

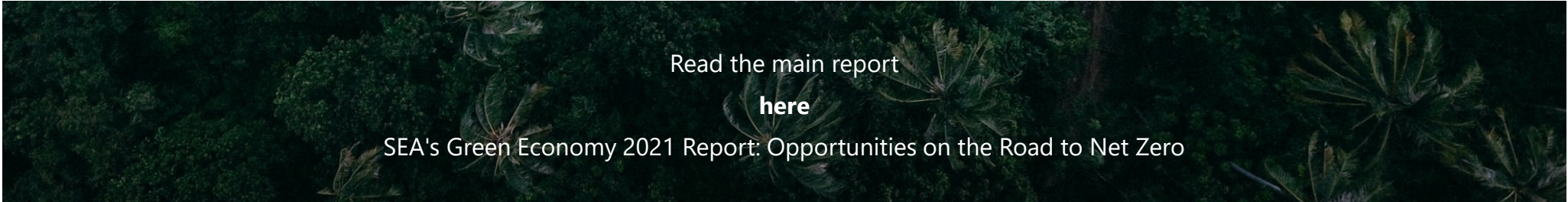


03

Unlocking Capital for Sustainability

Increasing flows, but
sizeable headroom

Main report

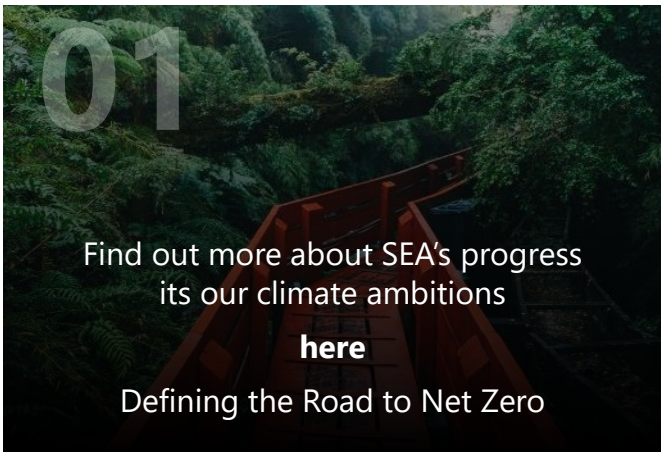


Read the main report

here

SEA's Green Economy 2021 Report: Opportunities on the Road to Net Zero

Deep-dive sections

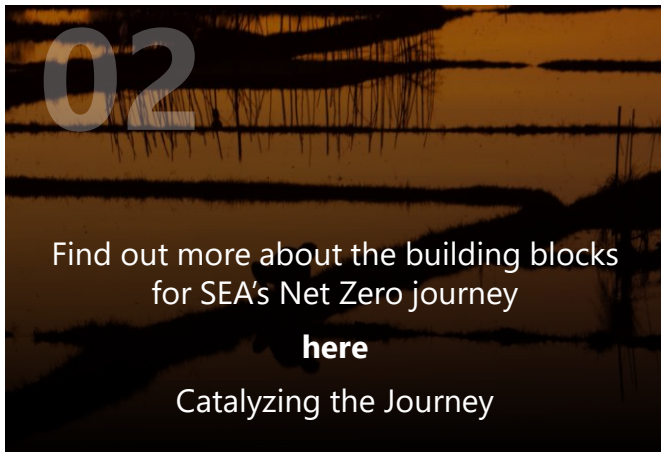


01

Find out more about SEA's progress
its our climate ambitions

here

Defining the Road to Net Zero



02

Find out more about the building blocks
for SEA's Net Zero journey

here

Catalyzing the Journey



03

Unlocking Capital Flows

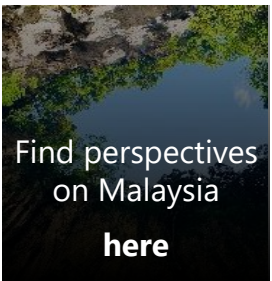
This report

Country insights



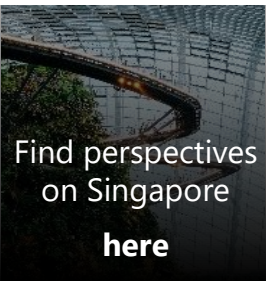
Find perspectives
on Indonesia

here



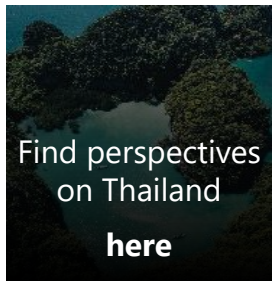
Find perspectives
on Malaysia

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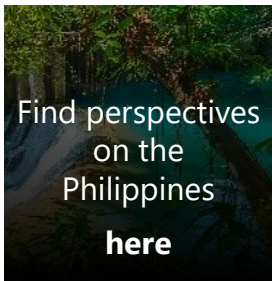
Find perspectives
on Singapore

here



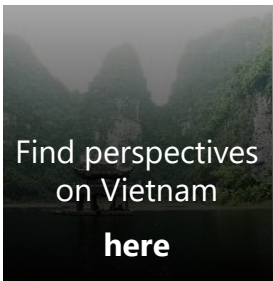
Find perspectives
on Thailand

here



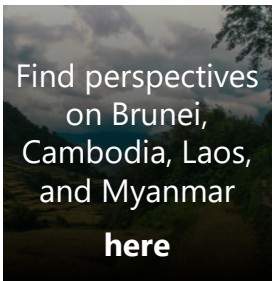
Find perspectives
on the
Philippines

here



Find perspectives
on Vietnam

here



Find perspectives
on Brunei,
Cambodia, Laos,
and Myanmar

here

Key messages

A

Southeast Asian (SEA) investors and financiers are accelerating the integration of sustainability into their investing strategies

- SEA investor sentiment is **shifting along the sustainability adoption spectrum**; SEA investors have caught up to the rest of Asia-Pacific in just the last 2 years in terms of integrating sustainability into their investing strategy
- Private investors and financiers are facing **pressure from clients (especially high-net-worth individuals and families)** and other stakeholders, and government-linked funds are mobilizing to influence **ecosystem-wide change**

- The **increase in regulatory support also offers new opportunities**, with the region's state machinery mobilizing capital through co-investments/grants, incentives, and guarantees in line with national green agendas

B

As a result, green capital has begun to flow in the region, but there is still much headroom to grow

- **Green fundraising** has been on a strong upward trajectory since activity began ~3-5 years ago, but there is **big headroom to grow**
 - In 2020: strong growth across debt¹ (~\$12B, 151% growth p.a. since 2016), IPOs² (~\$1.4B, 45% growth p.a. since 2016), private equity (~\$0.5B, 53% growth p.a. since 2017), and public funds³ (~\$0.6B, 40% growth p.a. since 2018)
- A **growing proportion of capital is being deployed into green businesses or assets**, though **growth is less consistent**
 - In 2020: ~11% corporate⁴ (~\$4.9B, 22% growth p.a. since 2016), ~19% PE/VC⁵ (~\$1.9B, 50% growth p.a. since 2016), and ~36% infrastructure capital (~\$1.9B, -18% decline p.a. since 2016) were deployed into green assets

- Further, **development and nongovernmental players are stepping up** climate financing in SEA, utilizing creative instruments such as **blended financing to catalyze more capital**, including from the private sector
- **Energy transition, sustainable buildings and construction, and waste and water** are the key sectors attracting capital today, while **nature-based solutions and sustainable agri-food** are nascent but promising areas, with regional developments supportive of the investment thesis

C

There are promises of the road ahead to full potential

- While a promising start, **much more is needed** to address the **scale of capital required for transition: ~\$2T** needed to develop sustainable infrastructure from 2021 to 2030
- There is **much room to grow**: SEA green debt levels lag global GDP contribution (<2% vs. ~4% respectively), and public funds' assets under management (AUM) is a sliver of global's (<0.1%)

