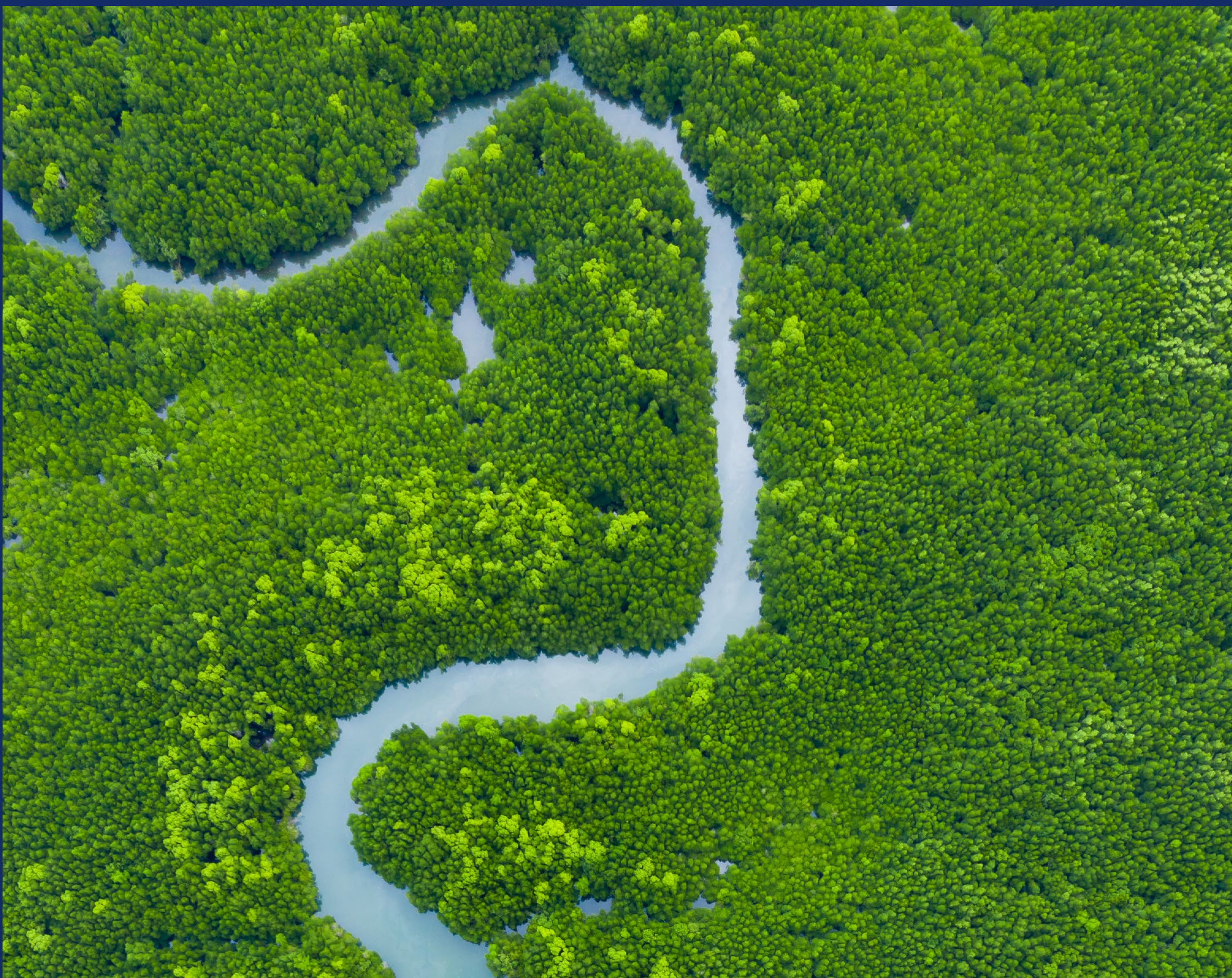
Supporting Southeast Asia's path to Net Zero

Opportunities for carbon services firms in the region



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Introduction

Southeast Asia is in the midst of a low-carbon transition. The region is poised to be the world's 4th largest economy by 2030, with a growing population of over 660 million[01] and a collective GDP of US$3.6 trillion.[02] Such economic growth coupled with rapid urbanisation and industrialisation would increase demand for resources, giving the region significant potential to contribute to climate action by fostering sustainable development.

