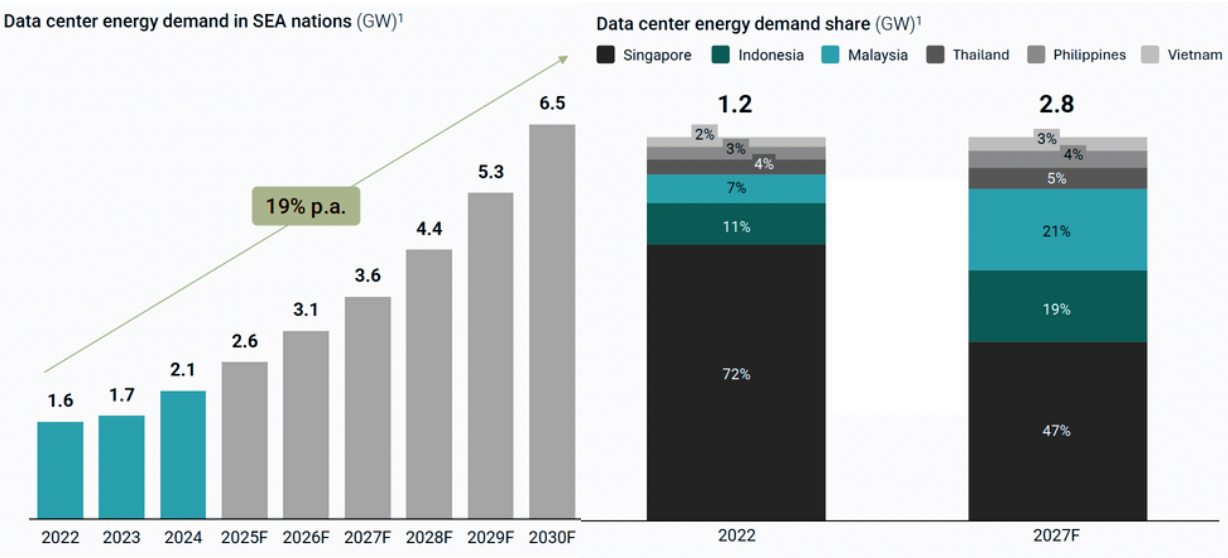
2. 1 Global Top DC Hub VS Energy Demand Pressure

Despite being a tiny island nation with a tropical climate that's hot, humid, and rainy all year round, Singapore has become a world's top data centre hub, just behind Northern Virginia, Beijing, and Chicago by capacity. [29]



Source: Energy and AI, IEA, 2025

With the world's most business-friendly environment, Singapore has attracted AI giants like Meta, Microsoft, Amazon and Google to deploy their AI infrastructure here.



Source: Southeast Asia's Green Economy 2024, Moving the Needle

However, Singapore faces a much steeper energy efficiency challenge than other renewable-rich DC clusters, with over 95% of its electricity imported from natural gas. SEA's DC energy demand **reached 2.1 GW in 2024, growing at 19% annually,** [30] and the growth could be less predictable under the surging global AI race. With high land constraints and high energy costs, some of the new DC development in SEA are shifting to Malaysia and Indonesia.

2.2 Singapore Green Data Centre Roadmap

To address surging DC energy demand, Singapore launched Green Data Centre Roadmap in 2024, aiming to provide at least 300 megawatts of additional capacity in the near term and outlined the key technology pillars to improve energy efficiency.[31]

Key Technology Roadmap

Hardware Level	Advanced Cooling Technology
Software Level	AI Energy Optimization & Digital Twins
Green Energy Source	Solar, Bioenergy, Hydrogen

Corporate's Green DC Efforts - Meta Singapore DC Example

MNCs in Singapore are making great efforts to improve energy efficiency in a sustainable way, with Meta as a strong example.

- Built 11-storey DC to maximize land use - one of the tallest in the world
- Reached 100% renewable and clean energy through adding renewables to local grid, deploying solar on the roof, a 25-year floating solar supply agreement with Sembcorp.

- To tackle the tropical climate challenge, Meta deployed the StatePoint Liquid Cooling system, and is actively partnering with local universities like National University of Singapore (NUS) and Nanyang Technological University (NTU) via the Sustainable Tropical Data Centre Testbed (STDCT) to co-develop next-generation Indirect Evaporative Cooling technologies.