- **Several barriers exist today** that impede growth in sustainable capital flow: macro challenges, an immature ecosystem, low quality and high risk of investments, and organizational hurdles
- **Critical enablers are required to scale up green finance** in the region: strong government policies and incentives, digital/data innovation to reduce frictions, blended financing, established ecosystem fundamentals, and fit-for-purpose fund allocation and operating principles

Notes: 1. Includes green and sustainability;
2. Initial public offering;
3. Includes funds with sustainability (social and environmental) objectives and/or use binding environmental, social and governance (ESG) criteria for investment selection;
4. Excludes investments <15 million; 5. Private equity/venture capital. Excludes deals <10 million

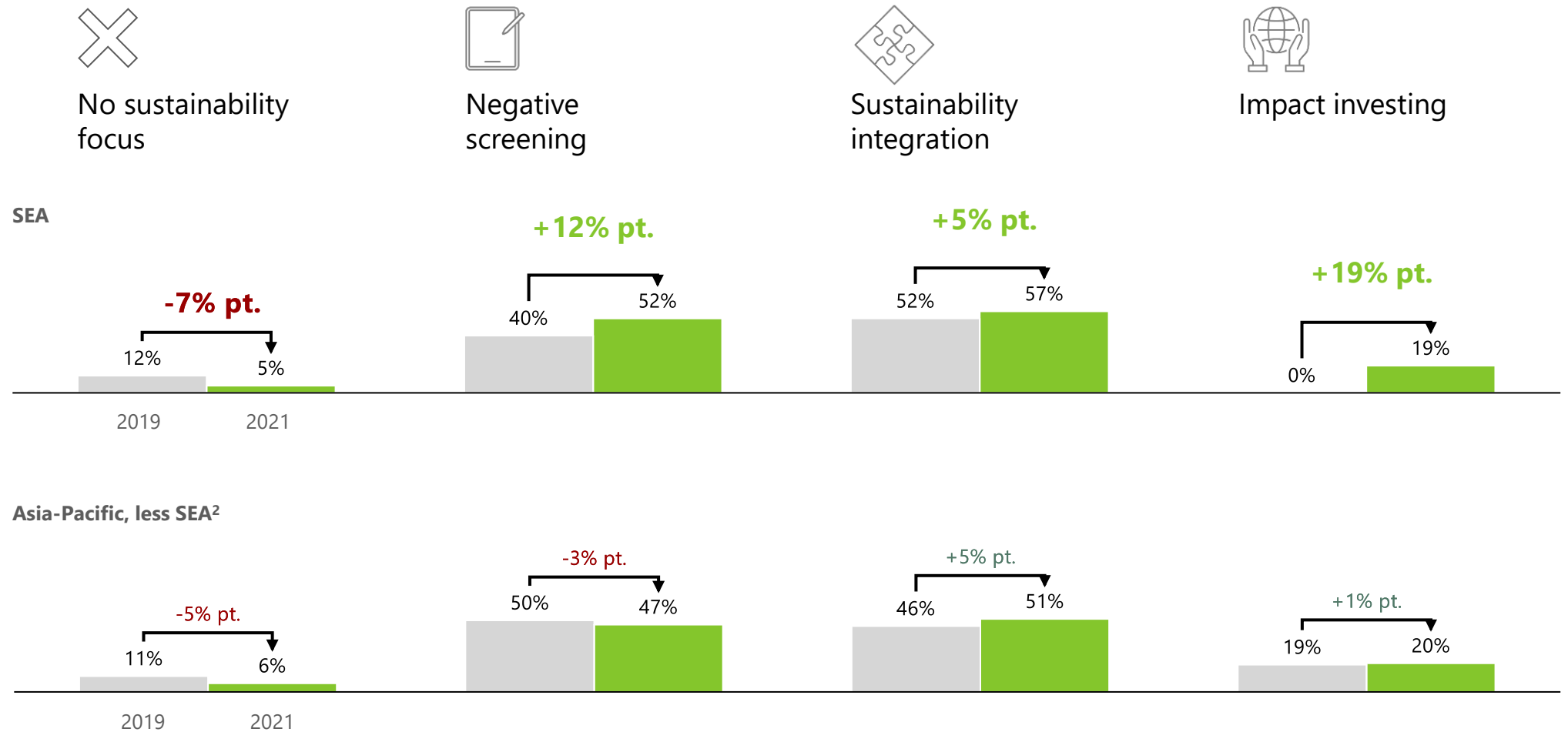
03

UNLOCKING CAPITAL

A

Investors are moving along the sustainability spectrum

SEA investors have caught up with the rest of Asia-Pacific in terms of sustainability integration into their investment strategies in just the last 2 years¹



Notes: 1. Total does not add up to 100% as funds may adopt multiple strategies; 2. Asia-Pacific countries include Greater China, India, Japan, Australia, New Zealand, and South Korea

Sources: Bain Asia-Pacific PE Survey 2019, Bain Asia-Pacific PE Survey 2021

Multiple sources of pressure to adopt sustainable investing

Clients/LPs¹

62% SEA PE/VC Funds² have adopted sustainability practices in **response to LP pressures**

“ *The **new generation of SEA high-net-worth individuals** is driving demand for sustainability*

SEA Strategy Head,
International Banking Group

“ *A lot of this is driven by LPs... who are increasingly asking for 'green' fund-level investments and co-investments*

SEA Senior VP,
International PE Fund

Regulators

~4.5x increase in SEA companies **supporting TCFD³** since 2019 (20 vs. 90 today)

~1.7x increase in **UN PRI⁴ signatories** in SEA since 2019 (40 vs. 67 today)

“ *G7⁵ has made climate risk disclosures mandatory... similar conversations are starting to happen around SEA*

Head of Sustainability,
SEA Exchange

Reputational risks

71% SEA PE/VC Funds² have adopted sustainability practices to **mitigate reputational risk**

“ *Investee companies... (with negative environmental impact) could pose **reputational risk** to asset managers, and this in turn, is a **business risk***



“ *Financing the culprits behind forest fires to make space for palm oil plantations can cause **severe damage** to banks' reputations*



Government-linked funds are stepping up to influence ecosystem change

Temasek aims to halve portfolio GHG⁶ emissions by 2030 in support of Singapore's Green Plan

TEMASEK

INA to invest in renewable energy sector in line with Indonesia's clean energy ambitions



Employee's Provident Fund (Malaysia's national pension fund) aims to be **Net Zero** by 2050



Notes: 1. Limited partners; 2. Investors surveyed (in 2021) include portfolio managers, CFOs, CEOs, ESG specialists, and investment specialists working in global financial services firms, commercial banks, asset and wealth management funds, insurance companies; 3. Task Force on Climate-Related Financial Disclosures; 4. United Nations Principles for Responsible Investment; 5. Group of Seven; 6. Greenhouse gases

