



How can ESG fintech help financial institutions and their clients drive a net-zero future?

Insights from 'Race to Zero: Decarbonising the Financial Markets with ESG Fintechs'

Event organised by KPMG's Business Foundry on 3 May 2023

KPMG in Singapore

Contents

01	▶ Overview	3
02	▶ Key takeaways	5
03	▶ Understanding business drivers for effective net-zero partnerships	7
04	▶ Exploring underserved problem statements	10
05	▶ Leveraging on business model innovation	12
06	▶ Looking ahead	14



01 Overview

The world is facing a race to net zero as countries and companies commit to various targets and timelines to reduce their carbon emissions.

In the financial services sector, the biggest challenge with decarbonisation and reducing overall carbon emissions lies with Scope 3 or financed emissions, which are associated with the lending and investment activities of financial institutions. This challenge is compounded by the fact that financial services organisations operate in different geographies and sectors, with each having their own unique pathways towards net-zero depending on the regulations, geographical considerations and climate impacts.

With the momentum to mobilise green and transition finance building up across the region, there is now a greater need for more sustainable solutions at scale. To achieve this, new green technologies alongside stronger governance processes will have to be developed, leveraging reliable and accurate data on environmental, social and governance (ESG).

Against this backdrop, the role of ESG fintech has become increasingly important for financial institutions and their clients in accelerating their decarbonisation and transformation journeys.

In broad terms, ESG fintech refers to solution providers that leverage data and technology to catalyse ESG transformation across the financial sector and the real economy achieving decarbonisation and broader societal progress. These can include technologies, products and services that can be used across both ESG and financial services. It could involve tech companies offering collaborations and services to help businesses future-proof their operating models or add new revenue streams. One example would be climate technologies that enable or are enabled by green financial products, which could reduce emissions, promote climate resilience, and help to overcome barriers for widespread adoption.

Drawing on the insights of industry leaders at the Business Foundry's Race to Zero: Decarbonising the Financial Markets with ESG Fintechs event, this report highlights how ESG fintechs can play a crucial role in helping the financial sector and their clients achieve their decarbonisation and net zero targets. It also explores opportunities for collaboration and ways for financial institutions and their clients to leverage these solutions to drive a more sustainable future.



Speaker panel



Benjamin Soh
Managing Director
STACS



Leong Li Sun
Head of ESG
AIA Singapore



Marie Cheong
Founding Partner
Wavemaker Impact



Simin Liu
Head of Product,
Project Greenprint
**Monetary Authority
of Singapore**



Vivien Jong
Chief Digital Officer
**BNP Paribas Wealth
Management**



Leon Ong
Partner, Financial
Services Advisory
KPMG in Singapore



02 Key takeaways

Industry challenges

- ▶ Certain areas in ESG, such as sustainability reporting, may be receiving disproportionate attention, leading to an overflow of related solutions that are often undifferentiated. There may be other pressing challenges, including the need to directly address decarbonisation, which may deserve more attention.
- ▶ Digital tools and platforms that are simplified, standardised and cost-effective are crucial in simplifying the capture of sustainability data, especially for small and medium enterprises (SMEs) in ASEAN.
- ▶ Financial Institutions (FIs) require various sets of data to build accurate risk-reward frameworks for appropriate lending towards the deployment of decarbonisation technologies, which is needed by their real economy clients to transition.
- ▶ Some decarbonisation technologies are still in early stages, and may require maturation to reduce costs and increase their commercial viability.
- ▶ While many mature decarbonisation technologies exist, incentives for widespread adoption are currently not aligned. These are ripe for business model innovations, including opportunities for customers to increase revenue or decrease costs through the adoption of commercially available technology.



Drivers for partnership success

- ▶ FIs are increasingly demanding for asset-level data to be securely and seamlessly integrated with their internal data lake as some financial products are tied to those assets.
- ▶ ESG fintechs can engage directly with environmentalists and non-governmental organisations (NGOs) working on the ground to identify potentially underserved segments of the market, and uncover new opportunities for the development of more varied innovative technologies to drive emissions reduction.
- ▶ To ensure successful solution adoption and implementation, partners will need to establish clear goals and KPIs, secure senior leadership buy-in and clarify deployment requirements from the outset.
- ▶ Collaborations between some large corporations and ESG fintechs continue to face challenges due to difficulties in meeting requirements, delivering at scale, and achieving certification standards.