2.3 Potential Solutions from Canada

The Roadmap aims for all DCs in Singapore to achieve Power Usage Effectiveness (PUE) ≤1.3 at 100% IT load, and WUE of 2.0 m3/MWh or lower over the next 10 years. This means extreme high energy efficiency compared to global standard. Although there is no historical engagement mapped in this sector, it is worth exploring where Canada's technology could serve Southeast Asia's surging DC energy demand.

** PUE = Total DC Energy/Equipment Energy. PUE=1 meaning all energy goes directly to computing (no cooling, lighting, etc.). PUE ≤1.3, indicating high energy efficiency compared with global standard.*
** WUE = total DC water consumption /total DC energy consumption, lower WUE indicates higher water efficiency*

CoolIT systems

Advanced Cooling Technology: CoolIT deploys its scalable liquid cooling solutions, which feature its modular, rack-based direct liquid cooling technology, to individual servers. As a result, not only do data centres remain cool, they also benefit from dramatic increases in rack density, component performance, and power efficiency, all while driving considerable environmental benefits. Alberta

Hypertec

Advanced Cooling Technology: Mature sustainable data centre infrastructure solutions, providing single-phase immersion cooling solutions that improve data center PUE and WUE while saving on OPEX and CAPEX. Quebec.

QScale

Growth provider of high-density colocation data centres that run on renewable energy and integrate advanced liquid/free cooling with waste-heat recovery to improve PUE and WUE. It could have strong market potential in Singapore, where colocation demand is booming due to land constraints and high PUE/WUE standards. Quebec.

PART 4

Ecosystem Players to Leverage for Southeast Asia Capital Access & Partnerships

PART 4

Ecosystem Players to Leverage for Southeast Asia Capital Access & Partnerships

We mapped out 16 key ecosystem players, including sovereign funds and private VCs with the capacity to invest globally beyond SEA, government agencies designed to support market entry into the region, and annual conferences with a dedicated cleantech focus.

Government Funds

Private Cleantech VC

Government Support

Annual Cleantech Events

1. Government-Backed Funds (GVCs)

- Sovereign funds play a leading role in scaling growth-stage cleantech from Canada. **Temasek, GenZero**, and Malaysia's **Khazanah Nasional** have backed landmark Canadian deals, including Orennia, Eavor, Svante, and General Fusion, effectively increase their credibility with Asian state-linked buyers. **SG Growth Capital** is a government-backed fund formed by merging EDBI and SEEDS Capital in 2024 to scale Singapore's tech ecosystem. EDBI focused on global growth-stage investments, while SEEDS focused on early-stage domestic startups.

2. Private Cleantech VCs with Global Investments

- Most SEA cleantech VCs invest solely in region or require foreign SMEs to register in SEA. However, **4 VCs** stand out with global cleantech investments. **Shift4Good** focuses on decarbonizing the mobility sector. **Vickers Venture Partners** has Canadian's Eavor in its portfolio. **Antares Ventures** is the most active players, backing 5 Canadian cleantech startups with a strong emphasis on commercialization.

3. Government Agencies

- Government agencies provide crucial support to de-risk entry and facilitate partnerships. Backed by Singapore's Economic Development Board (**EDB**), **ACE.SG** provide market entry support like registration, visa, and ecosystem connecting. They run regular Webinar Red Dot Cafe to help global startups navigate market entry. **Export Development Canada (EDC) Indonesia** provides debt financing, equity, credit insurance, trade knowledge and connections to support Canadian companies' expansion in Indonesia. with a priority on cleantech and renewable energy.

4. Annual Conferences with Cleantech Focus

- Singapore's maturing ecosystem is anchored by conferences such as **SWITCH** (Singapore Week of Innovation & Technology, Oct 2025), **Ecosperity** (May 2026), **Cleantech Forum Asia** (May 2026), and the **Canada-in-Asia Conference** (Feb 2026). They serve as platforms for Canadian companies to showcase solutions, meet capital providers, understand the policy landscape and engage with corporate buyers.

Hightlight 1: Why Singapore's Antares Ventures Invests in Canadian Cleantech?

As our mapping shows, Antares is the most active cleantech VC from Southeast Asia backing 5 Canadian startups like Summit Nanotech. To understand what drives their investment in Canadian cleantech, **MaRS Discovery District** interviewed **Michael Gryseels, Founder of Antares Ventures**, in February 2025. Below are 3 key insights:[32]

1. What excites Antares about Canadian founders?

- *Michael: "They are on average of higher quality, higher determination and higher grit. Both Founders and Co-Investors have **a global mindset early on** in the venture - that's very important for us because our objective is to **get them over to Asia**." "The lack of early stage funding is also pushing Canadian founders to be more resilient, more commercially focused and more internationally focused."*

2. Why do you encourage Canadian cleantech ventures to go to Southeast Asia?

- *Michael: "65% of the region is still powered by coal. Unfortunately there is little wind, and while people think there's solar, in reality it's often cloudy or rainy. So we look at what are the countries that have technologies that we can transfer. Canada has been a pioneer in geothermal energy, while Southeast Asia holds 50% of the world's geothermal reserves. Canada also has strong ocean tech capabilities, and SEA has 200,000 km of coastline. Even though the regions are different, Canada has solved similar problems, and SEA has the market need."*

3. What advice would you give Canada's ecosystem to foster more world-leading cleantech companies?

- *Michael: "The orchestration of how you get global capital to come to Canada, how do you get your Founders and ecosystem to take a global view because there are more opportunities beyond North America. Have exposure on markets that are very different to North America."*

The core message from Michael Gryseels is Canadian founders and investors should have a global commercialization mindset early on, and SEA is a great place to explore with real market needs.

Hightlight 2: EDC Indonesia and the New CEPA — Opening Doors for Canadian Cleantech

Export Development Canada (EDC) is a Canadian crown corporation providing debt financing, equity, credit insurance, trade knowledge and connections to support Canadian companies' international expansion.

With a priority on infrastructure, cleantech and renewable energy, and agriculture, **EDC Indonesia** supports Canadian firms in Indonesia, joint ventures, and Indonesian buyers of Canadian exports. Under the newly signed Canada–Indonesia Comprehensive Economic Partnership Agreement (**CEPA**) in September 2025, where cleantech is a key sector, EDC and the **Indonesia Investment Authority (INA)** established a new MOU that commits up to US$825 million in debt financing to co-fund projects across the priority fields, creating a new financing pathway and a de-risked entry point for Canadian firms.

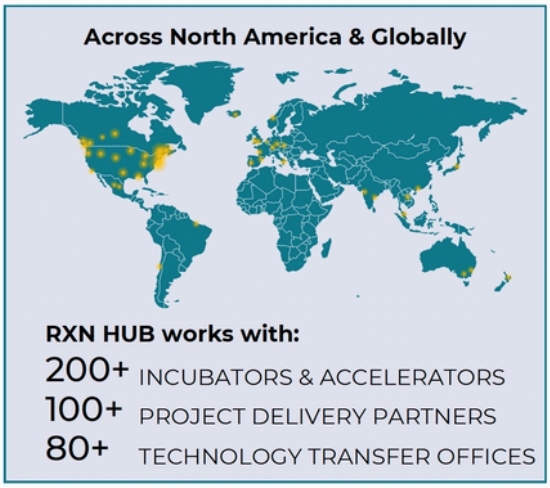
At the same time, Canadian firms must be prepared for the challenges of navigating Indonesia's market. In our conversations with **Sean Emmond, EDC's Chief Representative in Indonesia**, he shared some thoughtful considerations for Canadian companies who are interested in the market:

- *Commitment and a long-term view is critical. Companies must carefully assess if they are ready to come to Indonesia and willing to commit. It requires time and consistent presence in region to build trust.*
- *Establish local presence – consider opening a local office or securing a strong local partner.*
- *Leverage government support like Trade Commissioner Service (TCS) and EDC for support, connections, and credibility.*

Canadian firms now have unprecedented policy and institutional support to participate in Indonesia's green growth trajectory. With a GDP of ~US$1.4 trillion and annual growth of around 5%, Indonesia should not remain under the radar of Canadian cleantech.

Canada Ecosystem Player Highlight: How RXN HUB Supports International Markets

RXN HUB is a not-for-profit organization dedicated to supporting the scale-up and manufacturing of chemical technologies that address complex challenges based in Kingston, Ontario. Built by former founders and an ecosystem of 16 founding partners, RXN HUB's primary function is to empower an ecosystem of technology developers and adopters to collaborate by providing infrastructure and services.



Key ecosystem members include:

945 PRINCESS · KPM · MODERN NIAGARA · LOYALIST COLLEGE · Bioindustrial Innovation Canada · KINGSTON · OCTIA · Queen's · FORESIGHT CANADA · brinc · IAC·CAI · Deloitte. · KINGSTON · CANADA CLEANTECH · DUPONT · St. Lawrence College · venbridge · CLEANTECHNORTH · GreenCentre Canada · H2 · OCI · Chemical Angel Network

Non-Exhaustive List

RXN Hub's Key Functions

Provide Infrastructure

RXN HUB delivers purpose-built infrastructure that lowers CAPEX requirements and increase operational efficiencies.

Foster Collaboration

RXN HUB brings together academics, entrepreneurs, experts, innovators, investors, service providers, and technology adopters to execute large, multi-stakeholder projects - like commercialization.

Facilitate Commercialization

RXN HUB supports the development of chemical technologies from concept to commercialization.

How RXN HUB can support SEA's Ecosystem

Scout chemtech related technologies, IPs and research the ecosystem

Support market entry by establishing alliances with technology demonstration sites to create a network of infrastructure and procurement channels.

De-risk investment by providing eTEAs (ISO 14076), technology validation, and commercialization roadmaps to SEA investors.

Lower scale-up costs with shared labs, equipment and facilities for their portfolio companies.

Appendix

Mapping of 32 SEA deals with Canadian cleantech (2015–2025).