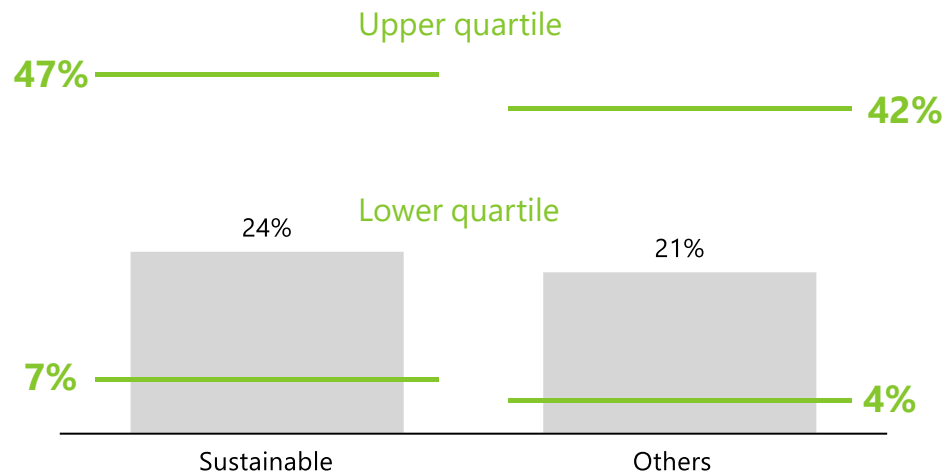
Sources: Eco-Business; CNBC; Company websites; Bain Asia-Pacific Private Equity Survey 2021; Bursa; Fund Selector Asia; EIU; TCFD; UN PRI; Business Times; S&P Global; MAS; Industry interviews

Growing recognition that sustainability is associated with improved financial returns

Upside potential driven by value creation from efficiencies, differentiated products, business models, and value preservation from risk mitigation as externalities are priced in

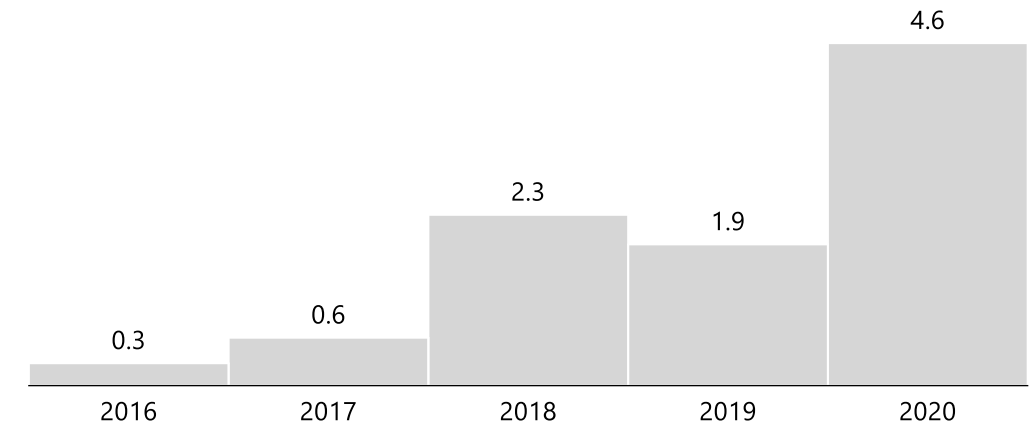
Private markets:

Median gross IRR¹ for buyout growth deals exited 2015-20



Public markets:

Excess returns (% pt.) of MSCI Socially Responsible Investing (SRI) index compared to MSCI All Country World Index (ACWI)²



Notes: 1. Internal rate of return;
 2. MSCI ACWI captures large and mid-cap representation across 23 Developed Markets (DM) and 27 Emerging Markets (EM) countries. MSCI SRI includes top 25% ESG performers across sectors

Sources: CNBC; INA; ESG Today; The Edge; MSCI

New opportunities are arising from **increasing regulatory support**

State machinery mobilizing capital support...

...spurring investors and businesses to act

Investments
(grants,
co-investments)

**Green and Sustainability-Linked
Loan Grant Scheme by MAS¹**

World's first grant scheme to support green and sustainability-linked loans (launched in 2020), which enhances the Sustainable Bond Grant Scheme (SBGS)



As of 2020

> \$8 billion

Green/sustainable bonds issued
Under SBGS since its launch in 2017

Tax incentives

**Bio-Circular-Green (BCG)
economy model**

Government tax exemptions and other incentives for green investments



In 2020

> \$1.7 billion

In investment apps across 300 projects
Proposed by local and international firms under the BCG program

Guarantees

**Feed-in-tariff (FiT) for
Solar Energy**

20-year purchase price guaranteed by government for solar power sold to national electricity grid



In 2020

~25x

Increase in solar capacity (~9 GW installed)
From surge in solar investments to meet the FiT scheme's deadline

Notes: 1. Monetary Authority of Singapore

Sources: ADB; ASEAN; Business Times; CFI; Bangkok Post; WEF; The Asset; The Straits Times; MAS

Green capital is beginning to flow in SEA, though still at early stage

B

Green fundraising has been on a **strong upward trajectory** over the last 3-5 years

While share of **capital deployment into green assets** is increasing, overall **growth is less strong** compared to fundraising

	Capital raised	Annual growth	Capital deployed	Annual growth	Share of total value ³
	2020		2020	Since 2016	2020 2016
Debt	\$11.9 billion debt issued	151% since 2016	Corporates⁴ \$4.9 billion	22%	11% 3%
IPO	\$1.4 billion IPOs	45% since 2016	PE/VC⁵ \$1.9 billion	50%	19% 5%
PE/VC	\$0.5 billion funds raised	53% since 2017 ¹	Infrastructure \$1.9 billion	-18%	36% 23%
Public funds²	\$0.6 billion total AUM	40% since 2018	Total \$8.7 billion	6%	15% 7%

Notes: 1. No green funds raised in 2016; 2. Includes funds raising capital for environmental and sustainability objectives; 3. Total value only includes SEA countries with available data for each asset category in SEA; 4. Excludes investments <\$15 million; 5. Excludes deals <\$10 million

Sources: Bain analysis

Green debt issuance at ~\$11.9 billion in 2020, but SEA lags on relative terms

Annual issuance has accelerated since first issuance in 2016

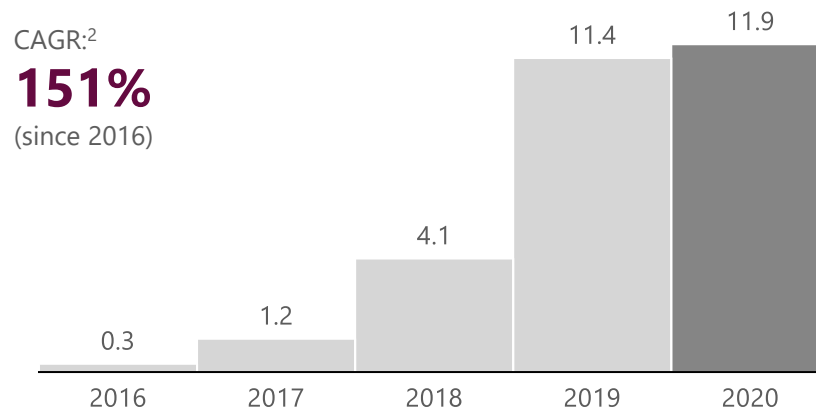
Singapore leads in issuances, with majority allocated to green buildings and infrastructure

B

FUNDRAISING

DEBT

Green¹ debt issued in SEA (US\$ billion)



In 2020, \$11.9 billion issued across:



SEA contribution to global in 2020:



Potential annual issuance in SEA if global GDP contribution levels reached

Notes: 1. Green includes both green and sustainability debt, where sustainability debt refers to projects with combination of green and social impact; 2. Compounded annual growth rates; 3. Bonds include senior unsecured bonds, senior secured bonds, subordinated unsecured bonds, perpetual bonds, sukus and medium-term notes. Loans include term loans and bridging loans. Others include private placements and project finance; 4. SG-Singapore; TH-Thailand; ID-Indonesia; PH-Philippines; MY-Malaysia; Others include Vietnam, Myanmar, Laos, Brunei, and Cambodia; 5. Others include waste, land use, industry, information and communications technology and unallocated.

