Catalyzing Climate Action: Emergent Asia-Pacific Case Studies of Financial Institutions' Net-zero Transition Plans



Contents

| Со | ntents | 2 | | | | |
|-----|---|----|--|--|--|--|
| Im | Important Notice | | | | | |
| Au | Authors and Acknowledgements | | | | | |
| Int | Introduction and Asia-Pacific's landscape on net-zero transition planning | | | | | |
| 1. | Foundations - Objectives and Priorities: Dai-Ichi Life Group | 12 | | | | |
| 2. | Implementation Strategy - Activities and Decision Making: DBS Group | 17 | | | | |
| 3. | Implementation Strategy - Policies and Conditions: Mitsubishi UFJ Financial Group (MUFG) | 21 | | | | |
| 4. | Engagement Strategy - Clients and Portfolio Companies: HSBC | 26 | | | | |
| 5. | Engagement Strategy - Clients and Portfolio Companies: Sumitomo Mitsui Trust Asset Management (SMTAM) | 30 | | | | |
| 6. | Engagement Strategy - Policy Advocacy and Industry: BNP Paribas Asset Management (BNPPAM) | 35 | | | | |
| 7. | Metrics and Targets - Mizuho Financial Group | 40 | | | | |
| 8. | Metrics and Targets - UOB Group | 46 | | | | |
| 9. | Governance: Roles, Responsibilities and Remuneration & Skills and Culture - Prudential plc | 52 | | | | |

Important Notice

This case study report was produced by the Asia-Pacific (**APAC**) Network of the Glasgow Financial Alliance for Net Zero (**GFANZ**) with contributions from members of the sector-specific alliances comprising GFANZ. This report aims to provide context for the APAC region on the various themes and components of the netzero transition plan (**NZTP**) set out in GFANZ's Recommendations and Guidance on Financial Institution Net-zero Transition Plans (November 2022). For the avoidance of doubt, nothing expressed or implied in the report is intended to prescribe a specific course of action. This report does not create legal relations or legally enforceable obligations of any kind. Each GFANZ sector-specific alliance member unilaterally determines whether, and the extent to which, it will adopt any of the potential courses of action described in this report.

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Members of the eight financial sector-specific net-zero alliances comprising GFANZ have signed up to the ambitious commitments of their respective alliances and are not automatically expected to adopt the principles and frameworks communicated within this report, although we expect all members to increase their ambition over time, so long as it is consistent with members' fiduciary and contractual duties and applicable laws and regulations, including securities, banking, and antitrust laws.

Authors and Acknowledgements

GFANZ would like to acknowledge and express our gratitude to the numerous GFANZ sector-specific alliance members which submitted the case studies in this report. This does not imply that the case studies included herein are endorsed by every GFANZ sector-specific alliance member firm, including the firms represented on the Principals Group [and the APAC Network / Advisory Board]. The report was developed and edited by Joyce Khoh from the GFANZ APAC Network Secretariat with support from the GFANZ Central Secretariat.

Introduction and Asia-Pacific's landscape on net-zero transition planning

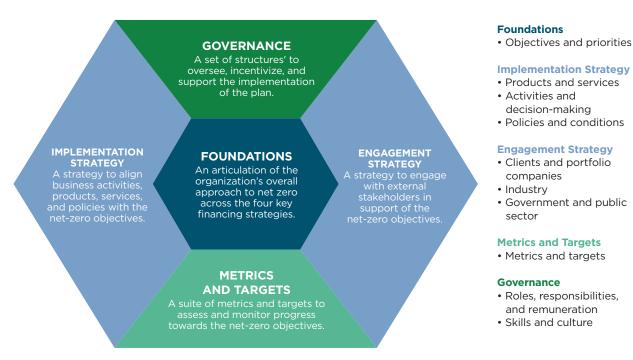
This GFANZ Asia-Pacific Network case-study report builds on the inaugural June 2023 report that reviewed how financial institutions in the region were developing the components of their net-zero transition plans. The case studies featured in this report showcase practical examples of transition planning advancing net-zero commitments and the evolution of practices across the region.

The case studies reference the November 2022 published report and framework on Recommendations and Guidance on Financial Institution Net-zero Transition Plans ("GFANZ FI NZTP Framework") which sets out ten components across five themes. Specific recommendations and guidance are provided for each component. The supplementary technical

review note on <u>Scaling Transition Finance and Real Economy Decarbonization</u> which was launched in December 2023 at COP 28 is also referenced.

The case studies aim to contextualize the themes, components and recommendations in in the GFANZ FI NZTP Framework (Figure 1). Each case study provides a deep dive into how a financial institution is approaching one of the five themes, and together they demonstrate how leading financial institutions are utilizing their transition plans to accelerate financing of the net-zero transition in Asia and globally. Examples of the four key net-zero financing strategies identified in the November 2022 report — financing climate solutions, 'aligned' entities, 'aligning' entities and managed phaseout of high emitting assets² are also included.

Figure 1: GFANZ financial institution net-zero transition plan framework: themes and components



¹ Figure 3 on p.10.

² Figure 4 on p.11.

INCREASING REGULATORY FOCUS ON DISCLOSURE, TRANSITION PLANS AND TRANSITION FINANCE

Globally and in Asia, the last few years have seen increasingly strong regulatory support for the development and disclosure of transition plans in alignment with globally recognized frameworks, alongside greater engagement surrounding transition finance. As work on regulatory and supervisory approaches to climate-related risks evolves, the role of transition plans for both financial institutions and real-economy corporates is not only viewed as a practical tool to enable an orderly transition³, but also a potentially useful source of information for financial authorities to assess micro and macroprudential risks.

In 2022, the G20 Sustainable Finance Working Group published a Transition Finance framework⁴ that provides five categories of high-level principles to guide transitional activities and investments, of which a number encourage transition planning. At the 2023 G7 Summit in Hiroshima, leaders also called on the private sector to set and implement credible transition plans in line with the Paris Agreement and emphasized the significant role of transition finance in advancing a whole-of-economy decarbonization — avoiding locking in carbon and being based on effective emission reductions.⁵ International

bodies such as the Financial Stability Board (FSB), the Network on Greening the Financial System (NGFS) and the Basel Committee on Banking Supervision (BCBS) are undertaking their own efforts to consider the role transition plans play in micro and macroprudential risk assessment. The International Sustainability Standards Board (ISSB)'s climate disclosure standard⁶ requires firms to disclose a transition plan if they have one. ISSB have announced they will consider developing globally applicable guidance for transition plan disclosures.⁷

Across the Asia-Pacific, governments have also been publishing taxonomies, mandatory climatereporting disclosure requirements, guidance on transition planning and related policy documents. A number of these, including the Hong Kong Monetary Authority (HKMA)'s published circular on transition planning8, reference the GFANZ voluntary FI NZTP Framework. Sustainability disclosure guidance that includes or references transition planning is also being consulted on by governments / regulators in major economies such as China and India. Figure 2 provides a nonexhaustive summary of markets across the Asia-Pacific that have introduced, or are consulting on, policy, guidance and / or regulation on reporting frameworks, disclosure, transition finance and transition planning.

- GFANZ uses the term "orderly transition" to refer to a net-zero transition in which both private sector action and public policy changes are early and ambitious, thereby limiting economic disruption related to the transition (e.g., mismatch between renewable energy supply and energy demand). For reference, the Network for Greening the Financial System (NGFS), which develops climate scenarios used by regulators and others, defines "orderly scenarios" as those with "early, ambitious action to a net-zero GHG emissions economy," as opposed to disorderly scenarios (with "action that is late, disruptive, sudden and / or unanticipated"). In an orderly transition, both physical climate risks and transition risks are minimized relative to disorderly transitions or scenarios where planned emissions reductions are not achieved. This explanation applies to all mentions of the term "orderly transition" in this document.
- 4 G20 <u>Transition Finance Framework</u> (2022).
- 5 <u>G7 Hiroshima Leaders' Communique</u>, May 2023.
- 6 IFRS S2 Climate-related Disclosures, June 2023.
- 7 ISSB, ISSB delivers further harmonisation of the sustainability disclosure landscape as it embarks on new work plan, June 2024.
- 8 HKMA Planning For a Net Zero Transition circular (2023).

Figure 2: Regulatory support for transition finance and transition planning across Asia

| Region / Market | Key Regulatory Developments | Status of Issuance |
|--------------------|--|--|
| ASEAN | ASEAN Taxonomy Board: ASEAN Taxonomy for Sustainable Finance (v3) — Apr 2024 | Voluntary |
| Australia | Australian Treasury: Climate-related financial disclosure consultation paper (Jun 2023), Sustainable Finance Strategy Consultation Paper —Nov 2023 Net Zero Economy Authority Bill (NZEA) 2024: New independent statutory authority (Net Zero Authority) established to promote orderly and positive economic transformation | To be announced |
| China | EU-China Common Ground Taxonomy - Nov 2021 National Development and Reform Commission (NDRC): Guidance Catalogue (Taxonomy) for Green and Low-Carbon Transition Industry (2024 edition) - Feb 2024 People's Bank of China (PBOC): Transition Taxonomy that will align with G20 Transition Finance Framework - upcoming, announced in 2022 Beijing Stock Exchange (BSE), Shanghai Stock Exchange (SSE), Shenzhen Stock Exchange (SZSE) publish draft guidelines on sustainability reporting — Feb 2024 | Sustainability reporting guidelines mandatory for listed companies. |
| Hong Kong | Hong Kong Monetary Authority (HKMA): <u>Circular on Planning for a Net Zero Transition</u> — Aug 2023 Hong Kong Exchange (HKEX): <u>ISSB disclosures from 2025</u> – Apr 2024 | Climate disclosures - mandatory. |
| India | Reserve Bank of India (RBI): <u>Draft Disclosure Framework on Climate-related Financial Risks</u> — Feb 2024 | Mandatory for 'Regulated Entities'. |
| Indonesia | Financial Services Authority (OJK): <u>Taxonomy for Indonesian</u> <u>Sustainable Finance (TKBI)</u> — updated Feb 2024 | Voluntary |
| Japan | Ministry of Economy, Trade and Industry (METI): Basic Guidelines on Climate Transition Finance — May 2021 Sustainability Standards Board of Japan (led by Financial Services Agency): three Exposure Drafts of Sustainability Disclosure Standards (ISSB-aligned) - Mar 2024 | Climate disclosures - mandatory for large entities from 2027. |
| Malaysia | Bank Negara Malaysia (BNM): <u>Guidance on Transition Planning</u> — under development, announced Oct 2023 Securities Commission (SC): <u>Consultation on mandatory adoption of ISSB standards</u> – Feb 2024 | To be announced |
| New Zealand | Reserve Bank of New Zealand: <u>Guidance on managing climate-related risks</u> — Mar 2024 | Voluntary |
| Singapore | Monetary Authority of Singapore (MAS): <u>Guidelines for Financial Institutions on Transition Planning</u> (Consultation) — Oct 2023 Accounting and Corporate Regulatory Authority (ACRA) and Singapore Exchange Regulation (SGX RegCo) introduce <u>mandatory climate-related disclosures</u> in a phased approach — Feb 2024 | Climate disclosures - mandatory. |
| South Korea | Ministry of Environment: Korean Green Taxonomy - Dec 2021 Financial Services Commission (FSC): ISSB-aligned ESG disclosures for listed entities from 2026 - Feb 2024 | Climate disclosures – mandatory for large entities from 2026. |
| | | |

Source: Various policy documents

CATALYZING CLIMATE AMBITION INTO STRATEGIC ACTION

The direction of travel on policy is clear, and financial institutions have been responding to the changing regulatory landscape. Asian financial institutions are making progress in their Climate Mitigation Journey⁹ across reporting and disclosure efforts as well as moving on to transition planning — typically starting with a specific theme (e.g. Metrics and Targets) and advancing toward publishing comprehensive end-to-end transition plans that set out how a financial institution intends to achieve its net-zero commitments. GFANZ's pan-sector voluntary FI NZTP Framework, alongside other tools and guidance have been used by financial institutions to help structure and implement their individual transition plans. Hundreds of financial institutions are expected to have developed transition plans, or components of transition plans, by the end of 2024. Referring to practitioner-led common frameworks can support the development of comparable and comprehensive transition plans, enabling key stakeholders, such as investors, to make use of this consistency in approach to aid their evaluation of a firm's net-zero efforts; while encouraging policymakers to support a globally consistent approach to considering policy around net-zero transition planning and disclosures.

Beyond viewing the net-zero transition planning process as a strategic organization-wide transformation and risk management tool, financial institutions have begun reaping broader benefits from the process, including: utilizing their transition plan as a key communication tool with internal and external stakeholders; achieving internal alignment and consensus on net-zero topics; bolstering investor and market confidence in the firm's commitment; and thus improving access to capital, and more. These and other benefits are detailed in the report.

The case studies also consider the broad and complex challenges that remain, including data availability, lack of region-and sector-specific pathways, nascent technologies and a continued need for increased regulatory clarity. While these issues continue to be addressed at global and regional levels, the snapshots provided by Asia-Pacific financial institutions in these case studies demonstrate their efforts and progress in developing net-zero strategies to ultimately support real economy decarbonization.

⁹ A UNEP FI-created <u>framework</u> that constitutes an end-to-end view of the capabilities financial institutions need to develop to align themselves with a 1.5 degree C trajectory.

HOW TO READ AND UTILIZE THIS REPORT

It is useful to note that the financial institutions providing case studies in this report are at different stages of their net-zero transition planning journey, and that transition plans will need to be consistently updated over time. Although each case study primarily focuses on one component within a theme as set out in the GFANZ framework, they touch on other components across the remaining themes. Tags have been used to demonstrate the interlinkages and interplay between different parts of each financial institution's individual net-zero transition plan.

Through the contributions of financial institutions to this report, practical lessons learned include:

- Starting early is key to building up capacity
 to adapt to regulatory changes. Transition
 planning is an iterative and organization-wide
 process that takes time. Financial institutions
 can start with and build on existing work and
 capabilities, with the vision to attain the full
 suite of capabilities needed to stay ahead of the
 curve.
- Learning through knowledge sharing and peerto-peer exchanges (e.g. voluntary participation in GFANZ organized roundtables or external events) has been frequently cited by financial

institutions as helpful in understanding how other participants in the financial and real economy sectors are implementing their own net-zero commitments and building internal understanding and capacity.

- Reviewing the transition plan regularly, in line with evolving global developments and the business landscape, to ensure continued relevance given the changing policy landscape at global and regional levels.
- Taking a localized approach to global plans.
 Transition plans for global financial institutions will require implementation strategies which retain clear ambition while considering the unique circumstances of the financial institution's local and regional markets of operation.

References:

Figure 3 presents an overview of the NZTP framework and recommendations that financial institutions could implement as they develop their net-zero transition plans.

Figure 4 illustrates the four key financing strategies included in the GFANZ FI NZTP Framework.

Figure 3: Summary of recommendations from the GFANZ FI NZTP Framework



1. Objectives and priorities

Define the organization's objectives to reach net zero by 2050 or sooner, in line with science-based pathways to limit warming to 1.5 degrees C, stating clearly defined and measurable interim and long-term targets and strategic timelines, and identify the priority financing strategies of net-zero transition action to enable real-economy emissions reduction.



1. Products and services

Use existing and new products and services to support and increase clients' and portfolio companies' efforts to transition in line with 1.5 degrees C net-zero pathways. Include accelerating and scaling the net-zero transition in the real economy, providing transition-related education and advice, and supporting portfolio decarbonization in accordance with the institution's net-zero transition strategy.

2. Activities and decision-making

Embed the financial institution's net-zero objectives and priorities in its core evaluation and decision-making tools and processes to support its net-zero commitment. This applies to both top-down/oversight structures and bottom-up tools and actions.

3. Policies and conditions

Establish and apply policies and conditions on priority sectors and activities, such as thermal coal, oil and gas, and deforestation. Include other sectors and activities that are high-emitting, or otherwise harmful to the climate, to define business boundaries in line with the institution's net-zero objectives and priorities.



1. Engagement with clients and portfolio companies

Proactively and constructively provide feedback and support to clients and portfolio companies to encourage net zero-aligned transition strategies, plans, and progress with an escalation framework with consequences when engagement is ineffective.

2. Engagement with industry

Proactively engage with peers in the industry to 1) as appropriate, exchange transition expertise and collectively work on common challenges and 2) represent the financial sector's views cohesively to external stakeholders, such as clients and governments.

3. Engagement with government and public sector

Direct and indirect lobbying and public-sector engagement should, in a consistent manner, support an orderly transition to net zero, and as appropriate, encourage consistency of clients' and portfolio companies' lobbying and advocacy efforts with the institution's own net-zero objectives.



1. Metrics and targets

Establish a suite of metrics and targets to drive execution of the net-zero transition plan and monitor progress of results in the near, medium, and long term. Include metrics and targets focused on aligning financial activity in support of the real-economy net-zero transition; on executing the transition plan; and on measuring changes in client and portfolio GHG emissions.



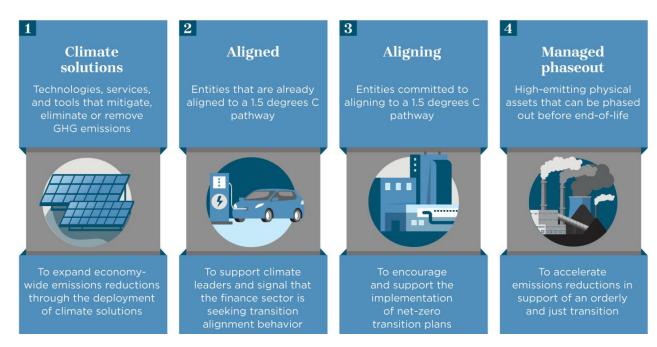
1. Roles, responsibilities, and remuneration

Define roles for the Board or strategy oversight body and senior management ensuring they have ownership, oversight, and responsibility for the net-zero targets. Assign appropriate individuals and teams to all aspects of both design and delivery of the transition plan. Use remuneration incentives for all roles, where possible. Review the transition plan regularly to ensure material updates/developments are incorporated; challenges are reviewed as an opportunity to correct course; and implementation risks are properly managed.

2. Skills and culture

Provide training and development support to the teams and individuals designing, implementing, and overseeing the plan so that they have sufficient skills and knowledge to perform their roles (including at the Board and senior management level). Implement a change management program and foster open communications to embed the net-zero transition plan into the organization's culture and practices.

Figure 4: Four key financing strategies



THEME

Foundations



Component: Objectives and Priorities — Dai-Ichi Life Group

Example 1: Dai-ichi Life Group - Clear and measurable objectives and priorities advance transition implementation

Sub-sector: Asset Owner

Objectives and priorities

Recommendation: Define the organization's objectives to reach net zero by 2050 or sooner, in line with science-based pathways to limit warming to 1.5 degrees C, stating clearly defined and measurable interim and long-term targets and strategic timelines, and identify the priority financing strategies of net-zero transition action to enable real economy emissions reduction.

The Dai-ichi Life Group (Dai-ichi Life) was established in 1902 as Japan's first mutual life insurance company and currently operates as a global network across 10 countries in Asia-Pacific and North America. In March 2021, Dai-ichi Life became the first Japanese asset owner to join the Net Zero Asset Owner Alliance (NZAOA) where it announced its commitment to net-zero greenhouse gas (GHG) emissions by 2050, which it had been working on since 2018.

The commitment to apply best practices on climate change as a member of the global financial sector was further reinforced by its participation in the GFANZ Principals Group in 2021. Following publication of the GFANZ FI NZTP framework, Dai-ichi Life advanced its efforts with its inaugural net-zero transition plan (NZTP) published in September 2023 (Figure 5). As recommended in the GFANZ FI NZTP voluntary framework, Dai-ichi Life's NZTP comprises foundations, implementation and engagement strategies, metrics and targets, and governance. The plan is the result of collaboration between various teams within the organization, including the Sustainability Unit (acting as central coordinator), Investment Department, Corporate Services Unit, and Research team.

Foundations Objectives of transition plan Roadmap to achieve net-zero emissions | P. 11 > P.9▶ Strategies P. 19, 40 Implementation Strategy Engagement Strategy | P.32▶ Emissions reduction Supporting transition to a Expanding assets initiatives related to business Opinion and low-carbon society and Encourage rule-making through covered by emission activities (shifting to creation of environmental investees' reduction targets and global finance renewable energy, saving innovation through initiatives analyze emissions energy, and reducing total initiatives investments paper usage, etc.) As an institutional investor Metrics and targets Financed emissions (Scope 3 Category 15) Reduction of GHG emissions from operation (Scope 1 and 2) Investments in climate solutions Creation of positive impacts via investments GHG emissions reduction from Supply Chain (Scope 3, excluding Category 15) Number of investees targetted for engagement Governance Structure to Address Climate Change Governance P. 44 ▶ Facilitation by the Governance structure that reports to Introduction of sustainability metrics Group Sustainability Committee the Executive Management Board as executive remuneration assessment and Board of Directors and is and Group ERM Committee criteria (including progress on CO2 overseen by the Board of Directors emission reduction) Transition plan: Oversight: CSuO*, Administration: Corporate Planning Unit, Implementation: relevant departments of Dai-ichi Life Skills and corporate culture | P. 47 > Building awareness among Group officers and employees

Figure 5: Dai-Ichi Life's inaugural Net Zero Transition Plan

* Chief Sustainability Officer

Source: Dai-Ichi Life Net Zero Transition Plan (2023)

The clear objectives and emission reduction targets included in its NZTP has enabled Daiichi Life to effectively communicate its transition approach with internal and external stakeholders, as well as engage more productively with portfolio companies. Beyond utilizing the plan to strengthen engagement and raise expectations with the top 50 emitters in its investment portfolio,

in the process of developing its plan, Dai-ichi Life also decided to expand the asset classes covered by its emission reduction targets to include enterprise loans. The Group's annual review of its NZTP will help maintain stakeholder accountability by assessing its progress in priority areas, and advancing its net-zero efforts accordingly.

CORPORATE ROLES GUIDE OBJECTIVES AND PRIORITIES

To effectively set and scope key objectives and priorities, Dai-ichi Life took the approach of first identifying and defining its three roles: operating company (insurance company), institutional investor, and NZAOA member. Specific objectives and priorities, and corresponding targets

and strategies were then identified for each role. Progress toward Dai-ichi Life's 2050 netzero target is guided by interim targets for its investment portfolio (Scope 3 Category 15¹⁰ emissions) and for its own business (Scope 1 and 2 emissions).

- As a **global operating company**, Dai-ichi Life Holdings views the reduction of GHG emissions from its operations as essential, with its transition plan providing a roadmap to achieve net-zero.
- As an **institutional investor** managing diversified asset classes, Dai-ichi Life recognizes the crucial role of its investments in achieving a sustainable society. To achieve net-zero targets, transition planning provides disclosure of key strategies and activities, and encourages GHG emission reductions with investees. The following interim metrics and targets have been set (with progress measured):
 - Scope 3 Category 15: 25% and 50% GHG emissions reduction by FY 2025 and FY 2030 respectively (from 2020 baseline), in alignment with NZAOA guidelines (16% reduction achieved in 2022¹¹)
 - JPY 2.5 trillion of environment / climate solution investments and loans (cumulative)¹² by FY2030 (approximately JPY 1.2 trillion achieved in FY2023)
 - $^{\circ}$ 2.4 million tons (CO2e) of avoided emissions by FY2026 (recorded 1.83 million tons CO2e in FY2023 13)
 - ° Engagement with investment portfolio's top 50 high emitters (exceeded target by engaging with top 55 emitters in 2022 (estimated portfolio coverage of 72%)), in alignment with 2030 sectoral targets that reference the IEA NZE / APS scenario.¹⁴
- As a **member of the NZAOA**, Dai-ichi Life recognizes its mission to take a leadership role and contribute to the financial sector addressing climate change issues. Developing its NZTP in line with GFANZ voluntary guidance promotes global consistency and action across the financial sector.

Balancing feasibility and ambition

Dai-ichi Life's core transition objectives and priorities are the result of extensive internal discussion between management and working teams about balancing feasibility and ambition. To best harness its NZTP as a meaningful tool for engaging external stakeholders and communicating the company's ambitions and strategy, the decision made was to present goals that are more ambitious than conservative, in Dai-ichi Life's estimation.

This development process created value by strengthening internal alignment and coordination around net-zero objectives. At the same time, the company endorses a flexible approach to its plan, recognizing the benefit of realignment and refinement based on consultation with key stakeholders. The annual review process has been structured to allow Dai-ichi Life to react swiftly, and course correct as necessary.

¹⁰ Based on PCAF standards.

¹¹ Actual results on an absolute volume basis in FY2022.

¹² Defined on p.16.

¹³ Avoided emissions per the PCAF's methodology, covering Dai-Ichi's environment/climate solution investment and loans.

^{14 185 ~ 255} g/kWh for the electricity sector, 16% emission reduction from 2020 baseline for the steel sector.





Investing in internal and external stakeholders

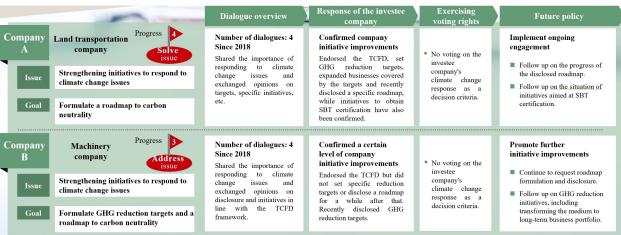
Recognizing climate governance to be critical to achieving its net-zero objectives and priorities, Dai-ichi Life has also prioritized a strong governance structure to address climate change and has invested in building awareness among Group executives and employees.

In 2021, Dai-Ichi Life established its Group Sustainability Committee to formulate policies and actions in response to climate change, including transition planning and monitoring of progress against the plan. The committee reports directly to the Board of Directors and is chaired by the Chief Sustainability Officer (a position established in 2023), and managed by the Sustainability Unit which is tasked with policy and strategy formulation. To incentivize management, sustainability-related indicators, including the Group's progress on emission reduction, have been included in executive compensation.

Dai-ichi Life is also building awareness and capacity across its global network of approximately 60,000 employees to ensure sustainability is embedded in every role. Rolespecific environmental-related training and sharing of sustainability initiatives at annual town hall meetings enhance employees' climate awareness and commitment across the Group. Further efforts have been set to bring together leaders from foreign offices and the central Sustainability Unit to share knowledge and collaboratively address global developments.

Dai-ichi Life has also identified priority areas to dedicate resources to in relation to its institutional investor role. These include: requiring disclosure of supporting data on avoided emissions from investee companies; enhancing the effectiveness of investee engagement by considering the nature and characteristics of the companies; assessing the relative merits of direct or collaborative engagement¹⁵; and sustained engagement to ensure progress in decarbonization. Examples of the engagement process are detailed in Figure 6. A collaborative approach is taken with industry and investees, as well as GFANZ and other external initiatives, to promote the disclosure of transition plans and increased transparency in corporate reporting.

Figure 6: Dai-Ichi Life's engagement process with investee companies



Source: Dai-Ichi Life Net Zero Transition Plan (2023)

¹⁵ Refers to group-based investor engagement initiatives that are targeted at advocating for specific outcomes with real-economy companies.

FOUNDATIONS DRIVE TRANSITION AND CLIMATE SOLUTIONS FINANCING



Dai-ichi Life's motto of "pursuing the well-being of current & future generations, realizing a sustainable society, and achieving sustainable business growth" is directly connected to its transition plan implementation. Its implementation strategy prioritizes: 1) expanding the scope of assets covered by its emission reduction targets and analysis, and 2) supporting the transition to a decarbonized society and the creation of environmental innovation through its investments.

In September 2022, the Dai-ichi Life Policy on Transition Finance was developed from its Basic Policy on Responsible Investment. Key principles include:

- (1) Choosing to take investment actions that prioritize the realization of long-term carbon neutrality¹⁶ for society as a whole;
- (2) Independently examining the validity and feasibility of companies' transition strategies when making investment decisions to ensure investment returns while aligning with key transition finance guidelines;
- (3) Continuously reviewing the criteria used in examining companies' transition strategies, including taking into account external developments such as technological innovation; and
- (4) Facilitating improvements in companies' transition strategies and initiatives through engagement, following thorough analysis of their performance.

Dai-ichi Life's transition finance is targeted at high-emitting industries and the policy identifies specific considerations to be included in the investment decision process. Negative screening is also conducted as part of the process, to exclude prohibited sectors or projects from Dai-ichi Life's financing. In particular, new thermal power plant projects that use fossil fuels and coal mining projects are excluded. The policy scope¹⁷ will be reviewed based on evolving social conditions and

other factors in Japan and internationally.

Internal standards have also been set for labelled transition finance instruments (e.g. transition bonds and loans) to further guide Dai-ichi Life in its investment decisions. These standards require issuers' net-zero strategy and use of proceeds to align with international standards, in addition to third party verification. Dai-ichi Life's Sustainable Finance Frameworks were also launched in January 2024 covering six corporate loan product types (Transition, Green, Social, Sustainability, Sustainability-Linked and Positive Impact)¹⁸. They detail approaches to determining borrowers' eligibility for financing, and key standards and guidelines used.

In pursuing environment / climate solution investments and loans (defined in Figure 7), Daiichi Life is actively exploring new and impactful opportunities that contribute to resolving climate change. For example, the company recently invested JPY 1.5 billion in a Japanese venture fund focused on startups that have business models or technologies to spur decarbonization. One of the fund investees, Sharing Energy, sets up decentralized sources of renewable energy and provides third-party ownership services for residential power solar systems – enabling residents to tap on their solar power system without paying initial costs and maintenance expenses.

Figure 7: How Dai-Ichi Life defines climate solution investments and loans

| with international standards Projects Investments and loans for renewable energy related infrastructure (e.g. renewable energy power plant projects) Real estate Investments and loans for green buildings Funds Transition-linked bond and/or loans for renewable energy related infrastructure (e.g. renewable energy power plant projects) Funds to be invested in | | | |
|--|--|---|--|
| renewable energy related infrastructure (e.g. renewable energy power plant projects Real estate Investments and loans for green buildings Funds Funds Funds to be invested in | loans in alignment with international | | Transition bond and/or loan Transition-linked bond and/ |
| green buildings Funds • Funds to be invested in | Projects | • | |
| | Real estate | • | mirodinionio and roano roi |
| renewable energy related infrastructure | Funds | • | renewable energy related |

^{16 &}quot;Carbon Neutrality" is used interchangeably with "Net Zero" in Japan. Japan's Ministry of Economy, Trade and Industry (METI) has publicly confirmed this.

¹⁷ Excludes transportation and storage of fossil fuels. Investments in LNG and new technologies such as CCS and CCUS are reviewed on a case-by-case basis, in line with internationally recognized scenarios.

¹⁸ News release on Dai-Ichi Life's Sustainable Finance Frameworks, January 2024.

THEME



Implementation Strategy

Component: Activities and Decision Making — DBS

Example 2: DBS - Use of Artificial Intelligence (AI) to enhance the climate and ESG risk assessment process

Sub-sector: Banking

Activities and Decision Making

Recommendation: Embed the financial institution's net-zero objectives and priorities in its core evaluation and decision-making tools and processes to support its net-zero commitment. This applies to both top-down / oversight structures and bottom-up tools and actions.

DBS is a leading financial services group in Asia, headquartered and listed in Singapore. It has presence in 19 markets and is active in the three key Asian axes of growth: Greater China, Southeast Asia and South Asia. It offers a full range of services in consumer banking, wealth management, and institutional banking, creating differentiated customer solutions by leveraging digital technology.

As a purpose-driven bank, DBS was the first Singaporean bank to join the Net Zero Banking Alliance (NZBA) in 2021. This decision was made to demonstrate its commitment to key stakeholders and to align its lending and investment portfolio to net-zero emissions by 2050. Being part of the NZBA community also

offers the opportunity to shape industry guidelines and best practices, in collaboration with other net zero-aligned peers.

DBS supports a fair and just transition across its markets. It believes that climate action presents both risk management and commercial opportunities, beyond being a societal responsibility. In 2022, DBS announced its net-zero commitments and science-informed decarbonization targets (Scope 3 financed emissions inclusive) across seven sectors and data coverage targets for two sectors. These sectors are significant contributors to global GHG emissions, and account for a material portion of the bank's emissions covering both corporate financing and capital market activities. Together, the 2030 interim and 2050 net-zero targets guide its lending and financing efforts for an economywide transformation. DBS Sustainability Reports and its inaugural Our Path to Net Zero report encapsulate its net-zero transition plan and cover governance, strategy, risk management and metrics and targets, in line with the Task Force on Climate-Related Financial Disclosures (TCFD) voluntary recommendations.

LEVERAGING ARTIFICIAL INTELLIGENCE FOR ENHANCED ESG RISK ASSESSMENTS

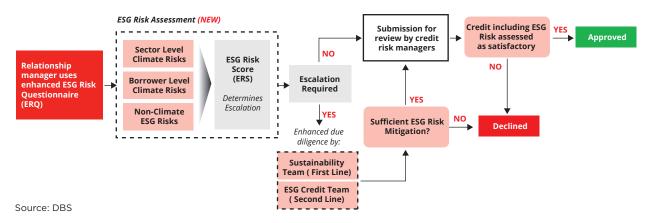


A key driver of DBS' climate strategy is its approach to client engagement, which is supported by the integration of climate considerations into its sectoral strategies and processes. DBS has accumulated a decade of experience leveraging Artificial Intelligence (AI) approaches to enhance customer experiences, improve operational efficiency and drive innovation. As such, the bank views Generative AI (Gen AI)¹⁹ as a revolutionary tool for efficiently processing vast amounts of unstructured data

to identify key patterns, trends and insights to optimize data-driven decision making, and managing broader climate and transition-related risks.

In early experiments with Gen AI, DBS had come up with over 240 ideas. This led to the scaling of more than 15 meaningful use cases across the bank, since early 2023. One such use case was its inclusion in the bank's ESG risk management approach to generate responses to selected questions in the bank's ESG Risk Questionnaires (ERQ). The overall ESG risk assessment process for all new credit applications, annual credit reviews and in cases where there are negative ESG news or reports around specific clients has also been enhanced (Figure 8).

Figure 8: DBS' enhanced ESG risk assessment process (excluding the credit approval process)



The ERQ is a key first step to assess clients on their commitment and ability to manage ESG issues and climate-related risks associated with their operations, which helps DBS evaluate whether a client's business activities could trigger credit or reputational risks. ERQ information provides critical insights into a client's alignment with

DBS' own net-zero commitments. Data collected from the ERQ also enables relationship managers to better understand client transition planning and sustainability efforts, to develop targeted engagement strategies, as well as financing and facilitation opportunities that support clients' transition to a lower-carbon business.

¹⁹ A field that focuses on creating new data similar to an inputted dataset and can be used across a variety of domains including text synthesis, art generation and audio-video creation. Gen Al models, such as the generative pre-trained transformer (GPT), can be leveraged and fine-tuned for generative tasks and has the potential to automate tasks, offer creativity and improve decision-making processes.

DBS' Gen AI pilot focused on generating responses to selected questions within the ERQ that cover topics including net-zero alignment, transition strategy, climate-related physical and transition risks, governance, and disclosure. To ensure appropriate source material, the responses and justifications are derived from relevant documents and disclosure uploaded

by the relationship managers (Figure 9). Gen Al's suggested responses and justifications are embedded within the ERQ tool to provide easy review by the relationship managers to support the broader due diligence process. DBS' institutional banking and risk management teams, with the aid of Al-generated inputs, remain responsible for ESG risk assessments and related decision making.

Figure 9: Integrated Gen AI assists relationship managers in the ESG risk assessment process



Source: DBS

DBS has also embedded a Gen AI chatbot within the ERQ platform, providing an interactive virtual assistant that facilitates human-like conversations. This allows relationship managers to clarify any ambiguity from the generated insights, or prompt further queries for additional ESG-related information.

To ensure the reliability of the Gen AI model for the enhanced ESG risk assessment process, DBS sustainability teams made extensive efforts to validate the generated responses during the pilot phase. Using their deep domain knowledge, the teams meticulously reviewed the model's assessments against predefined criteria and benchmarks, as well as cross checking against content in the uploaded documents. Ongoing feedback from relationship managers is also used to iteratively enhance the pre-defined Gen AI prompts. DBS found that having a focused set of questions to test and optimize the Gen AI model has been a key success factor for the pilot.

Using the Gen AI pilot to accelerate the completion of the enhanced ERQ will allow DBS to mitigate and manage key ESG risks, while increasing employee productivity through reducing time taken for document review. It also frees up the bandwidth of relationship managers to focus on engaging and uncovering new opportunities for DBS to provide transition finance support.

Early positive feedback strongly indicates Gen AI is meeting intended objectives. DBS concurrently continues to conduct training and capacity building sessions on various sustainable finance topics and industry-specific climate-related trends and issues to ensure relationship managers and credit risk managers are empowered to effectively perform their duties. Ongoing development of in-house data and technology talent is prioritized to support the development of new analytical tools and systems to further empower client engagement. As of December 2023, the bank had employed over 10,000 software engineers and data and analytics experts.

Navigating the risks of AI technologies

While Gen AI has tremendous potential to create value, DBS is cognizant of the need to manage both the ethical dimensions of data use and the risks associated with emergent technologies, particularly in areas such as data confidentiality, Gen AI hallucination²⁰, bias, toxicity, and cybersecurity. The existing AI and machine learning governance framework is being enhanced to mitigate these risks and DBS has established a PURE (Purposeful, Unsurprising, Respectful, Explainable) framework that provides guardrails for AI use cases. It has also established a responsible AI taskforce comprising senior leaders from multiple disciplines, to assess AI deployment and address relevant risks.

While embracing emerging technology, DBS will continue to rely on human oversight and decision making that encourages the transfer of

Al knowledge and skillsets across its workforce. Efforts include in-house training and workshops to deepen employee understanding of Gen Al and to develop skills that harness the power of Al-driven creativity and problem solving. DBS will continue to pilot, review, improve, and reiterate Al applications and explore utilizing it across other components of its transition plan to support netzero efforts.

DBS believes that Gen AI, and AI more broadly, will significantly reshape the future of work and has strong potential to support the bank in delivering on its net-zero commitments. DBS is also exploring newer Gen AI applications in a less-controlled environment, such as tracking of legitimate websites to better identify and summarize relevant ESG information as part of the ESG risk assessment process.

CLIMATE RISK MANAGEMENT SUPPORTS TRANSITION FINANCING OPPORTUNITIES





Implementation of DBS' net-zero transition plan encompasses core priorities for its lending and financing businesses, as well as its internal operations and processes. Strengthening risk management related to climate change provides the foundation for these priorities as it increasingly drives other traditional risk categories. The climate crisis continues to drive DBS' development of proprietary analytical tools and data sources to better assess, engage and support clients on their decarbonization journeys. Improved tools and data are further supported by a broad range of enabling activities, such as improving internal processes and upskilling its workforce to collectively steer the bank toward delivering on its net-zero ambitions.

DBS is maintaining strong growth momentum in its sustainable financing, where SGD 70 billion in loans and trade financing (net of repayments), had been recorded as at the end of December 2023. This represents a year-on-year growth of 37%.

DBS is also actively pursuing new transition financing opportunities, such as early retirement and managed phaseout of coal-fired power plants in Asia. It acted as the financial advisor to the Indonesian Investment Authority (INA), which is exploring such transactions and has signed a framework agreement (alongside various partners) to conditionally shorten by seven years the operating life of Cirebon-1, a 660 MW coal-fired power plant located on Java.²¹ DBS recently amended its thermal coal policy to enable its involvement in early and managed coal phase-out opportunities.²²

Disclaimer: This case study was written with the assistance of the Beta version of "DBS-GPT", DBS' employee-facing version of ChatGPT.

²⁰ Refers to incorrect or misleading results that AI models generate, caused by a variety of factors including insufficient training data or biases in the data used to train the model.

²¹ Refer to DBS' Sustainability Report 2023 p.19 for further details.

²² DBS Coal Policy, updated in March 2024.

THEME



Implementation Strategy

Component: Policies and Conditions — MUFG

Example 3: MUFG - Whitepapers and sectoral policies underpin transition financing and implementation efforts

Sub-sector: Banking

Policies and conditions

Recommendation: Establish and apply policies and conditions on priority sectors and activities, such as thermal coal, oil and gas, and deforestation. Include other sectors and activities that are high-emitting, or otherwise harmful to the climate, to define business boundaries in line with the institution's net-zero objectives and priorities.

Mitsubishi UFJ Financial Group (MUFG) is Japan's largest financial institution with a USD 3 trillion balance sheet and an extensive global footprint, which includes exposure to carbon-intensive sectors. It is focused on developing relevant internal policies and frameworks and actively engaging external stakeholders to realize a global net-zero transition.

Through client engagement, MUFG has become certain that although banks alone are unable to drive transition, they can play a strong supporting role by working with clients and financing their transition strategies (provided that the transition strategies are credible), in turn, collaboratively managing and mitigating transition risks. MUFG supports a whole-of-economy transition that

does not attempt to pick winners or leave behind certain regions or sectors. As divestment does not create an effective transition solution for the real economy, MUFG prioritizes active engagement to support clients in decarbonizing, which in turn advances its own net-zero ambitions.

MUFG joined the Net Zero Banking Alliance (NZBA) in June 2021, one month after becoming one of the first Japanese banks to make a net-zero commitment. It is active in chairing discussions in NZBA's Transition Finance Working Group while also actively participating in all GFANZ workstreams, including the 2024 Transition Finance and Real Economy Decarbonization Workstream and co-chairing the Public Policy Workstream.

MUFG published its inaugural <u>Climate Report</u> in April 2024. The report includes its transition plan and strategies, along with updates previously shared in its Progress Report 2023. Key pillars of the Climate Report include: 1) reducing emissions from own operations; 2) engagement and supporting the transition; 3) reducing emissions from its financing portfolio; and, 4) risk management and governance. Its transition strategy and actions are in line with GFANZ's FI NZTP voluntary Framework (Figure 10).

GFANZ guidance framework themes and recommended components¹¹ MUFG's response Definition of targets and timeline to achieve net zero emissions by 2050 (or earlier) to achieve a 1.5°C pathway New MTBP | p.9 CN declaration | p.10 3 commitments | p.11 Founda tions Objectives and priorities Financing strategies (including priorities) for measurable medium- and long-term goals and achieving net-zero emissions New MTBP GX | p.26 | Sustainable finance target | p.27 | Interim target | p.46 Engagement approach | p.24 | Engagement structure | p.25 | New MTBP GX | p.26 Products and Existing and new products and services to support client transitions to achieve 1.5°C strategy · Support for net-zero transition of the real econo my and advice on portfolio decarbonization Sustainable finance target | p.27, 93 | Investment & innovation | p.28 Effective management framework | p.52 Transition assessment | p.53 Activities and decision-making Project review process | p.55-56 | Sector-specific risk analysis | p.77 Implem Establish and apply policies and conditions on priority sectors and activities such as thermal coal, oil and gas, and deforestation Policies and Include other high-emitting sectors to define business boundaries in line with net-zero objectives. Approach to achieving targets | p.58-72 Proactively and constructively provide feedback and support to clients to encourage net zero-aligned transition strategies, plans, and processes Engagement approach | p.24 Transition support | p.30 Clients and strategy portfolio compar · Escalation process when engagement is ineffective Escalation process | p.52 Transition assessment | p.53 As appropriate, exchange transition expertise and collectively work on common challenges Engagement approach | p.24 · Represent the financial sector's views cohesively to external stakeholders, such as clients Transition support | p.30 Transition whitepaper | p.32-37 Engager • Direct and indirect lobbying and partner with governments/public sector toward net-zero Engagement approach | p.24 Government and public sector Ensure alignment between client/portfolio companies' lobbying and initiatives for net zero Transition support | p.30 Policy engagement | p.38 Operational emissions | p.17 | Sustainable finance target | p.27 Aetrics and argets Metrics and Establish appropriate metrics to drive execution of the net-zero transition plan and monitor the progress Interim target | p.46 | Approach to achieving targets | p.58-72 Define roles for the Board of Directors or management/organizations responsible for Roles, Governance structure | p.78 | Meeting structure | p.79 responsibilities. Review remuneration systems and transition plans regularly Skill set | p.80 Compensation system | p.81 and remuneration Training and development support to provide skills and knowledge (including the Board of Directors and management) Capability building | p.82 Gov Skills and culture

Figure 10: MUFG's transition plan is in line with GFANZ's voluntary framework

Source: MUFG Climate Report 2024

BUILDING MARKET-SPECIFIC KNOWLEDGE AND SECTOR GUARDRAILS TO STEER TRANSITION IMPLEMENTATION

 Programs and communications to embed the net-zero transition plan into the organization's culture and practices

In supporting real economy decarbonization, MUFG recognizes the need for a deep understanding of specific industry nuances and the challenges of pathways to net zero in Japan and other key markets. In 2022, MUFG engaged with policymakers in Europe and the US to discuss transition strategies for Japan and Asia. The meetings resulted in consensus around the importance of understanding each country's pathway toward net zero and recognizing key levers that consider the full supply chain, including linkages and dependencies across industries.

MUFG published transition whitepapers in 2022 and 2023 as part of its efforts to build internal transition expertise. Beyond that, these were also used to educate various stakeholders. The 2022 report provides the bank's perspective on how

Japanese companies are moving toward net zero and identifies new technologies in the electricity, heat and basic-material industries (together accounting for 70% of national CO2 emissions) as key levers for achieving net zero. The 2023 report examines the current state and direction of energy transition in Japan, focusing on net zero in electricity and heat in light of the government's Green Transformation (GX) Policy²³, while also reviewing the role and feasibility of various technologies.

The whitepapers enhanced MUFG's understanding of the complexities surrounding sector-specific energy and resource interdependencies to achieve a whole-of-economy just transition. The reports have been shared with policymakers in Japan and abroad, and also support client engagement.

Beyond Japan, MUFG is adopting a similar approach of building deep market understanding, confirming facts and calibrating across the ecosystem. This approach allows MUFG to create tailored solutions for its clients, and is particularly helpful in Asian markets where detailed government plans and credible transition pathways are still in development.

In addition to building market-specific expertise, MUFG has published an Environmental Policy

Statement and an Environmental and Social Policy Framework (E&S Framework) that guide the bank's transactions (Figure 11). The E&S Framework provides guidelines to identify, assess and manage ESG risks, with certain transactions being prohibited. It also details policies and guidelines for emission-intensive or high-risk sectors (such as coal-fired power generation, mining, oil and gas, large hydropower generation, biomass power generation, forestry, and palm oil).

Figure 11: MUFG's Environmental and Social Policy Framework includes sector-specific guidelines

Environmental and Social Policy Framework Prohibited transactions Policy for fossil fuel-related sectors Illegal transactions and transactions for illegal purposes Transactions which violate public order and good morals Coal-fired power generation • Transactions that negatively impact wetlands designated under the Ramsar Convention MUFG does not provide financing to new coal-fired power generation projects or expansion of existing facilities. However, coal-fired power generation equ · Transactions that negatively impact UNESCO designated World Heritage Sites CCUS, mixed combustion, and other technologies necessary to achieve the Paris · Transactions violating the Washington Convention Agreement target may be considered on an individual basis · Transactions involving the use of child labor, forced labor, or human trafficking · Cluster munitions and inhumane weapons manufacturing We do not provide any financing for new thermal coal mining projects for power Transactions of High Caution generation since we recognize that the development of new coal mines to supply thermal coal for power generation projects could result in an increase in GHG emissions in the future. Transactions that negatively impact indigenous communities Land expropriation leading to involuntary resettlement Cross-sector Oil & gas Transactions that negatively impact high conservation value areas auidelines Oil & gas are essential to our society and daily lives as energy sources, but we must be Transactions that cause or contribute to, or directly link with, violation of human rights in conflict areas aware of their effect on climate change through GHG emissions. We assess clients for development related to oil sands, the Arctic, shale oil & gas, and oil & ga pipelines to check whether development is conducted in an enviro Coal-fired power generation · Large hydropower generation socially responsible manner. Mining · Biomass power generation Sector-specific Oil & gas (oil sand, development · Forestry quidelines tic, shale oil & gas, oil & gas pipelines) For "Transactions of High Caution", if a client's environmental and social Screening is conducted by several expert departments for transactions that management approach is not considered sufficient relative to the level require deeply scrutinized transition assessments. of the potential risks or impacts, financing will not be provided.

Source: MUFG Climate Report 2024

For example, enhanced due diligence of oil and gas clients must be conducted for projects that involve the development of oil sands, shale oil and gas, extraction activities in the Arctic, and oil and gas pipeline construction and operation. These projects and activities are categorized as "transactions of high caution" in the E&S Framework. For other conventional oil and gas transactions, MUFG ensures that it follows the Equator Principles, paying due consideration to transition risk and GHG disclosure. MUFG conducts a separate assessment of climate change risk for upstream oil and gas development and pipelines that includes specific checkpoints

and criteria, including: alignment with regional and national transition strategies; transition and sustainability strategies of sponsors; and, environmental impact arising from technologies used.

Its policy statement, E&S Framework and whitepapers collectively provide clear boundaries and direction for MUFG's financing consistent with its net-zero ambitions. They also articulate a transition strategy and priorities that reflect national policy and global developments, thereby enhancing corporate transparency and credibility with key stakeholders.

²⁴ An industry benchmark for determining, assessing and managing environmental and social risk in projects. Available here.



Policies support transition assessments and client engagement

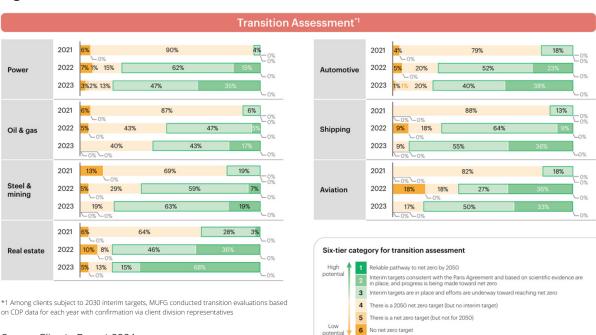
MUFG prioritizes supporting real economy decarbonization over "greening" its balance sheet (i.e. "paper decarbonization"). It has developed a transition assessment framework and a transaction screening process to evaluate clients in sectors covered by its 2030 targets²⁵ and to provide the necessary transition solutions. Based on publicly available information and past engagements, the process evaluates clients on three key assessment categories: 1) targets (including availability and credibility of net-zero and interim targets, alignment with a science-based 1.5-degree pathway, transition plan); 2) governance (whether

there are adequate climate governance and risk management processes in place); and 3) GHG reduction and progress.

For the power and upstream oil and gas sectors where transition risks are higher and ambitious transition is required, an enhanced review is conducted on clients' decarbonization plans, including key technologies selected. Analysis from the whitepapers also provides market- and sector-specific views to support transition assessments.

Based on the results of the evaluation process, each client is categorized according to MUFG's six tiers of client transition. Tier 1 indicates that the client has high potential and a reliable pathway to net zero by 2050, while Tier 6 indicates that the client has low potential due to absence of a netzero target. (Figure 12).

Figure 12: Sector-based results from MUFG's 2023 transition assessments



Source: Climate Report 2024

The whitepapers are also used constructively as a tool for engagement, particularly related to technological development and the selection of future technologies for decarbonization. Engaging on specific topics is a leveling exercise that

integrates MUFG's macro view with its clients' unique circumstances, enhancing understanding of where their plans sit in the context of Japan and Asia's transition, and identifying the specific transition issues that require further work. The

²⁵ Power, Oil and Gas, Commercial Real Estate, Residential Real Estate, Steel, Shipping, Automotive, Aviation, Coal.

whitepapers also support dialogue with hardto-abate sector clients who do not yet have a transition plan, through demonstrating the importance of having a transition strategy while evaluating the need to provide transition support.

Having a clear internal stance and sector-specific positions detailed in policy documents provides clarity for internal decision-making and external engagements, irrespective of developments in technological innovation, or policy and regulation. Client responses from engagements will also

inform MUFG's future strategies and transition documents. This dynamic and collaborative process is particularly helpful in the fast-shifting global environment where timely insights are needed to make decisions.

Taking a collaborative approach with clients and stakeholders has also extended to MUFG working with industry and the Japanese government to identify new solutions that are economically and commercially viable.

INTERNAL EXPERTISE SUPPORTS CLIENTS AND ADVANCES AMBITIONS





MUFG's transition-focused reports and tools collectively support its net-zero ambitions and financing activities. Development of the documents included significant input from MUFG's management and advanced their understanding of Japan's energy transition landscape and pathways to net zero - including technological developments and commercial challenges faced by clients in pursuing a just transition. Management has also participated in key discussions with regulators and strengthened internal governance mechanisms to support the bank's net-zero efforts. For example, 11 out of 16 appointed board members possess sustainabilityrelated knowledge, expertise or experience.²⁶ Sustainability-linked indicators, including ESG ratings and the bank's ESG efforts and sustainability initiatives are also used to determine executive compensation.

Growing transition expertise is also influencing the products and services available to clients. Since creating its transition-focused frameworks, MUFG has assisted its clients in developing ambitious and science-based emission reductions targets and arranged financing support, such as transition-linked loans.

Supporting a Japanese power generation client via transition-linked loans

- Through ongoing engagement and discussion with senior management as well as site visit to power plant facilities, MUFG enhanced its understanding of the client's strategy to decarbonize through developing renewable energy and pivoting to hydrogen power generation.
- Leveraging knowledge gained through its whitepapers, MUFG originated transitionlinked loans with relevant sustainability performance targets, such as emission reduction from power generation.

MUFG has a sustainable finance target of JPY 100 trillion by 2030 (including JPY 50 trillion earmarked for environmental finance), with JPY 27.7 trillion achieved as of October 2023 (cumulative from FY2019). It is committed to contributing to global climate action by building momentum for new capital flows toward net-zero solutions in Japan, Asia, and the rest of the world; through guiding / supporting clients to transition and contributing to the creation of new markets for innovative technologies that unlock real economy decarbonization.

THEME



Engagement Strategy

Component: Clients and Portfolio Companies — HSBC

Example 4: HSBC: Advancing net zero through assessing and engaging customers on their transitions **Sub-sector: Banking**

Engagement with clients and portfolio companies

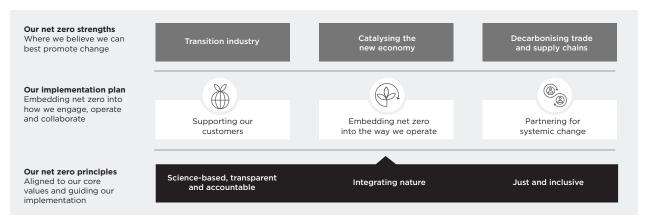
Recommendation: Proactively and constructively provide feedback and support to clients and portfolio companies to encourage net zero-aligned transition strategies, plans, and progress with an escalation framework with consequences when engagement is ineffective.

HSBC²⁷ is one of the world's largest banking and financing services organizations, serving around 42 million customers across 62 countries and territories. Its customers range from individual savers and investors to some of the world's biggest companies, organizations, and governments.

Along with announcing its ambition to become a net-zero bank by 2050, HSBC recognizes the critical role of banks in engaging customers on their transitions. As a member of the Net Zero Banking Alliance (NZBA), HSBC has set 2030 onbalance sheet financed emissions targets across a broad range of high-emitting sectors.²⁸

In its inaugural Net Zero Transition Plan published in January 2024, HSBC provides an overview of its approach to net zero (Figure 13) and the actions it is taking to embed its net-zero ambition. The transition plan is organized into three sections: vision and strategic approach; sector transitions; and implementation plan. In preparing the transition plan, HSBC took into consideration available guidance including the recommendations in the GFANZ FI NZTP voluntary Framework.²⁹

Figure 13: Overview of HSBC's approach to net zero



Source: HSBC's Net Zero Transition Plan (2024)

- 27 Unless the context requires otherwise, 'HSBC' refers to HSBC Holdings plc together with its subsidiaries.
- 28 To date, combined on-balance sheet financed and facilitated emissions targets have been set for the oil and gas and power and utilities sectors, and on-balance sheet financed emissions targets for cement, iron, steel and aluminum, aviation, automotive, and thermal coal mining
- 29 GFANZ. Recommendations and Guidance on Financial Institution Net-zero Transition Plans, 2022.

ASSESSING CORPORATE CUSTOMERS' TRANSITIONS FOR TAILORED ENGAGEMENT AND SUPPORT

Transition-focused engagement enables HSBC to guide corporate customers while also advancing its own net-zero ambition. To be effective, engagement needs to fully recognize that the pathway to net zero differs for each sector and that customers within a sector may be at different stages of their transition.

To steer corporate customer engagement, HSBC has designed and implemented a differentiated approach to the assessment of transition plans.

The type of assessment undertaken (deep dive or high level) depends on how material the customers are to HSBC's portfolios and financed emissions targets (Figure 14). This allows the bank to identify opportunities to support customers on their transitions and define areas for strategic engagement. Completed assessments can also be used to support business decisions in relation to financed emissions portfolio management and alignment, and climate risk-management efforts.

Deep-dive transition plan assessment conducted for customers that are the most material to our portfolio and financed emissions targets (2) (2) 8 8 8 2 ◬ Sustainability Centre of Strategic actions agreed If required, escalation to Excellence conducts deep with relationship manager governance forums for dive assessment to inform decision-making transaction and/or relationship approval and customer engagement High-level transition assessment calculated for other relevant corporate customers Transition plan information collected alongside wider ESG performance data by relationship managers based on public documents and customer engagement High-level assessment of Outcome shared with relationship

net zero and sustainability

performance

Figure 14: HSBC's differentiated approach to assessing corporate customers' transitions

Source: HSBC's Net Zero Transition Plan (2024)

To assess corporate customers' transition risks and plans, HSBC has defined criteria across five categories:

- Emissions trend: Requests the customer's current and historic Scope 1, 2, and 3 GHG emissions, including the completeness of the company's emissions reporting and whether it has been validated by a third party.
- Ambition of plan: Indicates whether the customer has announced a commitment to net zero and set interim targets to reduce emissions over the short, medium, or long term and across relevant emission scopes.
- Credibility of plan: Identifies details of the customer's plans to achieve its ambition, including the specificity of these plans (e.g. the investment required) in the context of its

- business activities, current source of emissions, and operating context.
- Credibility of action: Requests evidence of actions that the customer has taken to implement its plan and reduce emissions.

managers to inform deision-

making and customer engagement

• **Climate risk:** Considers physical and transition risks to which the customer may be exposed.

The collection of information for the five assessment categories is led by relationship managers who review customers' sustainability reports and climate disclosures. This is supplemented by discussions with the customers. The detail of collected information varies based on factors such as the size and materiality of customers.

Deep-dive and high-level transition plan assessments

For customers that are the most material to HSBC's portfolios and financed emissions targets, a deep-dive transition plan assessment is conducted. These assessments are performed by specialists from HSBC's Sustainability Centre of Excellence that have deep expertise in sector transitions and emerging technologies, with input from relationship managers.

This process is designed to provide insights specific to each customer and their circumstances. The assessment process creates a rating for each of the categories described above and provides a composite rating to indicate overall confidence in the customer's plan. Through this process, HSBC is able to pursue specific opportunities to support its customers as well as identify areas where further development of their transition plans may be needed. Assessment findings are then built into ongoing customer engagement.

With many corporate customers yet to have comprehensive transition plans in place or plans consistent with HSBC's targets and ambitions, customer engagement and support will be required over time. For other relevant corporate customers outside of the boundaries of the

deep-dive transition plan assessment, a high-level transition plan assessment is conducted. These reviews draw on publicly available information, supplemented with information collected directly from customers.

The assessments that have been completed so far show large variations amongst corporate customers in terms of maturity of their plans and alignment with a net-zero transition. HSBC aims to take these factors into account in how it continues to engage its customers in their transition.

To date, HSBC has completed most assessments for customers in scope of its thermal coal phase-out policy, major oil and gas and power and utilities customers globally, as well as other customers in EU and OECD markets in scope of its energy policy. As part of its next steps for 2024 and beyond, HSBC will complete assessments for customers in scope of its energy policy and thermal coal phase-out policy across all markets and commence roll-out of assessments for its most material customers in other material sectors where it has set 2030 financed emissions targets. Where relevant, completed assessments will also be reviewed to ensure customer progress on their transitions is captured.

SUPPORTING THE MOBILIZATION OF CAPITAL AND STRONGER CUSTOMER ENGAGEMENT







These tags refer to the themes and components of the GFANZ FI NZTP voluntary Framework (Figure 1 on p.5) and indicate the interlinkages and interplay between different parts of the financial institution's net zero transition plan.

Recognizing the central role that banks have in mobilizing finance to support the transition, HSBC has set an ambition to provide and facilitate US\$750 billion to US\$1 trillion of sustainable finance and investment by 2030 — \$294.4 billion of this ambition has been achieved as of end 2023. Its business lines are assisted by HSBC's Sustainability Centre of Excellence for the activation of commercial opportunities and the development of financing solutions that support customers' transitions.

HSBC is also contributing to the global dialogue and creation of impactful transition finance solutions, in collaboration with the public sector, industry, civil society and its peers. It has, for instance, been actively exploring how financial solutions can credibly support coal phaseout in Asia, in line with the goals of the Paris Agreement. This includes co-leading a workstream of the GFANZ APAC Network to develop voluntary guidance for financial institutions on financing the

managed phaseout of coal-fired power plants in Asia-Pacific. The <u>report</u> was launched by GFANZ at COP 28 in December 2023.

In addition, HSBC has been building its sustainability capabilities to strengthen customer support and engagement, and a range of upskilling initiatives that include online training, practical workshops, leadership development and sharing on-the-ground experiences from deals have been implemented. An online learning platform - the HSBC Sustainability Academy - was launched in 2022 to provide a central point for employees to access learning plans and resources. With more than 200 comprehensive modules on topics such as net-zero policies, nature restoration and preservation, climate science, new technologies and sustainable finance, the Sustainability Academy provides a range of resources for employees who are supporting customers through their net-zero transitions.

THEME



Engagement Strategy

Component: Clients and Portfolio Companies — SMTAM

Example 5: Sumitomo Mitsui Trust Asset Management - Exercise of shareholder rights via corporate engagement and escalation

Sub-sector: Asset Management

Engagement with clients and portfolio companies

Recommendation: Proactively and constructively provide feedback and support to clients and portfolio companies to encourage net zero-aligned transition strategies, plans, and progress with an escalation framework with consequences when engagement is ineffective.

Headquartered in Tokyo with subsidiaries in the US and UK, Sumitomo Mitsui Trust Asset Management (SMTAM) is one of Asia's largest asset managers, with US\$617 billion of assets under management as at end December 2023. Its portfolio is invested 60% in Japan and 40% globally.

SMTAM joined the Net Zero Asset Managers (NZAM) initiative in July 2021 and is an active participant in GFANZ Japan Chapter's Core

Working Group. Its net-zero transition plan is broadly captured in its <u>Investor Climate Action Plan (ICAP) Case Study, Carbon Neutrality Progress Report³⁰, TCFD Report, Stewardship Report and <u>Voting Rights Policy</u>.</u>

SMTAM pursues three key pillars of stewardship in line with its responsible investment approach: corporate engagement, exercising voting rights, and incorporating ESG factors into investment decision-making processes. As part of efforts to reduce financed emissions by 46% in alignment with the Paris Aligned Investment Initiative (PAII) Net Zero Investment Framework, SMTAM is strengthening its voting policy on climate change, engaging with investee companies on setting firm GHG reduction plans, and contributing to research on relevant technologies required to achieve netzero emissions by 2050.

UTILIZING SHAREHOLDER INFLUENCE WITH CLARITY AND PURPOSE

Thematic-focused corporate engagement

SMTAM has long identified climate change as a material ESG issue with tangible impacts on the corporate value of investees. Corporate engagement is done with the objective of encouraging performance improvement and growing investee value, while contributing to the broader outcomes of sustainable growth and global decarbonization. Key topics of engagement

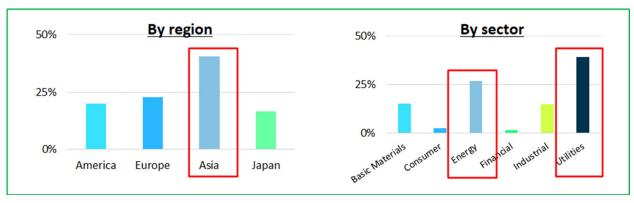
for SMTAM include GHG emission reduction and portfolio alignment with the Paris Agreement, as well as setting interim (2030) targets and having a detailed transition plan in place. Noting the impacts of nature loss on climate change, SMTAM is also accelerating efforts on natural capital and biodiversity, as well as sustainable supply chains, and engaging on the issue of deforestation in commodity supply chains.

^{30 &}quot;Carbon Neutrality" is used interchangeably with "Net Zero" in Japan. Japan's Ministry of Economy, Trade and Industry (METI) has publicly confirmed this.

Done globally from SMTAM's three main bases — Japan, London and New York — the engagement process includes the review and validation of investee company GHG reduction plans to prepare an opinion, direct meetings and dialogue to encourage performance improvement followed by the ongoing monitoring of company performance. Further engagement and escalation are done as required.

Although engagement is done with a broad range of portfolio companies — including those in high-emitting sectors such as utilities, oil and gas, steel, cement and financial services — SMTAM has prioritized engagement with the 100 investee companies (40 Japanese and 60 foreign) that cumulatively account for an estimated 40% of its total portfolio GHG emissions (Figure 16). Asian companies (outside Japan) account for the largest share of emissions from the 100 companies.

Figure 16: Estimated GHG emissions from SMTAM's priority 100 companies by region and sector (representing 40% of total portfolio emissions)



Source: SMTAM

Complementing its direct engagement, SMTAM is also active in investor collaborative engagement programs and working groups that engage and advocate for corporate climate action. It is one of the lead investors in Climate Action 100+ (an investor-led global initiative to advocate for climate action from the world's largest corporate emitters), and a member of the Asia Investor Group on Climate Change's (AIGCC) Asian Utilities Engagement Program that focuses on large Asian utilities, particularly those with a significant coal-fired power capacity. SMTAM also co-chairs AIGCC's Forest and Land Use Working Group that aims to support investors in developing risk

management processes, investment policies, and engagement programs that will contribute to ending deforestation, amongst other initiatives.

With the collective investor voice often stronger than an individual's, collaborative engagements are used as a functional and efficient method of engaging a broader range of companies. Industry engagement with key stakeholders including policymakers, voting advisory companies and data service providers also enables a broader understanding of relevant issues, while supporting the advancement of enabling public policy and data infrastructure.

Corporate Engagement example via Climate Action 100+ with local asset managers: UltraTech Cement (cement manufacturer headquartered in India)

- SMTAM's prepared opinion (pre-engagement): Cement production in a business-as-usual scenario is emission intensive, particularly at the manufacturing stage. Ultratech needs to reduce its emissions via a realistic transition plan and work on: (1) implementing measures for low-carbonization during production, (2) stimulating demand for low-carbon cement, and (3) disclosing specific measures to confirm the effectiveness of capital policy support.
- Company's response and actions: Accepting the urgent need to reduce emissions following
 three years of ongoing engagement, UltraTech produced a clear roadmap for decarbonisation
 measures that included plans to be Science Based Target Initiative (SBTi) certified and to
 enhance disclosure to align with the TCFD framework (both measures were subsequently included
 in the company's June 2023 Sustainability Report). UltraTech has also announced specific
 measures for adopting 100% renewable energy across its portfolio.

Escalation via proxy voting and climate resolution support

As a responsible institutional investor, SMTAM also deploys escalation techniques such as proxy voting and supporting shareholder resolutions when investee companies are not demonstrating adequate progress on climate change issues.

The exercise of voting rights is considered as a governance-related engagement and an opportunity to call for a minimum standard of corporate governance with portfolio companies. SMTAM prioritizes three key objectives in exercising its voting rights: (1) high-quality governance that respects shareholders' equity; (2) efficient utilization of shareholders' capital for sustainable growth; and, (3) appropriate action in the event an incident occurs that damages corporate value.³¹ Engagement with companies prior to voting helps ensure SMTAM's standards are communicated and understood.

SMTAM has a policy of opposing proposals for the election of directors when an investee company makes insufficient efforts to disclose information or set targets, with no reasonable explanations provided. This includes insufficient disclosure in line with TCFD voluntary recommendations (or an equivalent global framework), failure to set medium- and long-term targets in line with the Paris Agreement and disclosure of specific measures and actions to achieve them, as well as a lack of progress in GHG emission reduction.

SMTAM's structure for the exercise of voting rights is detailed in the diagram below (Figure 17). The Executive Officer in charge of the Stewardship Development Department has authority in exercising voting rights, supported by the Sustainability Committee (that spearheads engagements and ESG-related activities) and the Advisory Committee providing feedback and oversight.

Sustainability Committee (Former" Stewardship Meeting) Consultation Chairperson: Stewardship Activity Executive officer in charge of Stewardship **Advisory Committee #2** Developement Department (Approval #1) Recommendation Deliberation Report Proposal for individual exercise of voting rights (1) (3)(4)Draft of guideline Exercise voting for case not stipulated guideline Establishment or revision of guideline Results of exercise of voting rights #1 Making decision based on recommendation from Stewardship Activity Advisory Committee #2 Committee members • External experts (the majority of members) • Officer appointed by the board of directors #3 Making a proposal for individual exercise of voting rights with reference to research, analysis or advice from a proxy advisory firm (2) Exercise of voting rights based on guideline **General Manager of Proposal for** Stewardship individual exercise Stewardship Development **Developement Department** of voting rights #3 Department (Approval)

Figure 17: Structure for the exercise of SMTAM's voting rights

Source: SMTAM's Voting Rights Policy

In 2023, SMTAM exercised voting rights for about 2,500 Japanese companies and 2,700 foreign companies. It also supports climate-change resolutions that call on companies to address material and systemic risks and opportunities. For example, SMTAM voted 'For' in a shareholder proposal of a European energy company that asked the company to set its Scope 3 emission target in line with the Paris Agreement.

ADDRESSING ENGAGEMENT CHALLENGES AND CREATING SOLUTIONS





SMTAM believes that its corporate engagement and escalation methods are generally effective in encouraging investee companies to adopt best practices to address climate change. While seeking to contribute to the enhancement of long-term corporate value, SMTAM recognizes that engagement must be based on a comprehensive understanding of the company's state of management and business operations.

This understanding is firmly based on awareness of the specific challenges faced by both investors and portfolio companies in Asia. Challenges include the decoupling of continued growth and reduction of operational GHG emissions along with recognizing the number of active ESG-focused investors is significantly lower in Asia than in Europe (as evidenced by NZAM initiative membership).

SMTAM is thus active in helping to support the consideration and inclusion of Asian investors' voices and priorities in NZAM's overall strategy and workplan through its involvement in the NZAM initiative's Advisory Committee and activities

to increase Asian representation. For example, SMTAM President and CEO, Yoshio Hishida, has attended NZAM seminars and called on other asset managers to join the initiative. In May 2023, SMTAM also attended a meeting arranged by the NZAOA and NZAM in London to exchange region-specific views on corporate engagement and stewardship to tackle climate change.

Beyond actively engaging, in 2021, SMTAM launched the SMT ETF Carbon Efficient Index Japan Equity listed on the Tokyo Stock Exchange. The index comprises Tokyo Stock Price Index (TOPIX) constituents, with the weighting of each constituent based on the status of its environmental disclosure and the level of carbon efficiency (carbon emissions per net sales). By allocating a greater relative weight to companies with better environmental-related disclosure and higher carbon efficiency (lower carbon emissions per net sales), the index promotes improved disclosure and GHG reduction across the market, while achieving similar returns to TOPIX. Its relative carbon intensity was 28% lower than TSE TOPIX in Q3 2023.32 The index is also anticipated to be a useful tool in guiding the formation of new core Japanese equity portfolios that also address climate change risk, and as an extension or alternative to TOPIX-linked funds.

THEME



Engagement Strategy

Component: Policy Advocacy and Industry — BNPPAM

Example 6: BNP Paribas Asset Management - Collaboratively engaging policymakers to advocate for 2050-aligned climate policy

Sub-sector: Asset Management

Engagement with industry

Recommendation: Proactively engage with peers in the industry to 1) as appropriate, exchange transition expertise and collectively work on common challenges and 2) represent the financial sector's views cohesively to external stakeholders, such as clients and governments.

Engagement with government and public sector

Recommendation: Direct and indirect lobbying and public-sector engagement should, in a consistent manner, support an orderly transition to net zero, and as appropriate, encourage consistency of clients' and portfolio companies' lobbying and advocacy efforts with the institution's own net-zero objectives.

BNP Paribas Asset Management (BNPPAM) is a global manager of €501 billion of assets³³, serving institutional clients in 67 countries with a large commercial presence in Europe and Asia-Pacific (the region represents approximately 17% of total AUM). Considering the global shift toward a lower-carbon, environmentally responsible and more inclusive economy essential for planetary and financial-system sustainability, one of BNPPAM's key priorities is to deliver long-term sustainable returns to its clients while leveraging its emerging market presence to advance the energy transition in Asia.

Its 2015 commitment to achieving the Paris Agreement goals was strengthened in 2021 with its joining of the Net Zero Asset Managers (NZAM) initiative. In 2022, BNPPAM's Net Zero Roadmap formally introduced its climate commitments covering three key aspects of its business: Investments (portfolio alignment), Stewardship and Operations (Figure 18). The Roadmap will be instrumental in enabling a coherent and accountable organizational transition, while also strengthening external engagement with key stakeholders.

Figure 18: Net-zero commitments outline priorities across Investments, Stewardship and Operations

| | Net Zero Commitments |
|-------------|---|
| | 1. Reduce the carbon footprint of our in-scope corporate investments (Scopes 1 and 2) ¹ a) -30% by 2025 b) -50% by 2030 |
| | 2. Align with net zero a) 60% of in-scope investment to be Achieving, Aligned or Aligning with Net Zero (NZ-AAA) by 2030 b) 100% of in-scope investment to be NZ-AAA by 2040 |
| Investments | 3. Exit coal We will exclude mining companies that do not have a strategy to exit thermal coal activities, and power generators that still have coal capacity in their generation mix, in 2030 for European Union and OECD countries and in 2040 for the rest of the world. |
| | 4. Invest in climate solutions Substantially increase our climate and environmentally themed investments. |
| | 5. Engage with our clients Engage with our clients to transition towards net zero investing with us. |
| | 6. Vote for climate action a) Signal our expectation for companies to report on their carbon footprint, and for the world's largest greenhouse gas (GHG) emitters to set an ambition to achieve net zero by 2050 or sooner. b) Vote in favour of thoughtful shareholder proposals and submit proposals of our own to accelerate corporate action on climate change. |
| Stewardship | 7. Engage with companies on net zero Implement an engagement strategy that is consistent with our ambition for all assets under management to achieve net zero emissions by 2050 or sooner. |
| | 8. Advocate for NZ2050 aligned climate policy Play an active role in advocating for net zero aligned policy, and seek to ensure that any relevant direct and indirect policy advocacy that we undertake is supportive of achieving global net zero emissions by 2050 or sooner. |
| Operations | 9. Reduce our operational emissions footprint Continue to offset our operational emissions while we improve energy efficiency and use more green energy. |
| | 10. Report on progress Produce TCFD²-aligned reporting. |

Source: BNPPAM Net Zero Roadmap (2022)

Development of the Net Zero Roadmap was led by BNPPAM's Sustainability Centre (SC) which is responsible for implementing the firm's global sustainability strategy and related policies, with oversight from the board and executive teams. To ensure integration of specific considerations for Asia and emerging markets, the SC includes members strategically based in Singapore, Hong Kong, and Mainland China. It also works in collaboration with Asia-based colleagues and clients to develop regionally relevant ESG research and engage with local companies and regulators to advance their transitions.

PUBLIC POLICY ADVOCACY SUPPORTS AN ORDERLY TRANSITION

Recognizing climate change as a systemic risk that cannot be resolved by the private sector alone, BNPPAM believes public policy advocacy is consistent with its fiduciary duty and stewardship strategy, fitting alongside its proxy voting and corporate engagement efforts. Encouraging and supporting strong climate action from policymakers is a requirement for a just and orderly transition.

Guided by its Roadmap commitment and Stewardship Policy, BNPPAM is actively engaging public policymakers, including regulators and standard setters, to advocate for sustainable outcomes in market-shaping measures for investments and the rules that guide and govern company behavior. It is also involved in shaping the standards and guidance developed and overseen by professional bodies, such as accounting institutes.

BNPPAM's policy engagement focuses on critical topics such as corporate disclosure, climate regulation and corporate governance. Its longterm efforts include: public submissions to legislators, regulators, and multilateral institutions; responding to public consultations; meetings with policymakers; publication of white papers; and endorsement of public statements. Engagement examples include signing of the Global Investor Statement to Governments on the Climate Crisis in 2022 (calling for effective implementation of the Global Methane Pledge to reduce emissions by 2030 by at least 30% from 2020 levels)34, and participating in the investor call for the United Nations Food and Agriculture Organization (FAO) to develop a global roadmap to 2050 for the agriculture, food and land-use sectors.

Working together to achieve common aims

Industry collaboration is critical to achieving common aims and BNPPAM has a longstanding commitment to participating in investor networks and collaborative engagements to learn from peers and jointly raise standards. BNPPAM's priority thematic areas are energy transition, healthy ecosystems, and equality. BNPPAM is an active member of multiple formal and informal global groups and initiatives that seek to facilitate dialogue between investors and other stakeholders (Figure 19). For example, roundtables convened by the Asia Investor Group on Climate Change (AIGCC) often involve state-owned enterprises as well as government representatives and regulators, and its working groups (such as the Forest and Land Use Working Group which BNPPAM co-chairs) act as peer-to-peer forums for investors to strengthen their capabilities. BNPPAM also actively participates in the Investor Policy Dialogue on Deforestation (IPDD)'s workstreams for Brazil and Indonesia that seek to engage in collaborative dialogue with government authorities and other key stakeholders to preserve tropical forests and native vegetation.

Policy advocacy efforts have reaped results. As an advisory committee member of the Principles of Responsible Investment (PRI)'s collaborative sovereign engagement program on climate change, meetings with policymakers in Australia preceded the establishment of a National Net Zero Authority and plans to issue a green bond in 2024. BNPPAM's advocacy for increased transparency and exclusion of areas such as ammonia co-firing and gas plants for Japan's GX climate transition bonds through recent collaborative and bilateral engagement with relevant government ministries also resulted in these outcomes in the first tranche of the transition bonds.

Figure 19: Selected thematic-focused initiatives BNPPAM participates in

| Initiative / Organisation | Thematic Area | Supporter since | | |
|---|--|------------------------|--|--|
| Asia Investor Group on Climate Change (AIGCC) | Energy Transition, Healthy Ecosystems | 2018 | | |
| Bank Negara Malaysia Joint Committee on Climate Change (JC3) | Energy Transition | 2019 | | |
| Carbon Disclosure Project (CDP) | Energy Transition, Healthy Ecosystems | 2012 | | |
| Ceres | Energy Transition | 2019 | | |
| Climate Action 100+ | Energy Transition | 2017 | | |
| Farm Animal Investment Risk and Return (FAIRR) | Energy Transition, Healthy Ecosystems | 2021 | | |
| Institutional Investors Group on Climate Change (IIGCC), including Net Zero Engagement Initiative (2023) | Energy Transition | 10+ years | | |
| Investors' Policy Dialogue on Deforestation (IPDD) | Healthy Ecosystems | 2023 | | |
| Investor Agenda (AIGCC, CDP, Ceres, IICC, IIGCC, UNPRI, UNEP-FI) | Energy Transition | 2018 | | |
| Net Zero Asset Managers initiative | Energy Transition | 2021 | | |
| Principles for Responsible Investment (PRI) | Energy Transition, Healthy Ecosystems, Equality | 2006 (Founding member) | | |
| Singapore Sustainable Finance Association | Energy Transition, Healthy Ecosystems | 2023 | | |
| Transition Pathway Initiative | Energy Transition | 2018 | | |

Source: BNP Paribas Asset Management Global Sustainability Strategy 2023-2025 (Dec 2023)

BNPPAM's advocacy efforts acknowledge the constraints faced by policymakers, particularly in emerging markets where there can be significant differences in national timelines for net zero as well as the energy trilemma where accessibility, sustainability and affordability considerations need to be balanced. These situations are addressed through providing support while retaining high ambition; acknowledging progress while maintaining strong investor expectations in

line with 1.5 degree aligned scientific pathways; sharing resources and knowledge; and being prepared for long-term engagement. As an example of how Asia's unique circumstances are considered, BNPPAM's Coal Exit Policy (Figure 20) has differing coal phase-out timelines for developed and emerging markets to account for the differences in energy mix and economic development.

Figure 20: Coal Exit Policy considers regional circumstances



BNPP AM will exclude all power generators that:

 Still have coal capacity in their generation mix in 2030 in European Union and OECD countries, and by 2040 for the rest of the world.



BNPP AM will exclude all mining companies that:

 Do not have a strategy to exit from thermal coal activities by 2030 in European Union and OECD countries and by 2040 for the rest of the world.

Source: BNPPAM Net Zero Roadmap (2022)

CONSTRUCTIVE DIALOGUES AND COLLABORATIONS DRIVE ACTION



Industry and policy engagement is fully consistent with BNPPAM's Roadmap and its stewardship role, and is used as a critical tool to foster constructive dialogues and collaborations with clients, colleagues, companies, governments and civil society to collectively move toward a net-zero future. With the global economy not yet aligned to net zero, BNPPAM's investible universe stands to diminish over time if current and prospective investees are not advancing on their transitions.

BNPPAM believes ESG performance can be material to financial performance, and that voting and engagement can be key levers to reducing risk, unlocking value and encouraging improved corporate performance and transparency. Engagement is intended to drive change and support transition but, in cases in which it is ineffective, BNPPAM believes divestment can be a last resort. In line with its sector-specific policies, BNPPAM will also exclude companies, sectors or activities that violate international regulations, or cause unacceptable harm to society and/or the environment.

Beyond leveraging its influence through advocacy and engagement, BNPPAM's Roadmap includes commitments to invest in climate solutions and substantially increase climate and environmentally themed investments. These thematics enable access to specific sustainable transition themes by focusing investments on qualified and relevant companies or projects. In 2019, BNPPAM created a dedicated Environmental Strategies Group that launched its Energy Transition equity strategy followed by its Environmental Absolute Return Thematic (EARTH) and Emerging Climate Solutions equity strategies. Together, these strategies contribute to addressing the global financing gap for energy transition.

In responding to the urgent theme of improving the sustainability of Asian cities amidst continued growth, BNPPAM launched an investment strategy targeting activities that address the challenges posed by migration and climate change. The Sustainable Asian Cities fixed income strategy is designed to target opportunities in five critical areas:

- Enhancing urban mobility, incorporating lowcarbon elements where possible.
- Improving basic infrastructure to help cities operate and thrive, as well as improving their resilience to extreme weather events.
- Promoting integrated development to balance a mix of social, economic, and nature-based activities.
- Building health and education facilities to increase provision and improve access.
- Supporting innovative technological solutions for sustainable city development.

THEME

Metrics and Targets



Component: Metrics and Targets — Mizuho

Example 7: Mizuho - Beyond financed emissions measurement and disclosure, plan execution metrics and targets steer Mizuho toward its 2050 commitments

Sub-sector: Banking

Metrics and targets

Recommendation: Establish a suite of metrics and targets to drive execution of the net-zero transition plan and monitor progress of results in near, medium, and long term. Include metrics and targets focused on aligning financial activity in support of the real-economy net-zero transition, on executing the transition plan; and on measuring changes in client and portfolio GHG emission.

Mizuho Financial Group (Mizuho) based in Japan, is one of the world's largest financial institutions. It provides banking and trust services, securities, asset management, research and consulting, among other financial services. Mizuho joined the Net Zero Banking Alliance (NZBA) in October 2021 as part of its goal to attain net-zero GHG emissions by 2050, align its portfolios with the Paris Agreement goals, and positively contribute to the development of a climate-change resilient society.

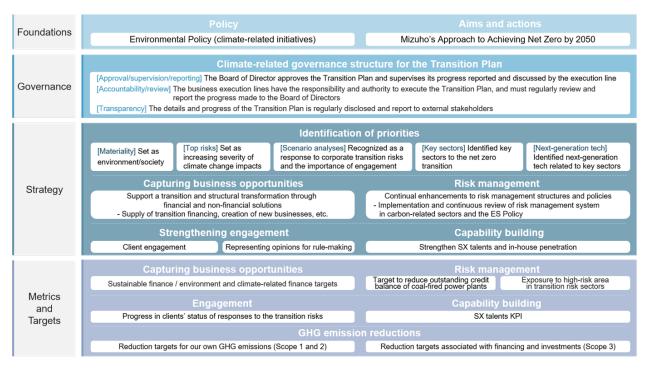
Mizuho's Approach to Achieving Net Zero Emissions by 2050 and its initial Net Zero Transition Plan (NZTP)³⁵ were developed in April 2022 to clarify medium-to long-term strategies and initiatives and to outline its intended actions to achieve a decarbonized society and limit global temperature increase to be within 1.5 degrees C.

A comprehensive revision of its NZTP in April 2023 (Figure 21)³⁶ streamlined its initiatives for addressing climate change. The updated plan prioritizes driving the transition of the real economy, identifying new business opportunities, and effective risk management. Developed in accordance with global frameworks and voluntary recommendations from TCFD and GFANZ, the NZTP is based on four pillars: Foundations, Governance, Strategy, and Metrics and Targets. It further aligns Strategy with Metrics and Targets to track progress and support tangible efforts that benefit its clients and society.

³⁵ Located in Mizuho's TCFD Report 2022, p.21 onwards.

³⁶ Located in Mizuho's Climate & Nature-related Report 2024, p.18 onwards.

Figure 21: Mizuho's Net Zero Transition Plan (2023)



Source: Mizuho Climate & Nature-related Report (2024)

HOLISTIC METRICS AND TARGETS SUPPORT TRANSITION STRATEGY

Metrics and Targets are an integral component of Mizuho's NZTP and have been designed to enable ongoing assessment against plan strategy. Although financed emissions is a key metric that offers valuable insights, it is not a panacea and has limitations in capturing the status and progression of Mizuho's NZTP. The bank has thus adopted a holistic approach that seeks to enable real economy transition through setting broad-ranging

metrics and targets such as "capturing business opportunities" and "risk management" that align with key strategic pillars. The approach effectively tracks progress on the implementation of strategy along with GHG emission reductions. Operational metrics and targets are used to drive transition plan execution and facilitate a PDCA (Plan-Do-Check-Action) cycle to monitor the execution and objectives of each strategic initiative.

Figure 22: Overview of Mizuho's metrics and targets

| Transition plan item | Monitored metrics | Targets | | | | | |
|----------------------------------|--|--|--|--|--|--|--|
| Net-zero GHG emissions | Scope 1 and 2 emissions Scope 1 and 2 energy consumption | Carbon neutral ³⁷ by FY2030 (Carbon neutrality to be maintained thereafter) | | | | | |
| | Scope 3 (financed emissions) | Net zero by FY2050 | | | | | |
| | - Electric power sector | FY2030: 138-232 kg CO ₂ e/MWh | | | | | |
| | - Oil and gas sector | FY2030: Scope 1 and 2: 4.2g CO2e/MJ Scope 3: 12%-29% reduction (Compared to FY2019) | | | | | |
| | - Coal mining (thermal coal) sector | Absolute emissions -OECD economies: Zero by FY2030 -Non-OECD economies: Zero by FY2040 | | | | | |
| | - Steel sector | FY2030: 17%-23% reduction (Compared to FY2021) | | | | | |
| | - Automotive sector | FY2030: Scope 1 and 2: 38% reduction (Compared to FY2021) Scope 3: 31%-43% reduction (Compared to FY2021) | | | | | |
| | - Maritime transport sector | FY2030: Portfolio climate alignment score 0% or less | | | | | |
| | - Real estate sector | FY2030: 33-42 kg CO ₂ e/m ² | | | | | |
| Capturing business opportunities | Sustainable finance | Total for FY2019 to FY2030: JPY 100 trillion (of which JPY 50 trillion is earmarked for environment and climate-related finance) | | | | | |
| Risk management | Outstanding credit balance of coal-fired power generation plants | Reduce the FY2019 amount by 50% by FY2030, and achieve an outstanding credit balance of zero by FY2040 | | | | | |
| | Exposure to high-risk areas in transition risk sectors | Reduce over the medium to long term | | | | | |
| Engagement | Status of clients' transition risk responses | - | | | | | |
| Capability building | Sustainability Transformation talent KPI -Sustainability management experts -Environment and energy sector consultants | FY2025: - 1,600 experts - 150 consultants | | | | | |

Source: Mizuho

^{37 &}quot;Carbon Neutrality" is used interchangeably with "Net Zero" in Japan. Japan's Ministry of Economy, Trade and Industry (METI) has <u>publicly confirmed this.</u>

GHG reduction metrics and targets drive portfolio alignment with net-zero goals

Key metrics selected in relation to GHG emissions are the reduction of Scope 1 and 2 emissions, as well as portfolio emissions arising from Mizuho's financing and investment activities (Partnership for Carbon Accounting Financials' Scope 3, Category 15).³⁸ Mizuho is committed to achieving net-zero in Scope 1 and 2 emissions by 2030 through year-on-year reductions and net zero in its Scope 3 emissions by 2050. Interim (2030) sectoral targets are in line with the NZBA voluntary Target Setting Guidance and have been set for electricity, oil and gas, coal mining (thermal coal), automotive, maritime transportation, steel, and commercial real estate.

Mizuho has taken a lead among Japanese banks in calculating and disclosing its exposure and financed emissions for 19 sectors based on TCFD voluntary recommendations and other global guidance (Figure 23). Mizuho uses the information to isolate significantly impacted sectors and strategically establish shorter- and mediumterm emission reduction targets, and adjusts its operations and plans accordingly. Credit exposure for high-risk sectors, including year-on-year change, is also measured and disclosed in the TCFD Report, providing internal insights on credit risk while offering increased accountability and transparency to enhance external stakeholder and investor confidence.

Figure 23: Measuring financed emissions across 19 sectors supports targeted action

| | [Loan] Financed Emissions | | | | | (Investment) Financed Emissions | | | Data Quality Score | | Number of | Measure- | | |
|---------------------------------|---------------------------------------|-------------------------------------|---------------------------------------|-------------------------------------|----------------------------|---------------------------------------|-------------------------------------|---------------------------------------|---------------------------------------|-------------------------------------|------------------|----------------|--|--------------------------------|
| | FY2 | 2020 | FY2 | 021 | FY2022 | | FY2022 | | | (FY2022) | | measured | ment | |
| | Scope 1,2 (MtCO ₂ e) | Scope 3 (MtCO ₂ e) | Scope 1,2 (MtCO ₂ e) | Scope 3 (MtCO ₂ e) | Loan balance (Bn \$) | Scope 1,2 (MtCO ₂ e) | Scope 3 (MtCO ₂ e) | Invest- ment balance (Bn \$) | Scope 1,2 (MtCO ₂ e) | Scope 3 (MtCO ₂ e) | Scop e 1,2 | Scop e 3 | companies/ proejcts ^{*1} (FY2022) | rate ^{*2} (FY2022) |
| Power Utilities*3 | 51.6 | 26.5 | 46.6 | 20.8 | 41.3 | 45.6 | 20.1 | 1.0 | 0.8 | 0.7 | 2.2 | 2.6 | 516 | 98% |
| Oil & gas ^{*3} | 44.1 | 76.6 | 13.9 | 76.4 | 23.2 | 13.0 | 56.6 | 0.3 | 0.2 | 0.8 | 2.9 | 3.1 | 253 | 82% |
| Steel ^{°3} | 23.4 | 13.9 | 21.1 | 13.9 | 11.3 | 15.3 | 8.5 | 0.8 | 1.0 | 0.5 | 2.3 | 2.5 | 225 | 100% |
| Capital goods | 2.4 | 60.9 | 2.4 | 102.8 | 37.0 | 1.7 | 96.1 | 4.8 | 0.2 | 5.6 | 2.3 | 2.8 | 2,365 | 98% |
| Chemicals | 8.6 | 32.0 | 8.0 | 20.8 | 27.0 | 8.0 | 23.5 | 1.7 | 0.5 | 1.8 | 2.2 | 2.8 | 995 | 97% |
| Automotive 3.4 | 1.9 | 61.7 | 2.1 | 37.0 | 36.6 | 2.2 | 78.0 | 1.8 | 0.3 | 3.1 | 2.1 | 2.6 | 1,218 | 98% |
| Coal ^{'3} | 1.1 | 1.3 | 0.2 | 1.4 | 0.2 | 0.2 | 0.6 | 0.0 | 0.0 | 0.0 | 3.3 | 3.3 | 8 | 100% |
| Metals and mining | 2.1 | 12.1 | 2.1 | 12.4 | 9.2 | 1.5 | 10.2 | 0.4 | 0.0 | 0.2 | 2.5 | 2.9 | 726 | 97% |
| Maritime transport ³ | 5.7 | 4.1 | 1.8 | 9.4 | 5.6 | 3.7 | 3.7 | 0.4 | 0.3 | 0.2 | 3.5 | 3.6 | 187 | 74% |
| Packaged food and meats | 3.8 | 6.4 | 2.3 | 4.0 | 10.2 | 3.2 | 9.3 | 1.5 | 0.2 | 2.1 | 3.0 | 3.3 | 789 | 98% |
| Cement | 3.3 | 2.2 | 3.0 | 0.4 | 1.4 | 3.0 | 0.7 | 0.1 | 0.2 | 0.0 | 2.2 | 2.7 | 73 | 82% |
| Paper and forest products | 2.2 | 2.2 | 2.2 | 2.6 | 4.1 | 2.2 | 2.2 | 0.2 | 0.1 | 0.1 | 2.5 | 3.2 | 246 | 100% |
| Construction materials | 2.0 | 1.7 | 1.2 | 1.3 | 2.1 | 1.4 | 1.2 | 0.1 | 0.1 | 0.1 | 2.2 | 2.8 | 103 | 96% |
| Aviatioin | 1.2 | 1.3 | 1.2 | 0.8 | 2.7 | 1.1 | 0.4 | 0.0 | 0.0 | 0.0 | 1.7 | 2.2 | 29 | 88% |
| Real estate ^{*3} | 0.2 | 0.9 | 0.4 | 2.4 | 69.9 | 0.4 | 2.8 | 2.7 | 0.0 | 0.1 | 2.9 | 3.1 | 3,183 | 92% |
| Rail transportation | 0.4 | 0.5 | 0.4 | 1.2 | 9.2 | 0.4 | 0.5 | 2.3 | 0.1 | 0.1 | 2.5 | 3.2 | 89 | 99% |
| Agriculture | 0.4 | 1.7 | 0.3 | 0.5 | 0.8 | 0.5 | 0.8 | 0.1 | 0.0 | 0.0 | 2.8 | 4.0 | 15 | 100% |
| Beverages | 0.2 | 0.6 | 0.2 | 0.5 | 2.5 | 0.2 | 0.6 | 0.2 | 0.0 | 0.1 | 2.6 | 3.1 | 97 | 98% |
| Insurance | 0.1 | 0.2 | 0.0 | 0.0 | 3.8 | 0.0 | 0.1 | 0.6 | 0.0 | 0.0 | 2.0 | 2.5 | 34 | 94% |
| 19 sectors total | 154.9 | 306.7 | 109.5 | 308.6 | 298.1 | 103.6 | 315.9 | 19.0 | 3.9 | 15.5 | 2.5 | 2.9 | 11,151 | 94% |
| Others ^{*5} | - | - | 7.0 | 47.1 | 160.8 | 6.9 | 66.2 | 26.2 | 0.4 | 2.5 | 2.7 | 3.1 | 10,314 | 79% |
| Total | - | - | 116.5 | 355.8 | 458.9 | 110.4 | 382.0 | 45.2 | 4.3 | 18.0 | 2.6 | 2.9 | 21,465 | 88% |
| Residential mortgages | ew _ | - | - | - | 46.8 | 0.4 | - | - | - | - | 4.0 | - | 319,641 | 82% |

³⁸ PCAF Global GHG Standard.

- *1. Companies / projects: Excludes clients and projects without a loan balance as of the base date and clients without measured financed emissions.
- *2. Measurement coverage percentage: The percentage of financed emissions that we were able to measure from the targeted loan amounts in each sector.
- *3. Regarding sectors for which Mizuho has set Scope 3 medium-term targets, the measured financed emissions above cover entire value chains, whereas the medium-term targets cover only part of value chains. (Examples: The medium-term target for oil and gas covers upstream production businesses (including integrated oil and gas businesses); the medium-term target for coal covers thermal coal mining)
- *4. Scope 3 emissions in the automotive sector increased compared to the previous year due to the improvement in data accuracy during the process of setting Mizuho's medium-term targets.
- *5. Other sectors: Represents the total for sectors that do not fall under the 19 sectors, such as telecommunications, finance, retail, and services.

Source: Mizuho Climate & Nature-related Report (2024)







Plan execution metrics and targets guide implementation

In addition to GHG reduction, Mizuho's transition plan includes metrics and targets focused on capturing business opportunities, risk management, engagement, and building internal capability. Together, these components monitor progress and guide plan implementation.

Mizuho seeks to develop business opportunities with clients to support their necessary structural transformations to a more sustainable future by providing both financial and non-financial solutions. An ambitious sustainable finance target of JPY 100 trillion by 2030 has been set, with half earmarked for environment and climate-related finance including green, transition and sustainable financing.³⁹ By the end of FY2023, JPY 31 trillion had been achieved (from its 2019 baseline).

Risk management is based on Mizuho's balance of exposure to coal-fired power generation and high-risk areas within transition sectors. Its target is to halve its 2019 outstanding balance by 2030 and achieve a zero outstanding balance by 2040. Further risk reduction for high-risk sectors and strengthened risk control in carbon-related sectors will be guided by its regularly reviewed Environmental and Social Management Policy for Financing and Investment Activity.

Strengthening client engagement to support their transition toward a net zero-aligned future will utilize the recently enhanced two-axis risk control framework⁴⁰ which evaluates risk based on the clients' sector and the status of their responses to transition risks. Engagement efforts are increased for higher-risk clients with a focus on managing transition risks, disclosing progress,

³⁹ Includes eligible projects under Mizuho's Green Bond Framework and other programs, as well as financing that contributes to addressing climate change. A breakdown of Mizuho's sustainable finance performance can be found on p.84 of Mizuho's Climate & Nature-related Report 2024.

⁴⁰ Figure 39 of Mizuho's Climate & Nature-related Report 2024.

and supporting early-stage business structural transformations. Mizuho has seen steady progress amongst its clients but will assess its relationships with those unwilling to address transition risks or formulate a transition strategy after one year of engagement.⁴¹

Mizuho is committed to assist clients in their netzero transitions through enhancing its internal capabilities by upskilling its workforce, and ultimately supporting a wider market transition. It targets the cultivation of 1,600 internal sustainability management experts (relationship managers who have obtained recognized certifications) and 150 environment and energy sector consultants by the end of FY2025. Notable progress has been achieved on both targets while also enhancing staff subject matter knowledge and practical skills for effective client engagement.

METRICS AND TARGETS ASSESS AND SUPPORT CLIENT TRANSITIONS





Mizuho's foundational approach relies directly on metrics and targets to support transition progress of its broad client base in Japan and internationally. Assessing and categorizing clients' transition status manages associated risks and supports positive transformation within highemitting sectors.

As the transition path differs for every client depending on factors such as sector, region, and size, Mizuho is working to foster a common understanding that recognizes differences and uses client engagement to co-create transition solutions. Priority is placed on championing a progressive shift from the client's initial status to 1.5 degrees C aligning and subsequently, 1.5 degrees C aligned.

In FY2022 and FY2023, Mizuho had provided JPY 0.8 trillion in transition finance, which covers arranging transition and transition-linked loans and underwriting of bonds. ⁴² As the lead arranger for a JPY 120 billion syndicated transition-linked loan to an electric power generation company in 2023, Mizuho set a sustainability performance target (SPT) for the company to halve the carbon emissions produced from its electricity retail business by 2030, as compared to 2013. The proceeds are to be utilized for decarbonized power sources such as renewable energy or nuclear power, and critical measures such as the strengthening and upgrading of electric power networks.

Mizuho's NZTP serves as a comprehensive articulation of its stance on climate change for both internal and external stakeholders. Recognizing the need for the broader ecosystem to share purpose and direction in addressing the collective challenge, the plan is used collaboratively to guide the bank toward achieving its sustainability ambitions.

⁴¹ Figure 41 of Mizuho's Climate & Nature-related Report 2024.

⁴² Defined based on global guidance including ICMA's <u>climate transition finance handbook</u>.

THEME

Metrics and Targets



Component: Metrics and Targets — UOB

Example 8: United Overseas Bank Limited - Interim sectoral targets covering majority of corporate lending portfolio support real-economy transition

Sub-sector: Banking

Metrics and targets

Recommendation: Establish a suite of metrics and targets to drive execution of the net-zero transition plan and monitor progress of results in near, medium, and long term. Include metrics and targets focused on aligning financial activity in support of the real-economy net-zero transition, on executing the transition plan; and on measuring changes in client and portfolio GHG emission.

United Overseas Bank Limited (UOB) is headquartered in Singapore, with banking subsidiaries in China, Indonesia, Malaysia, Thailand, and Vietnam. It operates a global network that spans 19 countries and territories in Asia-Pacific, Europe and North America. UOB has three core business segments — Group Retail, Group Wholesale Banking, and Group Global Markets — that provide a wide range of financial services including consumer, private, commercial, corporate, and institutional banking.

In support of regional and global decarbonization efforts and in alignment with its corporate purpose to build the future of ASEAN, UOB joined the Net Zero Banking Alliance (NZBA) in October 2022, concurrently publishing its netzero commitment and interim targets across six key sectors in its transition report Forging Our Net Zero Future. UOB is using NZBA voluntary technical guidance and engagements with the broader net-zero community to build internal capabilities.

A comprehensive review was initiated in 2023 to ensure UOB's existing processes and internal operating model were optimized to deliver on its net-zero commitment. The review provided the foundation for an operationalization program that covers 10 core aspects across governance, risk management and business policies and processes, as well as capabilities and culture (Figure 24). A multi-year and multi-stakeholder project, UOB's operating model is regularly reviewed and adapted to emerging challenges and opportunities. Net-zero transition planning is a bank-wide effort, with target setting a foundational element. The operationalization and commercialization of targets and commitments are critical levers to align sustainability with overall strategy.

Governance

Governance

Target operating model

Target operating model

Covernance model

Figure 24: UOB's net-zero operating model covers 10 key components



Source: UOB Forging Our Net Zero Future progress report (2022)

TARGET SETTING FOR KEY HIGH-EMITTING SECTORS DRIVES REAL-ECONOMY DECARBONIZATION

Alongside its initial 2050 net-zero commitment, UOB has set interim targets across six priority sectors (power, automotive, real estate, construction, steel, oil and gas) to support the transition of the real economy, using 2021 data as the baseline (Figure 25).

Figure 25: Summary of UOB's interim and long-term targets for six key sectors

| Sectors | 2030 | 2050 | | | | |
|--------------|--|--------------------------------|--|--|--|--|
| | Reduce emissions intensity by: | Reduce emissions intensity by: | | | | |
| Power | 64% | 98% | | | | |
| Automotive | 58% | 100% | | | | |
| Real Estate | 36% | 97% | | | | |
| Construction | 31% | 85% | | | | |
| Steel | 20% | 92% | | | | |
| Oil and Gas | Stop new project financing for upstream oil and gas projects approved after 2022 | | | | | |

Source: UOB

The six sectors span two key emitting ecosystems (energy and the built environment) that are amongst the most important and interconnected sectors to achieve net zero. In particular, the supply of fossil fuels (coal, oil and gas) is responsible for 73% of direct emissions globally; while the power, automotive, real estate, construction and steel sectors, through their use and creation of electricity, vehicles, iron, steel and buildings, account for 67% of global emissions arising from fossil fuel combustion.⁴³ These sectors are material contributors to regional GHG emissions and make up approximately 60% of UOB's corporate lending portfolio.

UOB considered three key principles in prioritizing sectors for target setting: 1) emissions materiality: ("brown" sectors with the highest GHG emissions and criticality for achieving climate goals); 2) sector abatement horizon (sectors with the largest expected decline in GHG emissions in coming years); and 3) portfolio materiality (sectors representing a significant portion of UOB's corporate loan book, in which it has the greatest potential to effect change).

Methodology and data considerations

UOB's approach to target setting is guided by science and global transition guidance, including voluntary guidance published by GFANZ.44 While globally available Paris-aligned pathways provide useful references, UOB determined the pathways generally do not consider regional challenges and are often not realistically applicable across all sectors in ASEAN. As such, UOB took the approach of basing some sectoral targets on regional pathways described by internationally recognized climate models (such as NGFS REMIND, NGFS GCAM, CRREM⁴⁵), while also constructing bottom-up reference pathways using the above models to ensure region-specific challenges and nuances that support a just transition are considered.

Establishing a baseline and measurement of Scope 3 financed emissions (clients' emissions and/

or emissions intensity) is a critical first step in target setting, but is often challenging due to data limitations. While standards for carbon accounting and disclosure are increasingly adopted globally by larger corporations, adoption is nascent for small and medium enterprises (SME) that form a significant portion of UOB's portfolio. A significant number of UOB's SME clients do not report such information and the issue is further complicated if client operations span multiple countries and business lines. UOB provides financial support at both headquarter level (where reporting is more commonly available) and in specific geographies and activities (where data is rarely reported). As a result, utilizing the headquarter-level numbers may result in material miscalculations.

UOB addressed this issue by considering a combination of additional data sources (in order of priority):

- Company-reported emissions data aggregated in established independent databases;
- 2. Company-reported emissions data sourced directly from clients' climate disclosures;
- Information of country-specific activity and sales information (e.g. the split of EVs versus ICE vehicles sold within country, to derive company-level data);
- 4. Bottom-up estimations of energy consumption using the company's asset-level data;
- Proxies based on country or sector averages as a fallback, in scenarios where the above data collection and estimation methods are unavailable.

Referencing PCAF's guidance⁴⁶, UOB's selection of data sources gives preference to company reported data and asset-level calculations, while providing a hierarchy for different fallbacks to ensure consistency across data sources. For data accuracy and quality, physical-based proxies are preferred to economic-based proxies.

Target setting was done via a five-step approach, detailed below in Figure 26.

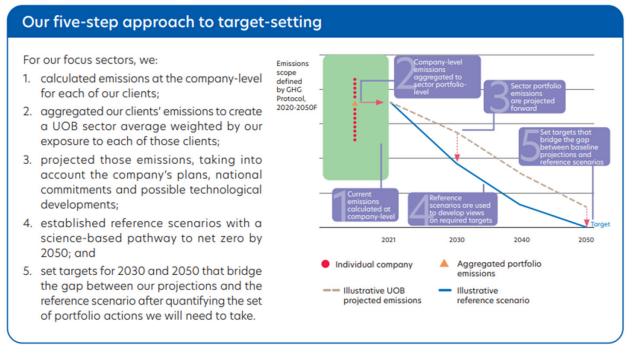
⁴³ University of Oxford, Our World in Data - Emissions by sector, 2020.

⁴⁴ GFANZ.Sectoral Pathways for Financial Institutions, 2022.

⁴⁵ NGFS, Guide to climate scenario analysis for central banks and supervisors, 2020; CRREM; IEA, Global Energy and Climate Model Documentation, 2023; Mission Possible Partnership Sector Transition Strategies.

⁴⁶ Partnership for Carbon Accounting Financials (PCAF) Standards.

Figure 26: UOB's approach to target setting



Source: UOB Forging Our Net Zero Future report

UOB believes that its approach to target setting provides the most accurately available estimate of client emissions and/or emissions intensity. As it works with clients to encourage improved disclosure and validate its estimates, UOB recognizes baselines may need to be restated or targets recalibrated.

The first annual progress report published in October 2023 indicated a decline in emission intensities across five sectors for the previous year, with the bank remaining 7-14% below the target reference pathways.

METRICS AND TARGETS INFORM OTHER PLAN COMPONENTS AND SUSTAINABLE FINANCE OFFERINGS





Implementation Strategy

Products and Services, Activities and Decision Making

UOB's transition target setting and operationalization provide a foundation to track and monitor progress, while supporting advice and financing to clients. Its net-zero metrics and targets have cascaded to governance, engagement strategy and implementation transition efforts in three main areas:

- Building a climate-focused dimension into the bank's risk appetite statement;
- Developing sector-specific commercial strategies to support clients with their transition journeys through sustainable finance offerings; and
- Embedding climate considerations into underwriting processes and strengthening ESGrelated due diligence.

A robust net zero-focused governance framework has been established, in alignment with existing sustainability governance efforts. Environmental risk appetite and sector policies guide UOB's lending activities and support delivery of net-zero commitments. Appropriate escalation processes and clarity around roles and responsibilities for ESG risk management by both business units and dedicated teams further support the policies.⁴⁷

Priority is also placed on ensuring UOB's employees are equipped with climate-related training and development. Essential changes in employee behavior and their technology are encouraged by developing clear climate-related roles and responsibilities across all functions and implementing targeted training plans.

UOB's business strategy to support decarbonization by target-sector clients includes exploring new climate-related commercial opportunities, including the financing of climate solutions, supporting clients along the spectrum of their alignment toward a net-zero pathway, and the managed phaseout of high emitting assets, where appropriate. Sustainable finance frameworks have been developed for six sectors (green buildings, smart cities, circular economy, agribusiness, sustainable trade finance, and transition finance) with a defined list of green and/ or social activities eligible for financing, to take into account unique challenges, opportunities and the available solutions (Figure 27). UOB then works closely with clients to tailor specific use of proceeds or performance targets, depending on the type of sustainable financing instrument.

Sustainable Supports companies in developing, retro-fitting, operating green buildings and driving energy efficiency. Covers both green and sustainability-linked financing for global real Finance Green or social loans estate financing across 8 asset classes: Framework for Directed to eligible projects **Green Building Developers** and and/or social benefits **Owners** Restaurants Hospitals Hotels Supports companies contributing to the creation of sustainable and smart cities through **Smart City** the following: Sustainable Financing Framework Sustainability-linked Renewable Green Building Energy Climate Change Water Waste Green Construction Efficiency Adaptation Management Management Transport Incentivise borrowers to **Green Financing** Supports companies in the 3R (renew, reuse and reduce) businesses. achieve pre-agreed sustainability targets for key Framework for Circular performance indicators. Can be used for general corporate purposes. Circular Plastics Product as Recycling Recycling Supports Food and Agribusiness companies and their full spectrum of food production Food and Agribusiness activities Framework Water, Waste & Chemical Management Climate Smart Restoration & Food Waste Packaging Lifecycle Agriculture Biodiversity Creation Sustainable Supports the needs of companies for shorter term financing (<1 year) using a 'principles-Sustainable trade Trade Finance based' approach. finance Framework Support business applications that are carried out in a green o Companies with sustainable manner recognised, sustainable projects industry certifications

Supports the transition of energy-intensive, fossil fuels/brown sectors, and 'hard-to-abate'

Metals &

Mining

Offsets

Fossil Fuels Power

Generation

Figure 27: Sector-driven sustainable finance frameworks and solutions

Source: UOB

Transition

Framework

Finance

sectors.

Oil. Gas &

UOB has also prioritized finding solutions for SMEs that make up 97% of Southeast Asia businesses to help them monitor and report data to meet increasing regulatory requirements. Findings from SMEs surveyed in the region indicate that sustainability is important to their businesses, but only a minority have started implementing sustainable practices, with many citing insufficient knowledge as a key barrier.⁴⁸

Transportation

and Logistics

To assist SME clients that lack the resources or capacity to calculate their GHG emissions or develop transition plans, UOB has developed targeted initiatives to provide support on a larger scale. They include: U-Series (connecting businesses to service providers to drive adoption of sustainable practices); UOB Sustainability Compass (an online customized reporting tool that offers actionable insights); and UOB FinLab's Sustainability Innovation Program (training program focused on topics such as energy efficiency, sustainable finance, renewable energy certificates, sustainable packaging, carbon management and sustainability reporting).⁴⁹ Meaningful collaborations with clients to support ecosystem decarbonization across their value chains are also explored.

Transition finance

to-abate sectors

Products that support the

transition of borrowers in

energy-intensive and hard

 CO^2

Carbon Capture and Storage

Utilisation and Storage (CCUS)

⁴⁸ UOB Business Outlook Study 2023.

⁴⁹ UOB Sustainability Compass and UOB Finlab Sustainability Innovation Program.

THEME

Governance

Component: Roles, Responsibilities and Remuneration, Skills and Culture — Prudential

Example 9: Prudential — Robust climate-governance incentivizes management and empowers staff **Sub-sector: Asset Owner**

Roles, responsibilities, and remuneration

Recommendation: Define roles for the Board or strategy oversight body and senior management ensuring they have ownership, oversight, and responsibility for the netzero targets. Assign appropriate individuals and teams to all aspects of both design and delivery of the transition plan. Use remuneration incentives for all roles, where possible. Review the transition plan regularly to ensure material updates/developments are incorporated; challenges are reviewed as an opportunity to correct course; and implementation risks are properly managed.

Skills and culture

Recommendation: Provide training and development support to the teams and individuals designing, implementing, and overseeing the plan so that they have sufficient skills and knowledge to perform their roles (including at the Board and senior management level). Implement a change management program and foster open communications to embed the net-zero transition plan into the organization's culture and practices.

Prudential plc provides life and health insurance for 18 million customers across 24 markets in Asia and Africa. A long-term steward of more than US\$220 billion of client assets, Prudential engages in responsible investment and applies ESG considerations into investment decisions as well as its fiduciary and stewardship duties.

Prudential joined the Net Zero Asset Owner Alliance (NZAOA) in 2021 to stay informed about leading responsible investment practices while supporting awareness of the need for global standards to reflect emerging market contexts. Experience operating in diverse markets across Asia and Africa underlines its belief in a thoughtful and adaptable approach to the low-carbon transition. Prudential's pursuit of sustainability reflects market-tailored efforts that capture opportunities, while understanding local challenges and addressing specific transition risks.

Prudential's inaugural Climate Transition Plan (CTP) published in March 2023 references global frameworks⁵⁰ and takes a phased approach that addresses both investments and operations (Figure 28). It sets out the foundations to its approach, including a long-term net-zero pledge, interim targets, objectives and priorities, and areas where further work is needed. Its implementation and engagement strategy— covering responsible investment, industry engagement and advocacy, products and services and operations—is further detailed, alongside key climate metrics and governance efforts. An update of climate-related targets was published in Prudential's recent FY23 Sustainability Report, which acts as an interim update of the CTP.

⁵⁰ Glasgow Financial Alliance for Net Zero: Financial Institution Net-zero Transition Plans- Fundamentals, Recommendations, and Guidance and Supplemental Information; Transition Plan Taskforce (TPT): The Transition Plan Taskforce Disclosure Framework and supplementary Implementation Guidance; TCFD: Guidance on Metrics, Targets and Transition Plans; CDP Technical Note: Reporting on Transition Plans; The Grantham Research Institute on Climate Change and the Environment: Making Transition Plans Just.

Figure 3: Phased approach to achieving net zero Phase 1: Phase 2: Phase 3: Phase 4: Decarbonisation by underlying investee companies Engagement and education Implementing our Responsible **Investment Policy** Focusng on executing Strengthening Continuing to encourage and Broader changes that occur as part of our policy including our engagement influence decarbonisation by our the whole economy transition, both at coal divestment, WACI with investee underlying investee companies in a local and international level budgets within equity companies and line with the Paris Agreement strategies and stakeholders, both corporate engagement bilaterally and through collaborate mechanisms 40% 25% - 60% NZAOA* Net 100% Zero reduction Carbon 100% neutral Scope 1 & 2 2019 2025 2030 2040 2050 2016 Baseline for Baseline for net zero operations investments Targets key Investments Operations "Net Zero Asset Owner Alliance (NZAOA), of which we are a member

Figure 28: Prudential's journey and approach to net zero by 2050

Source: Prudential Climate Transition Plan (2023)

Led by Prudential's Group Sustainability function, the CTP is a result of cross-functional collaboration with other internal teams such as responsible investment, finance and risk. Prudential's management and board provided input and oversight throughout the development process, and both continue to monitor progress against the plan. The inaugural plan is intended to be utilized as an engagement and feedback mechanism as Prudential further develops its climate-related targets.

ROBUST GOVERNANCE PROMOTES RESPONSIBILITY AND FOSTERS COMMITMENT

Prudential's leadership at both board and management level places great emphasis on governance for sustainability matters, including climate change.

Board

The Board is responsible for determining overall strategy and priorities, including climate change and other sustainability matters. The Board's Group Risk Committee (GRC) oversees environmental and climate-related issues, including progress against net-zero targets and other climate-related investment commitments. The GRC is also responsible for external sustainability disclosures, including TCFD voluntary reporting. The GRC advises the Board Remuneration Committee on climaterelated considerations to be applied to executive remuneration, to ensure remuneration is structured to encourage a culture and conduct of managing risk, and taking climate action. It is further supported by other board committees responsible for specific aspects of sustainability matters. Policies and processes such as those related to major capital expenditures, acquisitions, and divestitures are structured to consider their potential impacts on the Group's sustainability strategy, to support the Board in its duties.

The GRC receives updates on climate-related issues from management at least twice each year. It then makes recommendations and obtains relevant approvals from the Board. In 2023, the Board approved Prudential's interim portfolio emissions reduction target – a 55% reduction

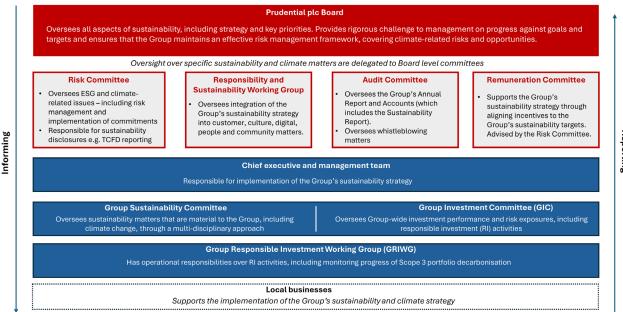
of weighted average carbon intensity (WACI) from the 2019 baseline. It also approved an internal capital mobilization target to support the commitment to financing the transition in emerging markets.

Management

Prudential's management oversees sustainability activities, including the impacts of climate change and TCFD reporting, through a Group Sustainability Committee (GSC). The committee is led by the Chief Financial Officer and includes the Chief Risk and Compliance Officer, Chief Investment Officer, Chief Corporate Affairs Officer, Chief Human Resources Officer, along with senior representatives from the asset owner and asset management businesses, including the chief executives of Eastspring and Prudential Singapore. The GSC manages key sustainability issues through a multi-disciplinary approach that includes regular engagement with regional leads to facilitate understanding of Asia-specific information and to ensure decisions reflect local challenges and nuances. It met five times in 2023.

Responsible investment activities are overseen by the Group Investment Committee (GIC) which is chaired by the Group Chief Investment Officer and driven by the Group Responsible Investment Working Group (GRIWG). Operational responsibilities have been delegated to the GRIWG, which also serves as a regular forum for discussing responsible investment approaches and monitoring progress toward decarbonizing the Group's investment portfolio.

Figure 29: Prudential's sustainability governance structure



Source: Prudential plc Sustainability Report (Dec 2023)

The Group Sustainable Finance Committee (GSFC) was recently established to oversee and manage certain issues and processes susceptible to greenwashing risk, through ensuring transparency and consistency in Prudential's definition and approach to sustainable finance and qualifying investments.

Prior to this, a cross-functional taskforce had been established to improve internal awareness and understanding of greenwashing risk, and identify key areas of exposure. To ensure consistency with emerging best practice, this work was informed by external sources, including the IAIS Application Paper on the Supervision of Climate-related Risks in the Insurance Sector, EU Proposal for a Directive on Green Claims (2023/0085(COD)), EU Taxonomy Regulation (EU 2020/852), SFDR Level 2 (EU 2022/1288), and Green Finance Industry Taskforce (GFIT)'s paper on identifying a green taxonomy and relevant standards for Singapore and ASEAN. The taskforce determined the characteristics of greenwashing by considering the different ways and avenues it could occur, potentially impacted stakeholders and the format

which it could take (e.g. products, labels, brand names). The insights gained were shared with risk management staff through group-wide training initiatives, and informed subsequent revisions of Prudential's internal fund policies. The GSFC currently oversees Prudential's qualification and monitoring of transition finance investments, with the strategy approved by the GIC.

Adopting remuneration linked-incentives and enhancing capacity

Sustainability has been included as a strategic priority for Executive Directors since 2022, and remuneration is used to incentivize progress on climate change. Carbon-reduction targets aligned with updated WACI targets have now been attached to their Prudential Long Term Incentive Plan (PLTIP) awards for three annual cycles. Sustainability metrics comprise 10% of the total 2024 Executive Director's PLTIP award, with 5% linked to carbon reduction and 5% linked to gender diversity. Viewing decarbonization as a cross-functional and collaborative effort, rather than a solo one, the target is based on the Prudential Group's overall progress on emissions

reduction. The Remuneration Committee has also adopted a transition finance underpin target for the carbon reduction component of the PLTIP award. This underpin takes into account the value of qualifying investments that will contribute to a low-carbon future.

Prudential is targeting all people-managers to have sustainability linked KPIs by 2026. This commenced in 2024 with senior team members who hold leadership positions across key functions.

To empower its staff to deliver on sustainability commitments, Prudential provides sustainability-related training and capacity building. Climate capacity building sessions delivered to the GRC have been expanded to include local boards across different jurisdictions. A foundational sustainability training module has also been introduced across the entire organization and is mandatory for people-managers (who make up an estimated 28% of the organization). Other training includes a climate-focused webinar series for risk teams and a responsible investment workshop tailored to the investment leads of regional business units.

CLIMATE GOVERNANCE THAT SUPPORTS OVERALL OBJECTIVES AND PRIORITIES





Prudential recognizes the critical role climate governance plays in informing strategic direction and ensuring accountability. Board oversight of all sustainability matters, including climate change, alongside the organization's overall strategy, enables integration and alignment with its overarching objective to be the most trusted partner and protector for current and future generations. This governance approach promotes responsibility and provides direction on the relevance, ambition and management of Prudential's climate-related strategy and targets. Reporting lines to the specific board and management committees drive net-zero implementation efforts.

Prudential considers net-zero transition planning to be a critical process and an occasional precondition to considering relevant financing opportunities. An internal framework on transition finance that refers to GFANZ's four voluntary financing strategies⁵¹ and other regional taxonomies and transition finance guidelines (e.g. ASEAN Taxonomy) is currently being developed, and transition planning will be a key topic of engagement with companies who constitute 65% of Prudential's absolute carbon emissions. Other critical topics of engagement to accelerate decarbonization progress include improving disclosure, net-zero target setting, adapting of business models and financing of green projects.

Prudential's asset manager, Eastspring Investments, further engages with portfolio companies on its behalf through thematic engagement, investor collaborative engagements and investment-led engagements. In 2023, Eastspring had conducted 875 engagements with portfolio companies.

⁵¹ Climate solutions, Aligned entities, Aligning entities and Managed Phaseout. From GFANZ. Recommendations and Guidance on Financial Institution Net-zero Transition Plans, 2022.