Predictions

- ▶ FIs will continue to prioritise sustainability and place a focus on increasing transparency in their actions to reach net-zero for themselves and their clients.
- ▶ As investments in sustainability by venture capital and private equity firms increase alongside bank-brokered deals, large-scale commercialisation of decarbonisation technologies will lead to more opportunities through private-public partnerships.
- ▶ Amid tightening ESG regulations, solutions that can enable credible and timely ESG data, reduce greenwashing and provide climate risk/stress testing will see extended opportunities.
- ▶ Climate tech will be the new “tech”, and with 80 percent of the world’s GDP tied to net-zero commitment, there are growth opportunities for high-growth companies in the near future.



03 Understanding business drivers for effective net-zero partnerships

To form effective partnerships with FIs and support their transition to net-zero, it is critical to have a deep understanding of their core business drivers and operations.

Even as sustainability goals and global targets increasingly factor into the decision making of FIs, maximising shareholder value and returns remains their primary duty. In evaluating ESG-aligned opportunities, including new business and operating models, products, services, financing deals or start-up partnership proposals, FIs will need to build a strong business case and make careful assessments across three value drivers: risk management, brand reputation, and financial performance. “Our motivation comes down to these three things. If a solution can address all three, it is a winner for us and our clients,” said Vivien Jong, Chief Digital Officer Asia of BNP Paribas Wealth Management.

Enabling education and client engagement

ESG fintechs can add value to FIs and their clients by developing solutions that enable them to navigate the risks and opportunities associated with the transition to net-zero. Vivien adds that a critical area that needs greater attention is educating client-facing staff, such as relationship managers, about ESG complexities. By understanding these complexities and credibly engaging and supporting clients in their transition journey, client-facing staff can accelerate the pace of green finance deployment. For instance, tools powered by artificial intelligence (AI) or machine learning (ML) from ESG fintechs that are able to facilitate client conversations around decarbonisation can offer real value to FIs.



The importance of improved ESG-related data

Another area that ESG fintechs can add value to FIs is in addressing the need for improved ESG-related data. As banks are held accountable for their clients' use of funds, having reliable and comparable data across sectors and geographies will be needed to be able to properly assess the credibility and feasibility of a client's transition plans. However, inconsistent reporting protocols and data collection methods, poor data sources, and the lack of a single source of truth for data has hindered the ability of FIs to prove the results of ESG-focused activities.

The ESG data challenge is a massive issue that is driving many data companies, including those with existing, relevant and adjacent services to ESG. The focus has turned to achieving better means of collecting, analysing and verifying data for ESG reporting. One way ESG fintechs can gain a competitive edge in this space is by utilising and aggregating near real-time data from alternative sources, such as drone and satellites, and employing big data to help companies identify ESG risk factors, such as deforestation, land use change, air quality, and water quality or availability. FIs can leverage these additional information, along

with their client's self reported data, to better contextualise the environmental risks associated with their clients and monitor their progress towards their sustainability goals. These technologies can provide data that is consistent and comparable across geographies, which is crucial for effective ESG reporting and decision-making.

"FIs are paying attention not only to ESG ratings, but also to the underlying data and methodology used to generate them," said Benjamin Soh, Managing Director of STACS. FIs are seeking to understand the scope, weights, measurements, and other granular details involved in ESG scores, as these are critical for their internal modelling.

When it comes to assessing ESG risks, FIs are increasingly demanding more holistic data, including asset-level data. This is because some financial products, including loans and investments, are tied to those assets. Additionally, this requires ESG fintechs working with FIs to seamlessly and securely transfer these data to the bank's internal data lake.



Although sustainability-linked financing has experienced significant growth in recent years, the deployment of transition finance has been slowed down by the complexity and proliferation of taxonomies and frameworks across jurisdictions. ESG fintechs can help to overcome this challenge by utilising AI/ML to identify commonalities and differences among various taxonomies and frameworks and develop solutions to transform data sets for them as well as streamline the assessment process.

Enhancing collaborations for sustainable finance

FIs can partner with ESG fintechs to offer innovative solutions to help clients achieve their sustainability targets for sustainability-linked loans or bonds.