Sources: Climate bonds (SEA and Global Reports)

Strong growth in green IPOs since 2016

Dip in 2018 due to macro factors, e.g., US-China trade tensions

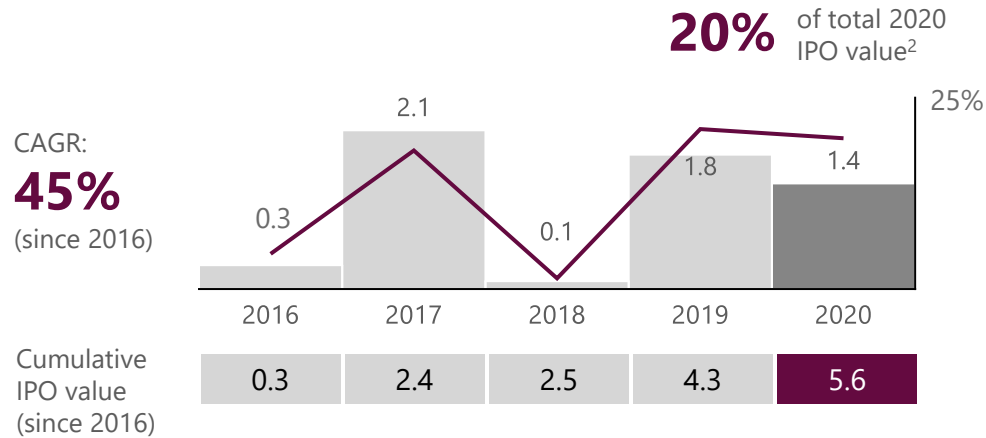
Thailand pulls ahead in green IPOs, with renewable energy, infrastructure, and buildings as leading sector themes

B

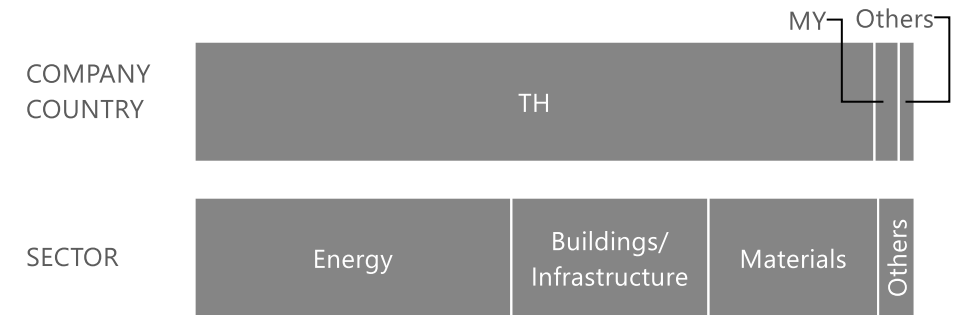
FUNDRAISING

IPOs

Capital raised for IPOs¹ of green companies in SEA (US\$ billion)



Cumulatively from 2016-2020, \$5.7 billion raised across:



	2016	2017	2018	2019	2020
# Sustainable IPOs	8	14	6	15	10
Largest deal values	 BCPG PCL \$0.2 billion Mixed renewable energy provider with >900 MW of installed capacity	 Gulf Energy \$0.7 billion Energy company with a focus on renewables	 BG Container Glass PCL \$60 million Glass packaging maker with investments in renewable energy	 Asset World Corp \$1.4 billion Property developer focused on sustainable development	 SCG Packaging \$1.3 billion Packaging solutions with circularity offerings

Notes: 1. IPOs in this analysis excludes special-purpose acquisition companies (SPACs) with insufficient information on target criteria; 2. Only includes countries with available data (Indonesia, Malaysia, Singapore, Thailand, the Philippines, and Vietnam).

Sources: Dealogic

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UNLOCKING CAPITAL

B

FUNDRAISING

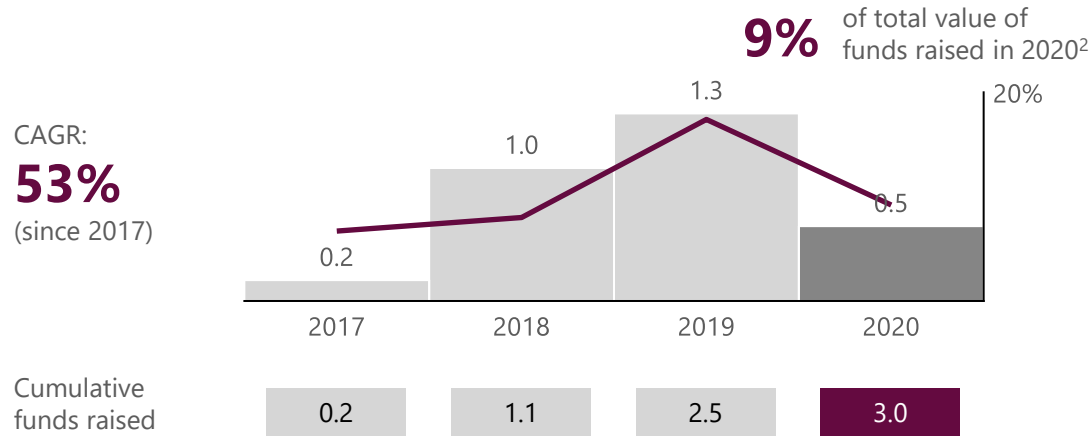
PE/VC

Green private equity fundraising has been on the rise since 2017, standing at \$0.5 billion in 2020

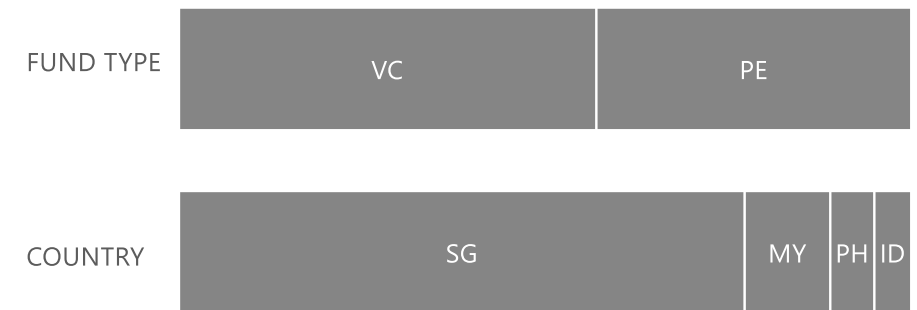
Dip in 2020 potentially due to Covid-19 pandemic; funds raised lean toward VC stage (~57% total)

Singapore is base of choice for most green funds, driving 2 of the largest fund closes since 2017 (no green funds raised in 2016)

Green private capital¹ raised in SEA (US\$ billion)



Cumulatively from 2017-2020, \$3.0 billion raised across:



	2017	2018	2019	2020
# Green funds	1	6	6	2
Largest closes	CAPSQUARE • ASIA  Capsquare Asia Partners Fund II \$0.2 billion Consumer-focused fund dedicated to growing businesses that are good for environment and the community	MAKARA CAPITAL  Makara Innovation fund \$0.7 billion Investing in urban solutions, alternative energy, and advanced technology	  Petronas Corporate VC \$0.4 billion Corporate venture capital arm with a focus on the future of energy	  8F Aquaculture fund I \$0.4 billion Investing in vertically integrated aquaculture facilities

Notes: 1. Funds in this analysis include PE/VC funds domiciled in SEA which have thematic focus on green economy sectors; 2. Only includes countries with available data (Indonesia, Malaysia, Singapore, Thailand, the Philippines, and Vietnam).

