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Navigating the Evolving Sustainable Landscape:

Hong Kong's Crucial Role in Financing the Transition to Sustainability

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Executive Summary

Executive summary

Over the past decades, green and sustainable finance development has emerged as a top priority in global discourse. With the Financial Services Development Council (FSDC) releasing its inaugural report on this topic in 2016,[1] Hong Kong was spotlighted as a nascent hub for green finance, poised to transform into a significant player in the field of sustainable economic practices. Since then, capitalising on the city's status as an international financial centre, the Hong Kong SAR Government has embraced a series of strategic initiatives aimed at cultivating a sustainable finance ecosystem. These measures, many of which align with FSDC recommendations, encompass the formulation of strategies for public and private stakeholders, the development of regulatory frameworks, and the promotion of green and sustainable products.

The sector's growth from nascency to vibrancy was highlighted in FSDC's 2022 publication, which showcased the concerted efforts of key industry players in fostering a thriving sustainable investment ecosystem in Hong Kong.[2] The publication underscored the city's successes as a rising international green and sustainable finance centre.

While considerable progress has been made, the landscape of green and sustainable finance is in constant flux, propelled by the urgency of climate-related challenges and shifting geopolitical dynamics. In 2023, the International Renewable Energy Agency (IRENA) highlighted the economic potential of transition towards a low-carbon economy, projecting a US$150 trillion investment opportunity by 2050.[3] Global discussions have expanded, underscoring the need for enhanced efforts to bridge existing gaps that green finance alone cannot address, calling for broader stakeholder involvement to create a more inclusive sustainable finance environment.

In this context, Hong Kong's role as a financier of sustainability transitions is becoming increasingly crucial. The work plan released by the Green and Sustainable Finance Cross Agency Steering Group (CASG) in early 2024, followed by the unveiling of the Sustainable Finance Action Agenda by the Hong Kong Monetary Authority (HKMA) in October,[4] reflects the Government's commitment to leading in this emerging field.[5] Transition finance, a concept gaining traction globally, aims to bridge the gap between traditional and sustainable finance. It specifically targets high-emitting entities and hard-to-abate sectors, providing them with the financial tools and support needed to gradually shift towards more sustainable operations.

Continuing its efforts to drive the evolving sustainable finance agenda, the FSDC has formed a dedicated Working Group of industry experts. By incorporating collective insights from a broad range of stakeholders, the Working Group aims to foster a conducive ecosystem for developing Hong Kong into a regional transition finance hub. The recommendations are designed to support the city in making an impact through its financial services industry to address transition challenges, further solidifying its position as a global leader in sustainable finance.

1 FSDC. (2016, May). *Hong Kong as a regional green finance hub*. https://www.fsdc.org.hk/media/p4pfkwvj/green-finance-report-english.pdf
2 FSDC. (2022, Dec). *The State of ESG in Hong Kong*. https://www.fsdc.org.hk/en/insights/the-state-of-esg-in-hong-kong
3 International Renewable Energy Agency. (2023). *World Energy Transitions Outlook 2023: 1.5°C Pathway*. https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2023/Jun/IRENA_World_energy_transitions_outlook_2023.pdf
4 Hong Kong Monetary Authority. (2024, January 8). *Cross-Agency Steering Group announces 2024 work plan to advance Hong Kong's position as a green and sustainable finance hub*. https://www.hkma.gov.hk/eng/news-and-media/press-releases/2024/01/20240108-5/
5 Hong Kong Monetary Authority. (2024, January 8). Cross-Agency Steering Group announces 2024 work plan to advance Hong Kong's position as a green and sustainable finance hub. https://www.hkma.gov.hk/eng/news-and-media/press-releases/2024/01/20240108-5/

These recommendations are:

Developing a guiding principle to align and bridge diverse global pathways

(i) Recommendation 1: Adopting a three-pillar approach to develop Hong Kong into a transition finance hub

Fostering collaborations to drive transition impact

(ii) Recommendation 2: Scaling transition finance through blended finance and other financing mechanisms

(iii) Recommendation 3: Establishing structured public-private dialogues to accelerate sector transitions

Strategic vision and support for inclusive development

(iv) Recommendation 4: Expanding Hong Kong's strategic vision for greater certainty – advancing through data management, tailored financing and technology

Introduction

Introduction

Transition finance: steering global investments toward a sustainable future

The global commitment to addressing climate change has been evolving since the Montreal Protocol in 1987. This commitment was further solidified through the establishment of the UN Framework Convention on Climate Change and the subsequent Kyoto Protocol in 1997—the first treaty to set legally binding targets to cut greenhouse gases. The 2016 Paris Agreement further reinforced this commitment, uniting 195 countries in the goal of limiting global temperature rise to well below 2°C. These landmark agreements, among others over the past decades, have kept climate change at the forefront of the global agenda, underscoring its critical importance.

As the urgency to stabilise global temperatures intensifies, the strategic role of innovative financial paradigms has become increasingly crucial. In this context, sustainable finance has gained considerable attention globally over the past decade. In simple terms, sustainable finance refers to investments in projects and activities that support environmental and social sustainability.[6] However, while important, this approach has only addressed part of the ecosystem and has, at times, sidelined high-emissions sectors like fossil fuels and heavy industries without a clear decarbonisation pathway from its frameworks.[7]

This imbalance raises risk by potentially hindering sustainable transformation in sectors critical for reducing global emissions. In 2021, the International Energy Agency (IEA) highlighted that the top 10% of emitting countries were responsible for nearly half of the global energy-related CO2 emissions.[8] Such concentration of emissions illustrates the need for more inclusive financial strategies to support the transformation of these high-impact sectors on a global scale.

The energy landscape in Asia presents a unique set of challenges, further exemplifying its complexity. For instance, coal-fired power plants in the region have an average operational age of 12 years - three decades younger than the average in Western nations.[9] Recent data also shows continued coal capacity growth in Asia. In the first half of 2024, the proposed coal capacity in the region nearly doubled the amount that was cancelled; notably, 97% of these new and revived proposals were in China and India.[10] The two countries, along with others in Southeast Asia, are projected to drive the majority of global electricity demand growth in the coming years.[11] By 2025, Asia is expected to consume over half of the world's electricity, highlighting the urgent need for tailored, sustainable energy solutions in the region.[12] Given these dynamics, unlike Western countries, which can focus on replacing ageing infrastructure with renewable alternatives, Asia requires a two-pronged approach. This includes strategies for early retirement of relatively new coal plants, implementation of carbon capture technologies, and storage of existing assets, alongside other innovative solutions that address both escalating power needs and decarbonisation goals.

6 European Investment Bank. (2023, April 3). What is sustainable finance? https://www.eib.org/en/stories/what-is-sustainable-finance
7 Yale Insights. (2023, May 15). *Green investing could push polluters to emit more greenhouse gases*. https://insights.som.yale.edu/insights/green-investing-could-push-polluters-to-emit-more-greenhouse-gases
8 Cozzi, L., Chen, O., & Kim, H. (2023, February 22). *The world's top 1% of emitters produce over 1000 times more CO2 than the bottom 1%*. International Energy Agency. https://www.iea.org/commentaries/the-world-s-top-1-of-emitters-produce-over-1000-times-more-co2-than-the-bottom-1
9 International Energy Agency. (2019, December 12). Fading fast in the US and Europe, coal still reigns in Asia. https://www.iea.org/commentaries/fading-fast-in-the-us-and-europe-coal-still-reigns-in-asia
10 Global Energy Monitor (2024. July). Global Coal Plant Tracker. https://www.carbonbrief.org/guest-post-just-15-countries-account-for-98-of-new-coal-power-development/
11 International Energy Agency. (2023, February 8). Low-emissions sources are set to cover almost all the growth in global electricity demand in the next three years. https://www.iea.org/news/low-emissions-sources-are-set-to-cover-almost-all-the-growth-in-global-electricity-demand-in-the-next-three-years
12 International Energy Agency. (2023, February 8). Low-emissions sources are set to cover almost all the growth in global electricity demand in the next three years. https://www.iea.org/news/low-emissions-sources-are-set-to-cover-almost-all-the-growth-in-global-electricity-demand-in-the-next-three-years

In this context, transition finance has emerged as an essential and supplementary approach, particularly crucial given the diverse economic and infrastructural realities across regions. Various organisations define transition finance in distinct ways, highlighting its multifaceted nature. For instance, the OECD's review in 2021 suggests that transition finance is generally intended to decarbonise entities or economic activities that are emissions-intensive, lack immediate low- or zero-emission substitutes, and are important for future socio-economic development.[13] Similarly, the CFA Institute describes it as "financing the decarbonisation of high-emitting activities and financing developing countries/regions as they develop while tackling environmental and social challenges".[14] Industry practitioners recognise that its scope extends beyond hard-to-abate sectors, encompassing a diverse range of activities that contribute to the gradual shift towards a low-carbon economy, including high-emission industries and various other economic activities in the transformation process. This acknowledges their crucial role in the economy and their capacity for environmental improvements (The implications posed by the varied definitions of transition finance will be explored in the next section).

Transition finance supports these sectors and activities with capital investments to adopt innovative technologies and practices that reduce emissions and improve efficiency. While these improvements may not instantly align with a pathway to reach net-zero emissions by 2050, they represent progress from the current baseline towards targeted climate objectives. This approach acknowledges the importance of incremental carbon emission reductions, even when they fall short of the deep cuts required. Examples include transitional energy solutions like shifting fossil fuels to cleaner and renewable energy sources in power generation and sustainable transportation projects.

By encompassing this broader range of activities, transition finance provides a pragmatic pathway for various sectors to contribute to climate goals, recognising that the journey to sustainability is often incremental and complex.

Recent global initiatives in transition finance

According to IRENA's estimation in 2023, achieving the 1.5°C target by 2050 requires US$150 trillion in total investments, averaging over US$5 trillion annually, far exceeding the record US$1.3 trillion invested in 2022.[15] This staggering figure underscores the critical role that transition finance must play in steering global investments toward a sustainable future.

Climate change mitigation through transition finance has become a central focus at the Conference of the Parties of the UN Climate Change Conference (COP) in recent years. At COP28 in 2023, global discussions emphasised developing climate-resilient economies and ensuring equitable transitions to net-zero emissions through enhanced financial mobilisation, marked by several key events and announcements concerning collaborations for transition finance.[16,17] Notably, the Glasgow Financial Alliance for Net Zero (GFANZ) released a progress update report on the transition finance development, suggesting that a broader perspective in addition to green finance should be considered for a just and inclusive transition.[18] Another initiative was the launch of the Industrial Transition Accelerator, which brings together leaders from the real economy, financial sector, technical experts, and policymakers to drive the decarbonisation of six heavy-emitting industries by formulating transition plans for stakeholders.[19]

13 OECD. (2021). Transition finance: Investigating the state of play: A stocktake of emerging approaches and financial instruments. OECD Environment Working Papers, No. 179. OECD Publishing. https://doi.org/10.1787/68becf35-en

14 CFA Institute. (2024). Navigating transition finance: An action list. https://rpc.cfainstitute.org/-/media/documents/article/industry-research/transition-finance.pdf

15 International Renewable Energy Agency. (2023). *World Energy Transitions Outlook 2023: 1.5°C Pathway*. https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2023/Jun/IRENA_World_energy_transitions_outlook_2023.pdf

16 2023 United Nations Climate Change Conference (COP 28). https://www.cop28.com/en/climate_finance_framework

17 United Nations Framework Convention on Climate Change. (2023). Summary of Global Climate Action at COP 28. https://unfccc.int/sites/default/files/resource/Summary_GCA_COP28.pdf

18 GFANZ. (2023, December 4). GFANZ delivers on the year of the transition plan with continued growth and progress to close key gaps in the global financial system and accelerate climate investment. https://www.gfanzero.com/press/gfanz-delivers-on-the-year-of-the-transition-plan-with-continued-growth-and-progress-to-close-key-gaps-in-the-global-financial-system-and-accelerate-climate-investment/

19 Mission Possible Partnership. (2024). Industrial Transition Accelerator. https://ita.missionpossiblepartnership.org/

Building on the momentum, COP29 in Baku further advanced the transition finance agenda. Nations collaborated to establish new quantifiable climate finance goals to support post-2025 climate actions in developing countries.[20] Reinforcing this commitment, multilateral development banks also jointly pledged increased financial support and introduced concrete measures to help countries achieve their climate objectives.[21] Furthermore, sector-specific progress was further made, with the United Nations Development Plan launching the first global guide on transition plans for the insurance industry.[22]

To maximise the impact of transition finance on building a sustainable and resilient future, a comprehensive strategy is essential. This approach must integrate efforts from governments, diverse industries, and community stakeholders worldwide. By leveraging international commitments, this collaborative framework can drive economies towards sustainable growth while ensuring equitable contributions and benefits across all sectors.

20 United Nations News. (2024, November 11). COP29: Push for agreement on a new climate finance deal 'right from the start'. https://news.un.org/en/story/2024/11/1156776
21 Multilateral Development Banks. (2024). Joint Multilateral Development Banks (MDBs) Statement for COP 29 – MDBs' Support to Implementing the Paris Agreement. European Bank for Reconstruction and Development. https://www.ebrd.com/documents/climate-finance/joint-multilateral-development-banks-statement-for-cop-29.pdf
22 UNDP. (2024, November 14). UNDP launches report on climate transition plans for insurers https://www.undp.org/press-releases/undp-launches-report-climate-transition-plans-insurers

Navigating the frontiers of transition finance

Navigating the frontiers of transition finance

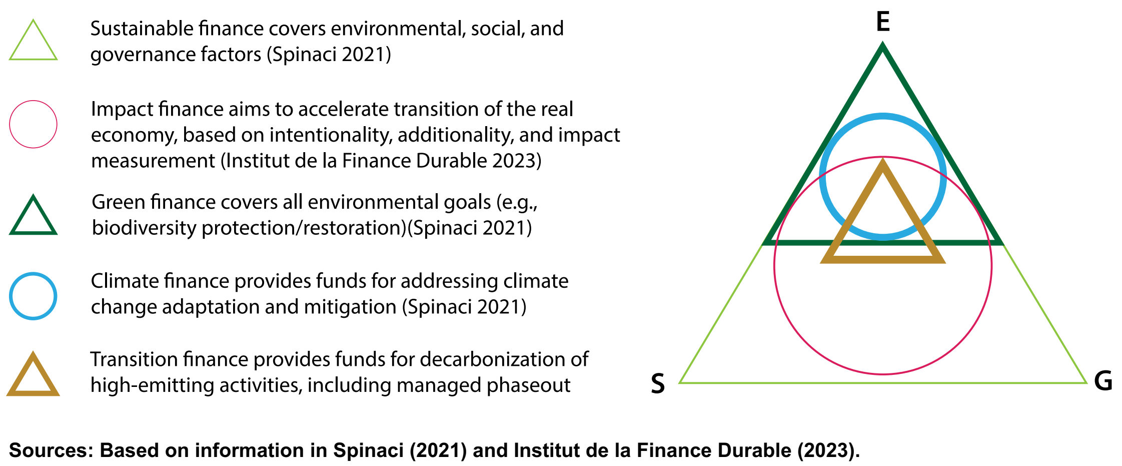
The common understanding of transition finance in today's evolving context

Achieving a net-zero emissions economy for a sustainable future is fraught with complexities which involve transformation across global energy systems, industry practices, consumer behaviour and others to stabilise the climate and mitigate environmental degradation. Without a comprehensive transition finance framework, this journey becomes even more challenging. The resulting ambiguity impedes the development of effective regulatory guidelines and makes it difficult to align the risk-return expectations of investors with the needs of long-term, capital-intensive technologies that are crucial for the transition to a sustainable economy. This lack of clarity hampers the mobilisation of necessary financial resources, ultimately slowing progress toward a sustainable future.