Country	Investor	Investor Type	Canadian Company	Sector	Year	Deal Type	Strategic Motivation / Rationale
Singapore	Temasek	GVC	Eavor Technologies (geothermal energy startup from Calgary)	RE & Infra	2021	Equity	Scale up Eavor's closed-loop geothermal technology as a source of clean, dispatchable baseload power. Temasek's backing (along with bp and Chevron's ventures) aimed to commercialize Eavor-Loop™ globally, complementing intermittent renewables with reliable geothermal energy (source)
Singapore	Temasek	GVC	Svante Inc. (Vancouver-based carbon capture tech for cement & hydrogen)	CCUS	2021	Equity	Scaling up point-source carbon capture to decarbonize heavy industries. Temasek led a $75 million round into Svante (source), supporting its solid sorbent CO_2-capture technology for cement and blue hydrogen production.
Singapore	Temasek	GVC	General Fusion (fusion energy startup – Vancouver)	RE & Infra	2019	Equity	Temasek's lead investment helped General Fusion accelerate development of its fusion prototype. this round came ~4 years after General Fusion's Khazanah-led raise. (source)
Singapore	Decarbonization Partners (Temasek + Blackrock partnership)	GVC	Orennia	SaaS	2025	Equity	"Developers and investors across the energy transition space require trustworthy data, analytics and insights. Orennia's platform allows market participants to make timely and confident investment decisions that deliver proven results and accelerate projects" (source)
Singapore	Pan-United Corp - SG leading concrete producer	CVC	CarbonCure Technologies (NS, Canada)	CCUS	2018	Licensing	CarbonCure licenses its CO_2-injected concrete technology to Pan-United. Singapore acts as a "gateway" for CarbonCure's expansion in Asia (source). Pan-United gains a proven green concrete solution, enabling CO_2 mineralization in cement and lowering cement's carbon footprint. The partnership was jointly witnessed by Canada's Trade Minister and Enterprise Singapore's CEO (source), underlining the strategic push to decarbonize construction in Southeast Asia.
Singapore	TRIREC	VC	Ekona Power	Hydrogen	2022	Equity	TRIREC Portfolio
Singapore	Vickers Venture Partners	VC	Eavor Technologies (AB, Canada)	RE & Infra	2019	Equity	Vickers' Chairman noted Eavor could "change the energy industry" by providing scalable baseload green power without intermittency. The funds and partnership help Eavor pursue global projects, with Vickers also advising on large-scale project finance as Eavor scales. (source)
Singapore	Confidential MNC in Singapore	Corporate	New Energy Corp (AB, Canada)	RE & Infra	2022	Pilot	Deployed ~20 5kW hydrokinetic systems at industrial waste water channel on Jurong Island, Singapore.
Singapore	Antares Ventures	VC	Aryton Energy	Hydrogen	2024	Equity	
Singapore	Antares Ventures	VC	Open Ocean Robitics	Water	2024	Equity	
Singapore	Antares Ventures	VC	Summit Nanotech	Mining	2020-2025 (undisclosed)	Equity	
Singapore	Antares Ventures	VC	Genecis Bioindustries	Circular Economy	2020-2025 (undisclosed)	Equity	
Singapore	Antares Ventures	VC	Fex Energy	Energy Storage	2025	Equity	Seed
Malaysia	Khazanah Nasional Berhad (Malaysia's sovereign wealth fund)	GVC	General Fusion (fusion energy startup – Vancouver)	RE & Infra	2015	Equity	Khazanah led a funding round to advance General Fusion's reactor R&D, reflecting Malaysia's interest in alternative clean energy sources. Coming from a fossil-fuel-rich country, the fund saw fusion as a long-term solution for carbon-free energy and wanted to support innovation in next-generation energy technology (source)
Malaysia	Khazanah Nasional Berhad (Malaysia's sovereign wealth fund)	GVC	General Fusion (Burnaby, BC – fusion energy startup)	RE & Infra	2019	Equity	source
Malaysia	PETRONAS (via PETRONAS Energy Canada Ltd.)	Corporate	Invest Alberta	Hydrogen	2022	MOU	Developing low-carbon fuel supply chains for export to Asia. PETRONAS's Canadian subsidiary signed an MOU (with Invest Alberta, Inter Pipeline and Japan's Itochu) to explore a world-scale blue ammonia and methanol facility in Alberta. The goal is to leverage Alberta's natural gas and carbon storage capacity to produce blue ammonia for Asian markets. (source)
Malaysia	Sarawak Economic Dev. Corp & Sarawak Energy (MY)	Government	Ballard Power Systems (BC, Canada)	Hydrogen	2019	Pilot	Malaysia's Sarawak state launched Southeast Asia's first hydrogen fuel-cell buses as a pilot in Kuching. Ballard (Canada's fuel-cell system provider) supplied 50 kW PEM fuel cell modules for the buses (via OEM partners). Source
Philippines	Philippines Department of Energy	Government	Saskatchewan Government	RE & Infra	2025	MOU	MoU to cooperate on sustainable energy solutions– including exploring small modular reactors (SMRs), renewable integration, grid modernization and workforce development. Leverage Saskatchewan's expertise in nuclear and clean power to assist the Philippines in diversifying its energy mix. (Source)