Sources: Pitchbook; Bain analysis

~\$7 billion in green funds raised across broader Asia-Pacific in 2020 – many with SEA mandate

Share of green fundraising of overall value is similar to SEA; most funds within PE stage and raised in Japan or China

B

FUNDRAISING

PE/VC

Green private capital¹ raised in Asia-Pacific, excluding SEA (US\$ billion)

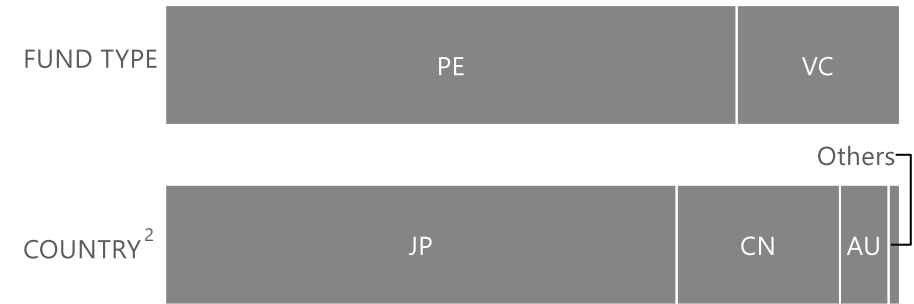
CAGR:

22%

(since 2016)



In 2020, \$7.2 billion raised across:



	2016	2020
# Green funds	18	14
Featured closes of funds with SEA mandate	MANDALA CAPITAL Focused on sustainable investments across the agri-food value chain	SoftBank Vision Fund II Tech fund covering smart mobility and clean energy
Investment examples	<p>\$0.1B raised in 2016</p> <div style="border: 1px solid #ccc; padding: 5px;"> <p>\$30M</p> <p>Biotech firm developing crops and agricultural products that benefit the environment, growers, and consumers</p> </div>	<p>\$5B raised in 2020 (total fund size ~\$30B)</p> <div style="border: 1px solid #ccc; padding: 5px;"> <p>\$100M</p> <p>Tech firm enabling renewable energy to be stored and delivered for less than the cost of fossil fuels at any hour of the day</p> </div>

Notes: 1. Funds included in this analysis include PE/VC funds domiciled in Asia-Pacific which have thematic focus on green economy sectors; 2. JP-Japan; CN; China; AU; Australia

Sources: Pitchbook; Vision Fund; Agri Investor; Mandala Capital

Increasing sustainability focus of SEA mutual funds and exchange-traded funds (ETFs), but still a small fraction of global activity

Malaysia leads the region. Globally, Europe dominates, accounting for >80% of assets value

B

FUNDRAISING

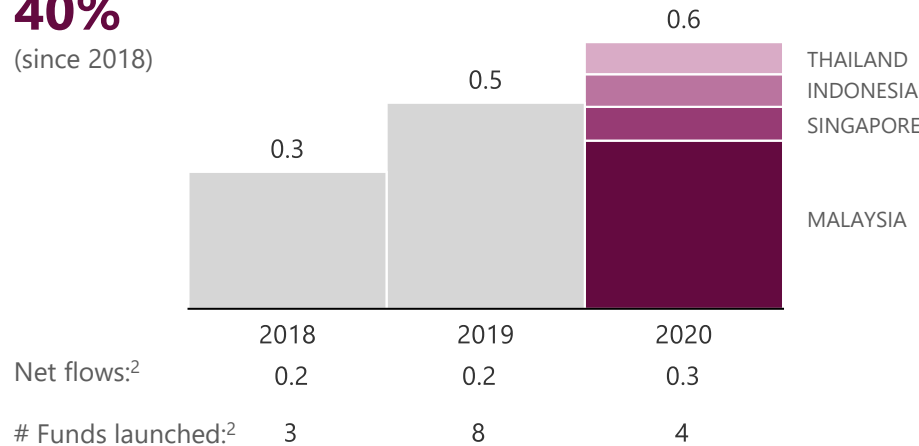
PUBLIC FUNDS

Total AUM of SEA domiciled sustainable¹ open-ended mutual funds and ETFs (in US\$ billions)

CAGR:

40%

(since 2018)



2020 global AUM of sustainable funds



Select fund launches:



2020

Global Sustainable Equity-I Fund to invest in sustainable, Shariah-compliant equities



NAV³ (as of Jan 21): **\$90 million**



2020

United Equity Sustainable Global Fund to invest in top sustainability performers



NAV (as of Jan 21): **\$8 million**



2021

Public e-Carbon efficient fund to invest in companies with efficient carbon footprints



NAV (at launch): **\$80 million**

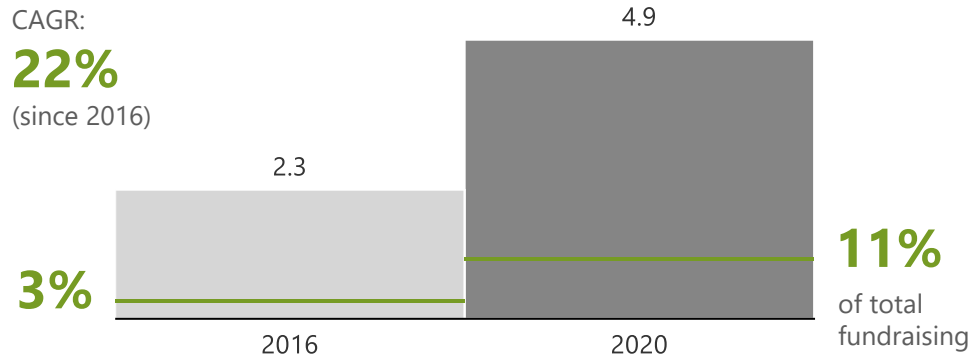
Notes: 1. Universe of sustainable funds encompasses open-end funds and ETFs that have a sustainability objective and/or use binding ESG criteria for investment selection. Money market funds, feeder funds, and funds of funds are excluded; 2. Data only included from Q2 2018 onwards (Q1 2018 unavailable). AUM taken at end of each year. 2019 data used for Europe sustainable fund AUM as % of overall AUM; 3. Net asset value

Sources: Asia Assets Domicile

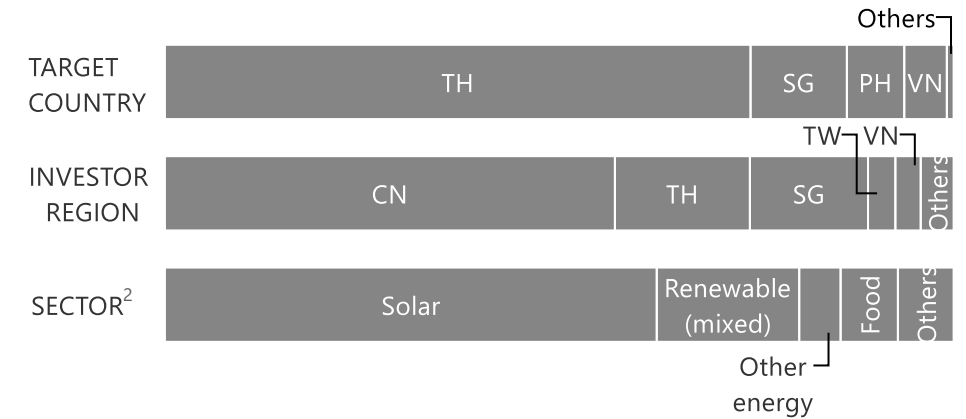
Increasing share of green corporate investments, hitting \$4.9 billion and 11% of overall value in 2020

Green investments have grown in value despite the overall market contracting between 2016 and 2020. Renewable energy, particularly solar, is the standout sector, with most activity taking place in Thailand.

Green corporate transactions¹ across SEA in 2016 and 2020 (US\$ billion)



In 2020, \$4.9 billion deployed across:



2016



Star Energy Group Holdings



Largest deals **\$755 million**

Description PT Barito Pacific Tbk (ID) acquired **67% stake** in the **geothermal power company** with a total power generation capacity of **875 MW**

2020

Yuan Feng New Energy Co.