Besides rich renewable energy resources such as solar and wind, Southeast Asia holds roughly 20 to 25% of the global Nature-based Solution (NbS) supply in its forests, mangroves, and peatlands. The region also makes up 20% of the world's biodiversity.[03] Indeed, the region's potential for sustainability lies in its ability to harness its natural resources and embrace innovation solutions to address environmental concerns.[04] With NbS providing over one-third of mitigation action needed to meet Paris Agreement targets by 2030, there are significant opportunities in the region for carbon services firms to explore.

Corporate commitments to decarbonisation in Southeast Asia are growing. There is a four-fold increase in Southeast Asian corporates setting science-based targets. However, with the race to net zero, companies face challenges in navigating different sustainability standards, developing targets, implementing strategies, and finding the right resources to reduce their carbon footprint. Growing demand for carbon accounting, advisory and carbon offsetting services such as project development, financing and trading provides an opportunity for sustainability services companies to support the region's low-carbon transition.

In the heart of Southeast Asia, Singapore is leveraging its strengths in trading, professional and financial services, to support the region's carbon management needs. With more than 120 carbon services firms, Singapore is already home to leading companies offering sustainability services and continues to welcome firms to use the country as a springboard to serve the region.

This report gives an overview of the current progress of companies in Southeast Asia in sustainability, the challenges they experience, demand areas in which they most seek support, as well as examples of companies that have already tapped into the market.

Southeast Asia's progress in sustainability

8 out of 10
SEA countries have set net zero goals or made carbon neutrality commitments.[06]

At both a regional and corporate level, Southeast Asia is committed to sustainability through its low-carbon transition. Southeast Asian (SEA) countries are at varying stages of progress in meeting Environmental, Social, and Governance (ESG) goals. Most countries have set climate targets, including nature targets, and aim to hit net zero targets by 2050. Additionally, **7 out of 10 are considering or have already implemented carbon pricing initiatives.[05]** Singapore is so far the only Southeast Asian nation to implement a carbon tax*, while the governments of Indonesia, Malaysia, and Thailand are considering it among their own carbon pricing initiatives.

Carbon pricing initiatives in Southeast Asia as of 2023[07]

ETS** implemented or scheduled
Indonesia, Vietnam

Carbon tax implemented or scheduled
Singapore

Carbon tax or ETS under consideration
Brunei, Indonesia, Malaysia, Philippines, Thailand

* For more information on Singapore's carbon tax, please refer to nccs.gov.sg.

** Emissions Trading System.

Southeast Asia's progress in sustainability

Corporates' commitments are rising, but many still experience barriers to implementation

In the race to net zero, more companies in Southeast Asia are starting their journey with target setting and sustainability disclosures. The number of companies disclosing their carbon emissions to the Carbon Disclosure Project (CDP) increased each year between 2019 and 2021. Around three-quarters of companies in the Asia-Pacific region have a process for identifying, assessing, and responding to climate-related risks and opportunities. However, fewer than 4 in 10 (38%) have an actual low-carbon transition plan.[08] Implementation is an issue for many companies, with 42% of corporates in Southeast Asia stating a lack of environmental impact strategy as a barrier to climate action.[09]