In response, various stakeholders—including national public bodies, international organisations, industry associations, and private institutions—have developed guidelines and frameworks, tailored to regulators, financial institutions, asset owners, and investors to foster a broader understanding and support the development of the transition finance ecosystem. Some industry practitioners see a universal definition and principles of transition finance as key to achieving consistent classification and stakeholder alignment. While promising, its practicality remains uncertain. Hong Kong could help bridge national and international standards by fostering common ground through a coordinated approach.

Transition finance within the sustainable finance ecosystem

The interconnectedness of transition finance with other forms of sustainable finance lies in their shared commitment to environmental improvement, but through different pathways, according to the CFA Institute. Transition finance has specific characteristics that set it apart. Notably, it focuses on providing funds for the decarbonisation of high-emitting activities, including their managed phaseout. This targeted approach, which we find optimal, positions transition finance as a vital bridge, supporting companies on their journey towards greener practices. Such a nuanced view acknowledges the complexities of transforming the real economy, emphasising the need for deliberate, guided efforts aligned with broader environmental and climate strategies.



Source: CFA Institute *Figure 1 – Scope of sustainable, impact, green, climate and transition finance* [23]

23 CFA Institute. (2024, March). Navigating transition finance: An action list. https://rpc.cfainstitute.org/-/media/documents/article/industry-research/transition-finance.pdf

Zooming into the scope of transition finance

Transition activities primarily focus on the adoption of technologies that generate lower greenhouse gas (GHG) emissions than the sector or industry average.[24] These are crucial for sectors that are hard to abate and cannot fully reduce emissions in line with a trajectory required by the Paris Agreement based on technology that is currently technically or commercially feasible. Although these activities do not lead to a lock-in of carbon-intensive assets, they are not devoid of GHG emissions, which categorises them as transitional rather than green. This nuanced categorisation highlights the importance of supporting emission reduction efforts even when net-zero is not immediately achievable.

The International Capital Market Association (ICMA) provides further clarity by defining transition finance instruments as any type of debt instrument where the proceeds are specifically used to finance or refinance, in whole or in part, eligible green projects undertaken by issuers focused on climate transition.[25] The definition highlights the significance of an issuer's overall climate strategy and transition plan and shifts the focus from the mere use of proceeds to the broader context of the issuer's commitment to reducing GHG emissions in line with the Paris Agreement. This necessitates a robust, science-based climate transition strategy as a prerequisite for the issuance of Green, Social, and Sustainability instruments that incorporate transition elements.

Similarly, the EU Taxonomy for Sustainable Activities provides a framework for identifying economic activities that contribute to climate change mitigation and adaptation. It recognises transition activities as those that support the transition to a climate-neutral economy. To be considered a transition activity under the EU Taxonomy, an activity must: [26]

- Have greenhouse gas emission levels that correspond to the best performance in the sector or industry.
- Not hamper the development and deployment of low-carbon alternatives.
- Not lead to a lock-in of carbon-intensive assets considering the economic lifetime of those assets.

These criteria underscore the importance of continuous improvement, and the avoidance of solutions might impede long-term progress towards sustainability.

The GFANZ provides a more comprehensive definition of transition finance, describing it as *"investment, financing, insurance, and related products and services essential for a structured transition to a net-zero economy"*. It aims to support financial institutions in enhancing their capital allocation towards achieving a net-zero economy by providing detailed information on key transition financing strategies and introducing advanced methods for evaluating decarbonisation impacts. Four key transition financing strategies are identified: [27,28]

24 Climate Policy Initiative. (2023). *Transition Finance. In Climate Policy Initiative (Ed.), Climate Finance: Insights from Emerging Markets and Developing Economies* https://www.climatepolicyinitiative.org/wp-content/uploads/2023/09/10.4324_9781003433088-23_chapterpdf.pdf

25 *ICMA. Climate Transition Finance Handbook. https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/climate-transition-finance-handbook/*

26 *European Commission. (2019). Questions and Answers: political agreement on an EU-wide classification system for sustainable investments (Taxonomy). https://ec.europa.eu/commission/presscorner/detail/it/qanda_19_6804*

27 *GFANZ Secretariat. (2023, December). Scaling transition finance and real-economy decarbonisation. https://assets.bbhub.io/company/sites/63/2023/11/Transition-Finance-and-Real-Economy-Decarbonization-December-2023.pdf*

28 *GFANZ. (2024). Four key transition financing strategies: Transition finance workshop series. https://assets.bbhub.io/company/sites/63/2024/05/GFANZ-Workshop-Four-Key-Transition-Financing-Strategies.pdf*

- **Climate solutions** - focus on direct and indirect methods to reduce emissions, including innovative technologies and nature-based strategies. They are expected to contribute to emissions reductions without extending the life of assets due for phaseout, aligning progressively with net-zero emissions goals over time.
- **Aligned** - entities with declared net-zero ambitions that are actively implementing comprehensive transition plans. These entities have clear, measurable targets and demonstrate consistent performance in alignment with their net-zero pathways, reflecting their commitment to sustainable operations.
- **Aligning** - entities in the initial or intermediate stages of commitment to net zero. Usually, they are in the process of setting up their transition frameworks and are actively developing strategies to meet interim targets. The focus is on gradual alignment with net-zero goals, moving from planning to action.
- **Managed phaseout** - strategic financial and operational measures to decommission high-emitting assets ahead of their projected end-of-life while ensuring minimal disruption to communities and economies. This strategy emphasises a structured phaseout with set targets, continuous monitoring, and integration of just transition principles to balance environmental and social considerations.

Varying approaches to transition finance taken across jurisdictions/ associations

The absence of a universally agreed-upon taxonomy and criteria for classifying transition finance activities and measuring their impact poses challenges. While the global market shares some initial common understanding based on guidance, varying approaches across jurisdictions highlight the need for a cohesive and inclusive framework to guide these efforts more effectively.

An overview of various jurisdictions/ authorities in approaching transition finance (Non-exhaustive) [29]

Jurisdiction	Authority	Approaches to supporting transition finance
Japan	Ministry of Economy, Trade and Industry	Transition finance should aim to support the implementation of transition strategies
ASEAN	ASEAN Taxonomy Board	Transition finance is listed as a use case for the taxonomy
Hong Kong	HKMA	Provides six high-level principles to guide banks in transition planning, with reference to the findings and recommendations of international bodies such as NGFS, GFANZ and TCFD
Malaysia	Bank Negara Malaysia	Develops guidance on transition planning to align financial institutions' business strategies with national plans while managing the risk of greenwashing. Financial institutions are also advised to consider the specific needs of their clients in their transition plans.
Singapore	Monetary Authority of Singapore	Sets out supervisory expectations for banks, insurers and asset managers respectively on transition planning including engagement over divestment, taking a multi-year, holistic approach to risk management and improved disclosure.

29 GFANZ. (2023, November 27). Net Zero Transition Plans: HKMA Webinar on Climate Transition Plans. https://www.hkma.gov.hk/media/eng/doc/key-functions/ifc/green-and-sustainable-finance/HKMA_NZTP_webinar_GFANZ_share_20231127.pdf

EU	European Commission	Mandatory transition plans for large companies are being discussed under the proposed Corporate Sustainability Due Diligence Directive, which sets out an obligation for large companies to adopt and put into effect, through best efforts, a transition plan for climate change mitigation
UK	Financial Conduct Authority	Provides recommendations on transition plan disclosures covering governance, strategy, risk management, metrics & targets. The UK Government will consult on TPs for large private & public companies this year. Next year the FCA will consult on updated transition plan requirements based on the TPT, which will come into force on 1 January 2025.
US	US Treasury	Recommends that FIs with net zero targets should publish net-zero transition plans. Refers to GFANZ and TPT Frameworks and Guidance as best practice.
Canada	Sustainable Finance Action Council	Issuers under the taxonomy should commit to net zero by 2050 and publish a net-zero transition plan Voluntary taxonomy

Ideally, establishing consistent definitions across various markets and sectors would be the best approach. That said, noting the challenges of complete standardisation, harmonising and aligning standards to a certain extent would be beneficial. This approach would facilitate the scaling of transition finance to achieve tangible real-economy decarbonisation and enable financial institutions to better assess their risk exposure, as well as identify potential investment opportunities.

Global efforts in transition plan disclosure

The success of transition finance depends on effective real-economy transition, which requires tailored disclosure frameworks and impact reporting that reflect its long-term focus and gradual decarbonisation approach. As global efforts to develop such frameworks progress, two key aspects emerge: standardisation and credibility. The Network for Greening the Financial System, a global network of central banks and financial supervisors, emphasises that credible transition plans must demonstrate robust governance, realistic implementation pathways, and clear alignment with climate targets.[30] Beyond standardised disclosures, financial institutions and stakeholders must also evaluate the feasibility of these plans considering companies' capabilities, resources, and track records in implementing climate-related initiatives.

The UK Transition Plan Taskforce (TPT), launched in 2022, plays a key role in shaping transition planning and disclosure. The TPT unites industries, academia, and regulatory bodies to develop best practices for transition plan disclosures across finance and the real economy, recognising that effective transition requires a comprehensive, multi-sector strategy.[31] The TPT's work is significant as it aims to create a standardised framework for transition plans, helping companies articulate their low-carbon strategies more clearly and consistently. This standardisation enables investors and stakeholders to better assess and compare transition efforts, facilitating informed decision-making in transition finance.

30 Network for Greening the Financial System. (2024, April). Credible transition plans: The micro-prudential perspective. https://www.ngfs.net/sites/default/files/media/2024/04/17/ngfs_credible_transition_plans.pdf
31 Transition Plan Taskforce. (2023, October). Disclosure Framework. International Financial Reporting Standards Foundation. https://www.ifrs.org/content/dam/ifrs/knowledge-hub/resources/tpt/disclosure-framework-oct-2023.pdf

The TPT's influence expanded in June 2024 when the IFRS Foundation announced it plans to incorporate TPT's disclosure materials into its framework.[32] This move signals potential global adoption of TPT's guidance through integrating it into International Sustainability Standards Board (ISSB) standards. Such integration would be a significant step towards global harmonisation of transition planning and disclosure practices, providing a more consistent basis for assessing transition efforts across jurisdictions. This could accelerate the flow of transition finance to where it is most needed and effective.

Momentum for standardised transition plan disclosure has continued to build, as evidenced by two recent developments: the UN Sustainable Stock Exchange Initiative establishing an Advisory Group on Transition Plans in July 2024,[33] and IOSCO's Sustainable Finance Task Force published its report on transition plans through its Transition Plan Workstream in November 2024,[34] with the Securities and Futures Commission participating in both initiatives. As these standards become more widely adopted, they are expected to shape the disclosure practices, as well as the strategic planning and operational decisions of companies in their transition to a low-carbon economy.

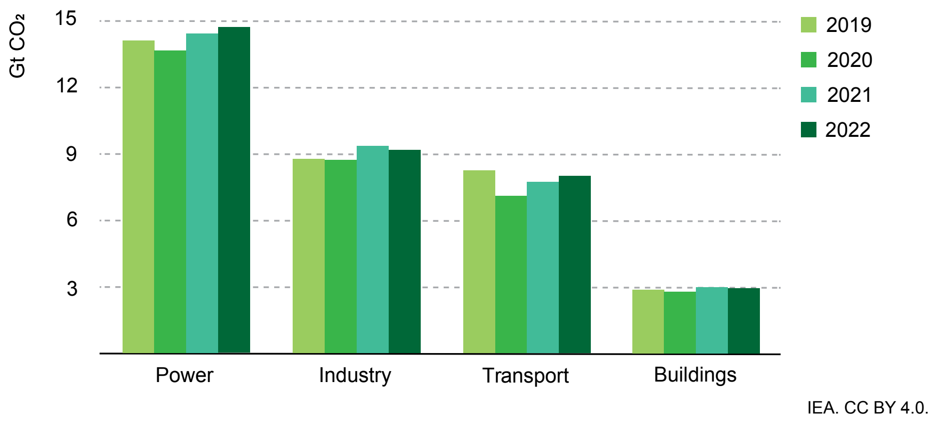
The critical role of transition finance in high-emission and hard-to-abate sectors

The importance of transition finance

With the clean energy sector demonstrating robust growth and accounting for 10% of global GDP growth in 2023, it is clear that green initiatives are gaining momentum.[35] However, transition finance has a key role to play in bridging the gap with traditional industries and accelerating the transition towards sustainability. This financial approach is not just complementary but essential in supporting high-emission sectors as they evolve towards cleaner practices, ensuring a balanced and progressive transition to a greener economy.

The global energy scenario highlights the importance of transition financing. Despite notable advancements in renewable energy, the largest absolute increase in emissions in 2022 was observed in the power sector, which included electricity and heat generation (Figure 2).[36] The increase was primarily fueled by coal consumption in emerging Asian markets and consistent natural gas emissions in the United States. This ongoing reliance on fossil fuels, which accounted for over 80% of global energy consumption and nearly two-thirds of global GHG in 2023,[37] highlights the critical need for a structured transition. Such a transition would entail the gradual phasing out of high-emission energy sources while scaling up cleaner alternatives. Energy companies, therefore, are at the heart of the global decarbonisation effort, illustrating that excluding high-emitting sectors from financial support does not contribute to achieving net-zero targets.

32 IAS Plus. (2024, June 28). IFRS Foundation to assume responsibility for the disclosure-specific material developed by the UK's Transition Plan Taskforce. https://www.iasplus.com/en/news/2024/06/ifrsf-tpt
33 UN Sustainable Stock Exchanges Initiative. (2024, July 25). Launch webinar: SSE Advisory Group on Transition Plans. SSE Initiative. https://sseinitiative.org/sse-event/launch-webinar-sse-advisory-group-transition-plans
34 International Organization of Securities Commissions. (2024, November). IOSCO Report on Transition Plans (Report No. FR/07/2024). https://www.iosco.org/library/pubdocs/pdf/IOSCOPD772.pdf
35 Cozzi, L., Gül, T., Spencer, T., & Levi, P. (2024, April 18). Clean energy is boosting economic growth. International Energy Agency. https://www.iea.org/commentaries/clean-energy-is-boosting-economic-growth
36 International Energy Agency. (2023). CO2 Emissions in 2022. https://www.iea.org/reports/co2-emissions-in-2022
37 United Nations. (n.d.). Renewable energy – powering a safer future. https://www.un.org/en/climatechange/raising-ambition/renewable-energy



Source: IEA *Figure 2 – Global CO2 emissions by sector* [38]

That said, access to transition finance remains a challenge for many companies – and ultimately, the overall economies. While financial institutions are keen to invest in promising clean energy and circular economy initiatives, they often hesitate when it comes to financing new, unconventional technologies in traditional sectors. This reluctance stems from the technology-agnostic nature of most financial institutions, which prioritise risk and return over specific technological advancements. As a result, a substantial funding gap has emerged, particularly in Asia, where limited regulatory support and reputational concerns further complicate the landscapes.