\$2.8 billion

Wenzhou Yihua Connector Co (CN) participated in an equity funding round for the Thai manufacturer of **solar energy components** and **photovoltaic modules**

Notes: 1. Only includes countries with available data (Indonesia, Malaysia, Singapore, Thailand, the Philippines, and Vietnam) and excludes investments <\$15 million; 2. Others include food, waste and water, industrial, transport, and building and infrastructure

Sources: Capital IQ, ThinkGeoEnergy

After slow start, share of green deals in PE/VC rose sharply in 2020 to \$1.9 billion, representing 19% of total deal value

Singapore and Philippines lead in deal value; energy takes spotlight, followed by waste and water

B

CAPITAL DEPLOYED

PE/VC

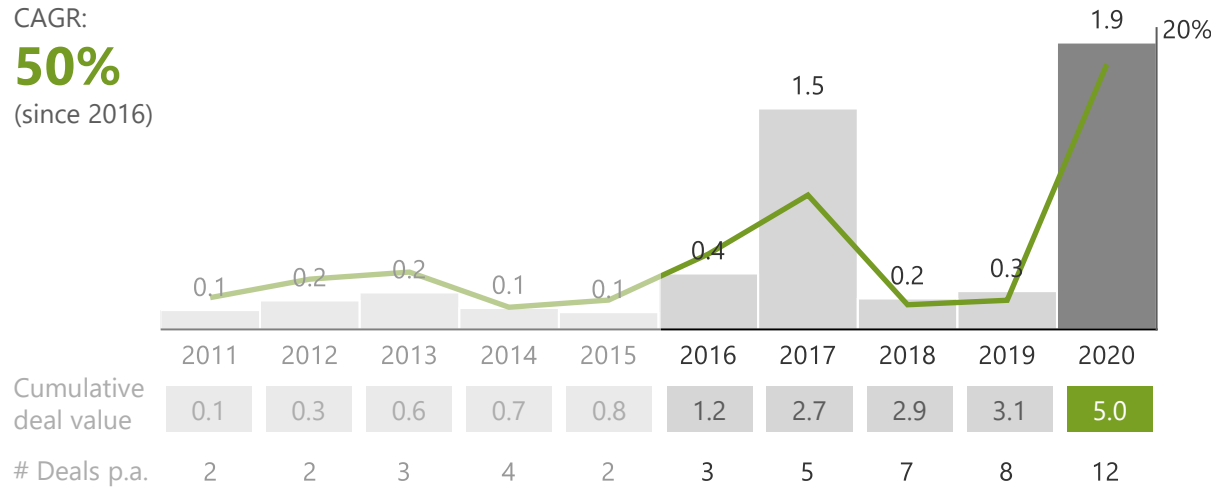
PE and VC green¹ capital deployed in SEA (US\$ billion)

CAGR:

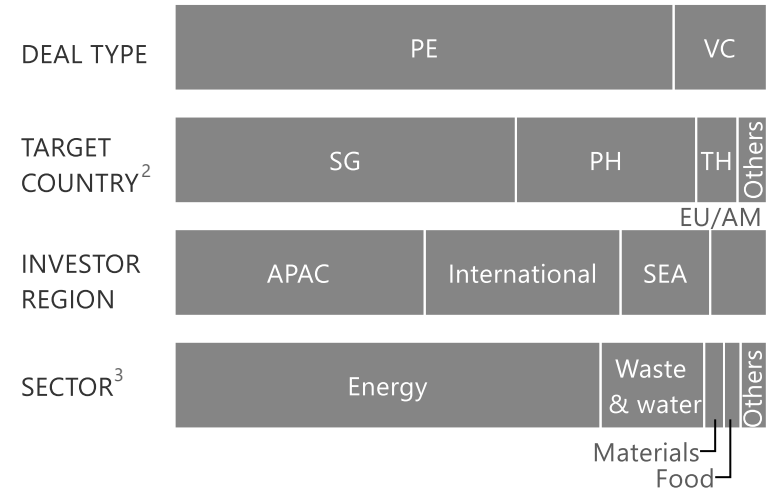
50%

(since 2016)

19% of total deal value in 2020



Cumulatively from 2011-2020, \$5.0 billion deployed:



Notes: 1. Excludes deals <10 million. Green PE/VC deals involve companies/firms that improve or protect the environment;

2. Only includes countries with available data (Indonesia, Malaysia, Singapore, Thailand, the Philippines, and Vietnam);

3. Others include electronics, transport, water, information technology, services, agriculture and aquaculture, computer-related

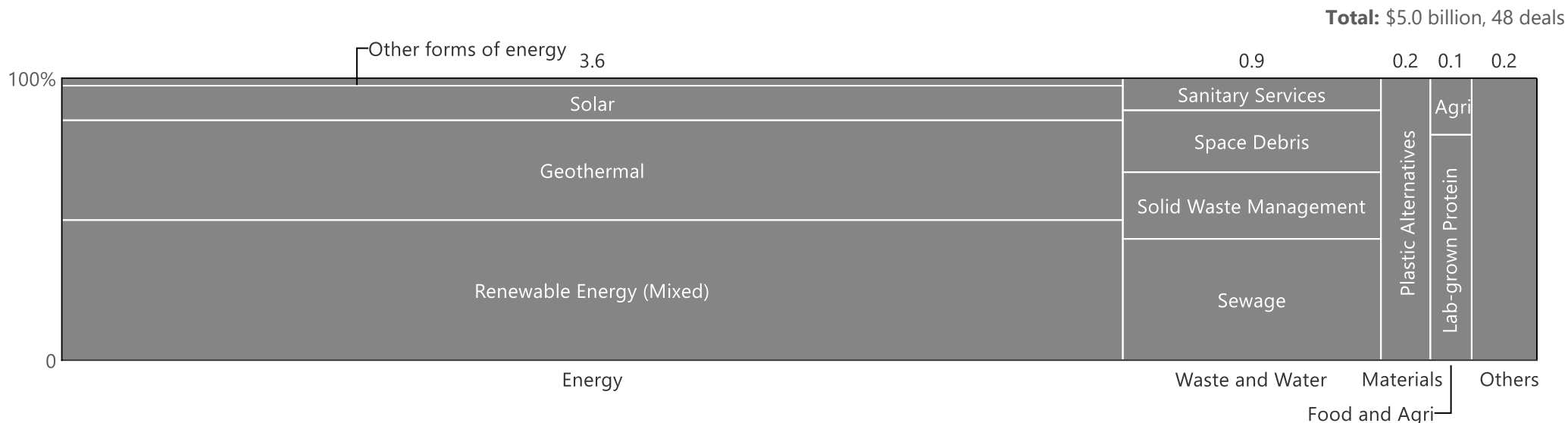
Sources: AVCJ, Bain analysis

	2016	2017	2018	2019	2020
Largest deals:	<p>中信环境技术 CITIC ENVIROTECH</p>	<p>energy Powering Green Possibilities</p>	<p>Astroscale</p>	<p>SUN ELECTRIC It's our power.</p>	<p>EQUIS</p>
	\$285 million	\$1.3 billion	\$100 million	\$100 million	\$1.3 billion
	Membrane-based solutions provider for wastewater treatment and recycling	Leading geothermal energy producer, with diversified renewable portfolio	Waste and debris management of orbital satellites	Solar energy company with 13 MWp of solar installations to date	Infrastructure developer targeting bioenergy, renewables, and waste management

Mixed renewables, geothermal, solar, waste, and materials are key subsectors

Most deals occurred in the expansion/growth stage

Cumulative green PE and VC deal value by primary and secondary industry, 2011–2020 (US\$ billion)



Deal #	20	11	3	3	11

48 green deals between 2011 and 2020 across stages (# deals):

	Start-up/early stage	Expansion/growth	Late-stage ¹
Energy	6	9	5
Waste	1	5	5
Plastics	1	2	0
Food and Agri	0	3	0
Others ²	5	6	0