Many banks today are seeing the need to expand their support services to include targeted sustainability advisory for clients by leveraging their network of experts in energy transition, circular economy, biodiversity, human rights and social inclusion. For example, BNP Paribas' Low-Carbon Transition group focuses on advising clients on addressing the challenges imposed by their

transition, and helping them offset any residual carbon footprint. Additionally, some banks are providing supplementary services such as access to sustainability data, assessment tools and a list of accredited tech solution providers. These resources enable their clients to achieve their sustainability goals, potentially leading to more favourable borrowing terms. For instance, a bank may provide a lower interest rate for maintaining a certain percentage of sustainable packaging, and similar incentives can be provided for promoting other sustainable practices, including circularity, achieving energy efficiency, promotion of social inclusion, and others.

Collaboration between large corporations and ESG fintechs can face challenges in meeting requirements, delivering at scale, and achieving certification standards. However, by establishing clear goals, securing senior leadership buy-in, and clarifying deployment requirements from the outset, FIs and their partners can overcome these challenges and drive successful solution adoption and implementation.



4 Exploring underserved problem statements

Opportunities for innovation in the climate and ESG space are numerous, with several areas, particularly those directly impacting the reduction of carbon emissions, still underserved. It is critical for entrepreneurs to shift their focus from well-served areas to solving other pain points that are less addressed.

One example of an overserved market is sustainability reporting, which leaves little room for further innovation. Additionally, the overflow of carbon accounting software in the market today has led to many companies offering what appears to be similar features and benefits. Established players in this space may have a significant advantage over smaller players or new entrants due to their brand recognition, substantial customer base and data assets, and the financial resources to rapidly invest and innovate in response to the changing needs of their corporate clients.

Simplifying reporting for SMEs

However, there is a potential game-changer in the form of high-quality and affordable sustainability reporting for SMEs. SMEs represent the largest segment in the global economy in terms of revenue, employment, and environmental impact, but this segment tends to be heterogeneous. It may also lack transparency due to its largely private ownership. In addition, many SMEs lack the financial resources to implement decarbonisation initiatives independently, which raises the issue of who should fund these solutions.

Accessing, acquiring, and utilising data at the SME level is especially challenging in ASEAN, with its long supply chain of SMEs. While SMEs want to report sustainability data, the current process is too complex. “Even mid-tier and large-tier companies with sustainability offices spend a significant amount of time filling out forms – time that could be better used for analytics and driving performance” said Simin Liu, Head of Product of Project Greenprint of MAS.

This presents an opportunity for the adoption of digital tools and platforms that can simplify and standardise the process of reporting and capturing data for SMEs. In order to work, these solutions need to be accompanied by a business model that can align incentives among SMEs, buyers, suppliers, and FIs. This alignment has the potential to bring down the costs for SMEs in adopting these solutions. It is crucial for SMEs to also understand how greater transparency provided by sustainability reporting tools can make them more visible to potential buyers and investors. This increased visibility may ultimately lead to improved business opportunities and partnerships, particularly as more companies and investors embark on their own net-zero transitions.



Thinking outside the box

There are also a number of other challenges in the climate and ESG space that may deserve more attention. These include the need to simplify complex climate or nature data through visualisation tools as well as provide better climate education resources for all age groups and in different languages. These developments could help generate public awareness about sustainable practices, and foster an ESG culture both upstream and downstream within an organisation. By addressing the need for organisational culture training and enablement solutions for carbon reduction, there would be less reliance on carbon offsetting.

Furthermore, the significance of subject matter expertise in ESG and sustainability is paramount to the development of high quality solutions that can effectively address industry challenges. However, many ESG fintechs may face challenges in this area, as teams may comprise generalists with a lack of subject matter expertise. This could result in a market saturated with similar solutions.

While sustainable financing is top of mind for many organisations, it is still fairly nascent in comparison with the wider sustainability agenda. ESG fintechs would be well served to engage directly with environmentalists and NGOs working on the ground to identify potentially underserved segments of the market, and uncover new opportunities for the development of more varied innovative technologies to drive emissions reduction.



05

Leveraging on business model innovation

The linkage between the real economy and financial services has never been closer in the collective journey towards net-zero. FIs require diverse datasets to make informed sustainability-linked lending decisions, while real economy clients seek decarbonisation technologies for their transition.

Finding opportunities within challenges

There are already mature decarbonisation technologies available in the market today, offering zero green premiums. However, adoption rates remain low due to misaligned incentives. This opens the doors for business model innovations that leverage commercially available technologies to increase revenue and decrease costs for customers.