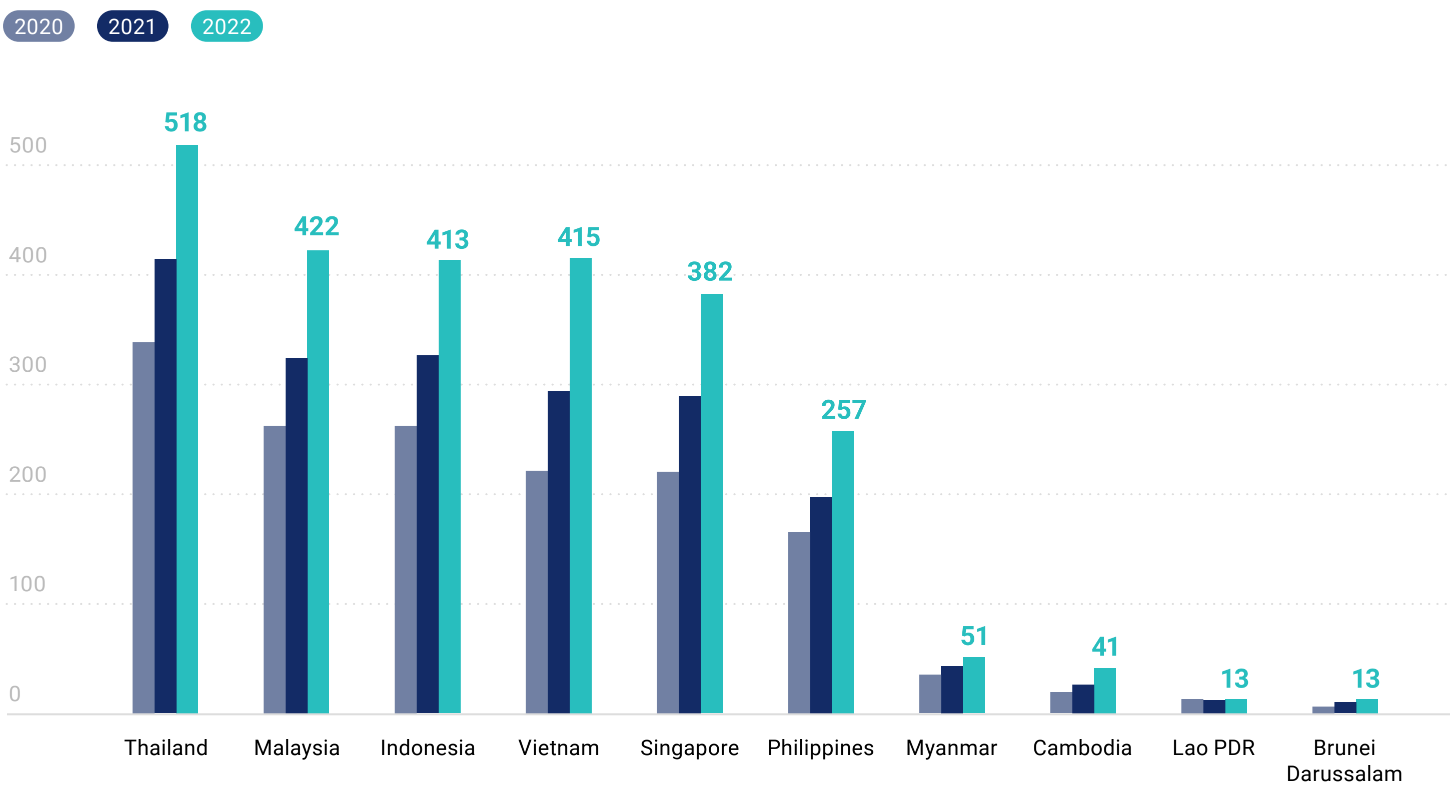
x4

more SEA companies set science-based climate targets between 2021 and 2022 (25 vs. 109).[10]

2,525

SEA companies disclosed emissions to the CDP in 2022, a 30% increase compared to the previous year.[11]

Number of SEA companies disclosing emissions to the CDP[12]



Challenges faced by companies embarking on sustainability

Lack of expertise to implement sustainability strategies

Finding the right expertise to develop and deploy strategies is among the main challenges for companies undertaking climate action.

- **32%** of SEA companies said they lacked the necessary expertise to carry out climate action.[13]
- **27%** were unclear how to embed sustainability into business processes and IT systems.[14]

Lack of financial support

Funding is another key obstacle for corporations in Southeast Asia to implement decarbonisation initiatives. Demand for green financing solutions is growing – US$200 billion per year is needed in green investments in ASEAN till 2030. However, investments have fallen short in recent years, with green finance flow estimated at only US$40 billion in 2017.[15]

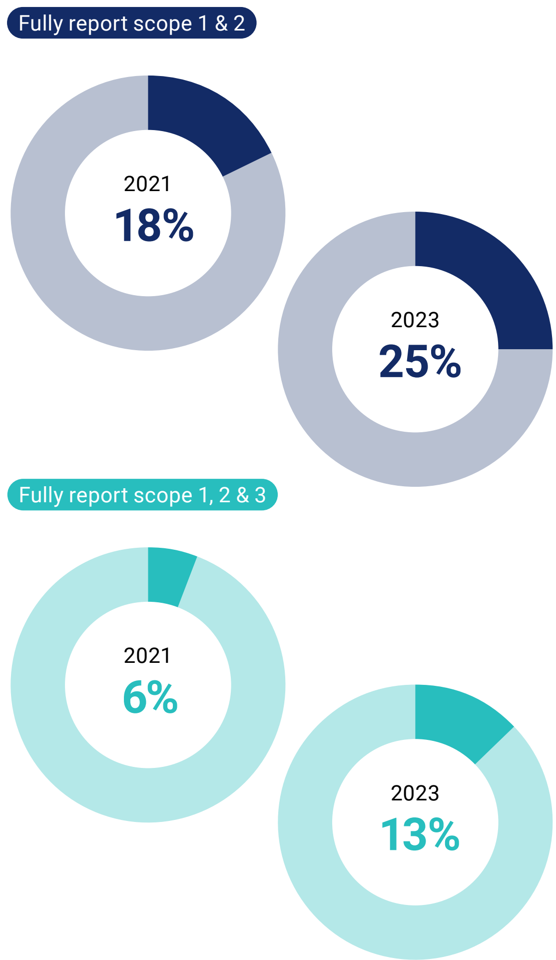
- **1 in 3** SEA companies stated a lack of funding as a barrier to corporate climate action.[16]

Challenges in accurate measuring and reporting of emissions

Companies specifically struggle to measure emissions accurately, especially scope 3. Globally, only 10% of companies comprehensively measured and reported their emissions accurately in 2023.[17] However, reporting for the whole Asia-Pacific region overall has increased.

- **24%** of SEA corporates were doubtful about their ability to measure impact on the environment in 2023.[18]

Share of companies measuring emissions in Asia Pacific region in 2021 and 2023, in percent (%)[19]



Demand for carbon services in Southeast Asia

Corporate challenges with decarbonisation and the emergence of a green economy have increased demand and created diverse project opportunities for carbon management service professionals, in both the near and medium term.

Sustainability reporting requirements are increasing demand for carbon accounting and disclosure services

Mandatory sustainability disclosures are increasing demand for sustainability reporting services. Reporting is currently mandatory for listed companies in Indonesia, the Philippines, Singapore, Thailand, and Vietnam. Singapore has released updated requirements for climate disclosures: Large non-listed companies with annual revenue of more than $1billion and total assets of more than S$500million are to report from FY2027, unless exempted. Additionally, the EU's Carbon Border Adjustment Mechanism (CBAM), that requires importers to report on carbon footprint, will also impact Southeast Asian businesses that export goods to the EU, further increasing demand for carbon accounting services.

On scopes 1 to 3 accounting, Singapore has also progressed in requiring listed issuers to report on scope 3 greenhouse gas emissions (GHG) from FY2026 and external limited assurance for scope 1 and 2 GHG from FY2027.

The Singapore Government will launch a Sustainability Reporting Grant. The grant will provide funding support for companies with an annual revenue of S$100 million and above to cover a portion of their costs in producing their first sustainability report in Singapore.

Sustainability and Corporate Social Responsibility (CSR) reporting was among the most requested services for accounting practices in Singapore, particularly for larger companies. It was the **third most requested service from the big four* accounting firm** by non-SMEs (24%) in 2022 and the fifth most requested from small medium accounting practices (SMPs) at 19%.[20]

Southeast Asia's growing carbon markets and carbon credit potential signals scope for more carbon-offsetting services

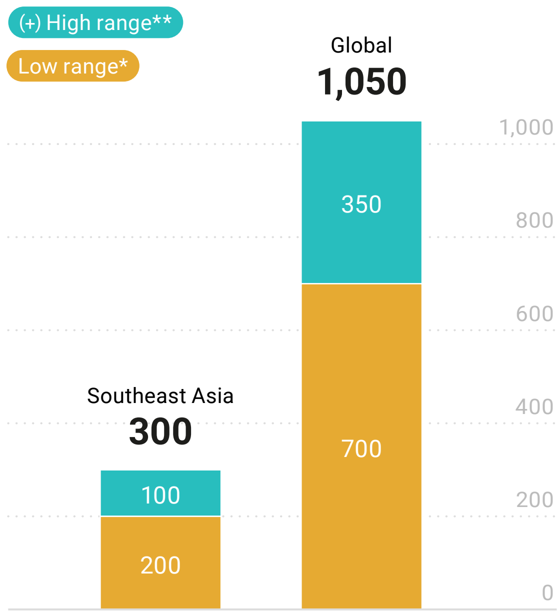
Southeast Asia's rich carbon sinks hold promise for high-quality carbon offsets that can support global demand. Carbon credits play a key role in meeting international climate goals, especially for hard-to-abate emissions. Global demand for voluntary carbon credits has the potential to increase by a factor of 15 by 2030 and a factor of 100 by 2050, depending on supply and overcoming challenges in the development of projects.[21]

Through its biodiversity, with forestland, peatlands, and mangroves, **Southeast Asia has the capability to supply approximately 30% of the global carbon-offset supply by 2030,** despite only covering 1% of the world's total area. Carbon offsets are projected to range from 200 to 300 Mt CO_2 per year in 2030.[22]

* Big four accountancy firms includes Deloitte, EY (Ernst & Young), KPMG and PwC (PricewaterhouseCoopers).

Demand for carbon services in Southeast Asia

Projected carbon offsets supply in Southeast Asia and globally in 2030, in Mt CO_2e/yr[23]



To facilitate in the trading of high-quality carbon credits, three Southeast Asian countries have launched national carbon exchanges: TheFederation of Thai Industries Exchange (FTIX) in Thailand in September 2022, the Bursa Carbon Exchange (BCX) in Malaysia in December 2022, and the Indonesia Carbon Exchange, IDX Carbon in September 2023. Singapore is also home to leading carbon exchanges such as ACX (AirCarbon Exchange) and Climate Impact X (CIX).

The Singapore government has also put policies in place that enable the use of carbon credits for compliance purposes. From 2024, carbon tax-liable companies in Singapore have the option to tap on eligible international carbon credits to fulfil up to 5% of their carbon tax liabilities. To advance international cooperation on Article 6 credits, Singapore has signed memorandums of understanding (MOU) with multiple countries on carbon credit collaboration and has published a list of eligibility criteria and whitelist of carbon crediting methodologies and programmes for international carbon credits. As of January 2024, Singapore is progressing MOUs with close to 20 countries, has signed an implementation agreement with Papua New Guinea, and is keen to work with project developers with access to eligible Article 6 credits.

The carbon market growth potential in Southeast Asia could lead to greater demand for services in carbon credits, such as carbon project origination, carbon market advisory, carbon trading and brokering, and verification services.

Demand for solutions to address challenges in carbon credits is also growing. This is where climate technology startups can play a role to solve lengthy and uncertain project development processes, limited seed financing, complex measuring, reporting and verification processes, and price stability and market mechanisms for trading.[24]

Supportive green financing policies open investment opportunities for financiers

Governments in Southeast Asia recognise the need for green financing to reach net zero targets.The UN Environment Programme estimated a green investment opportunity of US$3 trillion from 2016 to 2030 for ASEAN, with a demand to increase funding from the private sector.[25] The Monetary Authority of Singapore (MAS) actively develops Singapore to be a leading centre for Green and Sustainable Finance in Asia and globally, including supporting the development of financial solutions such as working with industry to develop transition credits and other sustainable financing solutions, as well as launching the Financing Asia's Transition Partnership (FAST-P) to accelerate transition.[26]

* Low Range refers to the lower range of the carbon offset projected supply in 2030.

** High range refers to the upper range of carbon offset projected supply in 2030.

Companies that have already tapped into the market potential through Singapore

AirCarbon Exchange (ACX)
ACX, a leading environmental markets exchange group with members across 33 countries, provides corporates, financial entities, project developers and other market participants with an efficient and transparent means of trading environmental instruments. Leveraging its proprietary technology as well as Singapore's strengths in financial services and as a commodities trading centre, ACX facilitates and scales the growth of environmental instruments markets to align with global ambitions of achieving Net Zero.

Terrascope
Terrascope is a global, end-to-end decarbonisation Software-as-a-Service (SaaS) platform that uniquely supports enterprises in their green transformation. By combining AI/machine learning models, climate science, and deep sectoral expertise in the Grown Economy*, Terrascope helps solve the data management, scope 1, 2 & 3 emissions measurement and decarbonisation planning challenges that large enterprises face. This not only includes meeting corporate level regulatory and reporting requirements but also enabling product level emissions management to support supplier engagement, product R&D and carbon labeling.

GenZero
GenZero is a Singapore-based investment platform company focused on accelerating decarbonisation globally. Founded by Temasek, it seeks to deliver positive climate impact alongside long-term sustainable financial returns by investing in opportunities with the potential to be nurtured into impactful and scalable solutions.

Aon
Leading global professional services firm Aon launched its climate innovation analytics hub in Singapore to help clients around the world navigate environment and risk opportunities. The hub helps clients improve analytical capabilities in areas such as ESG analytics, and compliments Singapore's growing ecosystem of sustainability solution providers that help businesses to meet climate commitments and explore green growth opportunities.

* The Grown Economy, responsible for over a third of global greenhouse gas emissions, encompasses a wide array of industries. It involves inputs, producers, manufacturers, brands, retailers, and service providers in food, agriculture, forestry, and other land-related value chains.

What is next for you

We hope to have brought you one step closer to understanding the opportunities for carbon management services in Southeast Asia to support the transition to a low-carbon future.

The conversation does not end here. At EDB, we partner with you to make your Southeast Asia expansion plans a reality. Here are other resources that may be helpful to you:

- Learn more about how Singapore is partnering the region to drive green growth opportunities in Asia here.

- For more information on how carbon services and trading firms can leverage Singapore's ecosystem to serve demand opportunities in Asia, click here.

Ready to take the next step and/or have questions? Reach out to us here.

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Endnotes

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All information is accurate as of January 2024