To address these challenges, it is crucial to establish a robust ecosystem that empowers financial institutions to confidently engage in transition finance. This ecosystem would facilitate resource allocation to decarbonisation activities in hard-to-abate sectors, enabling them to access sustainable debt markets and attract investments in both established and emerging green technologies. However, the risk of transition-washing looms large. The absence of standardised labelling makes it difficult to distinguish genuine decarbonisation efforts from superficial greenwashing attempts. Addressing this issue requires clear standards, enhanced transparency, and increased collaboration among key stakeholders to foster a more conducive environment for responsible transition finance.

The current state of transition finance

Global landscape of transition finance

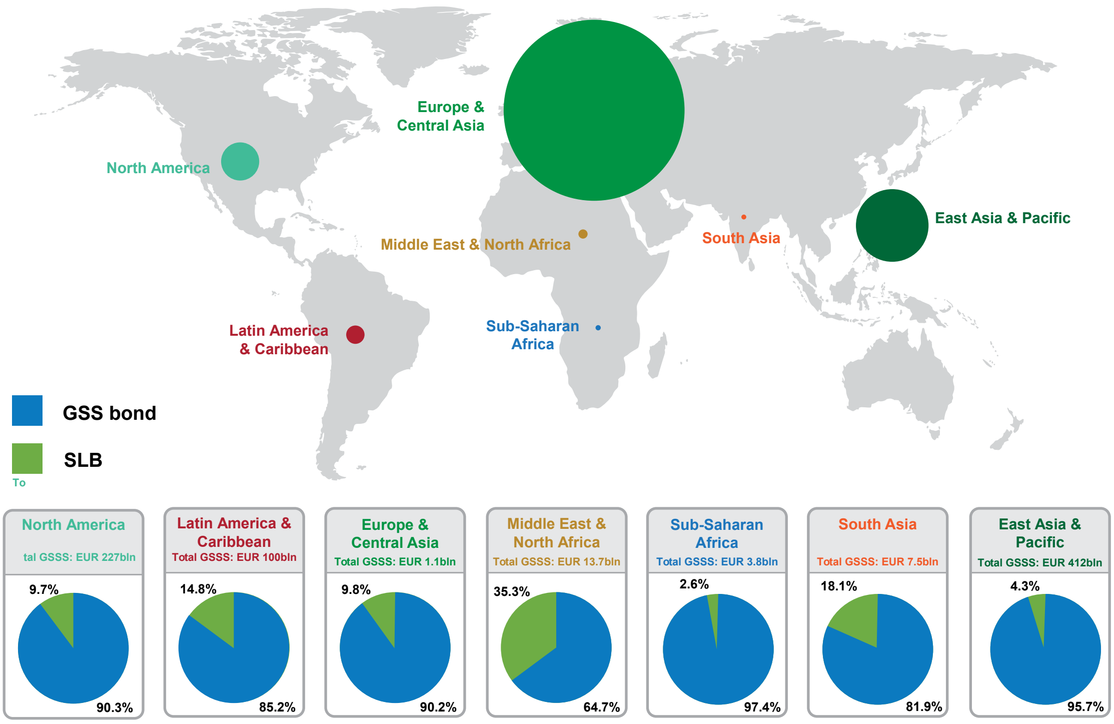
Transition finance is evolving as a crucial catalyst of the global shift towards a sustainable economy. It represents an innovative funding mechanism essential for bridging the investment gap needed to achieve net-zero targets by 2050. As noted earlier, the scale of this financial challenge is staggering: an estimated US$150 trillion is needed cumulatively. [39] To put this figure into perspective, Fidelity reports that this translates to a global transition financing gap amounting to nearly US$4 trillion annually.[40]

Central to these strategies are transition bonds and sustainability-linked bonds (SLBs),[41] which serve as the common tools for transition finance. Introduced in 2017, transition bonds

38 International Energy Agency. (2023). CO2 Emissions in 2022. https://www.iea.org/reports/co2-emissions-in-2022
39 International Renewable Energy Agency. (2023, June). World energy transitions outlook 2023. https://www.irena.org/Digital-Report/World-Energy-Transitions-Outlook-2023
40 Fidelity International. (2024, March 6). Asia leads the way as transition finance seeks to plug net zero investment gap. https://www.fidelity.com.hk/en/articles/investment-spotlight/2024-03-06-asia-leads-way-transition-finance-seeks-plug-net-zero-investment-gap-1709706138273
41 ClientEarth. (2024). Guardrails to address greenwashing of climate transition finance. https://www.clientearth.org/media/mbblc4aa/guardrails-to-address-greenwashing-of-climate-transition-finance-clientearth.pdf

are use-of-proceeds instruments specifically designed to finance transitional or enabling activities in high-emission sectors. While the market experienced a slow start, it has grown steadily, with total issuances reaching over $17 billion as of November 2024, driven by rising demand from countries in Asia, particularly Japan and China, in recent years.[42] This underscores the niche status of transition bonds within the broader sustainable bond market, as well as global disparities in adoption—despite Asia's leadership in advancing the development of these financial tools [43]

SLBs, meanwhile, offer a more versatile approach, linking financial returns to the achievement of predefined sustainability performance targets. These bonds provide a more flexible option compared to the stringent use-of-proceeds requirements of green bonds, making them applicable across various sustainability initiatives, including those related to transition. However, despite their adaptability, as of 2023, SLBs with a total cumulative market size of USD48.6 billion, only accounted for 1.1% of the total cumulative market size, suggesting that investors are cautious of these relatively new and perceived riskier financial options.[44]



Note: The GSS bond market is much larger and more established than the developing SLB market, The figure covers only the period since the first SLB issuance (2020 to Q1 2023). The circles representing total volumes at GSSS bond issuances for each region are scaled relative to each other.

Source: OECD *Figure 3– GSSS bond volume trend, 2020 - Q1 2023* [45]

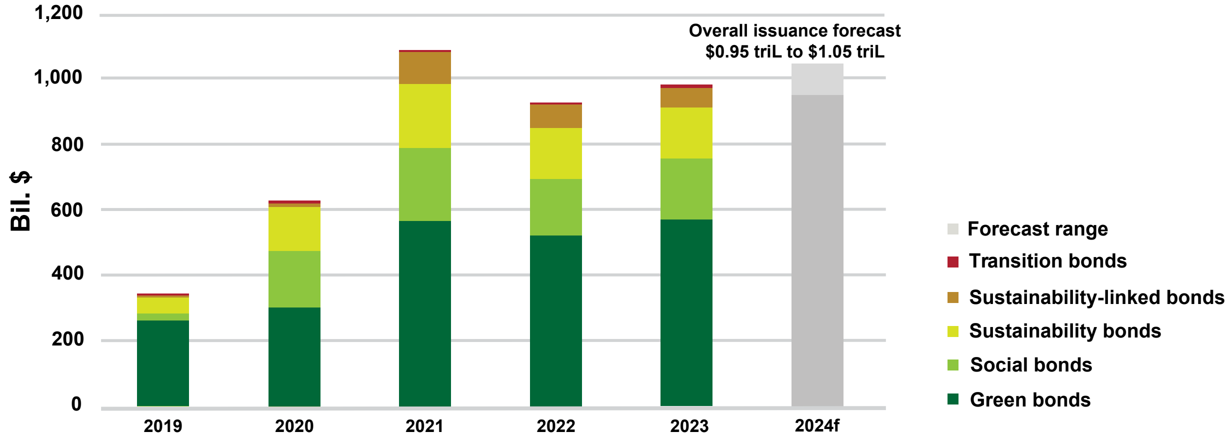
Although both transition finance instruments are gaining traction, their adoption remains slow. (Figure 4). This situation necessitates a concerted effort to enhance understanding and regulatory support for these tools. The success of transition finance depends on the availability of financial products and robust frameworks that build investor confidence and enable widespread adoption.

42 Environmental Finance Data. (2024, November 8). The latest trends in transition bond issuance. Environmental Finance. Retrieved November 19, 2024, from https://www.environmental-finance.com/content/market-insight/the-latest-trends-in-transition-bond-issuance.html

43 Climate Bonds Initiative. (2023). Sustainable Debt Global State of the Market 2023. Retrieved from https://www.climatebonds.net/files/reports/cbi_sotm23_02h.pdf

44 Climate Bonds Initiative. (2023). Sustainable Debt Global State of the Market 2023. Retrieved from https://www.climatebonds.net/files/reports/cbi_sotm23_02h.pdf.

45 OECD. (2024). DCD(2024)4. https://one.oecd.org/document/DCD(2024)4/en/pdf https://one.oecd.org/document/DCD(2024)4/en/pdf



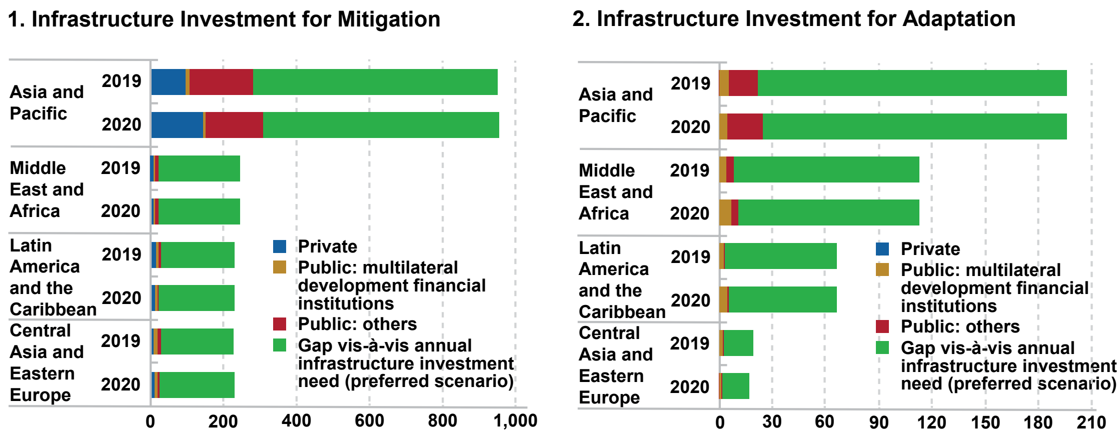
Source: S&P Global *Figure 4 – APAC's GSSSB volume trend* [46]

The untapped potential of transition finance in Asia

The potential for transition finance is particularly significant in Asia, a region that faces unique challenges in its journey towards sustainability. Despite a growing pool of sustainable investment and awareness, the region is struggling to meet its significant financing needs for sustainable development. A case in point is that with 85% of its energy derived from fossil fuels and accounting for over half of global energy consumption, Asia urgently requires targeted financial strategies to support its transition to cleaner energy sources.[47]

An IMF study in 2024 reveals that emerging and developing Asian economies will require at least US$1.1 trillion annually for climate mitigation and adaptation. However, current investments fall short by US$800 billion (Figure 5). This substantial gap underscores the urgent need for innovative financing solutions tailored to the region's specific circumstances.

(Billions of US dollars)



Sources: Emissions Database for Global Atmospheric Research; IMF 2022a, based on 2021 data from the Climate Policy Initiative; IMF, World Economic Outlook database; Notre Dame Global Adaptation Index; and IMF staff calculations.
Note: Panel 1 shows the infrastructure needs for mitigation that include the energy and transport sectors. Panel 2 shows infrastructure needs for adaptation that include the water and sanitation, irrigation, and flood protection sectors. Climate finance flow includes all instruments for both emerging market and developing economies and advanced economies in selected regions while the infrastructure investment needs are calculated for emerging market and developing economies. Therefore, the infrastructure needs gap is likely to be underestimated. Private flows are small, consistently below $1 billion dollars.

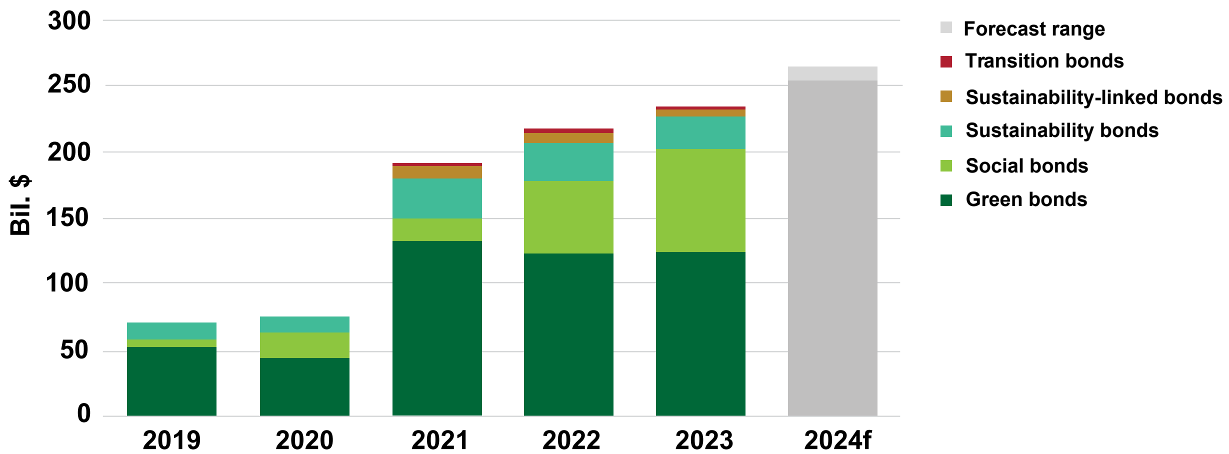
Source: IMF *Figure 5 – Global climate finance flows and investment need (by region)* [48]

46 S&P Global. (2024, February 21). Asia-Pacific sustainable bonds to step up growth in 2024. https://www.spglobal.com/_assets/documents/ratings/research/101593421.pdf
47 International Renewable Energy Agency. (n.d.). Asia and Pacific. IRENA. Retrieved May 10, 2024, from https://www.irena.org/How-we-work/Asia-and-Pacific
48 International Monetary Fund (2024, January 29). Unlocking climate finance in Asia-Pacific: Transitioning to a sustainable future. https://www.imf.org/en/Publications/Departmental-Papers-Policy-Papers/Issues/2024/01/29/Unlocking-Climate-Finance-in-Asia-Pacific-Transitioning-to-a-Sustainable-Future-541458

In this context, transition finance is a promising avenue to bridge this gap, especially in a diverse and economically varied region like Asia. It offers tailored pathways for industries facing environmental challenges, acknowledging their unique starting points and contexts. In sectors like manufacturing and energy, traditionally reliant on fossil fuels, transition finance can facilitate shifts towards renewable sources and efficient technologies, simultaneously reducing emissions and enhancing competitiveness.