Notes: 1. Late-stage includes buyout, mezzanine, private investment in public equity (PIPE) deals, and pre-IPO financing; 2. Others include IT, utilities, computer-related, electronics, manufacturing, consumer products, transportation and distribution, nonfinancial services, telecommunications, and retail

Sources: AVCJ

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UNLOCKING CAPITAL

Share of sustainable infrastructure investments rising despite dip in overall investments

Clean energy is the leading sector

B

CAPITAL DEPLOYED

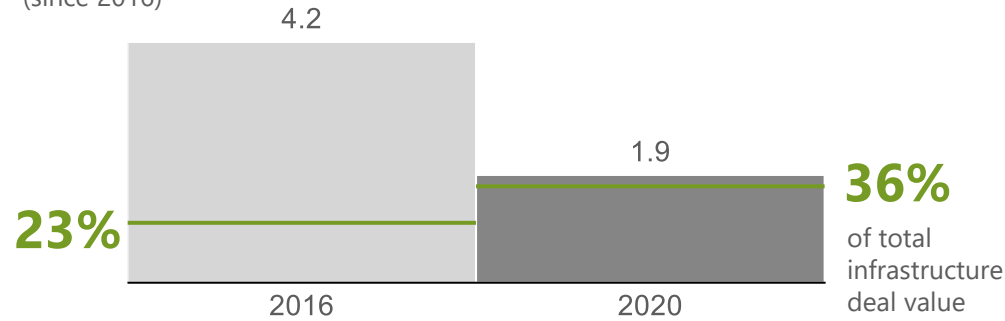
INFRASTRUCTURE

Capital deployed to sustainable infrastructure assets¹ in SEA (US\$ billion)

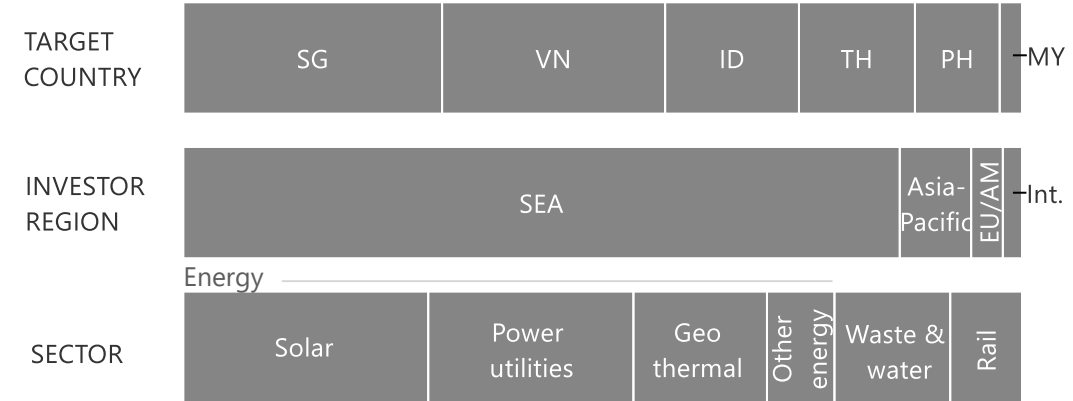
CAGR:

-18%

(since 2016)



In 2020, \$1.9 billion deployed across:



2016



Bangkok Mass Transit System Project (Red Line)



Largest deals

\$900 million

Description

Construction of **large-capacity railroad** in the Bangkok Metropolitan Region, estimated to greatly **alleviate traffic congestion** and shift road transport to **urban rail, reducing CO₂ emissions by ~48 kt per year**

2020



Java geothermal energy project



\$300 million

Investment by state-owned company PT Geo Dipa Energi (GDE) to **expand its geothermal energy** portfolio by **110 MW**. The project aims to **reduce CO₂ emissions** by more than **700 kt per year**

Notes: 1. Only completed deals included in analysis

Sources: Preqin, [Global Infrastructure](#), Bain analysis

Key sectoral themes attracting capital today

Energy solutions, green buildings and construction, waste and water, and sustainable materials are currently center stage

Sectors attracting capital



Energy solutions

Low-carbon energy (e.g., solar, hydropower, geothermal, wind), energy efficiency and grid solutions

Share of sector of total green:¹

Debt: 31% | IPOs: 45% | Corp.: 89%
PE/VC: 72% | Infra: 78%

Drivers

SEA energy transition agenda

~33% renewable energy capacity target by 2025, vs. ~24% today

Regional unconditional target to reduce emissions by 26% by 2030



Green buildings and construction

Smart buildings that optimize energy consumption, use sustainable materials, and embrace on-site renewable energy

Debt: 49% | IPOs: 27%

Government financial support and incentives for sustainable infrastructure development

Estimated ~\$400 billion in investments needed for sustainable buildings between 2021 and 2030



Waste and water management

Waste and water management and treatment and innovative solutions to reduce waste

Debt: 9% | IPOs: 2% | PE/VC: 18% | Infra: 14%

Rapid growth of waste volume, and rising adoption of Waste-to-Energy (WTE)

>90 WTE plants to be operational by 2022 in the region, with combined capacity of ~800 MW



Sustainable materials

Recyclable plastic alternatives, sustainably designed packaging, and low-carbon building materials

IPOs: 23% | Corp: 2% | PE/VC: 3%

SEA's worsening plastic waste crisis and increasing consumer discernment

4 out of the 5 countries responsible for ~60% of ocean plastic are in SEA

Nascent but promising



Sustainable food systems

Alternative proteins, aquaculture, controlled environment agriculture, and sustainable production

Share of sector of total green:¹

Corp.: 7% | PE/VC: 3%

Opportunity thesis

Prioritization of food security in the region, rising consumer preference and demand (for protein and rice staples), and the advent of technologies to increase yield and lower costs



Conservation and restoration of nature

Nature-based solutions to conserve and restore ecosystems
Limited private investments today but poised for change

Rising trend of carbon prices, new carbon crediting methods (e.g., for blue carbon), and emergence of catalytic financing (which absorbs risks from private capital)

Notes: 1. 2020 figures shown apart from IPOs (2016-2020 cumulative) and PE/VC (2011-2020 cumulative)

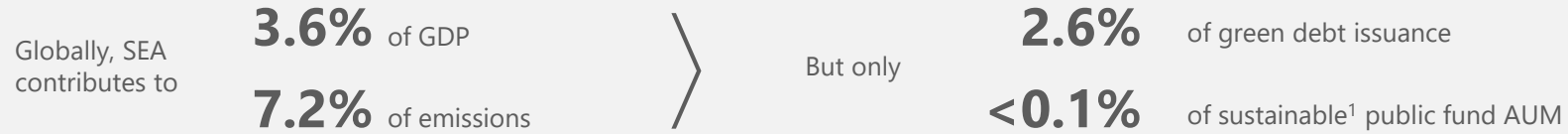
Sources: [ADB](#); [e-Economy SEA](#); [The Straits Times](#); [Science Magazine](#); [The ASEAN Post](#)

03

UNLOCKING CAPITAL

While a promising start, **a lot more is needed**

There is plenty of **headroom to grow**

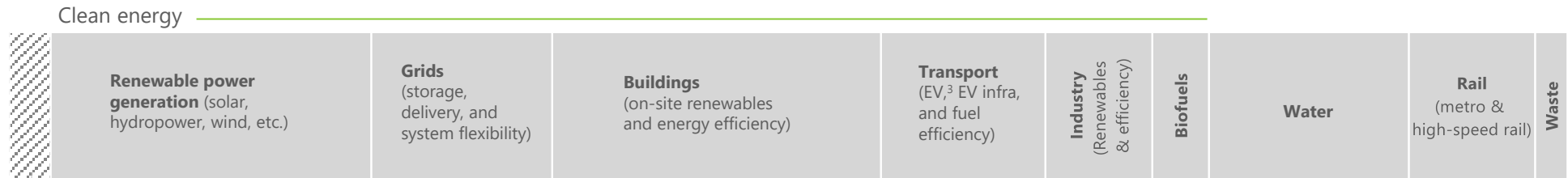


Notes: 1. Includes funds raising capital for environmental and social sustainability objectives; 2. Energy investments needed based on the Transforming Energy Scenario (compatible with well below 2°C, and toward 1.5°C Paris agreement targets) from the International Renewable Energy Agency (IRENA). Water estimated based on G20 Infrastructure Outlook (inclusive of investment needed to meet Sustainable Development Goals [SDGs]), includes wastewater, water collection, treatment and processing, transmission and distribution assets including desalination, excludes land purchases. Rail investments include Metro and high-speed rail investment needs only. Waste investments estimated for total waste management sector, inclusive of WTE, landfills, composters, recycling and other waste infrastructure; 3. Electric vehicle; 4. Asian Development Bank

The **scale of investment** required² to deliver SEA's green transition is massive

~\$2 trillion

sustainable infrastructure investment required between 2021 and 2030, which can be seen as **an obstacle or an opportunity**



Everyone is needed

40%

of infrastructure investments will need to **come from the private sector**, according to ADB⁴ forecasts

Governments cannot do this alone. Public-private partnerships and catalytic mechanisms like blended financing will play a critical role to meet the investment needs of the region

Sources: Bain analysis; [Global Infrastructure](#); [IRENA](#); World Bank; IFC; ADB; [DBS](#)

DFIs, international governments, and NGOs are also stepping up climate financing in SEA

Energy transition and conservation are key focus

Non-exhaustive

Significant DFI¹ capital deployed in 2020

~\$6 billion



To finance **climate change and rural infrastructure** projects (~1.5x increase from 2019)

~\$1 billion



To **mitigate and adapt to climate change** across energy, transport, agriculture, water, financing, and other sectors

International governments stepping up support

~\$10 billion



To aid SEA's **transition to cleaner energy** (investment and loan facility established by Japan in 2021)

~\$1 billion pledged



Results-based funding scheme based on **conservation outcomes**, e.g., avoided deforestation (first \$56 million paid out to Indonesia in 2019)

Global conservation NGOs² are investing in the region, with capital flow since 2017

>\$100 million across various projects



Numerous **smaller-scale** commitments for biodiversity **conservation** and **circular economy** projects

Notes: 1. Development Finance Institutes; 2. Nongovernmental organizations

Sources: AIB; ADB; World Bank; Conservation; The Jakarta Post; WWE; CI; TNC; IEEFA

03

UNLOCKING CAPITAL

Catalytic financial mechanisms are further mobilizing private capital

Increasing role of creative financial strategies and instruments (e.g., blended financing, take-out facilities (TOFs), outcomes-based funding)

Case studies

Non-exhaustive

Blended financing



Piloting in 2021

Proposal to **purchase coal-fired plants in SEA for early closure** using low-cost **blended financing**

~\$4 billion



Launched 2019

Aims to attract **\$3 of commercial capital per dollar of public capital** for **green infrastructure** projects

~\$3 billion



Launched 2018

De-risks **SDG-related infrastructure** projects to **mobilize private funds**

TOFs

~\$2 billion



Launched 2018

Established **Bayfront Infrastructure Capital**, Asia's 1st TOF, to mobilize private capital into infrastructure development

Outcomes-based funding

~\$1 billion



Launched 2021

Private sector-led initiative to incentivize **forest conservation** through **results-based funding**



EDSA Greenways
Infrastructure development in the Philippines (2020)

AIF¹ and ADB provided **~\$140 million** in financing, catalyzing **~\$90 million** in private sector investment



Ninh Thuan
168-MWp solar farm in Vietnam (2018)

Infraco provided **~\$20 million** in equity and loans, mobilizing **~\$150 million** in commercial capital

Notes: 1. ASEAN Infrastructure Fund

Sources: ADB; AIB; ACGF; Infraco; BBC

Several barriers impede green capital flows today



Macro challenges	Immature ecosystem	Low quality and high risk	Organizational hurdles
<p> Inconsistent government policies</p> <p><i>“(Clean energy) investments are heavily infrastructure-related, and lack of predictable policies and government support make investors hesitate to put capital in</i></p> <p>Director, Energy Investments SEA Government Investor Co</p>	<p> High transaction and compliance costs</p> <p><i>“The cost of environmental compliance in SEA today is too prohibitive</i></p> <p>Senior MD SEA, Global PE fund</p>	<p> Limited quality assets and project developers</p> <p><i>“There is a surplus of interested capital chasing scarce quality assets in the region</i></p> <p>Sustainability Director SEA Government Investor Co</p>	<p> Lack of sponsorship from leadership and organization inertia</p> <p><i>“Organizational change will not happen without alignment and focus from senior management</i></p> <p>Senior MD SEA, Global PE fund</p>
<p><i>“We need better advocacy from SEA governments – they need to lead the sustainability agenda</i></p> <p>Chief Procurement Officer, Global Consumer Products Co</p>	<p> Complex and evolving standards and expectations</p> <p><i>“Every organization has its own framework where the definition of green varies... hard for new adopters to get it right</i></p> <p>Executive Director SG, Global Business Coalition</p>	<p> Long lead times and volatility associated with returns</p> <p><i>“Investments in sustainable assets often have longer horizons and uncertain returns, which is inconsistent with the largely impatient capital in the private sector</i></p> <p>Director of AI, Global Development Org</p>	<p> Unclear capital allocation principles with misaligned incentives</p> <p><i>“We need a GAAP-style¹ global standard to account for and price climate outcomes... only then will you see actual action</i></p> <p>Senior MD SEA, Global PE fund</p>
	<p> Lack of consistent measurement and value of co-benefits</p> <p><i>“Mapping and valuing co-benefits are extremely challenging, with multiple schools of thought... but are critical in making the market more efficient</i></p> <p>Professor of Conservation Science, SEA University</p>		

Notes: 1. Generally Accepted Accounting Principles
Sources: Industry interviews

Critical enablers required to unlock full potential

Strong government support and consistent policies



- Consistent government signals and policies to strengthen investor confidence and attract more capital into the green economy (e.g., corporate tax benefits and land use incentives, etc. for solar energy in Vietnam)
- Financing and incentives aligned with achieving national green goals, and initiatives to support the transition of impacted sectors

Blended financing



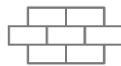
- Use of creative financial instruments through public-private partnerships such as blended financing and take-out facilities (TOFs) to align different stakeholder objectives and incentives, de-risk investments and attract more private capital
- Mobilization of private sector green infrastructure financing to reduce burden on pandemic-strained government budgets (e.g., ADB's ASEAN Catalytic Green Finance Facility [ACGF] supports SEA governments to finance sustainable infrastructure)

Digital platforms and data-enabled solutions



- Digital infrastructure and automated, data-enabled processes to minimize friction, optimize processes, and scale sustainability measurement and reporting while reducing transaction costs and efforts (e.g., SGX and Temasek partnership to develop a blockchain-based digital asset infrastructure)

Ecosystem fundamentals and infrastructure




- Ecosystem-wide guidelines to define sustainability impact and materiality (e.g., ASEAN Taxonomy)
- Short-term debt instruments to mobilize working capital and trade facilities for green projects
- Buildout and scaling of liquid, regional sustainable asset markets (e.g., regional carbon markets)

Fit-for-purpose fund allocation and operating principles



- Recognized metrics to assign value to social and environmental factors, in addition to financial return, to enable systematic allocation of funds to achieve highest impact
- Established operating principles to mitigate misaligned incentives that underpin impatient capital



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