Myanmar	Community of Hpa-An (MM) – local pilot site	Government	New Energy Corp (AB, Canada)	RE & Infra	2015	Pilot	New Energy's hydrokinetic platform on the Thanlyin River in Myanmar, powers a school at Hpa An.The system includes battery storage and the ability to provide peak power of up to 20 kW. (source)
Laos	Ministry of Energy and Mines (government)	Government	EXP Inc. (Canadian engineering firm)	RE & Infra	2018	MOU	Grid modernization partnership: Laos's Energy Ministry signed an MoU with Canada's EXP to cooperate on developing the power sector to modernize Laos' electricity system and improve cross-border grid connections, (source)
Indonesia	Government of Indonesia (Ministry of Energy & Mineral Resources)	Government	Government of Canada – Critical Minerals Cooperation	Mining	2024	MOU	Secure EV supply chains and investment ties. As part of Canada-Indonesia economic talks, an MoU on critical minerals was signed to foster cooperation in sourcing and developing minerals essential for clean technologiesc Indonesia, rich in nickel and other EV metals, and Canada agreed to collaborate on supply chain development for batteries and ensure mutual investment opportunities in mining and processing, supporting the EV and renewable energy industries. (source)
Indonesia	Canada-ASEAN Business Council	Government	ASEAN Centre for Energy	RE & Infra	2024	MOU	"This collaboration will enable Canadian businesses to share innovative solutions to the ASEAN region's energy needs"
Indonesia	PT Sarana Multi Infrastruktur (Persero) ("PT SMI")	Government	EDC	RE & Infra	2024	MOU	Deepen Canadian participation in Indonesia's infrastructure project development, as well as to connect technology experts and investors with projects and project developers in Indonesia. The MoU foresees joint outreach and knowledge sharing between Canadian exporters and Indonesian key stakeholders, as well as the joint financing of projects with Canadian participation. (source)
Indonesia	National Research & Innovation Agency (BRIN) (Indonesian government R&D agency)	Government	Canadian Nuclear Laboratories (CNL) – partnership on Small Modular Reactors (SMRs) and nuclear research	RE & Infra	2024	MOU	Collaborative clean energy innovation. BRIN and CNL signed an MoU to cooperate on nuclear energy solutions, including exploring SMR feasibility and joint research. Indonesia is evaluating nuclear technology for its energy transition, and Canada's expertise in SMRs and nuclear safety will help build Indonesian capacity (source)
Indonesia	Alfamart (Major Indonesian retail chain)	Corporate	Plastic Bank (plastic recycling social enterprise in Vancouver)	Circular Economy	2018	Pilot	Launch of Plastic Bank's program in Indonesia to trade ocean-bound plastic for value, helping both the environment and local communities. Through Alfamart stores, low-income collectors redeem collected plastic for essential goods (rice, cooking oil, etc.) via monthly vouchersplasticbank.com.
Vietnam	KLC Group (Vietnamese environmental services firm)	Corporate	WaterShed Monitoring (water data management startup – Quebec)	Water	2024	Pilot	Joint pilot in the Mekong Delta to implement WaterShed's cloud platform for water quality monitoring. (source)
Vietnam	Vietnam ASEAN Hydrogen Club (VAHC) (industry association)	Association	Canadian Hydrogen Association (CHA) – bilateral collaboration	Hydrogen	2025	MOU	The VAHC and CHA signed an MoU in June 2025 to jointly promote zero-emission hydrogen solutions. The partnership facilitates knowledge sharing, exchange of regulatory and policy frameworks, accelerating hydrogen project development in Vietnam and creating links to Canadian hydrogen expertise. (source)
Thailand	Indorama Ventures (Bangkok-based global petrochemicals firm)	Corporate	Loop Industries (Montreal-based plastics recycling technology)	Circular Economy	2018	Joint Venture	50:50 JV to deploy Loop's proprietary depolymerization technology for recycling waste PET into new resin, gaving Indorama an exclusive license to use Loop's technology globally, aiming to produce 100% recycled, food-grade polyester at scale. (source)
Thailand	Bangchak Corporation (Thai energy conglomerate)	Corporate	Lithium Americas Corp. (lithium resource developer – Vancouver)	Mining	2017	Equity	Bangkok-based Bangchak invested in Lithium Americas to secure a long-term lithium supply for the EV battery market. The deal included equity (16.4% stake) and a loan facility, plus Bangchak's right to offtake 20% of lithium production for 20 years. Ensuring access to battery-grade lithium. (source)
Thailand	Confidential client in Thailand	Corporate	Saltworks Technology	Water	2015	Pilot	Thailand's leader in reverse ssmosis Looks to saltworks for innovative brine & acid solutions (source)
Thailand	GC Ventures - PTT Global Chemical	CVC	Pangaea Ventures (Fund IV)	VC Fund	2024	LP	(source)
SEA undisclosed (probably Thailand)	Confidential client in SEA	Corporate	Saltworks Technology	Water	2021	Pilot	Deployed membrane pilot which achieves 98% water recovery in Southeast Asia (location undisclosed) (source)

References

1. Southeast Asia Energy Outlook 2024. International Energy Agency. Report. Link.
2. Southeast Asia's Green Economy - Unlocking Systems for Growth and Impact. Bain & Compant, 3. Gen Zero, Google, Standard Chartered, Temasek. Report. 2025. Link.
4. Singapore Energy Transition and Singapore International Energy Week (SIEW) 2025. Energy Market Authority. Report. 2025. Link.
5-6. 2025 Cleantech Industry Survey Results, NRCan, Website. 2025. Link.
7. Climate Solutions and Cleantech: Building a Greener Indo-Pacific Region Through Foreign Direct Investment. Asia-Pacific Foundation of Canada. 2024. Report. Link.
8. Economic Intelligence Unit. Website. 2023. Link.
Southeast Asia Energy Outlook 2024. International Energy Agency. Report. Link.
9-11. Southeast Asia's Green Economy 2024 Report: Moving the Needle. Bain & Compant, Gen Zero, Standard Chartered, Temasek. Report. 2024. Link.
12. Singapore Energy Transition and Singapore International Energy Week (SIEW) 2025. Energy Market Authority. Report. 2025. Link.
13. Just Energy Transition Partnership Indonesia - Comprehensive Investment and Policy Plan 2023. Policy document. 2023. Link.
14. Southeast Asia's Green Economy 2024 Report: Moving the Needle. Bain & Compant, Gen Zero, Standard Chartered, Temasek. Report. 2024. Link.
15. Southeast Asia Energy Outlook 2024. International Energy Agency. Report. Link.
16. Just Energy Transition Partnership Indonesia - Comprehensive Investment and Policy Plan 2023. Policy document. 2023. Link.
17. Southeast Asia Energy Outlook 2024. International Energy Agency. Report. Link.
18. Just Energy Transition Partnership Indonesia - Comprehensive Investment and Policy Plan 2023. Policy document. 2023. Link.
19.Bioenergy with Carbon Capture and Sequestration (BECCS), Net-negative energy generation from solid fuels. Babcock & Wilcox. Website. Link.
20. Singapore Sustainable Air Hub Blueprint. Civil Aviation Authority of Singapore. Report. Link.
21. Southeast Asia's Green Economy - Unlocking Systems for Growth and Impact. Bain & Compant, 3. Gen Zero, Google, Standard Chartered, Temasek. Report. 2025. Link.
22. Sustainable Value Chains: Tech and Finance for ASEAN's Smallholders. Singapore Institute of International Affairs. 2025. Link.

23. Charlotte Reich, Oliver Musshoff, Oil palm smallholders and the road to certification: Insights from Indonesia, Journal of Environmental Management, Volume 375, 2025, 124303. Link.
24. Sustainable Value Chains: Tech and Finance for ASEAN's Smallholders. Singapore Institute of International Affairs. 2025. Link.
25. Canada's Ventures to Value Chains, Carbon Technology. Foresight. Report. 2023. Link.
26. Indonesia CCS - New Regulation on Carbon Storage. Ashrust website. 2025. Link.
27. Carbon Capture, Utilisation and Storage in Indonesia Policy brief. IEA. 2023. Link.
28. Canada's Ventures to Value Chains, Carbon Technology. Foresight. Report. 2023. Link.
29. Energy And AI. IEA. Report. Link.
30. Southeast Asia's Green Economy - Unlocking Systems for Growth and Impact. Bain & Compant, 3. Gen Zero, Google, Standard Chartered, Temasek. Report. 2025. Link.
31. Singapore Green Data Centre (DC) Roadmap. IMDA Singapore. Policy document. 2024. Link.
32. Canada's cleantech advantage, MaRS Discovery District. Interview. Youtube. 2025. Link.

Acknowledgements

Sponsor:
Morgen Lehtinen, Executive Director
Sebastian Alamillo-Falkenberg, Director

✉ info@rxnhub.org

Reaction (RXN) Hub is a not-for-profit organization dedicated to supporting the scale-up and manufacturing of chemical technologies that address complex challenges based in Kingston, Ontario. Built by former founders and an ecosystem of 16 founding partners, RXN HUB's primary function is to empower an ecosystem of technology developers and adopters to collaborate by providing infrastructure and services.

Author
Joy Zhang, Partner

✉ connect@ecosystem17.com

Ecosystem 17 bridges the Cleantech ecosystems of Canada and the Asia-Pacific region. Our mission is to accelerate cleantech commercialization through conducting in-depth ecosystem and market research, cultivating cross-border partnerships, and unlocking capital pathways.

Special Thanks

- **Lynn Cote,** Executive Director, Canada Cleantech Alliance - for her essential feedback and guidance in shaping the direction.
- **Sean Emmond**, Chief Representative, EDC Indonesia, and **Dwina Soerono**, Senior Regional Manager, EDC Indonesia - for sharing insightful and thoughtful market perspectives on Indonesia.
- **Karleigh Young**, Partnerships Lead, RXN Hub - for design and communications support of the series.
- **Guojie Qi,** Project Director, ZGC Innovation Centre - for advisory.
- **Hisham Ismail**, Asset Manager, Oxford Properties Group - for proofread.