The success of transition financing hinges on robust frameworks that ensure transparency, accountability, and clear progress benchmarks. This is especially crucial for Asia's emerging markets, where climate reporting requirements are often insufficient. Effective frameworks should address both transition planning for the real economy and transition finance for financial institutions. Transition planning frameworks guide companies in setting clear decarbonisation pathways, while transition finance frameworks enable financial institutions to support these efforts transparently. Implementing these frameworks, along with climate-related requirements for companies, will be essential for Asia to expedite sustainable growth and achieve desired climate outcomes.

In Asia, the development of transition finance in sustainable markets is at a nuanced stage. According to S&P Global's study, as of 2023, transition bonds represent a tiny segment, accounting for less than 1% of all regional sustainable bond issuances (Figure 6), highlighting a significant gap and a substantial opportunity for growth. This dynamic interplay of market expansion, innovative product development, and strategic financial initiatives emphasises the sector's vibrancy and potential for tangible impact.[49]



f--S&P Global Ratings forecast. GSSSB--Green, social, sustainability, and sustainability-linked bond. Sources: Environmental Finance Bond Database. S&P Global Ratings.

Source: S&P *Figure 6 – APAC's GSSSB volume trend* [50]

Investors interest in global transition finance

Recognising the need for a balanced approach that allows for incremental improvements while maintaining economic stability, global stakeholders are turning to transition finance as a more targeted solution.

49 S&P Global. (2024, February 21). Asia-Pacific sustainable bonds to step up growth in 2024. https://www.spglobal.com/_assets/documents/ratings/research/101593421.pdf
50 S&P Global. (2024, February 21). Asia-Pacific sustainable bonds to step up growth in 2024. https://www.spglobal.com/_assets/documents/ratings/research/101593421.pdf

Surveys and studies highlight a growing awareness and commitment to transition finance among investors. According to a survey conducted by Blackrock in 2023, 56% of global institutional investors indicated that they would increase their allocations to transition finance within the next one to three years.[51] This demonstrates the increasing recognition of transition finance's role and underscores its importance as an investment priority in the shift towards a low-carbon economy.

While interest in transition finance is clearly growing, actual investment in this area has been slower to materialise compared to other climate-focused strategies. A 2024 Robeco study of global institutional and wholesale investors reveals that only 37% of investors allocate funds to transitioning companies—those that are high emitters now but have credible plans to reduce their emissions. In contrast, nearly half of the surveyed investors have already invested funds with a low-carbon approach (49%) or in other climate solutions (48%).[52] Surveyed investors have identified some enhancements to expand transition finance. Primarily, they call for consistent standards within the asset management industry, access to reliable, standardised data, and clearer insights into the risk-return implications of transition investments. They also demand greater transparency in climate performance assessments and more effective policy advocacy efforts.

As transition finance falls within the broader spectrum of sustainable finance, it is worth noting that the growth of sustainable finance in Europe has slowed in recent years, largely due to concerns over greenwashing.[53] Although growth momentum in Asia remains robust, the region could face similar challenges as litigation risks related to greenwashing increase. To mitigate these risks and build investor confidence in transition finance, it is crucial to demonstrate the effectiveness of such strategies. This could involve providing investors with compelling evidence that transition finance can deliver tangible decarbonisation outcomes. Equally important is incentivising issuers by offering competitive financing terms. For potential issuers, the cost of financing will be a key determinant of their participation in transition finance.

To address this, public-private collaboration could play a vital role in driving more attractive pricing for transition financing. The private sector alone may struggle to offer sufficiently low financing costs, particularly given the complexities and risks associated with transitioning high-emission industries. By working together, the Government and financial institutions can develop mechanisms—such as guarantees or subsidies—that reduce the cost of capital for transition finance, making it more accessible to a broader range of issuers (Details to be further discussed in Recommendation). This would not only stimulate greater participation in transition finance but also enhance the credibility and scalability of these investments.

Transition finance has the potential to reshape investment strategies in high-emission sectors, and align them with global decarbonisation goals. To maximise its potential in channelling capital towwards sustainable transitions, stakeholders across the financial spectrum need to collaborate to refine investment structures, enhance transparency, and boost investor confidence in transition strategies.

51 BlackRock. (2023). Global perspectives on investing in the low-carbon transition: Survey of 200 institutional investors. https://www.blackrock.com/corporate/literature/brochure/global-transition-investing-survey.pdf

52 Robeco. (2024, May). 2024 Global Climate Investing Survey: Realism on the transition journey: Insights from investors. https://www.robeco.com/files/docm/docu-202405-robeco-global-climate-investing-survey.pdf

53 Centre for Economic Policy Research. (n.d.). Corporate investment: Cyclical slowdown versus structural needs. Retrieved from https://cepr.org/voxeu/columns/corporate-investment-cyclical-slowdown-versus-structural-needs

Other drivers and practical applications of transition finance

At first glance, transition finance might be perceived as primarily focused on environmental protection and climate change mitigation. However, a closer examination reveals its much broader scope and impact. In fact, transition finance plays a pivotal role in shaping economic landscapes, particularly in emerging markets. Its appeal lies in its dual capacity to address environmental concerns while simultaneously driving economic efficiency, modernising value chains, and generating multiplier effects across diverse sectors.[54]

For instance, China's "new-for-old" programme, backed by RMB300 billion in special treasury bonds, exemplifies transition finance in action.[55] It aims to renew large-scale equipment and replace old consumer goods across various sectors, from energy power to agricultural machinery, aligning environmental goals with economic priorities. Similarly, the accelerated shift from diesel to natural gas in Mainland China's trucking industry is another case where transition finance is playing an instrumental role.[56] It is widely viewed as a positive development that could lead to an earlier-than-expected peak in diesel and oil consumption. These examples underscore how transition finance can facilitate both environmental progress and economic restructuring, positioning Hong Kong as a potential facilitator in this evolving landscape.

Another emerging driver is climate adaptation. As environmental conditions evolve, there is an increasing need to adapt facilities, infrastructure, and operations. Incorporating "future-proofing" activities into transition finance frameworks can address immediate environmental concerns and foster long-term resilience and innovation. This proactive approach ensures that investments are safeguarded against future climate impacts, enhancing their sustainability and effectiveness.

Alongside these initiatives, practical applications of transition finance also involve international organisations providing capacity building programmes, which are essential for bridging knowledge gaps and facilitating informed decision-making. For instance, the IFC's China Utility-Based Energy Efficiency Finance Programme supports banks in assessing the risk and return profiles of transition investments, enabling more effective allocation of resources.

The diverse drivers and applications of transition finance highlight its multifaceted nature. By addressing both environmental and economic objectives, transition finance emerges as a powerful tool for sustainable development. Its potential to drive economic transformation and climate resilience becomes increasingly apparent when viewed through this broader lens. This perspective underscores the importance of continued investment and innovation in transition finance, positioning it as a key enabler of both economic growth and environmental sustainability.

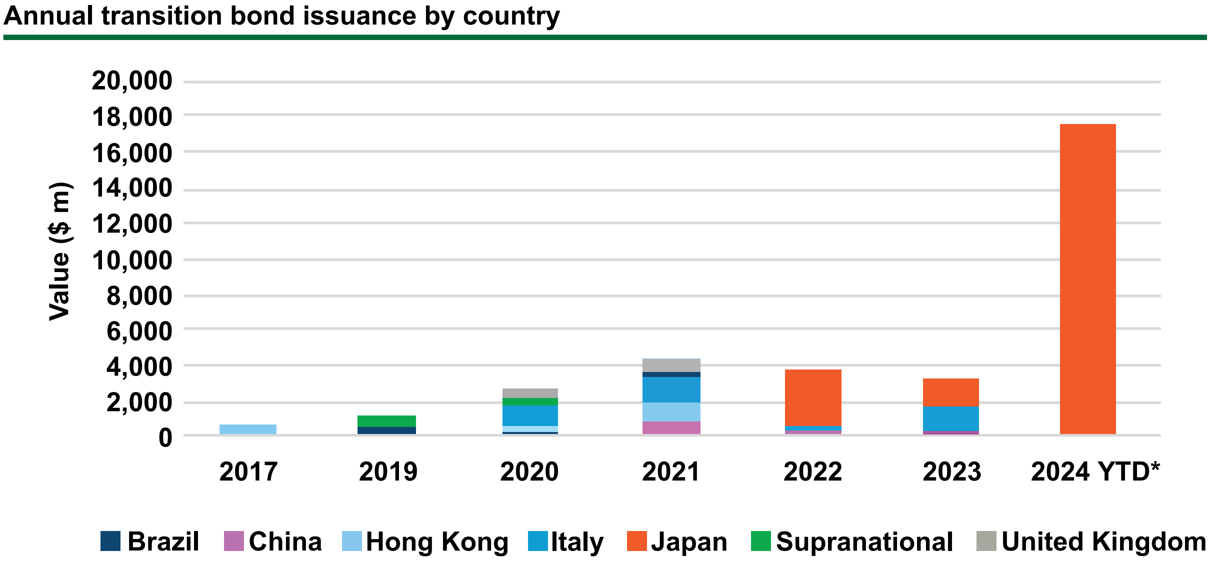
54 Energy Transitions Commission. (2023). Financing the transition: How to make the money flow for a net-zero economy. https://www.energy-transitions.org/wp-content/uploads/2023/08/ETC-Financing-the-Transition-MainReport_update.pdf
55 China' State Council. (July 25, 2024). China announces new measures to boost trade-in program. https://english.www.gov.cn/news/202407/25/content_WS66a2385ec6d0868f4e8e9738.html
56 Financial Times. (2024, October 14) Rapid rise of LNG trucking pushes China to peak diesel. https://www.ft.com/content/301f0161-e9a2-4b3b-bfdc-d838e765aceb?shareType=nongift

Hong Kong’s strategic position and common global challenges in transition finance

Hong Kong's strategic position and common global challenges in transition finance

Hong Kong's readiness in advancing transition finance development

Capitalising on its established foundation and reputation as a green and sustainable finance hub, Hong Kong is well-positioned to further its development in transition finance. The city has demonstrated growth in this sector, with the volume of green, social, sustainability, and sustainability-linked bond debt originating from Hong Kong reaching US$18.2 billion in 2023, more than tripling from the previous year.[57] From 2019 through 2023, Hong Kong ranked among the top three in terms of transition bond issuance. (See Figure 7) [58,59]



Source: Environmental finance *Figure 7: Transition bond issuance by main issuance countries*[60]

Japan's experience in transition finance could serves as key reference for Hong Kong's market development. In 2021, Japan's Ministry of Economy, Trade and Industry's introduction of climate transition finance guidelines contributed to such market development,[61] with Japanese issuers representing 91% of global transition bonds by value in 2022.[62] They further strengthened their leadership in 2024 with the latest issuance of sovereign transition bonds worth $15.1 billion. While Japan's regulatory approach and sovereign issuance have demonstrated one possible path forward, Hong Kong's current trajectory in debt instruments and commitment to sustainable finance suggest the potential for similar market development in transition finance.

57 Climate Bonds Initiative. (2024, June). Green and Sustainable Debt Market Briefing 2023: Hong Kong. https://www.climatebonds.net/files/reports/cbi_hk_sotm_23_02e.pdf
58 Climate Bonds Initiative. (2024, June). Green and Sustainable Debt Market Briefing 2023: Hong Kong. https://www.climatebonds.net/files/reports/cbi_hk_sotm_23_02e.pdf
59 Fidelity International. (2024, March 6). Asia leads the way as transition finance seeks to plug net-zero investment gap. https://www.fidelity.com.hk/en/articles/investment-spotlight/2024-03-06-asia-leads-way-transition-finance-seeks-plug-net-zero-investment-gap-1709706138273
60 Fidelity International. (n.d.). Asia leads the way as transition finance seeks to plug net zero investment gap. https://www.fidelity.com.hk/en/articles/investment-spotlight/2024-03-06-asia-leads-way-transition-finance-seeks-plug-net-zero-investment-gap-1709706138273
61 Ministry of Economy, Trade and Industry. (2021). Basic Guidelines on Climate Transition Finance. Retrieved November 19, 2024, from https://www.meti.go.jp/english/policy/energy_environment/transition_finance/index.html
62 Environmental Finance Data. (2024, November 8). The latest trends in transition bond issuance. Environmental Finance. Retrieved November 19, 2024, from https://www.environmental-finance.com/content/market-insight/the-latest-trends-in-transition-bond-issuance.html

Hong Kong Government's and public bodies have continued to demonstrate a strong presence in the public bond market throughout 2024. The Government, along with public bodies such as MTR Corporation, Urban Renewal Authority, Hong Kong Airport Authority, and Hong Kong Mortgage Corporation, have made issuances in various currencies.[63] Notably, many of these issuances were oversubscribed, indicating strong investor interest. An example includes the Government's offering of HK$25 billion worth of green bonds (the Green Bonds), denominated in RMB, USD, and EUR, in July 2024.[64] This continued robust activity in the bond market underscores Hong Kong's potential to play a key role in the transition finance landscape.

Other recent initiatives from regulatory bodies also exemplify Hong Kong's commitment to transition finance. In early 2024, the CASG announced a work plan highlighting three key initiatives to capture financing and investment opportunities from the Asia-Pacific Region's low-carbon transition. One of these is supporting the development of transition finance to consolidate Hong Kong's role as a leading sustainable finance hub.[65] This strategic move recognises the importance of transition finance in facilitating the shift towards a low-carbon economy, particularly in sectors not traditionally considered "green".

The Hong Kong Taxonomy for Sustainable Finance, published by the HKMA in May 2024,[66] provides clear definitions for green activities. To make the Hong Kong Taxonomy more usable and support the transition of the region, efforts are underway to expand it to introduce transition activities and add new green activities. The Hong Kong Taxonomy will continue to strive to align with global standards while addressing local needs.

In terms of incentives, in May 2024, HKMA's Green and Sustainable Finance Grant Scheme,[67] which subsidise the issuance of green and sustainable bonds and loans, was expanded to include transition bonds and loans. This expansion encourages regional industries to utilise Hong Kong's transition financing platform and underscores the city's commitment to this emerging field. These initiatives set the stage for Hong Kong to leverage its unique position in the global financial landscape.

Complementing these initiatives, the Hong Kong Stock Exchange (HKEX) has taken steps to enhance transparency in the marketplace through updating climate-related disclosures. In April 2024, HKEX published new requirements for climate-related disclosures, aligning with the ISSB Climate Standard, and accompanied by a detailed implementation guidance. Scheduled for phased implementation starting in 2025. This move aims to prepare listed companies for more comprehensive sustainability reporting, further supporting Hong Kong's transition finance ecosystem.[68]

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63 J.P Morgan, Dealogic, Bloomberg as of 2024, September

64 Hong Kong Monetary Authority. (2024, July 18). Government launches new issuance of green bonds. https://www.hkma.gov.hk/eng/news-and-media/press-releases/2024/07/20240718-5/#:~:text=The%20Green%20Bonds%20are%20being,and%20the%20London%20Stock%20Exchange.

65 Hong Kong Monetary Authority. (2024, January 8). HKMA announces new initiatives for sustainable finance. https://www.hkma.gov.hk/eng/news-and-media/press-releases/2024/01/20240108-5/

66 Hong Kong Monetary Authority. (2024, May). Hong Kong Taxonomy for Sustainable Finance: Supplemental Guidance. https://www.hkma.gov.hk/media/eng/doc/key-information/guidelines-and-circular/2024/20240503e1a2.pdf

67 HKMA has been administering the Green and Sustainable Finance Grant Scheme launched in 2021, which provides subsidy for the issuance of green and sustainable bonds and loans including the costs for third-party sustainability review. https://www.hkma.gov.hk/eng/key-functions/international-financial-centre/bond-market-development/tax-concessions-and-incentive-schemes/

68 Hong Kong Exchanges and Clearing Limited. (2023, April 14). *Exchange publishes consultation paper on enhancement of climate disclosure under its ESG framework*. Retrieved from https://www.hkex.com.hk/News/Regulatory-Announcements/2023/230414news?sc_lang=en

The burgeoning transition investment market presents substantial opportunities for Hong Kong. As its role as a transition finance hub becomes increasingly pivotal, Hong Kong is leveraging its unique strengths as an international financial centre to capitalise on these prospects. Beyond the immediate regional focus, additional opportunities are emerging at the broader national level in the Mainalnd China and across the Asian landscape, offering further potential for Hong Kong's growth in this sector.

While the outlook is promising, fully realising these opportunities remains challenging. Hong Kong's regulatory bodies have demonstrated their commitment to addressing these challenges through a proactive stance, developing a comprehensive transition finance ecosystem that strengthens the city's position as a leading sustainable finance hub. The extended prospects in the transition finance sector that complement Hong Kong's existing advantages are detailed in Annex 1.

Common global challenges facing the transition journey

The emergence of greenwashing, and more specifically transition-washing, has posed challenges to the credibility and effectiveness of climate transition finance. This issue often stems through weak sustainability targets, misleading labels, or the financing of projects that lack alignment with meaningful climate objectives. For example, sustainability-linked bonds have faced criticism for their lack of ambition and inadequate sustainability performance targets.[69] Such practices may distort market dynamics and hinder progress toward global climate goals. The following common global challenges further underscore the barriers to developing and scaling of transition finance

Inconsistent classifications and labels for transition activities

A comprehensive and interoperable framework for classifying transition activities is essential for ensuring clarity, consistency, and credibility in the rapidly evolving field of sustainable finance. Such a framework would establish a common language for investors, issuers, regulators, and other stakeholders worldwide, enabling them to effectively identify, assess, and compare transition finance activities and instruments.

The current landscape is characterised by a patchwork of national, regional, sector and institutional-specific approaches, as mentioned in the previous section. While these frameworks aim to shape and guide the development and assessment of transition finance, the proliferation and differences at a detailed level have not led to a *universal definition or eligible activities,*[70] leading to confusion and hindering the growth of the global transition finance market.[71]

The ICMA, for instance, has identified three broad, overlapping definitions of the term, each with a different scope.[72] Similarly, the CFA Institute notes that transition, sustainable, impact, green, and climate finance are interconnected and available in various forms.[73] Global financial hubs face the challenge of navigating diverse economic contexts, transition pathways, and regulations while aiming to create a taxonomy that balances credibility with flexibility to meet the needs of international issuers, investors, and market development. [74,75]

This complexity hinders investment in sectors making progress on climate transition. According to a survey study of 300 global asset owners and advisors conducted in 2022, the top three barriers to adopting transition finance are a lack of credible transition plans, challenges in measuring progress, and resistance to changing business strategies, with over a quarter of respondents expecting these issues to worsen.[76] The root cause of these barriers may stem from unclear and uncoordinated guidelines, standards, and definitions for transition finance.

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69 ClientEarth. (2024). Guardrails to address greenwashing of climate transition finance. https://www.clientearth.org/media/mbblc4aa/guardrails-to-address-greenwashing-of-climate-transition-finance-clientearth.pdf

70 Climate Bonds Initiative. (2023, November 6). *Transition mapping - Climate Bonds*. Retrieved from https://www.climatebonds.net/files/files/Transition%20Mapping%20-%20Climate%20Bonds%20-%206%20Nov%202023.pdf

71 RMI (2024, May 6). Unpacking five key barriers to transition finance. RMI. https://rmi.org/five-barriers-transition-finance/

72 International Capital Market Association. (2024). *Transition finance in the debt capital market*. Retrieved from https://www.icmagroup.org/assets/Transition-Finance-in-the-Debt-Capital-Market-paper-ICMA-14022024.pdf

73 CFA Institute. (2024, March). Navigating transition finance: An action list. https://rpc.cfainstitute.org/-/media/documents/article/industry-research/transition-finance.pdf

74 Hong Kong Green Finance Association. (2020). Navigating climate transition finance. https://www.hkgreenfinance.org/wp-content/uploads/2020/11/Navigating-Climate-Transition-Finance.pdf

75 OECD. (2021). Transition finance: Investigating the state of play - A stocktake of emerging approaches and financial instruments. OECD Environment Working Papers, No. 179. OECD Publishing. https://doi.org/10.1787/68becf35-en

76 Ninety One. (2022). Planetary pulse: The rise of transition finance. https://ninetyone.com/-/media/documents/sustainability/91-planetary-pulse-the-rise-of-transition-finance-en.pdf

The emergence of localised transition finance taxonomies in Asia

The development of transition finance taxonomies across Asia reflects a growing recognition of the need for localised strategies to address climate challenges. In Mainland China, for example, there is a slew of changes in taxonomies across different government levels. While this reflects the country's recognition of the need for localised strategies in addressing transition challenges, it also highlights the potential for increased complexity in an already diverse landscape. For example, Shanghai has introduced the Shanghai Transition Finance Catalog (Trial) that encompasses six carbon-intensive sectors, including water shipping, ferrous metal processing, and petroleum refineries.[77] This initiative builds upon earlier efforts in other regions, such as Huzhou in Zhejiang province, which launched its own taxonomy (Huzhou Transition Finance Support Activity Catalogue) covering nine industries in 2022 and subsequently updated it.[78] Similar efforts have emerged in other locations including Chongqing, Hebei and Tianjin, each of which has introduced transition finance standards or policies tailored to their specific industrial context.[79]

This granular approach allows for solutions to be tailored to specific regional and industrial needs. However, it also poses challenges in creating a single, nationally or internationally coherent system. For international investors and multinational corporations, navigating this complex web of local, provincial, and national taxonomies for a single country can be daunting, potentially hindering the efficient allocation of capital to transition projects.

The trend of localised frameworks extends beyond China to the broader Asian region. ASEAN has taken a step by launching the ASEAN Transition Finance Guidance, which is based on the ASEAN Taxonomy for Sustainable Finance.[80] This guidance aims to provide a standardised approach for transition finance across the ASEAN region, promoting consistency while acknowledging the diverse economic landscapes of its member countries.

However, individual ASEAN members are also developing their own frameworks to address their specific priorities. For example, Malaysia is developing its Joint Committee on Climate Change Transition Finance Framework, which aims to outline credible transition finance solutions tailored to the Malaysian context,[81] and Singapore has introduced the Singapore-Asia Taxonomy for Sustainable Finance, which outlines its vision for defining transition activities.[82]

These developments highlight the need for a delicate balance between regional harmonisation and national specificity in transition finance frameworks. The regional level guidelines provide a common foundation, and the country-specific taxonomies underscore the need to address unique national circumstances and transition pathways. This multi-layered approach to transition finance illustrates the complexity of creating systems that can effectively channel capital towards sustainable transitions while accommodating diverse economic and environmental contexts.

77 Green Finance Committee of China Society for Finance and Banking. (2024). Shanghai Green and Transition Finance Guidance. http://www.greenfinance.org.cn/upfile/file/20240106111856_461948_18135.pdf
78 Huzhou Municipal People's Government. (2023, July 7). Huzhou Green and Low-Carbon Transition Finance Catalogue (2023 Edition). https://custom.huzhou.gov.cn/DFS/file/2023/07/07/202307071610424478zrjmi.pdf?iid=563786
79 SynTao Green Finance & China Sustainable Investment Forum. (2024, February 22). Top 10 Trends of Responsible Investment in China 2024. China Water Risk. https://chinawaterrisk.org/opinions/top-10-trends-of-responsible-investment-in-china-2024/
80 ASEAN Capital Markets Forum. (2023, October 17). ASEAN Transition Finance Guidance. https://www.theacmf.org/sustainable-finance/publications/asean-transition-finance-guidance
81 Bank Negara Malaysia. (2024, February 29.). JC3 Meeting No. 12. https://www.bnm.gov.my/-/jc3-mtg12
82 Monetary Authority of Singapore. (2023, December). Singapore-Asia Taxonomy for Sustainable Finance | 2023 Edition. https://www.mas.gov.sg/-/media/mas-media-library/development/sustainable-finance/singaporeasia-taxonomy-dec-2023.pdf

It is important to recognise that the transition finance landscape is continually changing, with new countries and frameworks entering the field. This dynamic environment presents unique challenges in measuring sustainable performance and establishing key performance indicators. Ongoing adjustments and enhancements to these frameworks will be crucial to supporting the sustainable growth of transition finance.

Defining and measuring transition finance

An internationally aligned taxonomy is useful for setting comparable sustainable finance targets across global financial institutions. This standardisation enables consistent measurement, thereby enhancing the scalability and transparency of sustainable finance initiatives.

While recognising the complexities involved, it is crucial to identify transition metrics and establish coherent minimum standards. Key considerations in defining and measuring transition finance include:[83]

- **Metrics selection for transition finance:** As banks have evolved their strategies to support the transition to net zero, the need for additional metrics that capture the complexity of transition finance has become apparent. These new metrics would complement existing ones by more accurately reflecting banks' efforts to support companies with credible transition plans, which may not immediately qualify as sustainable under current taxonomies. This is particularly crucial as financing the phase-out of high-emitting assets or supporting carbon-intensive companies in the short term could misrepresent a bank's progress on emissions reduction targets. However, it enables critical early coal phase-out financing, accelerating the transition despite temporary increases in financed emissions. By selecting the appropriate metrics, such as forward-looking metrics, banks can better demonstrate the extent of decarbonisation they are facilitating, provide forward-looking guidance on their climate impact, and enhance their strategic influence through direct engagement with company management.[84] The United Nations Environment Programme contributes to this effort by proposing input and output metrics in their "Developing Metrics for Transition Finance" paper, offering a framework for financial institutions to track and monitor their transition finance activities. This allows banks to leverage their unique position to drive climate action and provide a comprehensive view of their efforts.[85]

- **Absolute reductions and assessing improvements in emission intensity:** A key challenge in defining and measuring transition finance lies in selecting appropriate emission reduction metrics. Bank lending is typically covered by impact-based metrics (absolute financed emissions and/or sector-specific emissions intensity).[86] **Absolute metrics** offer a straightforward view of total greenhouse gas reductions but may not account for economic growth or changes in production; in contrast, **intensity metrics,** which measure emissions relative to output, allow for comparisons across different company sizes and growth stages but could potentially mask increases in total emissions during periods of expansion. Absolute reductions and assessing improvements in emission intensity are the key metrics to keep track of the impact of transition finance. The crux of the challenge lies in developing frameworks that effectively integrate both metrics, allowing financial institutions to recognise efficiency improvements while ensuring alignment with broader climate objectives. This balance is essential for establishing transition finance criteria that are both meaningful and

83 UNEP Finance Initiative. (2023). Developing metrics for transition finance: Discussion paper. https://www.unepfi.org/wordpress/wp-content/uploads/2023/12/Developing-Metrics-for-Transition-Finance.pdf
84 UNEP Finance Initiative. (2023). Developing metrics for transition finance: Discussion paper. https://www.unepfi.org/wordpress/wp-content/uploads/2023/12/Developing-Metrics-for-Transition-Finance.pdf
85 UNEP Finance Initiative. (2023). Developing metrics for transition finance: Discussion paper. https://www.unepfi.org/wordpress/wp-content/uploads/2023/12/Developing-Metrics-for-Transition-Finance.pdf
86 Science Based Targets initiative. (2024). Financial institutions metrics and methods synthesis (Version 1.0). https://sciencebasedtargets.org/resources/files/FINZ-Metrics-and-Methods-Synthesis.pdf

practical across diverse sectors and organisational scales. As the field of transition finance continues to evolve, the refinement and standardisation of these measurement approaches remain paramount for its effective implementation and credibility.

- The World Green Building Council's (WorldGBC) approach to 2030 targets exemplifies this dual metric strategy in practice, adhering to the concept of transition. The WorldGBC has set two types of targets: (i) an absolute target mandating that all new buildings must be net-zero operational carbon by 2030, and (ii) an improvement target requiring a 40% reduction in embodied carbon for new buildings, infrastructure, and renovations.[87] This two-pronged approach demonstrates how absolute goals can be combined with relative improvement targets to drive comprehensive change. The absolute target ensures a clear endpoint for new construction, while the improvement target acknowledges the complexities of existing structures and the need for gradual, yet significant, progress in reducing carbon emissions across the built environment. As the field of transition finance continues to evolve, the refinement and standardisation of these measurement approaches remain paramount for its effective implementation and credibility. The integration of both absolute and improvement-based targets, as demonstrated by the WorldGBC, offers a potential model for other sectors seeking to develop comprehensive and achievable transition strategies.

- **Sector suitability:**[88] The application of transition finance criteria presents a complex landscape, varying across sectors. Some sectors, like energy, benefit from well-developed scientific methodologies enabling precise measurements and stringent criteria application, while emerging or harder-to-abate sectors often lack defined pathways, necessitating more flexible standards. This disparity underscores the need for a nuanced, pan-sector approach to transition finance. Financial institutions must navigate these sector-specific challenges while striving for a broadly applicable framework that remains relevant across various institution types, business models, and portfolio exposures. A **principles-based approach** allows for flexibility in implementation, crucial for addressing the gaps and challenges in analysing transition finance initiatives aligned with Paris Agreement goals.

These challenges in definition and measurement have practical implications for the global financial sector. The absence of standardised or aligned cross-border metrics and methodologies has led to a diverse landscape of approaches and tools adopted by financial institutions worldwide. For instance, according to a research report by Ninety One, whilst emission reduction goals are common, with nearly half of asset owners implementing them, other approaches vary by region. For instance, climate value-at-risk is popular among asset owners in Asia-Pacific, and portfolio coverage metrics are more prevalent in North America. In contrast, implied temperature rise targets are frequently used in Europe—demonstrating the absence of a global consensus on best practices.[89] This lack of uniformity complicates efforts to compare and assess progress on a global scale, hindering the effective development and implementation of transition finance initiatives. Moreover, standardising calculations across sectors and quantifying emissions reductions from enabling technologies remain challenging.

To address this gap, as suggested by Oliver Wyman, three categories of transition finance reporting metrics could be considered: input metrics, output metrics, and additional supporting metrics.[90] Input metrics focus on the volume of financing provided to actively transitioning companies, while output metrics aim to capture the aggregate decarbonisation impact of financed activities. Additional supporting metrics are designed to enhance the

87 World Green Building Council. (n.d.). Embodied Carbon. https://worldgbc.org/advancing-net-zero/embodied-carbon/
88 GFANZ (2023, December). Scaling transition finance and real-economy decarbonisation: Supplement to the 2022 Net-zero Transition Plans report. https://assets.bbhub.io/company/sites/63/2023/11/Transition-Finance-and-Real-Economy-Decarbonization-December-2023.pdf
89 Ninety One. (2023). Climate-focused targets. https://ninetyone.com/en/insights/planetary-pulse-2023/climate-focused-targets
90 Oliver Wyman. (2023). Building better metrics to measure transition finance. https://www.oliverwyman.com/our-expertise/insights/2023/dec/transition-finance-metrics-for-banks.html

credibility of forward-looking metrics through simpler measures of achieved impact and back-testing calculations. Expanding these metrics beyond banks to include asset managers and owners could provide a more comprehensive view of the financial sector's engagement with sustainable practices.

Tailoring these metrics for different sectors and ensuring cross-jurisdictional recognition is crucial for effective transition finance. These metrics, if aligned with the technical screening criteria for green investments, can track current progress. This approach also suggests that setting hard thresholds and targets for every sector or country may not be necessary initially. Instead, focusing on absolute reductions or improvements could be more effective. As international regulatory bodies establish more defined pathways, these metrics can be refined to enhance precision and relevance.

The challenge of definition and measurement is not merely academic; it has real-world implications. Addressing these issues by establishing clear, adaptable, and sector-specific criteria can help Hong Kong lead the charge in driving effective global transition finance strategies.

Data availability and stakeholder engagement

The transition finance landscape faces two interrelated challenges: limited stakeholder engagement and a lack of standardised, comprehensive data. Together, these collectively create uncertainties that hinder the growth and effectiveness of transition finance initiatives.

The complexity of transition finance, which carries with it execution and reputational risks, creats uncertainty. Despite the importance of transition efforts, investors remain hesitant due to market ambiguities, while issuers are reluctant to commit without clear guidance and incentives. This reluctance stems from the challenges of managing these risks rather than a lack of focus or interest in the sector's importance. The resulting limited engagement creates a circular problem: without robust participation, the market lacks the scale and liquidity needed to attract more investors. This, in turn, discourages potential issuers from entering the market, further limiting its growth and appeal.[91]

The hesitation is exacerbated by the diverse approaches and methodologies currently employed in the transition finance landscape. This diversity makes it challenging for stakeholders to align their strategies and measure progress effectively, leading to a fragmented landscape that complicates decision-making and investment processes.

The challenge of stakeholder engagement is closely tied to another concern: data insufficiency. According to a survey study of senior professionals from global asset-owners and institutions, 60% of respondents identified the lack of credible, viable transition plans as a primary barrier to transition finance. This scarcity of reliable planning hinders companies' ability to meet transition finance goals. Additionally, 50% of respondents cited evolving data regulations as a significant challenge, emphasising the need for high-quality data, particularly from high-emitting companies.[92]

This shortage of reliable data is not just an institutional or localised matter but a widespread challenge, as highlighted by a study by the Asian Development Bank. It reported that 29 national statistical offices in Asia and the Pacific faced inadequate data, therefore hampering

91 Clifford Chance. (n.d.). *Just transition: A framework for investor engagement*. https://www.cliffordchance.com/content/dam/cliffordchance/PDF/Feature_topics/just-transition-a-framework-for-investor-engagement.pdf
92 Ninety One. (2023). Planetary pulse: The rise of transition finance. https://ninetyone.com/-/media/documents/sustainability/91-planetary-pulse-the-rise-of-transition-finance-en.pdf

climate change response efforts across the region.[93] This data gap resonates with global transition finance challenges, particularly in standardisation. The current transition finance landscape illustrates this data challenge. While nearly half of global asset owners have implemented emissions-reduction targets, the methods for setting and measuring these targets lack uniformity. This diversity creates hurdles in comparing results and assessing true progress. The challenge is compounded by limited access to granular, geographically specific data on crucial factors such as fossil fuel use and total greenhouse gas emissions.

Fragmentation, capacity gaps, and limited project availability

The transition to a low-carbon economy requires robust partnerships, skilled professionals, and a pipeline of viable projects. However, many financial centres, including Hong Kong, face challenges in these areas, hindering the growth of transition finance.

The current landscape is characterised by fragmentation in target setting and adoption across organisations and within institutions,[94] creating silos that impede knowledge exchange and capacity building. This fragmentation complicates the operationalisation of transition targets across business units. Additionally, organisations struggle to balance carbon reduction goals with growth objectives, often requiring substantial shifts in client engagement strategies.

To address these challenges, effective collaboration among financial institutions, academia, industry, and government is crucial. Such an effort can foster innovation and break down silos, facilitating a more integrated and balanced approach. It involves aligning processes with net-zero targets, co-defining objectives for respective departments, and implementing carbon budgets across the institution. This ensures that sustainability goals are integrated into financial decision-making at all levels.

The growth of transition finance also relies on the development of a skilled workforce with expertise in climate science, sustainable finance, and data analytics, extending beyond technical knowledge to include an understanding of the interplay between finance, climate science, and policy.

Another substantial barrier is the limited availability of investment-ready transition technology projects. Despite ample liquidity and investor interest, a notable gap exists between capital availability and viable projects in areas like renewable energy infrastructure, carbon capture and storage, and advanced biofuels.[95,96] This mismatch has slowed deal flow. Transition projects, especially in developing countries, often fail to secure funding due to their unconventional risk profiles and lack of traditional safeguards.[97] For example, renewable energy initiatives without long-term purchase agreements face revenue uncertainty, while unproven clean technologies raise viability concerns.

Addressing these issues demands substantial investments in technology and human capital. Financial centres need to develop robust climate data systems, improve risk assessment capabilities, and build expertise in sustainable finance. The cost of inaction far outweighs these investment requirements, as financial hubs risk losing relevance and competitiveness in the era of climate change and sustainable finance.

For the world's financial centre, overcoming these interrelated challenges is crucial to channelling capital towards a low-carbon future. The ability to address these hurdles will likely determine which centres emerge as leaders in the rapidly growing field of transition finance.

93 Asian Development Bank. (2024, August 22). Climate change response in Asia and Pacific held back by insufficient data. https://www.adb.org/news/climate-change-response-asia-and-pacific-held-back-insufficient-data
94 McKinsey & Company. (2023). Financing the net-zero transition: From planning to practice. https://www.mckinsey.com/~/media/mckinsey/business%20functions/risk/our%20insights/financing%20the%20net%20zero%20transition%20from%20planning%20to%20practice/financing-the-net-zero-transition-from-planning-to-practice.pdf
95 International Renewable Energy Agency. (2023). World Energy Transitions Outlook 2023. https://www.irena.org/Digital-Report/World-Energy-Transitions-Outlook-2023
96 RMI (2024, May 6). Unpacking five key barriers to transition finance. RMI. https://rmi.org/five-barriers-transition-finance/
97 World Economic Forum. (2023, August 21). How to finance the energy transition in developing economies. https://www.weforum.org/agenda/2023/08/financing-energy-transition-developing-economies/

Policy Recommendations

Policy recommendations

Over the years, Hong Kong has emerged as a key player in sustainable finance, yet it is crucial to recognise that transition finance, while related, is distinct from the broader concept of green finance. As we build on our momentum in sustainable finance, there is a compelling need to develop transition finance as a subset. By leveraging Hong Kong's strategic location, robust regulatory framework, and deep capital markets, the city can create a more comprehensive sustainable finance ecosystem integrating both green and transition aspects. This can support local industries during critical transition phases and align with global sustainable development goals, further reinforcing the city's position as a global financial hub and ensuring our pivotal role in driving the shift towards a low-carbon economy.

Developing a guiding principle to align and bridge diverse global pathways

Recommendation 1: Adopting a three-pillar approach to develop Hong Kong into a transition finance hub

In May 2024, Hong Kong unveiled its taxonomy for sustainable finance, referencing the China-EU Common Ground Taxonomy. While this is a promising start, transition activities and associated financing remain to be addressed. As part of its second phase of development, the HKMA plans to expand the scope of sectors and economic activities to include transition activities.[98] To solidify its position as both a regional and global transition finance hub, Hong Kong needs to build on this foundation and adopt a flexible, principles-based framework that is interoperable with various markets—from emerging to developed economies.

As a super-connector between Mainland China and the rest of the world, the city's framework should accommodate national, regional and global differences while ensuring consistency in core taxonomy. This can be achieved by building upon existing global and regional efforts such as the G20 Sustainable Finance Working Group's Transition Finance Framework and others as listed in earlier sections.[99]

Such a framework can encourage collaborations across jurisdictions, offering broad applicability and addressing the unique capabilities of different regions. To this end, and considering that Hong Kong's transition taxonomy is still under development by the Government, a three-pillar approach is suggested to support the development of a flexible yet consistent framework that balances regional differences with international standards:

> **Pillar 1 - Policy certainty to encourage transition:** While Hong Kong's Climate Action Plan 2050 outlines strategies for reducing carbon emissions, the market demands more concrete, actionable implementation frameworks, particularly for key sectors such as buildings and energy. Establishing sector-specific working groups—including industry experts, regulators, and other public stakeholders—could expedite the development of clear decarbonisation pathways. These groups would set interim milestones and define sector-specific transition targets and metrics, providing much-needed policy certainty.
>
> Extending this initiative to the Greater Bay Area would enhance regional integration. Aligning more closely with Mainland China's transition objectives could clarify Hong Kong's role in the region. A coordinated approach would support a certification system for transition finance products, incorporating standards and thresholds reflecting local and national decarbonisation priorities. This would provide clarity for market participants and position Hong Kong as a leading hub for transition finance.

98 Hong Kong Monetary Authority. (2024, May 3). HKMA announces Hong Kong's green and sustainable finance taxonomy. https://www.hkma.gov.hk/eng/news-and-media/press-releases/2024/05/20240503-3/

99 G20 Sustainable Finance Working Group. (2023). G20 Transition Finance Framework (TFF). https://g20sfwg.org/wp-content/uploads/2023/12/TFF-2-pager-digital.pdf

Pillar 2 - Interoperability with regional and global taxonomies: Demonstrating alignment between local pathway/transition activities with the national and international frameworks through targeted pilot or proof of concept project can validate Hong Kong's approach to taxonomy development. In the near term, these pilot projects can be initiated by the Government and focus on sectors material to both Hong Kong and Mainland China, to test how local implementations can effectively integrate with global standards while supporting national decarbonisation pathways. The implementation of common ground taxonomy principles and standardised elements will enable the creation of clearly labelled financial instruments that appeal to international capital. This process will continue to refine Hong Kong's taxonomy, ensuring it is consistent with regional and global frameworks. Ultimately, this approach will enhance the city's role as a leading hub for transition finance and attract global investment into both local and Mainland China's transition projects.

Pillar 3 - A coordinated approach through different levels of partnership: Building on the comprehensive industry consultations from the first pillar, this approach focuses on identifying and eliminating key bottlenecks in Hong Kong's transition delivery. Critical initiatives include developing common data sets and fostering 'demand-pull' mechanisms, where local companies can drive the transition by integrating sustainable practices into their supply chains. Given the cross-border nature of many of these efforts, regional and global partnerships will be essential for ensuring interoperability and consistency in execution. These partnerships will also promote transparency and the adoption of best practices by establishing common reporting platforms and leveraging successful global initiatives. For instance, the Transition Pathway Initiative, backed by over 150 investors, demonstrates the potential of this approach through its open-access data and detailed transition pathways for numerous high-emitting sectors and companies.[100]

By adopting a three-pillar approach—focused on policy certainty, interoperability, and strategic partnerships—Hong Kong can strengthen its position as a global transition finance hub.

Notably, the complexity of creating such a framework is underscored by ongoing efforts in the field. For instance, the CBI is currently conducting a mapping exercise of 13 corporate transition frameworks.[101] This project aims to bring clarity to the sector, accelerate capital flow to companies at various stages of their transition, and prevent greenwashing by establishing clearer guidelines. Hong Kong can leverage these findings to inform its own framework development, ensuring alignment with global best practices while maintaining regional relevance.

Coordinating efforts across these pillars and facilitating collaboration between local and national stakeholders can ensure a robust and effective response to the challenges of sustainable development. By integrating global insights, such as those from the CBI's mapping exercise, with local and regional considerations, Hong Kong can create a transition finance framework that is both globally relevant and locally applicable

100 Transition Pathway Initiative. (2022, February). TPI Sectoral decarbonization Pathways. https://www.transitionpathwayinitiative.org/publications/uploads/2022-tpi-publishes-consolidated-report-containing-decarbonisation-pathways-for-all-high-emitting-sectors

101 Climate Bonds Initiative. (2023). Transition finance mapping: Frameworks to assess corporate transition. https://www.climatebonds.net/files/files/Transition%20Mapping%20-%20Climate%20Bonds%20-%206%20Nov%202023.pdf

Fostering collaborations to drive transition impact

Recommendation 2: Scaling transition finance through blended finance and other financing mechanisms

The pressing nature of climate issues demands innovative financial products and solutions that differ from conventional instruments. To drive meaningful impact, the financial sector must evolve by offering more sophisticated solutions that enable industry transitions and incentivise the development of green technologies. Balancing financial returns with measurable environmental and social impacts will be crucial in this context.

The Government has taken a positive step in this direction by extending the Green and Sustainable Finance Grant Scheme and expanding its subsidy scope to cover transition finance instruments.[102] Additionally, Hong Kong has explored strategic regional partnerships, which are also crucial for scaling transition finance. The HKMA's recent collaboration with the Dubai Financial Services Authority highlights Hong Kong's commitment to fostering international financial cooperation,[103] along with other strategic partnerships with multilateral organisations such as the Asian Development Bank, Asian Infrastructure Investment Bank and International Finance Corporation.[104]

These partnerships create a powerful network effect through knowledge sharing, standardised approaches, and expanded capital pools for sustainable finance deployment. While these initiatives provide a solid foundation for financial innovation, the sector requires additional support to develop a broader range of innovative products and services.

A key barrier to scaling transition finance is the shortage of commercially viable projects, particularly for certain transition technologies. Not many transition projects are able to meet required/ expected risk-return profiles or have sufficient safeguards to be deemed bankable by private investors alone. This is where blended finance can play a crucial role. While blended finance traditionally uses development finance or philanthropic funds to mobilise private capital flows to emerging markets,[105] its definition has broadened to encompass various financial structures at the fund, project, company, and outcome levels, making it a versatile tool for driving sustainable development. This approach can be effective as it allows for the sharing of risks and rewards between public and private sector entities.

Blended finance offers several key benefits in addressing pressing climate issues:

- Risk mitigation: By incorporating concessional funding, blended finance can help reduce the risk profile of climate-related investments, making them more attractive to private investors.
- Catalysing private investment: The involvement of public or donor funds can help attract additional private capital, significantly increasing the total investment in sustainable projects.
- Market development: Successful blended finance projects can demonstrate the viability of sustainable investments, potentially leading to the development of new markets and encouraging future investments without the need for concessional funding.

102 HKMA. (2024, May 3). HKMA announces details on extending the Green and Sustainable Finance Grant Scheme and expanding subsidy scope to cover transition finance instruments. https://www.hkma.gov.hk/eng/news-and-media/press-releases/2024/05/20240503-9/

103 HKMA. (2024, September 16). The HKMA and DFSA sign MoU to strengthen collaboration on banking and financial innovation. Hong Kong Monetary Authority. https://www.hkma.gov.hk/eng/news-and-media/press-releases/2024/09/20240916-4/

104 HKMA. (2024, November 11). HKMA and multilateral organisations enhance strategic partnership for climate investment in Asia. https://www.info.gov.hk/gia/general/202411/11/P2024110800648.htm

105 OECD. "Primer on Blended Finance | Making Blended Finance Work for Water and Sanitation: Unlocking Commercial Finance for SDG 6." Accessed Mat 5, 2024. https://www.oecd-ilibrary.org/sites/e8eee10a-en/index.html?itemId=/content/component/e8eee10a-en.

- Flexibility: Blended finance solutions can be structured in various ways, including debt, equity, risk-sharing, or guarantee products, allowing for tailored approaches to specific climate challenges.
- Addressing market barriers: This approach can help overcome market failures and barriers that currently prevent private investment in critical climate-related projects.

Given the potential of blended finance to address climate issues, the Government and the HKMA are well-positioned to advance this approach. As a leading international financial centre with deep capital markets and established regional connections, Hong Kong is uniquely positioned to channel capital toward transition projects in emerging Asian economies, this role is particularly crucial as developing markets in the region face significant funding gaps in their transition journeys. In the Sustainable Finance Action Agenda published by the HKMA in October 2024,[106] the use of the Exchange Fund investment to support transition efforts in the region was highlighted. Furthermore, the establishment of the Hong Kong Investment Corporation also enables the formation of partnerships with regional and international development banks.

The Government may also wish to consider taking a more proactive stance in exploring transition-focused blended finance opportunities. A crucial step could be building upon established regional partnerships to strengthen local expertise in blended finance structuring among financial institutions, while developing a comprehensive strategy to identify sectors and project types where blended finance could generate maximum climate impact. Another key challenge to address is the cost burden of transition finance, as the private sector alone may struggle to offer attractive financing terms for transition projects due to the inherent risks and complexities. Strategic public-private collaboration could help distribute these costs more effectively, enabling banks and financiers to provide more competitive pricing and ensure broader participation from both issuers and investors.

To scale blended finance initiatives efficiently, the HKMA could consider establishing a dedicated fund that standardises blended finance principles and structures. By partnering with established institutions that have a mandate for impact investing—such as regional development banks—the HKMA could develop a fund-of-funds model. This approach would streamline the deployment of blended finance, making it more accessible and attractive to market participants. A standardised framework would complexity inherent in project-level blended finance structures and ensure that blended finance principles are applied consistently across sectors.

As part of a broader strategy to enhance the development of transition finance, the Government may wish to consider the possibility of a government transition bond, referencing Japan's recent issuance of a sovereign climate transition bond, valued at JPY1.6 trillion.[107] This initiative could be explored following the expansion of the Hong Kong Taxonomy to include transition finance and in consideration of the financing needs of capital works projects in Hong Kong. Such an initiative can serve as a credible use case for a transition taxonomy, showcasing Hong Kong's commitment to transition finance and directly channelling private capital into critical transition projects. By earmarking funds for research and development in key transition technologies and providing subsidies for established green activities, such a government transition bond could accelerate the region's progress towards its climate goals.

Furthermore, dual mandate investments in transition finance —where market development is an explicit objective alongside financial returns— have the potential to ensure sustainable development in the field. This approach, currently embraced by various development banks in the impact investing sector, is recognised for its ability to enhance transparency and promote resilient development.[108] Applying this strategy to transition finance could further these goals. While implementing such strategies may not be immediate, proposing an exploratory direction could lay the groundwork for future advancements.

106 https://www.hkma.gov.hk/media/eng/doc/key-information/press-release/2024/20241021e4a1.pdf

107 Ministry of Finance Japan. (n.d.). Japan Climate Transition Bonds. https://www.mof.go.jp/english/policy/jgbs/topics/JapanClimateTransitionBonds/index.html

108 Badan Perencanaan Pembangunan Nasional. (n.d.). *Scaling up blended finance in developing countries*. https://perpustakaan.bappenas.go.id/e-library/file_upload/koleksi/migrasi-data-publikasi/file/Policy_Paper/Scaling%20Up%20Blended%20Finance%20In%20Developing%20Countries.pdf

In addition to these efforts, Hong Kong can leverage its growing family office ecosystem. With increasing interest from family offices in sustainable and impact investing, there is an opportunity to channel private wealth into transition finance projects. This aligns with the Government's broader strategy to attract family offices, as noted in a recent report by the FSDC on impact investing.[109] The growing interest in the new *Capital Investment Entrant Scheme* —which has already received over 600 applicants —[110] presents a further opportunity. Mandating an allocation of investments to green or transition finance projects under the CIES programme could be explored to help direct more private capital toward sustainable initiatives. This proposal echoes recommendations made in the FSDC's recent report, underscoring the strategic alignment between impact investing and the Government's objectives.[111]

Recommendation 3: Establishing structured public-private dialogues to accelerate sector transitions

Hong Kong has cultivated a diverse stakeholder network since embracing sustainable finance, which is also a critical factor behind the development of a transition ecosystem. This concerted effort underscores the importance of facilitating cross-sectoral knowledge exchange. The establishment of the CASG represents an effort in this direction, showcasing a unified commitment among Hong Kong's relevant government bureaux and financial regulators. Concurrently, the private sector has also been contributing to the development, as demonstrated by initiatives such as the Hong Kong Chapter of GFANZ,[112] where global entities and other local organisations forging partnerships to convene experts, stimulate discussions, and elevate the profile of transition finance through establishing guidelines and developing collaborative products tailored to the sector.

Building on the first pillar of recommendation 1, while public sector stakeholders in Hong Kong already engage with private market participants through topical roundtables and consultations, it is essential to formalise more regular and structured public-private stakeholder dialogues to accelerate sectoral transitions. These dialogues would bring together a diverse array of participants, including regulators, corporations, investment firms, industry associations, and other pertinent entities, to identify practical pathways for meeting Hong Kong's 2050 carbon neutrality goals. As an immediate deliverable, forums should be established for pilot sectors, such as energy and buildings, to map out how each sector can align with the required policy and 2050 roadmap. These forums should aim to identify challenges and develop collaborative solutions to address gaps between current capabilities and policy requirements.

Corporate governance for transition finance

To support these sector-specific initiatives, strengthening corporate governance structures can play a complementary role. The HKEX Corporate Governance Code and ESG Reporting Guide already mandate board oversight of ESG issues through detailed disclosures, including its oversight approach, management strategy, and progress reviews against ESG-related goals.[113] Building on these, establishing dedicated sustainable and climate finance committees within corporate boards can be explored. These committees, composed of members with diverse expertise in sustainability and financial innovation, would be responsible for formulating robust transition strategies, monitoring progress toward climate goals, and ensuring transparent reporting of progress and challenges.

Furthermore, to bolster this governance structure, Hong Kong can draw inspiration from

109 FSDC. (September 2024). Trailblazing for change: Hong Kong, the Impact Investing Hub of Asia
110 RTHK. "Christopher Hui: ~600 Applications for New CIES Received So Far." October 22, 2024. https://news.rthk.hk/rthk/ch/component/k2/1775595-20241022.htm.
111 FSDC. (September 2024). Trailblazing for change: Hong Kong, the Impact Investing Hub of Asia
112 GFANZ. GFANZ Announces Hong Kong Chapter to Support Asia-Pacific Net-Zero Transition. https://www.gfanzero.com/press/gfanz-announces-hong-kong-chapter-to-support-asia-pacific-net-zero-transition/
113 HKEX. (2023). The Stock Exchange of Hong Kong Limited Rules Governing the Listing of Securities. Retrieved from https://en-rules.hkex.com.hk/sites/default/files/net_file_store/HKEX4476_1892_VER31079.pdf

neighbouring jurisdictions by mandating sustainable and transition finance-related training from certified providers for board members of listed corporations.[114] This initiative would ensure that top-level decision-makers remain abreast of the latest trends, risks, and opportunities in the rapidly evolving field of sustainability finance while emphasising the critical importance of meeting net-zero goals. Additionally, expanding climate disclosure requirements to encompass large-scale unlisted companies, potentially through strategic amendments to the Companies Ordinance, would foster a more inclusive ecosystem of climate-conscious businesses. Such an expansion would align a wider spectrum of stakeholders with sustainability objectives, reinforcing Hong Kong's commitment to a resilient and sustainable financial future.

Strategic vision and support for inclusive development

Recommendation 4: Expanding Hong Kong's strategic vision for greater certainty – advancing through data management, tailored financing and technology

Hong Kong's sustainability journey requires structured planning and deep societal commitment. This city's vision to create a thriving, low-carbon economy that benefits all sectors while preserving the environment for future generations calls for a more inclusive and specific framework to guide investment, production activities, and community engagement towards a sustainable transition, a process which should be detailed out in a roadmap.

Hong Kong's Climate Action Plan 2050 aims to achieve carbon neutrality through four major decarbonisation strategies: net-zero electricity generation, energy saving and green buildings, green transport, and waste reduction.[115] Hong Kong's Sustainable Finance Taxonomy, launched earlier in 2024, has further reinforced these efforts by introducing specific metrics, criteria, and thresholds across these focus areas.[116] While these initiatives provide a strong foundation, the living document would benefit from more frequent updates to reflect emerging challenges and opportunities. Regular revisions, with detailed recommendations and government directions, would help stakeholders better understand how these strategies will be implemented across sectors.

From plans to progress – building a data-driven path

To ensure the effective delivery of these strategies, having a robust data infrastructure is essential. Identifying key data points tied to each objective and creating comprehensive public databases would provide transparency and enable stakeholders to track progress more effectively. To support these efforts, the Centre for Green and Sustainable Finance, launched by the CASG, has established a data repository to aid in climate risk management, sustainable finance-related analysis, and research. Recent initiatives include the introduction of the Non-listed Company Questionnaire on Cliamte and Enviromental Risk as a standard reporting template,[117] and the development of new tools for calculating greenhouse gas emissions, created in collaboration with the Hong Kong University of Science and Technology.[118]

These tools are particularly beneficial for non-listed companies and SMEs that may lack the resources to meet these requirements independently. The HKMA's Sustainable Finance Action Agenda also committed to measures that support high-quality, comprehensive sustainability disclosures for banks and their clients.[119]

114 Singapore Exchange Limited. (2022, March.). SGX RegCo announces start of sustainability training for company directors. from https://www.sgxgroup.com/media-centre/20220317-sgx-regco-announces-start-sustainability-training-company-directors
115 Hong Kong Climate Action Plan 2050. (2021, October). https://cnsd.gov.hk/wp-content/uploads/pdf/CAP2050_booklet_en.pdf
116 Hong Kong Monetary Authority. (2024, May). *Hong Kong Taxonomy for Sustainable Finance: Supplemental Guidance*. https://www.hkma.gov.hk/media/eng/doc/key-information/guidelines-and-circular/2024/20240503e1a2.pdf
117 Hong Kong Monetary Authority. (n.d.). *CASG non-listed company questionnaire on climate and environmental risk*. https://www.hkma.gov.hk/eng/key-functions/international-financial-centre/green-and-sustainable-finance/casg-sme-questionnaire-on-climate-and-environmental-risk/
118 Hong Kong Monetary Authority. (2024, March 26). *Guidelines on greenhouse gas emissions*. https://www.hkma.gov.hk/media/eng/doc/key-information/guidelines-and-circular/2024/20240326e2.pdf
119 Hong Kong Monetary Authority. (2024, October 21). *Press release on climate-related financial disclosures*. https://www.hkma.gov.hk/media/eng/doc/key-information/press-release/2024/20241021e4a1.pdf

However, industry practitioners have highlighted the need for Hong Kong to provide a more structured and expansive approach to data management and infrastructure, particularly in three key areas: emissions data across sectors, physical climate risk assessments, and sector-specific performance indicators. A unified framework for collecting and reporting emissions data would enable financial institutions to more effectively assess transition risks and opportunities. For instance, readily available, standardised carbon emissions data would streamline credit approval processes and help banks make informed financing decisions for transition projects.

Strategic partnerships with local technology companies—such as engaging Hong Kong-based climate risk specialists—could be considered to support the development of comprehensive physical risk maps for the city's building stock. Making this data, alongside other performance data, publicly accessible would enhance both market transparency and decision-making. Furthermore, the enhanced data infrastructure should support specific sectoral transition pathways with measurable milestones and KPIs. For example, setting intermediate targets for reducing greenhouse gas emissions by specific percentages at regular intervals, backed by actual emissions data, can maintain momentum and accountability. This data-driven approach would also facilitate more effective ISSB-aligned sustainability reporting by providing businesses with reliable information about emissions in their supply chains.

In this context, the CASG's databases and repository could be expanded to track industry transition performance and map various taxonomies to provide clearer guidance for transition finance decisions. Additionally, the HKMA's Commercial Data Interchange (CDI), currently used to support SME trade financing, could be leveraged to integrate climate and emissions data. The CDI could also explore offering an open-source inventory of sector-specific transactions, addressing greenwashing concerns and improving transparency across supply chains. Collaboration between the CASG database and CDI could create a more comprehensive and interconnected data infrastructure, enabling seamless data-sharing among stakeholders.

Extending this data-driven framework and infrastructure to the Greater Bay Area could position Hong Kong as a key facilitator of sustainable development in the region. By integrating local transition data with Mainland China's initiatives (Annex 1), Hong Kong can strengthen its role in internationalising and scaling the financing of China's transition activities. Building on FSDC's earlier research on Hong Kong's position as a data hub,[120] and the Government's strategic vision for cross-boundary data flows within the GBA,[121] a longer-term opportunity in this area lies in incorporating regional emissions and energy efficiency data, which could significantly enhance stakeholders' ability to identify and act on transition financing opportunities across the region.

Such a comprehensive data management approach would enable more sophisticated impact reporting, providing investors with clearer insights into how their investments contribute to decarbonisation at the portfolio level. Standardising metrics for measuring and reporting the impact of transition investments, underpinned by reliable public data, would improve comparability between projects and facilitate the flow of capital into the transition finance space. This would encourage greater transparency and accountability, making it easier for investors to align their portfolios with sustainability goals.

120 FSDC. (2022, December). Report on Hong Kong Data Hub for Financial, Regulatory and Sustainability Data: Consolidating Data Resources for the Financial Services Industry. Retrieved from https://www.fsdc.org.hk/media/rbjle0yr/20221209-datahub-report-final-en.pdf

121 Digital Policy Office. (2024). Facilitating cross-boundary data flow within the Greater Bay Area. Government of the Hong Kong Special Administrative Region. https://www.digitalpolicy.gov.hk/en/our_work/digital_infrastructure/mainland/cross-boundary_data_flow/

Tailoring financing approaches by referencing other jurisdictions' models

While drawing inspiration from international models, Hong Kong should tailor its approach to its unique economic context. As mentioned in early sections, Japan is the largest transition bond issuer in recent years, its transition framework, despite some inconsistencies, offers certain insights. Their detailed roadmap includes a comprehensive implementation plan for achieving net-zero emissions, projecting ¥150 trillion in investment over the next decade, initiated by ¥20 trillion in government bonds to stimulate private investment.[122] Furthermore, Japan's commitment to subsidising sectors facing high decarbonisation costs demonstrates a holistic approach to promoting sustainable transition.

While seeing its merits, it is worth noting that Japan's tailored approach focuses on local demand by supporting predominantly hard-to-abate sectors such as electronics and automobile manufacturing—representing a significant portion of its GDP (26.9% in 2022). Hong Kong, as a global financial hub, would require a different strategy that is more internationally oriented. This strategy should integrate diverse market dynamics and regulatory environments to foster a conducive framework for transition finance. By selectively drawing insights from Japan's framework —particularly its methodology for outlining key action points and finance needs estimations—Hong Kong can develop a transition finance strategy that leverages its strengths and aligns with international standards, thus advancing both local and global sustainability goals.

A refined and expanded Climate Action Plan 2050 will ensure all stakeholders have a clear understanding of the required actions and timelines. This specific net-zero transition roadmap, coupled with continued government support, is vital for aligning efforts and achieving sustainability goals. By implementing these enhancements, Hong Kong can position itself as a proof of concept for effective climate action and transition finance, catalysing both regional and global sustainability efforts.

Promoting tokenisation as a game-changer for sustainable finance

Beyond traditional financing tools, the adoption of tokenisation in transition-related products presents a powerful opportunity to enhance Hong Kong's position as a global leader in sustainable finance. Under Project Evergreen, in February 2023, Hong Kong issued HK$800 million worth of tokenised green bond,[123] marking as the first tokenised green bond issued by a government globally. This showcased the potential of blockchain technology to re-engineer the financial market. The effort continued with the issuance of a second batch of tokenised green bond in February 2024, which was also the first multi-currency digital green bond offered globally and the first digitally native bond issuance in Hong Kong, valued at close to HK$6 billion (HKD, RMB, USD and EUR)[124]. This further solidified Hong Kong as a pioneer in tokenised sustainable financing, setting a benchmark for private sector participation.

These issuance signal more than just innovation—they lay the groundwork for a new issuance format that can attract international investors seeking transparency and efficiency in sustainable finance. The Securities and Futures Commission reinforced this direction by issuing guidance in November 2023 on tokenised securities, clarifying regulatory expectations and ensuring investor protection.[125]

122 GR Japan. Overview of Japan's Green Transformation (GX). January 2023. https://grjapan.com/sites/default/files/content/articles/files/gr_japan_overview_of_gx_plans_january_2023.pdf

123 Hong Kong Monetary Authority. (2023, February 16). HKSAR Government's inaugural tokenised green bond offering. https://www.hkma.gov.hk/eng/news-and-media/press-releases/2023/02/20230216-3/

124 Hong Kong Monetary Authority. (2024, February 7). Press release on sustainable finance initiatives. https://www.hkma.gov.hk/eng/news-and-media/press-releases/2024/02/20240207-6/

125 Securities and Futures Commission. (2023). Circular regarding climate-related disclosures. https://apps.sfc.hk/edistributionWeb/gateway/EN/circular/doc?refNo=23EC53

One of the promising aspects of tokenisation is its potential to reduce greenwashing by enhancing transparency. Blockchain technology enables real-time, immutable tracking of the environmental performance of funded projects, providing investors with reliable data on sustainability outcomes. This aligns with growing investor demand for clear, verifiable insights into the environmental impact of their portfolios. Hong Kong's regulatory environment has been conducive to exploring these innovations, with initiatives like Project Ensemble Sandbox enabling market participants to test tokenisation applications in green and sustainable finance.[126]

The Hong Kong Government's 2024 Policy Address further underscores its commitment to blockchain and real-world asset tokenisation. By addressing regulatory gaps and fostering a conducive environment for technological innovation, Hong Kong can accelerate the development of tokenised sustainable finance products. This will attract more institutional investors and also diversify funding sources for sustainable projects.

Tokenisation provides Hong Kong with a strategic advantage in the evolving landscape of sustainable finance. By embracing this technology, Hong Kong can enhance its leadership role, attract international capital, and drive meaningful progress toward global climate goals.

126 HKMA. (2024, August 28). Project Ensemble Sandbox launched to facilitate testing of tokenised securities and explore use cases. Retrieved from https://www.hkma.gov.hk/eng/news-and-media/press-releases/2024/08/20240828-3/

Conclusion

Conclusion

As Hong Kong embraces its role as a regional hub for transition finance, it has the potential to be at the forefront of addressing global climate challenges and integrating diverse economic landscapes. This paper has delved into how Hong Kong is shaping its role in this arena, focusing particularly on its influence over high-emission and hard-to-abate sectors and its growing capacity to propel forward global climate initiatives.

Hong Kong's financial ecosystem, characterised by a robust track record in financial innovation and a growing expertise in green and sustainable finance, provides a solid foundation for advancing transition finance initiatives. The city's commitment to sustainability uniquely positions it to lead in this emerging field. By leveraging its capabilities in bridging traditional and sustainable finance, Hong Kong can channel investments into critical sectors, supporting sustainability transitions through driving innovation.

Now is an opportune time for Hong Kong to enhance its position in sustainable finance and contribute to global climate efforts. Through strategic collaboration and a dedication to sustainable development, Hong Kong can establish itself as a leader in transition finance. This leadership role will enable the city to drive significant positive change, fostering a more resilient future for the region and beyond.

Annex 1: Leveraging China's transition finance push and Asian market potential

Opportunities stemming from China's transition finance commitment

China's pledge to achieve carbon neutrality by 2060 necessitates a profound transformation across its energy-intensive industries, including steel, cement, and petrochemicals. This clean energy transition specifically demands a significant escalation in energy-related investments. According to the International Energy Agency's 2021 projections, China's total investment in this sector is expected to reach approximately US$640 billion (RMB 4 trillion) by 2030. This substantial sum, to be invested over the course of 10 years, represents an increase of over 10% compared to the average annual investment from 2016 to 2020. By 2060, this figure is anticipated to nearly touch US$ 900 billion (RMB 6 trillion), almost a 60% surge from recent levels, with the electricity and transport sectors accounting for the majority of this increase. [127]

To support and manage these financial needs, Mainland China has been pioneering a comprehensive transition finance framework. The People's Bank of China is leading this effort, developing sector-specific standards that include a rigorous taxonomy, disclosure requirements, and tailored financial products and incentives. This framework initially targets pivotal industries such as steel, thermal power, construction materials, and agriculture. It is expected to broaden to encompass additional sectors in response to the growing demand for reliable transition standards.

In conjunction with financial innovations, the National Development and Reform Commission, along with other relevant ministries, has been formulating technical guidelines for decarbonisation. These guidelines are essential for ensuring that sectoral practices align with financial strategies and effectively implement necessary sustainability measures.

Transition finance instruments, particularly SLBs, have experienced rapid adoption. Since their introduction in 2021, approximately RMB 121.5 billion in SLBs have been issued, channelling funds towards high-carbon industries to facilitate emission reductions and sustainability improvements. However, the market for dedicated transition bonds is less developed, with only RMB 10.4 billion issued, primarily focused on natural gas projects.

Recent enhancements in China's green transition policy framework

In August 2024, the Communist Party of China Central Committee and the State Council released an extensive set of guidelines to accelerate the green transition agenda across China's economy and society. These directives outline strategies for sustainable land use, eco-friendly industrial and energy infrastructure, and environmental conservation in transportation and urban-rural development. [128,129]

By 2030, China plans to make substantial progress in greening its economy through sustainable production practices, enhanced pollution control, and increased carbon reduction efforts. The guidelines set economic targets, notably projecting the energy-conservation and environmental protection industry to reach approximately RMB 15 trillion (US$2.1 trillion).[130] This valuation underscores the significant economic potential of China's green transition. The long-term goal is to establish a green, low-carbon, and circular economic system by 2035, setting international benchmarks for resource efficiency and widely adopting eco-friendly practices.

127 International Energy Agency. (2021). An energy sector roadmap to carbon neutrality in China. https://iea.blob.core.windows.net/assets/9448bd6e-670e-4cfd-953c-32e822a80f77/AnenergysectorroadmaptocarbonneutralityinChina.pdf
128 The State Council of the People's Republic of China. (2024, August). Policy document on climate finance initiatives. Retrieved from https://www.gov.cn/zhengce/202408/content_6967665.htm
129 The State Council of the People's Republic of China. (2024, August 11). China issues guidelines to ramp up green transition of economic and social development. https://english.www.gov.cn/policies/latestreleases/202408/11/content_WS66b8a6f7c6d0868f4e8e9d80.html
130 The State Council of the People's Republic of China. (2024, August 11). China issues guidelines to ramp up green transition of economic and social development. https://english.www.gov.cn/policies/latestreleases/202408/11/content_WS66b8a6f7c6d0868f4e8e9d80.html

Among others, the guideline stressed various financial-related policies (non-exhaustive):[131]

- **Expanding financial tools for green transition:** The directives advocate for the establishment of standards for transition finance to aid traditional industries in transitioning to greener operations. Financial institutions are encouraged to prioritise green projects and develop innovative financial products such as green bonds and carbon finance. The development of green insurance and the introduction of differential insurance premiums are also recommended to support these initiatives.
- **Optimising investment in green transition:** The guidelines call for diversification and an increase in investments within the green sector, urging various stakeholders to contribute. Central budget investments are directed towards supporting projects that advance green technologies and promote energy efficiency. There is also a push for private capital to increase involvement in green projects and to consider market-based investment funds dedicated to green initiatives. The support for infrastructure-based Real Estate Investment Trusts in new energy projects is identified as a key driver for substantial progress.
- **Establishing standards for green development:** The establishment of a comprehensive standard system for achieving carbon peak and neutrality is deemed essential. This involves developing standards for corporate emissions and product carbon footprints and revising energy-saving benchmarks. Furthermore, enhancing standards for renewable energy and creating a framework for hydrogen energy are crucial measures to ensure a unified approach to green development.

Implications for Hong Kong

As Hong Kong and Mainland China are developing their respective transition taxonomies, there exists an opportunity for collaboration, similar to ASEAN's approach to creating a cross-jurisdictional taxonomy. By harmonising these frameworks, both areas can ensure consistency in standards and facilitate smoother cross-border investments in green transition projects. Such collaboration would streamline the process of funding and strengthen the regional market's ability to attract global investors looking for clear and reliable green investment channels.

Furthermore, Hong Kong's status as an offshore RMB hub and its expertise in multi-currency tokenised assets position it well for creating innovative transition finance instruments. HKEX is a preferred venue for international green bond issuances, particularly from Mainland China. In 2023, HKEX hosted over 43% of Chinese offshore green bonds, including some of the largest of the year,[132] and showcased its financial innovation with developments like tokenised green bonds.

Strategically located in the Greater Bay Area (GBA), Hong Kong can leverage its financial infrastructure to support and capitalise on China's green finance initiatives. The GBA, aiming for carbon neutrality by 2060, needs an estimated US$1.85 trillion, representing significant investment opportunities for regional financial centres.[133]

Hong Kong's financial expertise positions it as a key player in mobilising vast resources for this purpose. As an offshore RMB centre, it can facilitate cross-boundary green financial products and services, developing tailored instruments for the GBA market. By leveraging its innovative capacity, Hong Kong is poised to direct substantial capital into low-carbon projects across the region, effectively supporting China's green transition goals.

131 Central Committee of the Communist Party of China and the State Council. (2024, August 11). Opinions on accelerating the comprehensive green transformation of economic and social development. The State Council of the People's Republic of China. https://www.gov.cn/zhengce/202408/content_6967665.htm

132 Climate Bonds Initiative. (2024, June). Green and Sustainable Debt Market Briefing 2023: Hong Kong. https://www.climatebonds.net/files/reports/cbi_hk_sotm_23_02e.pdf

133 WRI China. (2023, April). Greater Bay Area: Decarbonisation pathways. https://av.sc.com/hk/content/docs/hk-gba-decarbonisation-pathways-apr-2023-en.pdf

Untapped potential: Hong Kong's gateway to the Asia market

As countries across Asia grapple with the need to transition from carbon-intensive industries to greener alternatives, Hong Kong can seize a strategic opportunity to become a regional hub for transition finance.

Transition finance in Asia is still nascent compared to Western standards but is gaining traction. While the EU has long been at the forefront, Asia's pace differs; each country has unique energy landscapes and economic dependencies that require bespoke solutions.

Unlike Japan and Mainland China, which have largely domestic financial markets, Hong Kong is internationally connected and boasts a robust financial infrastructure. This positions it uniquely as an ideal marketplace to connect issuers and investors. The city's potential to bridge financial matters is becoming increasingly apparent as more companies seek funding channels to support their green transitions, particularly in Southeast Asia, where the energy sector is a major economic driver.

The share of coal in energy supply in Asia accounted for nearly half of its total energy supply and around 79% of the global share of coal energy supply in 2021.[134] According to the IMF, countries in the Asia Pacific region face a shortfall of at least US$800 billion in climate financing.[135] The Asia Pacific region stands at a critical juncture, facing the dual challenges of economic growth and environmental sustainability. Hong Kong's potential role in this context is evolving from a local financial hub to a regional catalyst for green transition development. Leveraging its sophisticated financial infrastructure, Hong Kong is uniquely positioned to pioneer innovative green financial instruments, foster cross-border collaborations, and drive collaborative, sustainable finance practices with emerging markets.

134 International Energy Agency. (n.d.). Coal in Asia Pacific. https://www.iea.org/regions/asia-pacific/coal

135 International Monetary Fund.(2024, January) Explainer: How Asia can unlock $800 billion of climate financing. International Monetary Fund. https://www.imf.org/en/Blogs/Articles/2024/01/29/explainer-how-asia-can-unlock-800-billion-of-climate-financing

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About the FSDC

The FSDC was established in 2013 by the Hong Kong Special Administrative Region Government as a high-level, cross-sectoral advisory body to engage the industry in formulating proposals to promote the further development of the financial services industry of Hong Kong and to map out the strategic direction for the development.

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