“Unlocking the potential of solar energy on every rooftop in Southeast Asia is not about by the efficiency of solar panels or the availability of batteries, but rather creating the right incentives that drive widespread adoption,” said Marie Cheong, Founding Partner of Wavemaker Impact.

According to Marie, one of Wavemaker’s portfolio companies, Helios, is working with banks to offer solar mortgages, labelling solar energy as an income generating asset as it enables asset owners to earn income through sale of energy back to the grid. The rising number of low to middle income families living in landed properties in Southeast Asia has opened a new market for solar energy to be deemed as a marketable asset. This allows homeowners to obtain lower interest rates or bigger loans simply via the installation of solar panels.



Enabling early stage venture debt

Such business model innovations will have to work in tandem with banks, which ultimately provide the capital for implementation. This becomes more challenging for certain technologies that are still in early stages and require further development to lower the costs and improve commercial viability.

There is a big opportunity in green finance, particularly in early stage venture debt, especially for climate tech ventures with a hardware component. Marie highlights that many start-ups find traditional equity financing to be costly and limiting as a source of working capital. Early stage venture debt could be a solution to this challenge and support early stage development of decarbonisation technologies. Currently, options for early-stage debt are limited given underlying risk constraints for such types of lending. Banks with strong understanding of start-up models can seize the opportunity to refinance their loans and move in step with start-ups to support their growth and development.

Striking a balance for effective collaboration

ESG fintechs will need to strike a balance between providing appropriate solutions to problem statements of consumers while concurrently addressing the requirements set out by banks.

Vivien highlights that banks may caveat their lending with conditions that ensure their reputation and financial returns are not compromised in the process. Data companies can help banks develop risk-reward frameworks to properly categorise and determine the level of potential risks and benefits for financing. When done in sync, business model innovations targeting this purpose can be developed, paving the way for successful collaborations between banks, ESG fintechs and data providers.



06

Looking ahead

Achieving net zero emissions is a critical global priority that will require the involvement of multiple stakeholders, including countries, regulators, FIs, and technology companies.

As the ESG space remains nascent, partnerships that are able to pool together resources, expertise and capabilities will be expected to increase in importance. With 80 percent of the world's GDP under a net-zero commitment, this represents a sizeable market opportunity.

To capitalise on this, FIs will be expected to fine-tune their sector policies, adopt more sustainable activities and investment frameworks, and outline their decarbonisation plans with greater transparency – both within their own operations and also within their sphere of influence.

In addition, regulators are also looking towards greater alignment with internationally recognised taxonomy and transition finance principles, with increased opportunities for solutions that offer credible and timely ESG data, reduce greenwashing, and provide climate risk and stress testing.



Panelists discussing the role of ESG fintechs in driving the financial services sector and their clients towards sustainability, before a diverse audience comprising corporate executives, sustainability professionals, start-ups, students, and more.



Climate tech is set to play a pivotal role in the future. There are key opportunities for ESG fintechs in the underserved segments, including solutions to reduce direct emissions and simplify sustainability reporting for SMEs. With greater alignment of incentives between solution providers and consumers, including revenue generation and cost reduction via business model innovation, this creates a window for greater adoption of decarbonisation solutions in the near future.

The shift in investor and consumer preferences towards sustainable products and services is also expected to incentivise more companies to embrace decarbonisation. This will lead to a higher demand for ESG-linked products and services, resulting in

increased investments in this area by venture capital and private equity firms, and bank-brokered deals. This, in turn, will lead to the large-scale commercialisation of more decarbonisation technologies and present increased opportunities, particularly around private-public partnerships.

Partnerships between stakeholders in the ESG space, such as between climate tech providers and FIs, will become more prevalent in the future. These partnerships can effectively tackle complex challenges, accelerate innovation, and create systemic change within the ESG space to drive the adoption of ESG practices in the real economy sectors and further accelerating their journey towards net-zero.



Contact us



Leon Ong
Partner
Financial Services Advisory
T: +65 9776 6742
E: long1@kpmg.com.sg



Audrey Mah
Associate Director
ESG Banking Centre of Excellence
T: +65 9788 5072
E: audreymah@kpmg.com.sg



www.kpmg.com.sg

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

The KPMG name and logo are trademarks used under license by the independent member firms of the KPMG global organization.

© 2023 KPMG Services Pte. Ltd. (Registration No: 200003956G), a Singapore incorporated company and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved.