ASEAN Capital Markets Forum

ASEAN TRANSITION FINANCE GUIDANCE

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FOREWORD

by Chair of the ASEAN Capital Markets Forum

These days we frequently hear that the war against climate change will be won or lost in Asia. Indeed, Asia has now emerged as the largest source of emissions globally, although it has been less responsible for global cumulative emissions. At its current level of GHG emissions of 21.7 GtCO2e per year, Asia would by itself exhaust the global remaining carbon budget consistent with under 1.5°C warming by 2040[1]. Southeast Asia will be the fourth largest economic bloc globally by 2030 but is also one of the most at-risk regions, with three of its member states among the ten most vulnerable countries to climate change[2]. As such, climate change is a matter of urgency and importance to the Association of Southeast Asian Nations (ASEAN), and ASEAN Member States (AMS) have proactively taken measures to address the issue at every level - national, regional and global.

Finance is key to winning the climate change war. The ASEAN Capital Markets Forum (ACMF)'s *Roadmap for ASEAN Sustainable Capital Markets* and the ASEAN Working Committee on Capital Market Development's *Report on Promoting Sustainable Finance in ASEAN* both identify several elements that are needed to enhance the sustainable finance ecosystem for better orientation of finance towards the sustainability agenda. These elements are an ASEAN Taxonomy, Transition Finance Frameworks and Disclosures which form the pillars of that ecosystem. The ACMF is a founding member of the ASEAN Taxonomy Board (ATB). The ATB is responsible for the development, maintenance and promotion of the *ASEAN Taxonomy for Sustainable Finance* (ASEAN Taxonomy) that will be 'the overarching guide for all AMS, complementing their respective national sustainability initiatives and serving as ASEAN's common language for sustainable finance'. The ASEAN Taxonomy Version 2 was issued on 27 March 2023. The ASEAN Taxonomy has been developed to facilitate an orderly, just, and affordable transition needed for the region. Transition is an important theme for ASEAN, as ASEAN economies, societies and individual AMS capacities do not allow for a rapid shift to green. ASEAN transitions need to be managed to avoid economic and social dislocations.

The ASEAN Taxonomy provides the thresholds for different sustainability performance levels for identified economic activities. This ASEAN Transition Finance Guidance (ATFG) builds on that by creating an approach to assess the forward-looking plans of companies and facilitate investor support for those companies. In developing this ATFG, the ACMF was acutely aware of the need for transition finance guidance that is contextualised for ASEAN, and that would be useful in enabling the capital markets to support transition, including against the backdrop of seventy (70) million Micro, Small and Medium Sized Enterprises in the region. As there is a wealth of guidances, frameworks and standards on transition finance globally, the ACMF wanted to ensure that the best elements of these approaches, enhanced with the regional contextualisation and latitude for company specificity to advance the ASEAN sustainability agenda, would be incorporated into the ATFG. In particular, there is a need to provide clear guidance to ASEAN companies as to what would meet the expectations for a transition, the possible transition pathways and how this is to be communicated, while giving providers of capital a framework to make informed financing decisions.

Like the ASEAN Taxonomy, this Guidance is a living document and will be enhanced over time to reflect progress in evolving global climate expectations, global transition approaches, the changing needs of our region and the AMS as well as advances in technology. The ACMF is dedicated in its efforts to develop the three pillars of the sustainable finance ecosystem - Taxonomy, Transition and Disclosures. This Guidance, together with the ASEAN Taxonomy, serve to strengthen two of the three pillars of the ASEAN sustainable finance ecosystem, as the ACMF continues to drive quality disclosures to ensure that consistent, comparable and credible information is available for informed decision making.

Inarno Djajadi
Chief Executive of Capital Market, Financial Derivatives, and Carbon Exchange Supervisor, concurrently a Member of the Board of Commissioners of OJK
ACMF Chair 2023

1. Asia in the Global Transition to Net Zero, Asian Development Bank, quoting Climate Analytics and New Climate Institute - Climate Action Tracker (accessed 20 February 2023)
2. Global Climate Risk Index 2021, Germanwatch, 2021

FOREWORD and MESSAGE

by Asian Development Bank

Southeast Asia can meet the daunting challenges of transitioning to low-carbon economies even as the region continues to build strong, inclusive growth that reduces poverty. However, this complex task requires urgent action on innovative finance to fund crucial infrastructure and energy projects.

The region's particular vulnerability to climate change is well known: its burgeoning cities lining long coastlines are in the path of increasingly frequent typhoons and storm surges, for example, while other climate-related issues loom, such as more frequent and severe wildfires and droughts. At the same time, Southeast Asia was responsible for 6.5% of global energy-related carbon dioxide emissions in 2020, with Asia as a whole the largest current source of emissions in the world.

The ASEAN Transition Finance Guidance therefore provides timely practical guidance to companies in the Association of Southeast Asian Nations (ASEAN) to develop credible and science-based transition and decarbonization plans and to share them with investors. The report is the latest initiative from the ASEAN Capital Markets Forum (ACMF), with technical assistance (TA) support from the Asian Development Bank under the TA *Promoting an Interconnected, Inclusive, and Resilient Association of Southeast Asian Nations Capital Market*.

According to this Guidance, companies require vast financing to successfully execute their climate transition plans. This "transition finance" directs capital to companies across debt, equity, and other forms of financing instruments. Building on the work of the ASEAN Taxonomy for Sustainable Finance, it helps companies assess or demonstrate credible transition plans and thus obtain financing from capital markets. Doing so will enable financial institutions to augment direct finance to transitioning companies. It also encourages companies to create more ambitious and credible transition plans by differentiating "what commands a greater demand premium from investors". This first version of the guidance is designed to evolve as investor demands and real economy plans change with climate science.

ACMF has already introduced several sustainable finance initiatives with ADB's support, including the GSS+ bond standards, the ASEAN Sustainable and Responsible Fund Standards, the ACMF Roadmap for Sustainable Capital Markets, and others.

Alongside initiatives including the ASEAN Sustainable Finance Taxonomy and the ongoing study on voluntary carbon markets, this latest report aligns well with ADB's goals for a just and affordable transition in the ASEAN region. For example, it complements such ADB-supported programs as the Energy Transition Mechanism intended to facilitate and accelerate early coal phase out.

As the ASEAN region strives to meet climate change transition goals, even as it continues to recover economically from the COVID-19 pandemic, the role of capital markets and capital market regulators cannot be overestimated. ADB is confident that the guidance report will provide companies in the region invaluable advice on how to proceed. We thank ACMF for its efforts to promote integrated, inclusive, resilient, competitive, and sustainable capital markets across the ASEAN region.

Christine Engstrom
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Executive Summary

Purpose of this guidance

Delivering on ambitious climate targets demands enormous mobilisation of capital across the entire financial system. While leading emission-intensive companies globally have developed plans to transition their businesses, they require financing for successful execution. This is the role of transition finance, which directs capital to transitioning companies across debt, equity and other forms of financing instruments.

The ASEAN Transition Finance guidance addresses how entities may assess or demonstrate a credible transition in ASEAN to obtain financing from capital markets, making use of relevant resources as needed, thereby aiming to:

- Accelerate the efforts of financial institutions to direct finance to transitioning companies, by standardising which companies should be the focus of such efforts.
- Create incentives for real economy companies to create more ambitious and credible transition plans, through differentiating what commands a greater demand premium from investors.

To be effective, this guidance needs to satisfy the demands of investors while remaining attainable by, and reflecting the regional transition pace expected of, ASEAN real economy companies. Its principles are grounded in existing international and regional transition finance guidelines to ensure coherence with global and scientific expectations, and are adapted to meaningfully address stakeholder pain points as informed by an extensive survey of ASEAN corporates' transition plans and investor interviews. The guidance is voluntary and may be subject to future updates.

Investors, real economy companies and other stakeholders may view this guidance as a basis for:

- Issuing, developing, or managing transition-labelled financing instruments (albeit further subject to existing requirements and/or frameworks in their respective contexts).
- Providing financing that supports the transition and supports transition objectives of financial institutions or funds, but need not be explicitly transition-labelled.
- Building or assessing fundamental climate transition capabilities increasingly requisite for general corporate financing.

Approach to assessing transition credibility

Entities looking to be considered as credibly transitioning should demonstrate two main elements: sufficient climate ambition aligned with the objectives of the Paris Agreement, and robustness of the entity's ability to deliver on said ambition. This reflects the minimum boundaries of what the market is willing to accept as credible in accordance with international guidelines, with additional guidance provided in this document on how entities may interpret select criteria in the ASEAN context (e.g., selection of geographically relevant transition pathways).

Demonstrating sufficient climate ambition requires a company to be either already aligned to or aligning to a science-based pathway. The chosen pathway should be science-based from one of the commonly accepted models (such as the IEA, NGFS or others). To reflect differences in both the starting emissions intensity of ASEAN and the challenges of transition in developing economies with young high-emitting assets, ASEAN companies may refer to a regional or national cut of such science-based pathways, provided that this is also scientifically derived. Aligned or aligning is defined as requiring a long-term ambition to converge to the science-based pathway, and a short-term plan to be at least parallel to (for companies currently above the reference pathway), or converging to the line (for those below).

For a plan to be viewed as having sufficiently robust ability to deliver, it should include:

- An Implementation strategy. This should in turn include:
  - An action plan with a roadmap of actions to be taken
  - A capital allocation plan that explains how the plan will be financed
  - Risk assessment and mitigation
  - Ongoing monitoring
  - Governance
- Disclosure of ongoing progress
- Independent verification
- Consideration of just transition

These elements borrow on existing international standards and aim to maximise the interoperability of ASEAN transition finance with global transition finance – this should make it easier for issuers to issue, and for investors operating across continents to assess new opportunities and manage their portfolios.

This guidance builds upon the work of and is intended to complement the ASEAN Taxonomy. It sets requirements to qualify for Green and Amber tiers of sustainable finance, and in the Plus standard has defined quantitative thresholds with retirement dates for Amber tiers that creates a ratcheting of requirements over time. The transition finance guidance builds on that by creating an approach to assess the forward looking plans of companies and facilitate investor support for those companies. Any company may in principle qualify for transition finance – the current position is not a restriction, only the forward looking plan. In other words, to be considered for transition finance, companies will need to demonstrate how they intend to transition their operations and use of technologies through the tiers defined in the ASEAN Taxonomy at a speed that is consistent with a science-based pathway.

To meaningfully represent the differences in market expectations beyond these boundaries and encourage progress of real economy companies in ASEAN, this guidance proposes three tiers for transitioning entities:

1. **Aligned and Aligning – 1.5°C**: Entities that demonstrate sufficient climate ambition that is already aligned or aligning with a science-based 1.5°C trajectory and meet all other criteria of transition credibility.
2. **Aligned and Aligning – Well below 2°C**: Entities that demonstrate sufficient climate ambition that is already aligned or aligning with a science-based well below 2°C trajectory and meet all other criteria of transition credibility.
3. **Progressing**: Entities that demonstrate most but not all elements of ability to deliver and/or a climate ambition that is material but not yet aligned or aligning to well below 2°C, and have committed to addressing any material omissions in the next 2 years.

These tiers are intended to facilitate financing activity by providing a consistent basis for evaluating corporates' transition approaches. **The 1.5°C tier** represents the gold standard for what is globally accepted as a credible transition, consistent with international guidance, while **Well below 2°C** is more reflective of climate ambitions across ASEAN while maintaining the robustness of all other criteria. Additionally, including a **Progressing tier** is designed for companies that meet most but not all criteria of transition credibility, and serves two purposes: facilitating capability development of real economy companies, and directing capital towards the more climate mature even if they may not meet all requirements. All three tiers are worthy of financing and support – investors should seek to support those companies aligned and aligning to 1.5°C, and encourage companies in the other tiers to strengthen their plans by supporting with financing. However, all three represent tiers that a climate conscious investor should remain supportive of.

Guidance for transition plans and transition finance are fast evolving, and this guidance should be read as a version 1.0 for ASEAN. As investor demands, real economy plans and the climate science evolve, it is likely that new versions of this guidance will be needed, to ensure it remains fit for purpose and interoperable with new global standards. This may involve a revision of the tiering system, the possibility to introduce standardised reference pathways, the need for certification, the translation of guidance into transition labelled instruments and other developments.

Note. This guidance aims to be as consistent with key principles of existing guidelines and initiatives as possible, and discrepancies in wording or terminology are unintentional. Unless clearly defined or otherwise stated, this guidance also does not provide or intend to adopt existing technical definitions of terms. To illustrate, “materiality” is used to mean “the majority of” or “the importance of”, and is not intended to be aligned with the technical definition in the IFRS Sustainability Disclosure Standard nor any other relevant definitions from climate-related guidelines or initiatives.

1. Introduction

1.1. What is "transition finance"?

Addressing climate change is the great industrial challenge of our time, requiring wholesale technological and behavioural change across nearly all sectors and all countries in the global economy. Making this change will require enormous investment, with estimates ranging from US$125[1] to US$200[2] TN globally between now and 2050. Private capital has a key role to play in this transition – proactive funding of the Green transition is essential to an accelerated transition, whilst global financial institutions face the attractive prospect of investing in a global megatrend that is well signposted and supported by coordinated government policy.

Financial institutions have responded to this challenge in several ways:

- **Exclusionary policies**. To avoid the financial risks associated with assets left unproductive by the transition ("stranded assets"), and to ensure a high cost of capital to high emitting businesses, financial institutions have withdrawn funding from high-emitting activities. This is most obvious in the coal industry, where the withdrawal of much finance has accelerating industrial transitions away from coal.
- **Sustainable finance targets**. New asset classes of sustainable finance were created – Green Loans, Green Bonds and Sustainability-linked instruments in particular. For use of proceeds financing specifically, efforts aimed to identify new technologies that needed accelerated investment, and direct financing towards them. The ensuing competition has lowered the cost of capital for these technologies. To help define the eligible assets for various purposes such as planning, standards setters have developed or are in the process of developing taxonomies that define sustainable activities, including the ASEAN Taxonomy for Sustainable Finance, as well as national taxonomies developed by ASEAN Member States.
- **Portfolio alignment targets**. One of the key scientific advances in the climate field has been the development of sectoral pathways – independent scientific views of the required pace of transition for different industrial sectors needed for the world to achieve net zero emissions and limit warming to a target range. Many financial institutions have adopted these pathways to set their own targets for financed emissions (or average emissions intensity), either at a portfolio level or for each sector they are financing. This has the advantage of being comprehensive, and mobilises large parts of financial institutions' balance sheets towards the transition.

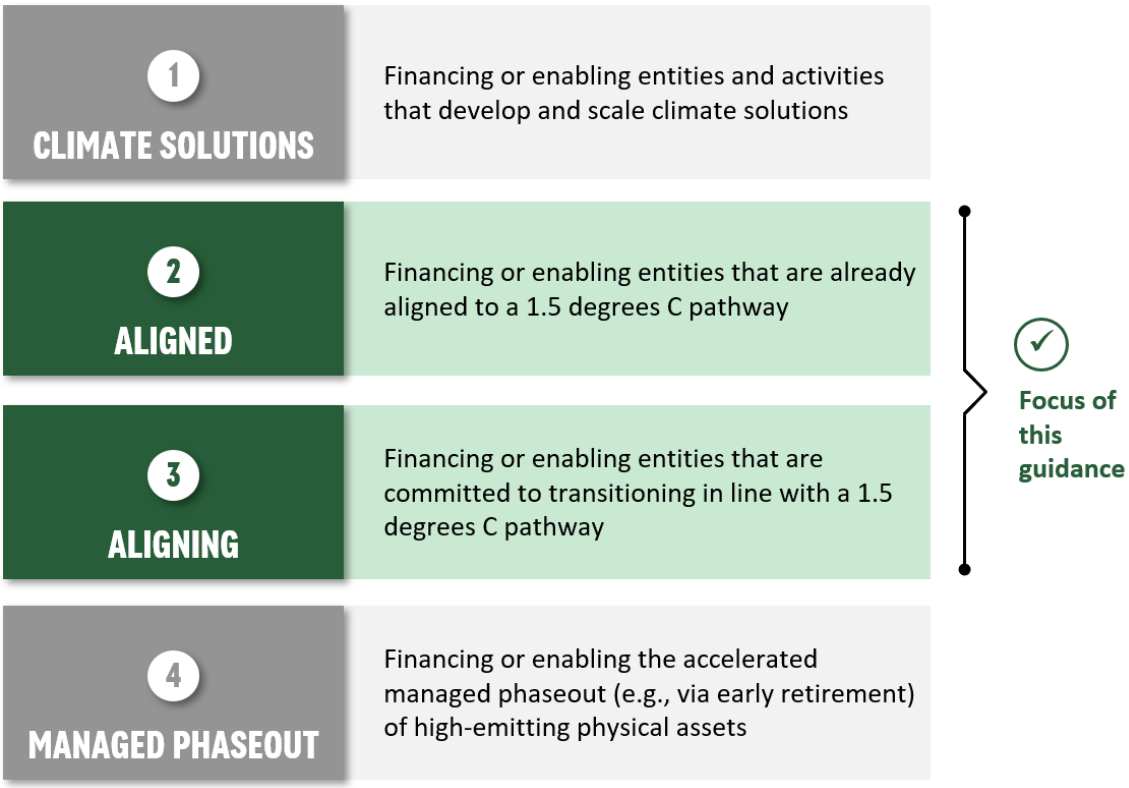
What is further needed, however, is the importance of transition efforts being taken by existing industrial companies and utilities. Leading emissions-intensive companies around the world have developed their own plans to transition their businesses. These companies will span all the activity categories in a traditional taxonomy – with high-emitting activities that are being phased out, through intermediate technologies that reduce emissions without delivering zero emissions, and with an increasing share of leading low emissions technologies.

These companies need finance – ensuring that more finance is directed towards companies with more ambitious and credible plans is a powerful lever by which finance can accelerate the transition. This is the role that **transition finance** should play.

[1] UNFCCC Race to Zero campaign and the Glasgow Financial Alliance for Net Zero. Net Zero Financing Roadmaps. November 2021.
[2] BloombergNEF. The $7 Trillion a Year Needed to Hit Net-Zero Goal. December 2022.

With reference to the Glasgow Financial Alliance for Net Zero (GFANZ) [3], transition finance is defined as the investment, financing, insurance and related products and services that are necessary to support an orderly real-economy transition to net zero, and can be segmented into four key financing strategies as illustrated in Exhibit 1. Specifically, this guidance aims to address entity-level opportunities that facilitate real economy companies' transition to net zero in ASEAN, by building upon the two relevant categories of Aligned and Aligning from GFANZ.

Exhibit 1: GFANZ's four key financing strategies for net-zero transition planning[4]



1.2. What is the role of this guidance?

The intention in developing transition finance guidance is to:

- **Accelerate the efforts of financial institutions** to direct finance to transitioning companies, by standardising which companies should be the focus of such efforts.
- Create incentives for **real economy companies to create more ambitious and credible transition plans**, through guidance that link those plans to superior financing cost and availability.

Whilst clear guidance on what constitutes for a credible transition is intended to be useful for all financial instruments, this is particularly important in capital markets where secondary market trading requires a minimum degree of consistency in principles across similar instruments.

[3] Glasgow Financial Alliance for Net Zero (GFANZ). Defining Transition Finance and Considerations for Decarbonisation Contribution Methodologies (Consultative Document). September 2023.

[4] Glasgow Financial Alliance for Net Zero (GFANZ). Defining Transition Finance and Considerations for Decarbonisation Contribution Methodologies (Consultative Document). September 2023.

However, transition finance remains vaguely defined for most stakeholders, which leads to significant variability in what qualifies as transition finance and how it is perceived by the broader market. Despite increasing market interest in the potential for this asset class to address gaps in existing financing instruments, there remains no single standard for what constitutes credible transitioning activity and how this relates to transition-labelled instruments. This results not from the lack of existing guidance, but rather from the challenges of navigating and identifying consensus across the multitude of transition finance guidelines that may differ in purpose, target audience and in some cases, recommended principles. In conjunction with the variety of other climate-related guidelines, frameworks and tools in the current market, there is a strong need for greater clarity of guidance on transition finance before it may serve as a meaningful and robust asset class to accelerate global decarbonisation.

Therefore, in the ASEAN context, this guidance aims to:

- Define principles by which stakeholders may assess their or another company's transition credibility at an entity level as the basis for financing.
- Identify and provide guidance where applicable on how to make use of relevant climate-oriented resources to facilitate transition planning and disclosure, including the ASEAN Taxonomy.

To be effective, this guidance needs to "clear the market". That is:

- **Guidance needs to satisfy the demands of investors**. Investors with a mandate to support the transition and justify their investments to end investors need sufficiently robust principles that fit with their objectives. Many of these institutions invest in multiple markets across and outside ASEAN, and thus require coherence with global principles and scientific robustness. Guidance that fail to meet this bar will fail to attract capital.
- Guidance needs to be **attainable for issuers in ASEAN.** If guidance is set impossibly high, then there will be no supply of instruments for capital nor will investors be able to meaningfully contribute to the global transition. There is a need to provide guidance that is aspirational yet meaningfully encourages progress - i.e., recommended principles may currently only be achieved by climate leaders, but is achievable for a wider set of transitioning companies as capabilities evolve.
- Investors are adopting different standards when approaching transitioning companies, whilst there is also a range of sophistication in issuer transition plans. This guidance hopes to address that full range, providing a means by which this range of investors can support the range of transitioning issuers. Issuers looking for the widest array of financing will need to meet the highest standards, which will also mean remaining abreast of and compliant with global standards in addition to this ASEAN guidance.
- Both investors and issuers recognise that different parts of the world will transition at different times and paces, and that this range of regional differences is consistent with a global move to net zero emissions. A key objective in developing guidance at the ASEAN level is to define principles that reflect this, and explain how this can ensure a meaningful amount of capital can go to a meaningful number of issuers.

These principles have been developed based on:

- Review of existing transition finance guidelines, other relevant initiatives, and tools (see **Section 3**).
- Analysis of the current state of the ASEAN market (see **Exhibit 2** for key highlights, and **Appendix A** for more details)
  - Survey of company transition plans for 94 ASEAN corporates across countries and sectors.
  - Interviews with several significant investors in the ASEAN region.

Exhibit 2: Key highlights on current state of market in ASEAN

Investors	• Increasing sophistication and nuance in how investors view their support for the climate transition. A lot of investors now not only use taxonomies to define assets that count as "sustainable", but have set their own science-based targets for portfolio decarbonization, with interim targets. • This increased awareness results in widespread interest in "transition finance" as an asset class, with investors looking for increased supply of investible assets outside traditional definitions of sustainable finance. • Many investors operate in multiple markets, and want a consistent set of principles – for ASEAN, there is a need for any principles to be interoperable with global principles for it to be widely adopted. • There is a recognition of the need for a "just transition", and that this can mean a slower transition in emerging economies than in developed economies whilst being consistent with a global transition to net zero emissions.
Issuers	• An increasing number of issuers are reporting their emissions (71% of the companies surveyed). However, the scope of emissions covered (across Scopes 1 to 3) is inconsistent and for many, incomplete; as is the scope of business activities. • 49% of the companies surveyed have a net zero target year, though only 61% of which had interim targets. • 54% of companies have a transition plan tied to an external source – the choice of reference pathway however was a mix of national targets (22%), industry body (13%) targets and science-based pathways (19%). • Many of the published plans lack detail at present – only 6 in 10 companies have reported their high-level decarbonisation strategy, of which only 32% have reported a detailed action plan.

2. Scope

This guidance addresses how an entity may assess and/or demonstrate a credible transition

Transition is defined by the collective progress of the world from its current state of emissions to decarbonise in line with the objectives of the Paris Agreement. With reference to the Glasgow Financial Alliance for Net Zero (GFANZ) transition financing framework (see Exhibit 1), all four opportunities have an important role in facilitating transition activity in the real economy. "Climate solutions" enables the scaling of "green" activities, while "Managed phaseout" enables legacy "brown" activities to be down-scaled as is appropriate. Between both extremes, companies looking to credibly decarbonise will require financing to facilitate their transition and may fall in the "Aligned" and "Aligning" categories.

As introduced in Section 1.1, this guidance aims to address entity-level opportunities that facilitate real economy companies' transition to net zero in ASEAN by building upon the two relevant categories of Aligned and Aligning from GFANZ' four key transition financing strategies. While transition is fundamentally defined by progress, it is highly context specific and market perspectives can differ on what this means for the required or expected speed of entities' decarbonisation through to their net zero year (i.e., also referred to as decarbonisation pathways or trajectories). Establishing a common definition of a credible transition will provide ASEAN companies with clarity on how to chart a robust market-accepted decarbonisation trajectory, particularly for the less climate mature and/or those in operating in hard-to-abate sectors with less visibility on their decarbonisation journey.

Climate solutions and managed phaseout are broadly covered only where they are incorporated within ASEAN companies' transition targets and strategies. They tend to be more straightforward on evaluation, given clearly defined activity- or asset-specific parameters and targets, and are robustly covered by existing regional and/or international standards and tools. For more guidance on these two categories (non-exhaustive), users may refer to:

- Climate solutions:
  - Regional: ASEAN Green Bonds Standards[5], ASEAN Taxonomy Version 2[6]
  - International: ICMA Green Bond Principles[7]; LMA Green Loan Principles[8]; CBI Climate Bond Standards[9]
- Managed phaseout:
  - Regional: GFANZ Financing the Managed Phaseout of Coal-Fired Power Plants in Asia Pacific[10], ASEAN Taxonomy Version 2[11]
  - International: GFANZ The Managed Phaseout of High-emitting Assets[12].

This guidance should also be interpreted in the context of:

Climate change mitigation. While this guidance broadly outlines how climate change mitigation should be evaluated in the context of a just transition (e.g., socio-economic factors, biodiversity, other priorities aligned

[5] ASEAN Capital Market Forum (ACMF). Green Bond Standards. October 2018.
[6] The ASEAN Taxonomy Board. ASEAN Taxonomy Version 2. March 2023.
[7] The International Capital Market Association (ICMA). Green Bond Principles. June 2021.
[8] The Loan Market Association (LMA). Green Loan Principles. February 2023.
[9] The Climate Bond Initiative (CBI). Climate Bond Standards. April 2023.
[10] The Glasgow Financial Alliance for Net Zero (GFANZ). Financing the Managed Phaseout of Coal-Fired Power Plants in Asia Pacific. June 2023.
[11] The ASEAN Taxonomy Board. ASEAN Taxonomy Version 2. March 2023.
[12] The Glasgow Financial Alliance for Net Zero (GFANZ). The Managed Phaseout of High-emitting Assets. June 2022.

with the United Nations Sustainable Development Goals), these factors are not the focus and will require further consideration beyond this guidance.

All financial instruments. The guidance focuses on how the transition credibility of real economy companies can be assessed, which can be interpreted in the context of any financing instrument where stakeholders may incorporate additional instrument-specific requirements as needed.

Such instruments include:

- Debt instruments:
  - Use-of-proceeds instruments e.g., green bonds or loans.
  - General corporate purpose instruments e.g., sustainability-linked bonds or loans.
- Equity and equity-related instruments: e.g., private equity funds, venture capital funds and mezzanine financing.
- Other financial instruments that credibly contribute to the overall climate transition objective e.g., asset-backed securities, real estate investment trusts, mutual funds, exchange traded funds (ETFs), internally managed funds and derivatives.

ASEAN. The company under assessment and financing instruments must have either a geographical or economic connection to ASEAN, otherwise:

- For use-of-proceeds financing instruments, eligible projects must be located in ASEAN.
- For general corporate financing, equity or other instruments, this guidance should be used to inform transition targets, strategies or activity in ASEAN.

3. Review of existing guidance

3.1. Transition finance guidelines

This document aims to provide a simplified and practical approach for stakeholders to assess their or another company's transition credibility in the context of ASEAN that is interoperable with but also addresses the limitations of existing guidance. This section presents a review of existing international and regional guidelines that serves as the basis for this document – in particular when assessing the qualitative elements that make a transition plan credible, where this guidance strives for maximum interoperability. This is not intended as an exhaustive review of all transition finance guidelines; this analysis focuses on a selection of guidelines developed by international or leading climate organisations as well as national or regional bodies.

Exhibit 3: Overview of transition finance frameworks [13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23]

Geographic focus	Framework	Organisation	Target audience	Type of financing instruments covered	Publication date
International	**Transition Finance for Transforming Companies**	Climate Bond Initiative (CBI)	Issuers	• Use-of-proceeds instruments • Sustainability-linked bonds	September 2022
International	**Climate Transition Handbook**	International Capital Market Association (ICMA)	Issuers	• Use-of-proceeds instruments • General purpose sustainability-linked instruments	June 2023
International	**NZBA Transition Finance Guide**	Net-Zero Banking Alliance (NZBA)	Investors (banks)	• Use-of-proceeds instruments • General corporate purpose instruments	October 2022
International	**2022 G20 Sustainable Finance Report**	The Group of Twenty (G20)	Investors	• Debt instruments: use-of-proceeds green or transition bonds or loans, sustainability-linked loans or bonds, etc.	October 2022

[13] Climate Bonds Initiative (CBI). Transition Finance for Transforming Companies. September 2022.
[14] International Capital Market Association (ICMA). Climate Transition Finance Handbook. June 2023.
[15] Net Zero Banking Alliance (NZBA). NZBA Transition Finance Guide. October 2022.
[16] G20. 2022 G20 Sustainable Finance Report. October 2022.
[17] OECD. OECD Guidance on Transition Finance: Ensuring Credibility of Corporate Climate Transition Plans. 2022.
[18] Glasgow Financial Alliance for Net Zero (GFANZ). Expectations for Real-economy Transition Plans. September 2022.
[19] Asia Transition (ATF) Study Group. Asia Transition Finance Guidelines. September 2022.
[20] European Commission. Commission recommendation on facilitating finance for the transition to a sustainable economy. June 2023.
[21] The United States Department of the Treasury. Principles for Net-Zero Financing & Investment. September 2023.
[22] Transition Plan Taskforce. Transition Plan Taskforce Disclosure Framework. October 2023.
[23] Financial Services Agency; Ministry of Economy, Trade and Industry; and Ministry of the Environment, Japan. Basic Guidelines on Climate Transition Finance. May 2021.

Geographic focus	Framework	Organisation	Target audience	Type of financing instruments covered	Publication date
				• Equity-related instruments: transition-focused buyout funds, venture capital funds, and mezzanine financing, etc. • Risk mitigation products: insurance, guarantee, credit enhancement products, etc. • Others	
International	**Guidance on Transition Finance**	The Organization for Economic Co-operation and Development (OECD)	Issuers and investors	• General access to financing required for issuers' transition (including loans, bonds and equity)	October 2022
International	**Expectations for Real-economy Transition Plans**	The Glasgow Financial Alliance for Net Zero (GFANZ)	Issuers	General access to financing required for issuers' transition (including loans, bonds and equity)	September 2022
Regional (Asia)	**Asia Transition Finance Guidelines**	Asia Transition Finance Study Group	Investors	General access to financing required for issuers' transition (including loans, bonds and equity)	September 2022
Regional (EU)	**Commission recommendation on facilitating finance for the transition to a sustainable economy**	European Commission	Issuers and investors	• Green or other sustainability loans and bonds • Equity financing and specialised lending	June 2023
Regional (US)	**Principles for Net Zero Financing & Investment**	The United States Department of the Treasury	Investors	General access to financing required for issuers' transition (including loans, bonds and equity)	September 2023
Regional (UK)	**Transition Plan Taskforce Disclosure Framework**	Transition Plan Taskforce	Issuers	General access to financing required for issuers' transition (including loans, bonds and equity)	October 2023
Regional (Japan)	**Basic Guidelines on Climate Transition Finance**	Financial Services Agency; Ministry of Economy, Trade and Industry;	Issuers and investors	• Use-of-proceeds instruments • General corporate purpose instruments	May 2021

Geographic focus	Framework	Organisation	Target audience	Type of financing instruments covered	Publication date
		and Ministry of the Environment, Japan			

3.1.1. Overall evaluation

The six international guidelines are robust and widely accepted by market stakeholders. Collectively, existing transition finance guidelines provide a comprehensive overview of what makes a transition credible that is collectively representative of the perspectives of leading climate organisations and regional or national bodies. Although many of these guidelines have only been published in recent years, many market stakeholders have already aligned to or are actively incorporating one or several of these approaches into their assessment of transition credibility.

However, ASEAN companies may find it challenging to navigate the diversity of existing international guidelines and interpret broad principles in their local contexts. Although most of these guidelines are largely interoperable and consistent, they may differ in how the recommendations are framed, their constituent elements, and their level of specificity. In the absence of a single clear market standard, entities will either need to identify consensus and best practices across existing guidelines and frameworks or prioritise one guideline to align with. The broad-based nature of guidance targeted at an international audience may also pose a challenge in interpretation in the ASEAN context, especially where it relates to applicable resources or tools. This can be relatively onerous and prohibitive for companies' transition progress, particularly for those earlier in their climate journey.

This document therefore, serves an important function in synthesising key principles from robust existing guidelines to provide interoperable and consistent guidance for ASEAN companies. The intention is not to redevelop existing market-accepted guidelines, but to distil commonalities and incorporate more specific guidance where relevant in ASEAN. Regional guidelines provide a useful reference on how to incorporate regional perspectives and contexts in guidance for transition finance, such as in the identification of suitable transition pathways. Specifically, the Asia Transition Finance Guidelines was designed to provide investors with greater clarity on evaluating transition finance opportunities in Asia, and provides targeted guidance on how regional tools like taxonomies and roadmaps may facilitate transition planning. This guidance references these regional guidelines to identify areas where more contextualised guidance is beneficial and builds upon the Asia Transition Finance Guidelines in developing complementary practical guidance for real economy companies in ASEAN.

While existing guidelines define a highly robust set of requirements for companies to be considered as credibly transitioning, this sets a high bar that many real economy companies may not currently be able to meet. While this guidance will synthesise the full set of criteria expected of a credible transition by the market, there is merit in considering different tiers of qualifying companies that allow those meeting most requirements but not yet all elements to be recognised as transitioning for a period of time. In so doing, this has the potential to facilitate more inclusive and greater progress towards regional decarbonisation to net zero by enabling transitioning ASEAN companies that may fall short of only select criteria to access transition financing. This does not mean that ASEAN companies should aim at a lower standard or level of ambition – those seeking the widest and most advantageous financing will need to meet all of these standards. However, in the near term, the climate transition is best served by investors remaining supportive of – and invested in – companies as they work on their plans and bring them up to global standards.

3.1.2. Common elements of a credible transition

Broadly, existing guidance defines a credible transition by two overarching elements:

- **Climate Ambition:** Presence of a net zero target and sufficiently ambitious decarbonisation trajectory aligned with the objectives of the Paris Agreement to limit the rise of average global temperature with no to low overshoot to 1.5°C, or at least well below 2°C.
- **Robustness of Ability to Deliver**: Implementation strategy that enables tangible progress towards achieving climate ambitions, underpinned by robust consistent disclosure and monitoring.

These elements encompass a spectrum of recommended components that collectively represent a credible transition. Existing guidance encourages entities to achieve all components but allow for flexibility; entities should be evaluated on their best efforts under current circumstances, but will also be expected to demonstrate progress as capabilities and conditions (e.g., regulatory environment) evolve.

Exhibit 4: Comparison of the ASEAN Transition Finance Guidance with international transition finance frameworks

Note: Elements covered by international transition finance frameworks highlighted in green; elements with limited coverage in white

				Element mapping to international transition finance frameworks					
Element	**Sub-element**		**Description**	**CBI**	**ICMA**	**NZBA**	**G20**	**OECD**	**GFANZ**
Climate Ambition	Current state assessment		Measure and disclose material sources of emissions						
	Transition pathway		Select sectoral science-based decarbonization pathway aligned with Paris Agreement						
	Transition targets		Define company-specific targets over the short, medium and long term to align with selected transition pathway						
Robustness of Ability to Deliver	Implementation strategy	Action plan	Translate transition targets into concrete short, medium and long term actions						
		Capital allocation plan	Establish financial requirements necessary for the delivery of action plan						
		Risk assessment and mitigation	Assess climate risks and opportunities, and delivery risks associated with implementation strategy						
		Ongoing monitoring	Develop capabilities to track and report progress of implementation strategy						
		Governance	Develop mechanisms to oversee and support the execution of implementation strategy						
	Disclosure		Disclose publicly details of climate ambition and implementation strategy						
	Independent verification		Obtain independent verification for publicly disclosed details						
	Just transition considerations		Ensure no significant harm to other environmental and social objectives						

3.2. Other relevant guidelines and initiatives

Additionally, there exists numerous other existing climate-oriented frameworks, methodologies and guidance, which has been illustrated in greater detail in the GFANZ Expectations for Real-economy Transition Plans paper. These guidelines and initiatives aim to comprehensively detail the market-accepted recommended approach for one of the following main categories respectively: disclosure and data collection, target setting and transition plan development. Stakeholders may refer to these initiatives to access more detailed guidance to meaningfully facilitate their efforts in assessing transition credibility.

Exhibit 5: Summary of global climate and transition initiatives[24]

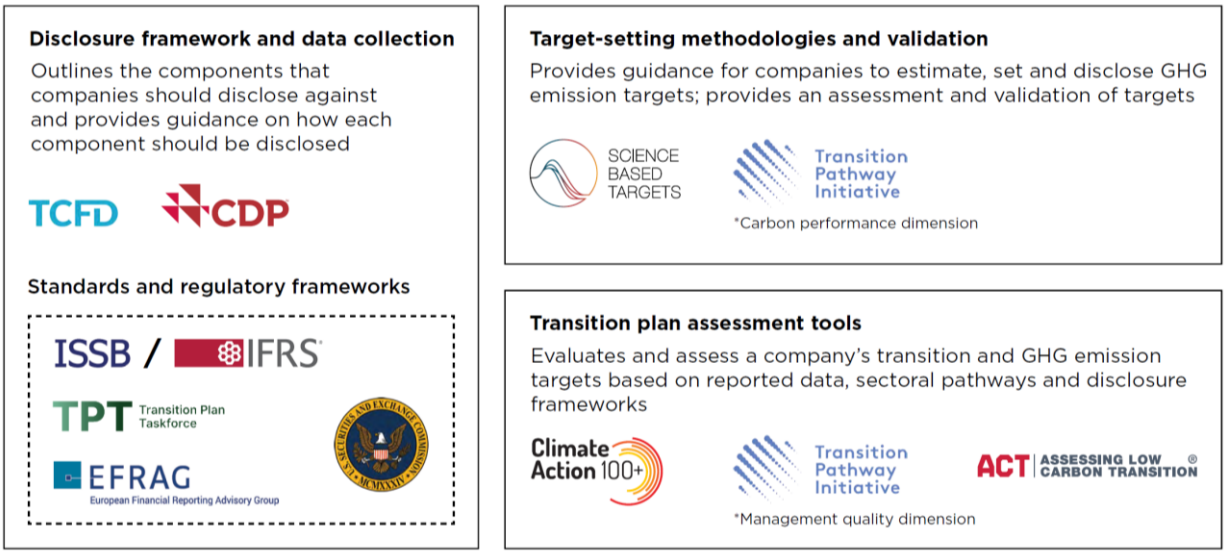


Exhibit 6: Deep-dive into disclosure frameworks

Multiple disclosure standards exist with differing focus areas, which can be challenging for capital market participants to navigate. In response to this global market concern, the International Sustainability Standards Board (ISSB) has recently introduced in June 2023 the new International Financial Reporting Standards (IFRS) S1 and S2 to create a global baseline for sustainability reporting that enables investors to be informed in their decision making[25]. These standards are expected to become the leading disclosure standard once its adoption phase begins in 1 January 2024[26], backed by multiple international institutions such as the G20, the Financial Stability Board and the International Organization of Securities Commissions (IOSCO), as well as leaders in the business and investor community.

IFRS S1 and S2 focus on how companies may assess their sustainability and climate risks and opportunities, as well as communicate the assessment results to their investors[27,28]. This guidance has undergone an extensive consultation process and has built upon well-recognised climate disclosure standards that have

[24] Glasgow Financial Alliance for Net Zero (GFANZ). Expectations for Real-economy Transition Plans. September 2022.
[25] International Financial Reporting Standards (IFRS). ISSB issues inaugural global sustainability disclosure standards. June 2023.
[26] Ibid.
[27] Ibid.
[28] International Financial Reporting Standards (IFRS). Project Summary. June 2023.

been widely adopted by market stakeholders, including Task Force on Climate-Related Financial Disclosures (TCFD) and Sustainability Accounting Standards Board (SASB).

Broadly, IFRS S1 addresses broad-based sustainability risks and opportunities and forms the underlying principles for IFRS S2, which emphasises climate-specific risks and opportunities and is the key standard informing transition-related assessments:

1. **International Financial Reporting Standards (IFRS) S1 General Requirements for Disclosure of Sustainability-related Financial information**
   A. **Overview**:
      i. Sets out general requirements for a company to disclose information about its sustainability-related risks and opportunities that is useful to investors.
      ii. Develops strong conceptual foundations, which form the basis of other sustainability-related disclosure standards such as IFRS S2.
   B. **Suggested use cases (non-exhaustive)**:
      i. Perform assessments of broad-based sustainability risks and opportunities.
      ii. Prepare disclosure materials on their assessments to investors.
2. **International Financial Reporting Standards (IFRS) S2 Climate-related Disclosures**
   A. **Overview:**
      i. Sets out requirements for a company to disclose information about its climate-related risks and opportunities, while building on the requirements described in IFRS S1.
   B. **Suggested use cases (non-exhaustive):**
      i. Perform assessments of climate-specific risks and opportunities, which forms the basis of transition credibility.
      ii. Prepare disclosure materials on their assessments to investors, which can help highlight key information relevant for investors' decision-making on transition finance.

Companies can refer to **Section 4** for more details on how the IFRS S2 can be applied in risk assessments and disclosures. A brief overview of the 4 structural elements of IFRS S2 is provided below, which broadly aim to allow the users of general purpose financial reports to understand:

1. **Governance**: Processes, controls and procedures an entity uses to monitor, manage and oversee climate-related risks and opportunities.
2. **Strategy:** Entity's approach to managing climate-related risks and opportunities.
3. **Risk Management:** Processes to identify, assess, prioritise and monitor climate-related risks and opportunities, including whether and how those processes are integrated into and inform the entity's overall risk management process.
4. **Metrics and Target:** Performance tracking in relation to management of climate-related risks and opportunities, including progress towards any climate-related targets it has set and any targets it is required to meet by law or regulation.

3.3. Other tools: Taxonomies, technology roadmaps and technology lists

Companies may also refer to supplementary tools in developing transition targets or strategies, such as taxonomies, technology roadmaps and technology lists. These tools establish common criteria to identify activities, assets or technologies that are aligned with the needs of a decarbonising world presently and/or in the near, medium and long-term.

Exhibit 7: Definition of taxonomies, technology roadmaps and technology lists[29]

Tools	Description	Examples of available ASEAN tools
Taxonomies	A taxonomy is a classification system that provides businesses with a common language and the means to identify whether or the extent to which a given economic activity is environmentally sustainable	ASEAN, Singapore, Thailand, Indonesia, Malaysia and Philippines Taxonomies
Technology roadmaps	A technology roadmap outlines the technologies that will be necessary to get specific industry sectors aligned with the Paris Agreement, showing technology ready for use by year	Technology roadmaps by the Singapore and Malaysian governments
Technology lists	A technology list provides a reference point when assessing potential transition technologies until technology roadmaps or taxonomies with thresholds and eligible activity lists are developed	Technology List and Perspectives for Transition Finance in Asia by Economic Research Institute for ASEAN and East Asia

These tools complement existing principles-based guidelines by presenting ASEAN companies with practical and sector-specific resources to facilitate decision-making and planning. For example, companies may refer to one or more of these tools to translate the following principles into action:

1. **Point-in-time current state assessment**: Companies may use a taxonomy or technology list to evaluate if current or near-term planned activities are presently considered transition-aligned for any activity-specific use of proceeds financing; users may refer to the Asia Transition Finance Guidelines for more details on how these tools meaningfully facilitate assessment for use of proceeds financing[30].
2. **Forward-looking perspective on transition-aligned activities per time period**
   A. **Target setting**: Companies can develop near-, mid- and long-term targets for specific decarbonisation activities by referencing technology roadmaps that illustrate when technologies may become commercially viable and how effective they will be, or referencing how the quantitative thresholds of taxonomies change over time.
   B. **Action plan development**: Similarly, companies may develop and refine their action plan to achieve their emissions targets by referring to the available decarbonisation activities from all tools in the near-term and technology roadmaps in the longer term.
   C. **Risk assessment and mitigation**: Companies can evaluate their entity-level transition risks and risk of emissions lock-in based on how long their current or future activities will remain transition-aligned

[29] Description of tools from Asia Transition (ATF) Study Group. Asia Transition Finance Guidelines. September 2022.
[30] Ibid.

per the taxonomy or technology roadmaps, which is particularly relevant for entities in hard-to-abate sectors dependent on interim transition technologies.

Companies should exercise discretion in identifying the tool best suited for their business models and objectives, given that tools can vary by:

- **Geographic specificity**: As with existing guidelines and transition pathways, these tools often have global, regional and national versions. In many cases, regional or national tools are developed to be as interoperable as possible but are adapted for specific localised constraints and priorities. For instance, national taxonomies often have provisions or specific focus areas to support local companies in progressing towards national targets or strategic interests and may vary in degree to which they are mandatory. Issuers using their plans to attract financing should consider the location of relevant investors – for example, those seeking EU funding will likely need to adhere to EU as well as local taxonomies.
- **Level of detail**: Many tools intended for ASEAN are in their early stages or are under development, and may not be sufficiently comprehensive or informative. Limitations include limited coverage of relevant sectors or the lack of quantitative science-based thresholds for activity / technology classification (i.e., activity evaluation is based on only qualitative principles). Entities should identify tools that align with their needs and enable them to build climate capabilities; this guidance aligns with the Asia Transition Finance Guidelines in that science-based tools with specific quantitative thresholds or clear definitions of transition-aligned activities are broadly perceived as more credible.

Exhibit 8 illustrates the available taxonomies for ASEAN by select points of differentiation, aligned with and building upon the Asia Transition Finance Guidelines[31] to capture additional nuances.

[31] Asia Transition (ATF) Study Group. Asia Transition Finance Guidelines. September 2022.

Exhibit 8: Overview of existing regional and national taxonomies in ASEAN[32]

	ASEAN[33]	Singapore[34]	Thailand[35]	Indonesia[36]	Malaysia[37],[38]	Philippines[39]
Taxonomy	ASEAN Taxonomy Version 2	Singapore-Asia Taxonomy	Thailand Taxonomy Phase 1	Indonesia Green Taxonomy Edition 1	Principles-Based Sustainable and Responsible Investment Taxonomy	Proposed Philippine Sustainable Finance Taxonomy Guidelines
Date of publication / latest update	Jun-2023	Jun-2023	Jun-2023	Jan-2022	Dec-2022	Sep-2023
List of eligible activities *Whether the taxonomy includes a list of green or transition-aligned activities*	☑	☑	☑	☑	☒	☒
Quantitative thresholds *Whether eligible activities may be identified via quantitative thresholds (e.g., emission intensity, energy consumption)*	☑ 1 sector, Energy	☑ 8 sectors, including Energy, Transport and Buildings	☑ 2 sectors, Energy and Transport	☒	☒	☒

[32] At the time of writing, all other ASEAN countries have yet to publish a national taxonomy.

[33] The ASEAN Taxonomy Board. ASEAN Taxonomy Version 2. March 2023.

[34] Green Finance Industry Taskforce, convened by the Monetary Authority of Singapore. Singapore Taxonomy 4th Consultation Paper. June 2023.

[35] The Thailand Taxonomy Board. Thailand Taxonomy Phase 1. June 2023.

[36] Otoritas Jasa Keuangan (OJK). Indonesia Green Taxonomy Edition 1. January 2022.

[37] Securities Commission Malaysia. Principles-Based Sustainable and Responsible Investment Taxonomy. December 2022.

[38] Malaysia has 2 taxonomies, namely the Climate Change and Principle-based Taxonomy (CCPT) released by Bank Negara Malaysia in April 2021, and the Principles-Based Sustainable and Responsible Investment Taxonomy (SRI) released by Securities Commission Malaysia in December 2022. Among the 2 taxonomies, the SRI is chosen for evaluation as it builds upon and is consistent with the CCPT. Furthermore, the SRI is specifically developed for capital market participants to identify sustainable investment assets and activities, whereas the CCPT is targeted at general financial institutions.

[39] Financial Sector Forum (FSF), a voluntary interagency body comprised of the Bangko Sentral ng Pilipinas (BSP), Securities and Exchange Commission (SEC), Insurance Commission (IC), and the Philippine Deposit Insurance Corporation (PDIC). Proposed Philippine Sustainable Finance Taxonomy Guidelines. September 2023.

Transition pathway ***Type of transition pathways referenced in in setting quantitative thresholds***	**Country/ sectoral industry body targets**	☑	☑	☑	☒	☒	☒
	Science-based models	☑	☑	☑	☒	☒	☒

Specifically, this guidance is intended to complement the ASEAN Taxonomy. The taxonomy sets requirements to qualify for Green and Amber tiers of sustainable finance, and in the Plus standard has defined quantitative thresholds with retirement dates for Amber tiers that creates a ratcheting of requirements over time. This guidance builds on that by creating an approach to assess the forward looking plans of companies and facilitate investor support for those companies. Any company may in principle qualify for transition finance – the current position is not a restriction, only the forward looking plan. In other words, to be considered for transition finance, companies will need to demonstrate how they intend to transition their operations and use of technologies through the tiers defined in the ASEAN Taxonomy at a speed that is consistent with a science-based pathway.

Exhibit 9: ASEAN Taxonomy and how it can be used

The ASEAN Taxonomy for Sustainable Finance Version 2 has introduced a Plus Standard (PS) as an advanced assessment approach, with this version focused on entities in the Electricity, gas, steam and air conditioning supply (i.e. Energy) sector. This enables climate change mitigation activities in this sector to be categorised into tiers based on quantitative Technical Screening Criteria (TSC) informed by a science-based reference pathway from the International Energy Agency (IEA), should they meet all other environmental objectives and essential criteria. There are three qualifying tiers at present (Green, Amber Tier 2, and Amber Tier 3), with Amber tiers reflecting transition-aligned activities. tiers will be sunset and thresholds, revised down over time to reflect the downward-sloping trajectory of the underlying transition pathway.

To illustrate, an ASEAN power generation company may find the ASEAN Taxonomy helpful in:

- **Current state assessment:** Companies can use current tier thresholds to identify whether their power generation activities are presently transition-aligned; if entities' assets perform on par with industry-average emission factors[40] until 2030, this broadly entails the following:

Tiers (2023-2030)	Qualifying power generation activity type
Red	Coal
Amber Tier 3	Average gas
Amber Tier 2	Best-in-class gas, biomass
Green	Most renewables

- **Target setting and action plan development:** Although the ASEAN Taxonomy has yet to publish how the thresholds will evolve per time period, companies may consider how the tier sunsetting period will affect whether their existing assets will remain transition-aligned through time. For example, given that Amber Tier 3 will be sunset by 2030, companies should consider how this might affect any plans to develop new gas power plants after 2030 and the implications on its continued financing.
- **Risk assessment and mitigation:** With the understanding of how the Taxonomy will tighten their thresholds at fixed time intervals, companies may also assess the degree to which their current or planned assets will represent emissions lock-in throughout their lifetime. For example, in the absence of any retrofitting with abatement technologies, a new gas plant that is currently Amber Tier 3 will remain similarly emissions intensive over the next 30 years by which it will not be transition-aligned by the end

[40] Intergovernmental Panel on Climate Change (IPCC). Annex II: Metrics & Methodology. In: Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. 2014.

of its life span. Companies should consider the lifetime of their assets together with the sunsetting horizon of the Amber tiers.

4. Guidance on assessing transition credibility for financing

4.1. Summary

Purpose

In the ASEAN context, this guidance is designed to:

- Define principles by which stakeholders may assess their or another company's transition credibility at an entity level as the basis for financing.
- Identify and provide guidance where applicable on how to make use of relevant climate-oriented resources to facilitate transition planning and disclosure, including the ASEAN Taxonomy.

Overarching guidance characteristics

1. **Voluntary**: This guidance is not binding by nature, and is designed to be interpreted in the user's respective context and in conjunction with existing frameworks (e.g., national- or company-level guidelines).
2. **Interoperable**: The following principles closely references robust existing guidelines for interoperability – this guidance does not aim to redefine principles that have already been accepted by the market.
3. **Practicality**: In recognition of the challenge of navigating the diversity of existing tools and resources, this section incorporates practical guidance where relevant on how to identify and make use of the most pertinent ones, such as taxonomies and reference pathways.
4. **Flexible**: Stakeholders are encouraged to use discretion in the application of these principles, given that many ASEAN companies may not presently have climate maturity and sophistication needed to achieve all criteria and the challenges in data availability and accessibility in more developing countries.

Approach to assessing transition credibility

A credible transition comprises two main elements: sufficient climate ambition, and robustness of the entity's ability to deliver on said ambition. Building upon international guidance and stakeholder input, this section defines the characteristics of transition credibility accepted by the market, with key principles as follows:

- **Element 1: Climate ambition (Section 4.2)**
  - **Current state assessment (Section 4.2.1)**: Entities must assess all emissions from environmentally material business activity (Scopes 1, 2 as well as Scope 3 where material), which serves as a robust foundation for their forward-looking progress.
  - **Transition pathway (Section 4.2.2)**: Entities should identify a reference trajectory that informs the extent of required decarbonization consistent with the Paris Agreement, with the following characteristics:
    - Pathway source: From a science-based model - in the interim, some may accept country- or industry body-led commitments.
    - Temperature outcome: Aligned with objectives of the Paris Agreement, ideally 1.5°C above pre-industrial levels with no to low overshoot or at a minimum, well below 2°C.

- Level of specificity: May be specific to the sector and geographic region representative of entity's business activity, provided that this geographic and sector version is itself aligned with aforementioned criteria for pathway source and temperature outcome; this may lead to different pathways and target levels for ASEAN viz. other parts of the world.

- **Transition targets (Section 4.2.3)**: Entities should set concrete, time-bound targets on how it will align with its transition pathway, where:
  - Absolute emissions targets must show a decarbonisation trajectory equivalent or more ambitious to the reference pathway through to their net zero year.
  - Emission intensity targets must converge with the selected transition pathway by 2050 and in the interim:
    - Companies starting above the pathway should plan to decarbonise in parallel with the reference pathway as a minimum.
    - Companies starting below the pathway should target to remain on or below the pathway.

- **Element 2: Robustness of Ability to Deliver (Section 4.3)**
  - **Implementation strategy (Section 4.3.1):** Entities must clearly demonstrate how it intends to make tangible progress towards achieving their climate ambitions, which includes:
    - Action plan: Detailed roadmap of actions to achieve targets differentiated by near-, mid- and long-term milestones.
    - Capital allocation plan: Financial requirements for execution of the action plan, and how to achieve such financing.
    - Risk assessment and mitigation measures: Robust climate and delivery risk assessment and relevant mitigation strategies.
    - Ongoing monitoring: Processes to track progress against targets and adapt as needed.
    - Governance: Organisational structure and mechanisms to oversee and support the execution of the other elements of the implementation strategy.
  - **Disclosure (Section 4.3.2):** Entities should disclose their performance, targets and progress on an annual basis as a minimum, aligned with existing climate-related disclosure standards such as IFRS S1 and S2.
  - **Independent verification (Section 4.3.3):** Entities are encouraged to seek third-party verification on their transition credibility, particularly for those with lower climate maturity.
  - **Just transition considerations (Section 4.3.4):** Entities should assess and account for potential adverse environmental impacts and social considerations that arise from their transition plan.

To be considered as credibly transitioning, entities are encouraged to demonstrate all aforementioned characteristics, and provide clear justification where there are any deviations (e.g., if a specific criterion may not be applicable in their context or for a particular financing instrument).

While these principles are robust and interoperable with existing market-accepted guidance, they focus on establishing the minimum boundaries of what the market is willing to accept as credible and are limited in their ability to recognise that entities may differ in the degree to which they demonstrate these criteria and still be recognised as credible. To meaningfully represent the differences in market expectations beyond these boundaries and encourage progress of real economy companies in ASEAN, this guidance proposes three tiers representing the differences in approaches of transitioning entities (**Section 4.4**):

1. **Aligned and Aligning – 1.5°C**: Entities that demonstrate sufficient climate ambition that is already aligned or aligning with a science-based 1.5°C trajectory and meet all other criteria of transition credibility.

2. **Aligned and Aligning – Well below 2°C**: Entities that demonstrate sufficient climate ambition that is already aligned or aligning with a science-based well below 2°C trajectory and meet all other criteria of transition credibility.
3. **Progressing**: Entities that demonstrate most but not all elements of ability to deliver and/or a climate ambition that is material but not yet aligned or aligning to well below 2°C, and have committed to addressing any material omissions in the next 2 years.

These tiers are intended to facilitate financing activity by providing a consistent basis for evaluating corporates' transition approaches. **The 1.5°C tier** represents the gold standard for what is globally accepted as a credible transition, consistent with international guidance, while **Well below 2°C** is more reflective of climate ambitions across ASEAN while maintaining the robustness of all other criteria. Additionally, including a **Progressing** tier is designed for companies that meet most but not all criteria of transition credibility, and serves two purposes: facilitating capability development of real economy companies, and directing capital towards the more climate mature even if they may not meet all requirements. The latter reflects evolving investor interest in steering their full portfolio, independent of labels or specific financing instruments, in line with their climate goals.

4.2. Element 1: Climate Ambition

Entities should have a net zero target and sufficiently ambitious decarbonisation trajectory aligned with the objectives of the Paris Agreement to limit the rise of average global temperature with no to low overshoot to 1.5°C, or at least well below 2°C. Where entities deviate from any recommended guidance in the following section, they should provide a clear rationale.

Key principles

- **Current state assessment**
  - Identify and report GHG emissions from environmentally-material parts of the entity's business model.
  - Include all sources of emissions – Scopes 1, 2 as well as 3 where material, from identified business segments.
  - Select and justify emissions metrics to quantify the entity's current state (i.e., use of absolute or intensity).
  - Disclose use and impact of carbon credits, if applicable.
- **Transition pathway**
  - Select level of global warming ambition aligned with the objectives of the Paris Agreement; if it is not well below 2°C aligned as a minimum, provide rationale.
  - Select a reference pathway to inform the decarbonisation trajectory; this should ideally be science-based, and if not then clear rationale should be provided.
  - The chosen reference pathway may be region-specific (i.e. showing the decarbonization trajectory for a country or set of countries in ASEAN or beyond) – this allows transition plans to take into account the requirements of a just transition whilst remaining consistent with the global goal of limiting warming in line with the Paris Agreement. Where transition plans rely on such regional pathways, they should meet the two aforementioned criteria for transition pathways and be clearly explained.
- **Transition targets**
  - Set targets that demonstrate how the entity will transition from its current state to align with the choice of transition pathway, with the following conditions:
    - Comprehensive coverage of all environmentally-material business segments and their respective sources of emissions, including expected role of carbon credits where relevant.
    - Differentiated by near-term, medium-term and long-term.
    - Relative to the reference pathway, and not compared to the entity's business-as-usual performance.
  - Companies targeting an improvement in emissions intensity may have a starting intensity that is significantly above or below the regional or global average shown in the reference pathway. In such a case, near-term targets (to 2030) should be at least parallel with (for those starting above) or converging (for those starting below) the reference pathway.

4.2.1. Current State Assessment

To meaningfully understand what a path towards decarbonisation entails, entities must first develop a robust understanding of where they currently are. Entities should first evaluate the environmentally-material aspects of their business model, which are the activities that are the main drivers of their current and future

environmental performance. For the purposes of this guidance, entities may quantify environmental materiality by greenhouse gas emissions as a key metric[41]. This may be expressed as metric tonnes of CO_2 equivalent (or CO_2e), which requires entities to measure and aggregate the seven constituent greenhouse gases into CO_2 equivalent values. Entities may refer to IFRS S2 on Climate-related Disclosures[42] for more guidance.

All material sources of emissions must be included in an entity's current state assessment, which includes:

- Scope 1: Direct greenhouse gas emissions that occur from entity's operational activity.
- Scope 2: Indirect emissions from purchased or acquired electricity consumed by entity.
- Scope 3: Indirect value chain emissions that are non-negligible in volume and is controlled in part by the entity (including upstream and downstream).
    - The material categories of scope 3 emissions will differ depending on the sector and where the company operates on the value chain (see **Exhibit 10** for an illustration of how material sources of emissions differ by sector and value chain operations).

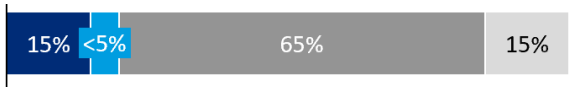
The aim of the ASEAN guidance here is to be consistent with global guidelines in order to maximise interoperability – ASEAN companies should include the full scope of their greenhouse gas emissions consistent with global practices. Where entities may lack in the comprehensiveness of their current state assessment (e.g., Scope 3 emissions not assessed, measurement of only CO_2 but not the other greenhouse gases), entities should commit to a clear action plan and time frame in the near term by which they aim to build their capabilities to do so.

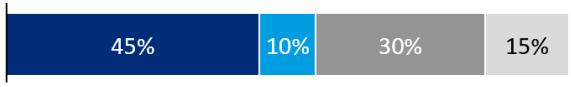
[41] In the broader context of a just transition, environmental materiality should consider the broader scope of socio-environmental impacts on biodiversity, water, people and communities, etc. Refer to Section 5.4.4 for more information on how an entity may incorporate just transition considerations in their approach to climate change mitigation.

[42] International Financial Reporting Standards (IFRS). IFRS S2. June 2023.

Exhibit 10: Most material sources of emissions by sector

Note: The emissions distribution data is calculated from the latest available reported emissions performance of the largest companies in ASEAN to CDP (global disclosure database on environmental reporting). This provides an overview of common sector characteristics and is not intended to be representative of all entities in the sector; this distribution will vary by business model and other operating characteristics.

Sector	Emission distribution Scope 1 Scope 2 Scope 3 - Upstream Scope 3 - Downstream	Most material source(s) of emissions	Value chain type	Relevant emission scope(s)
Power		• Combustion of fossil fuels for power generation	Generation	Scope 1
Oil & Gas		• Use of end-products (processed crude, refined products, etc.) • Emissions from extraction and processing operations or maintenance activities (flaring, methane venting, etc.)	Integrated	Scopes 1 and 3 downstream
Agriculture		• Forestry and land use • Livestock farming (enteric fermentation, manure management, etc.) • Crop cultivation (agriculture residues, fertiliser application, etc.) • Post-farmgate activities (processing, transportation, etc.)	Production / processing	Scopes 1 and 3 upstream
Road Transport		• Combustion of fuels by vehicles	OEM manufacturing	Scope 3 downstream
Aviation		• Combustion of fuel by aircrafts	Airlines operators	Scope 1
Shipping		• Combustion of fuel by ship vessels	Ship operators	Scope 1

Sector	Emission distribution Scope 1 Scope 2 Scope 3 - Upstream Scope 3 - Downstream	Most material source(s) of emissions	Value chain type	Relevant emission scope(s)
Real Estate & Construction		• Embodied emissions in building material • Energy consumption from tenant activity	Real estate owner-operator	Scope 3 (upstream from embodied emissions, downstream from tenant activity)
		• Combustion of fuels by machinery and other equipment from on-site activity	Construction	Scope 1
Metals & Mining		• Combustion of fuels and purchased energy for mining, processing and other operations (smelting, heating, etc.) • Use of commodity end-products (processed metals, minerals, etc.)	Integrated	Scopes 1 and 3
Chemicals		• Use of chemical end products (reactants) • Combustion of fuels for various chemical processes (heating, etc.) and reactants from chemical reactions and processes	Integrated	Scopes 1 and 3 downstream
Textile		• Production of raw materials (cotton, wool, etc.) • Combustion of fuels in textile manufacturing (boilers, generators, etc.)	Producers	Scopes 1 and 3 upstream
Paper		• Combustion of fuels in paper production (boilers, kilns, etc.) and transportation • Land use and deforestation	Producers	Scopes 1 and 3 upstream

Real economy companies may also refer to the GHG Protocol for specific guidance on how to assess their Scope 3 emissions (see **Exhibit 11** for more details).

Exhibit 11: GHG Protocol Guidance on how to assess Scope 3 emissions

The GHG Protocol represents the market-accepted global standard in measuring and managing emissions and has published a series of guidelines on how companies may assess their Scopes 1, 2 and 3 emissions. Entities may refer to the following key publications for robust, detailed guidance:

- Corporate Value Chain (Scope 3) Accounting and Reporting Standard[43].
- Technical Guidance for Calculating Scope 3 Emissions[44].

The measurement of Scope 3 emissions can be challenging, particularly where it requires value chain partners to be comparably sophisticated in their assessment of emissions. Data availability and quality issues in ASEAN also exacerbate the difficulty of comprehensively quantifying emissions that an entity is not directly responsible for, even for the largest and most well-resourced companies. The GHG protocol outlines a series of steps on how companies may accommodate for existing limitations, with the guidance for data collection as an example:

- Evaluate the availability of data for material sources of emissions by primary and secondary sources
  - Primary data includes direct collection of data from value chain partners, which enables more precise and accurate emission measurement but can be costly and challenging to verify.
  - Secondary data refers to the use of industry averages or comparable proxies, which may not be reflective of the company's specific emission profile.
- Prioritise more precise primary data collection for most significant sources of Scope 3 emissions; use secondary data where there are significant data gaps and/or for other sources of Scope 3 emissions.

An entity will also need to select metrics to communicate their baseline performance, and subsequently set targets upon. Greenhouse gas (GHG) emissions is the most used metric and enables comparability within and across sectors. Commonly, this may take the form of:

- Absolute emissions in carbon dioxide equivalent (CO_2e) or carbon dioxide (CO_2), whichever is most representative of sectoral emissions profile.
- Physical-based emission intensity (i.e., emissions divided by a physical activity unit typically specific to the sector).

As a minimum, companies should disclose their absolute emissions and the baseline performance for all metrics that inform target-setting. Companies should clearly justify their choice of metric for target setting (e.g., emission intensity, alternative metrics). To facilitate a comprehensive assessment of the entity's performance within and across sectors, they should also disclose breakdowns by sector, emission scopes and any other meaningful factors of differentiation (e.g., business units, geographic location). They should also specify the coverage of their GHG emissions assessment, such as whether there are any excluded business segments or geographic regions, and their methodology for assessment.

Lastly, on the treatment of carbon credits or offsets, as per the Race to Zero global campaign[45] and consistent with existing guidance from GFANZ and NZBA, companies may use high quality carbon credits only as the

[43] GHG Protocol. Corporate Value Chain (Scope 3) Accounting and Reporting Standard. n.d.
[44] GHG Protocol. Technical Guidance for Calculating Scope 3 Emissions. 2013.
[45] Race to Zero. Race to Zero Criteria. July 2022.

last mile measure to address residual emissions after they have fully engaged in all other meaningful and viable decarbonisation activities. In other words, offsets should not be the first or only strategy of a robust decarbonisation plan. Carbon credits should count only to offset point-in-time emissions, and does not count towards longer-term progress against entity targets.

Where companies use offsets, they should report gross emissions performance as aligned with ISSB IFRS. In other words, entities should disclose the impact of any carbon offsets separately from their baseline emissions and share any relevant details that demonstrates the quality of these offsets, and detail how the use of offsets fits into their broader decarbonisation strategy. Companies seeking international finance should also be mindful of evolving attitudes to the role of offsets – companies should prioritise changes in business model over offsets wherever possible to ensure the widest range of financing remains available.

4.2.2. Transition Pathway

There is no single "right" transition pathway for any entity, therefore requiring entities to prove that their selected decarbonisation pathway is credible.

Temperature outcome. Scientists are broadly aligned on the collective global pathway to limit global warming to well below 2 degrees and ideally 1.5 degrees above pre-industrial levels as per the Paris Agreement.

Pathway source. However, this represents a shared responsibility that will need to be "allocated" by geography, sector and/or other meaningful divisions. This allocation process depends on a variety of forward-looking assumptions, such as technological viability and economic or political barriers to decarbonisation. Decarbonisation trajectories may differ significantly between geographical regions or sectors, just as how different science-based models may derive different trajectories for the same regions and sector.

In view of the complexity in pathway development, specific reference pathways should ideally be developed under a global science-based model that ensures that the net outcome is aligned with the collective goal set by the Paris Agreement. Fundamentally, a slower transition pathway is only credible if it is accompanied by a faster one. These models are also able to reflect the interactions and trade-offs between sectors' relative rates of decarbonisation, given how interdependent sectoral progress can be.

Countries or industry bodies have also developed alternative pathways that best reflect unique constraints and priorities. While these transition pathways are often adopted by many real economy companies as a more realistic guidepost, these only consider feasibility within a specific scope and do not effectively account for global decarbonisation needs and other interdependencies. Therefore, such pathways may be acceptable as transitional in enabling greater climate change mitigation but may not be as credible as pathways from science-based models.

Adjusting to ASEAN. Per stakeholder consultations, both global and specific pathways can be accepted by the market so long as it meets the above criteria on temperature outcome and pathway source. Companies may prefer more specific reference pathways that reflect their individual circumstances by geography and sector. For example, country-level pathways account for localised starting points, technological readiness and regulatory headwinds or tailwinds and may be perceived as representing a more realistic transition trajectory – particularly in developing markets and in sectors such as Real Estate where emissions intensity depends on local weather and property type specifics.

However, while science-based models now provide specific pathways for most emissions-intensive sectors, they can be limited in their degree of geographic specificity. Regional decarbonisation pathways from science-based sources, particularly by international groups like the IEA, provide strong credence to how geographic regions may differ in their pace of transition – the development of such pathways will be useful in encouraging greater support for the decarbonisation of emerging markets. In the absence of that, companies may use either global pathways, or conduct their own analysis to simulate a regional cut of the science-based pathway. In doing so, they should find suitable scientific sources to justify their approach, and publish the methodologies used[46].

[46] For example, at the time of writing, in its latest Net Zero Emissions scenarios (NZE), the IEA has provided only a global pathway for each sector and not separate regional pathways. By contrast, earlier Sustainable Development Scenarios that represent "Below 2 Degrees" temperature outcomes did provide further regional specificity. Companies may use this earlier regional cut as a way of adjusting the NZE to create a "regional NZE" scenario as a reference pathway. However, this should be clearly explained in entities' disclosure in transition plans.

In this area, the ASEAN guidance may differ from other global guidelines, as the use of regional pathways will involve setting different numerical targets for emissions intensity, reflecting the just transition for the region. This guidance emphasises the need for a science-based justification of such deviation to ensure that transition plans consistent with this guidance remain consistent with global financial institutions' ambitions to support a global warming target.

How to select a credible pathway

Companies should start by identifying available transition pathways from science-based models that provide a comparable basis for its current state assessment and future targets. All environmentally material aspects of their business model should have a corresponding transition pathway. There may be one or many pathways, depending on the specificity required to the level of sectors and/or geographic regions. Said pathways should also encompass all material sources of emissions (Scopes 1, 2 as well as 3 where material) and be of a comparable metric to the entity's desired targets (e.g., absolute emissions, physical-based emission intensity). Note that any selected transition pathway should be of the same scope as the baseline performance and future targets. In other words, if a company is only able to assess direct operational emissions, their selected transition pathway should also only be of Scope 1 and 2 emissions to provide a comparable basis for their climate targets. In some cases, companies may choose to adjust the scenario to augment to its preferred scope of emissions – this should only apply where a wider scope is taken, and should be clearly explained.

Leading climate industry bodies and initiatives have released, endorsed and/or compiled credible transition pathways that entities may directly reference. These tend to be specific to sectors, including hard-to-abate sectors, and increasingly, geographic regions or countries. **Exhibit 12** illustrates a selection of widely-accepted pathways that ASEAN companies may adopt.

Exhibit 12: Common science-based reference pathways by temperature outcome, geographic scope and sector (non-exhaustive)[47,48,49]

Publisher	Development sources	Pathway	Emissions type	Temperature alignment	Latest available data point	Geographical scope			Sectors covered												
						Global	Regional	National													
IEA	Global Energy and Climate (GEC) Model	**Net Zero Emissions by 2050**	Absolute / intensity	1.5°C	October 2022	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	World Energy Model (WEM)	**Sustainable Development Scenario (SDS)**		Well below 2°C	October 2021	✓	✓														
NGFS	• REMIND-MAgPIE model • MESSAGEix-GLOBIOM model • GCAM model	**Delayed Transition**	Absolute / intensity	1.8°C	June 2021	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		Below 2°C		1.7 °C																	
		Net Zero 2050		1.5 °C																	
		Divergent Net Zero		1.5°C																	
ERIA	IEEJ-NE Model	**CN2050/2060 without Carbon Sink**	Absolute	1.5°C	July 2022		✓	✓		✓		✓	✓	✓		✓		✓		✓	
		CN2050/2060 Stringent 2030		Well below 2°C																	
one earth	One Earth Climate Model (OECM)	**OECM - Shared Socieconomic Pathway**	Absolute / intensity	1.5°C	May 2022	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Sector

Power | Oil & Gas | Agriculture | Road Transport | Aviation | Shipping

Real Estate & Construction | Metals & Mining | Chemicals | Textile | Paper | No sectoral split

[47] Only the science-based robust pathways that have a temperature outcome aligned with the objectives of the Paris Agreement have been included in this table, where non-qualifying scenarios from organisations like IEA, NGFS and SBTi have been deliberately excluded (e.g., IEA's STEPS or APS, NGFS's current policies scenario).

[48] IPCC: Annual Report 6 presents a compilation of all existing Integrated Assessment Models, with their outputs categorised by 8 categories of temperature outcomes. The scope and sectors covered will vary significantly by the source model.

[49] SBTi for Forest, Land and Agriculture (FLAG) development sources: IAM - Integrated Assessment Model; Land sector mitigation - Includes reducing emissions from land use change and agriculture, shifting toward plant-based diets, reducing food waste, restoring forests, improving forest management and agroforestry, and enhancing soil carbon sequestration and biochar in agriculture.

Publisher	Development sources	Pathway	Emissions type	Temperature alignment	Latest available data point	Geographical scope			Sectors covered												
						Global	Regional	National													
ipcc	Coupled Model Intercomparison Projects (CMIP), which consists of around 100 distinct climate models	**C1 (SSP1-1.9): 97 scenarios**	Absolute emissions	Limit warming to 1.5 °C (>50%) with no or limited overshoot	2022 (AR6 Scenario Explorer and Database hosted by IIATA)	*Model-dependent*			*Model-dependent*												
SCIENCE BASED TARGETS	MESSAGEix-GLOBIOM model	**SBTi for Power**	Absolute / intensity	1.5 °C	June 2020					✓											
	Consolidation of all relevant IAMs with focus on land sector mitigation by Roe et al. (2019)	**SBTi for Forest, Land and Agriculture (FLAG)**			September 2022							✓									
					May 2023	✓															
	Outputs of science-based models (IPCC Special Report 1.5 °C)	**SBTi for Maritime**											✓								
					July 2023																
	IEA GEC Model: Net Zero Emissions by 2050	**SBTi for Steel**														✓					
IRENA	PLEXOS-World Model	**1.5 °C Scenario (1.5-S)**	Absolute	1.5 °C	September 2022		✓	✓		✓	✓										
CRREM	IEA GEC Model: Net Zero Emissions by 2050	**Carbon Risk Real Estate Monitor – 1.5 °C Scenario**	Intensity	1.5 °C	March 2023	✓		✓							✓						
		Carbon Risk Real Estate Monitor – 2 °C Scenario		2.0 °C																	

Sector						
	Power	Oil & Gas	Agriculture	Road Transport	Aviation	Shipping
	Real Estate & Construction	Metals & Mining	Chemicals	Textile	Paper	No sectoral split

Exhibit 13: Example industry-published reference pathways by temperature outcome, geographic scope and sector (non-exhaustive)[50]

Publisher	Pathway	Emissions type	Temperature alignment	Latest available data point	Geographical scope			Sectors covered										
					Global	Regional	National											
MISSION POSSIBLE PARTNERSHIP	Sector Transition Strategies - Trucking	Absolute / intensity	1.5 °C	July 2022								✓						
	Sector Transition Strategies – Aviation			July 2022									✓					
	Sector Transition Strategies – Shipping			October 2021										✓				
	Sector Transition Strategies – Steel			September 2022	✓											✓		
	Sector Transition Strategies – Aluminium			April 2023												✓		
	Sector Transition Strategies - Chemicals			September 2022													✓	
IATA	Scenario 1: pushing technology and operations	Absolute	1.5 °C	September 2021														
	Scenario 2: aggressive sustainable fuel deployment				✓								✓					
	Scenario 3: aspirational and aggressive technology perspective																	
IMO	GHG Reduction Strategy	Absolute / Intensity	1.5 °C	July 2023	✓									✓				
Responsible Steel	ResponsibleSteel International Standard	Absolute / Intensity	Well below 2 °C	September 2022	✓											✓		
asi Aluminium Stewardship Initiative	Aluminium Stewardship Initiative Standard	Absolute / Intensity	1.5 °C	April 2023	✓											✓		

Sector						
	Power	Oil & Gas	Agriculture	Road Transport	Aviation	Shipping
	Real Estate & Construction	Metals & Mining	Chemicals	Textile	Paper	No sectoral split

[50] Sector Transition Strategies: Various 1.5 ^{0}C aligned scenarios provided that represent different trajectories as per different underlying assumptions on decarbonisation levers.

Where more than one science-based transition pathway is reasonably applicable, entities may select the most suitable one based on the following two criteria, aligned with the sectoral pathway framework published by GFANZ[51]:

- **Scope and ambition:** What is the boundary of this reference pathway (e.g., geographic region, sector specificity, emission scopes) and its overall temperature ambition? To what extent does this align with my organisation's current and future scope of operations and targets?
- **Underlying assumptions, credibility and feasibility:** What are the underlying key assumptions (e.g., on decarbonisation levers, timeframe for commercial viability of low-emission technologies, local regulations) of the pathway? How does this align with my organisation's strategies, capabilities and operating environments?

4.2.3. Transition Targets

Where the current state assessment reflects the entity's starting point and the choice of transition pathway indicates the goalpost for which it may fairly contribute to the objectives of the Paris Agreement, transition targets represent the entity's commitment to progress.

Transition targets should be of comparable scope to the entity's current state assessment as well as the reference pathway. In other words, if the entity has assessed and disclosed Scopes 1 to 3 emissions in metric tonnes of CO_2 for its current state assessment and identified a transition pathway with a comparable scope, its targets should similarly be on Scopes 1 to 3 emissions in metric tonnes of CO_2. Where entities have committed to expanding the comprehensiveness of its current state assessment, it should also make provisions to adapt its transition targets accordingly.

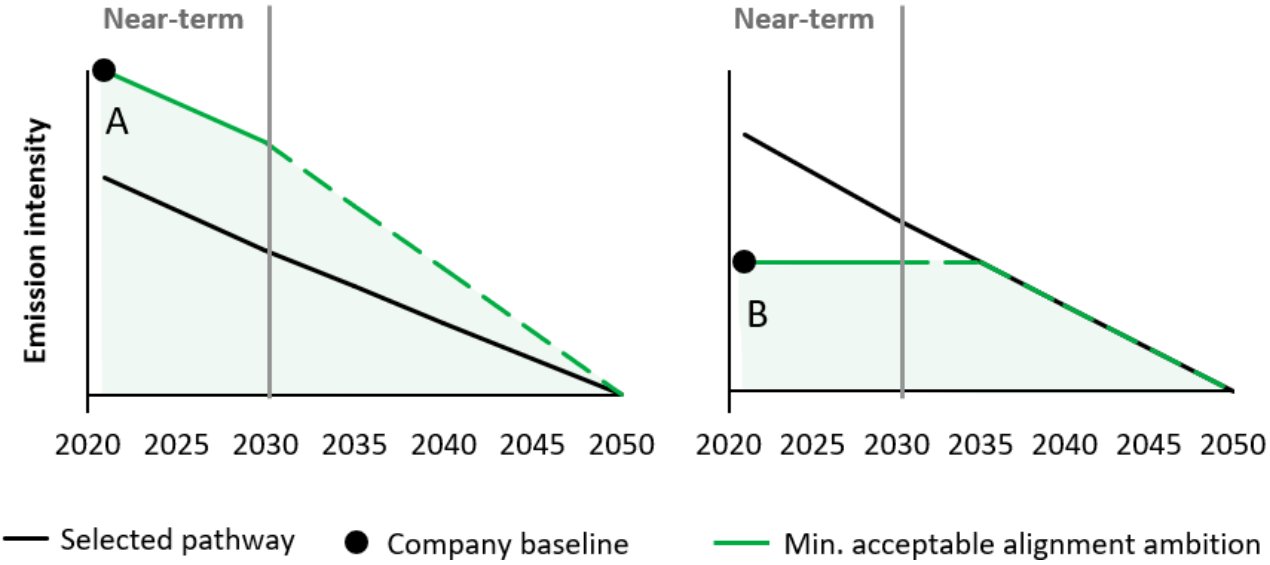
Companies setting **absolute emissions** targets should target decarbonisation commensurate with that of their chosen reference pathway in both interim and long-term goals. This is independent of their starting absolute emissions. That is, if the decarbonisation required by 2030 for the chosen reference scenario is -30%, then the company should also target a decarbonisation of at least 30% from its starting point.

Companies targeting improvements in **emission intensity** will compare their starting point to a regional or global average that may differ significantly from their own emissions intensity – this will result in differences in the amount of decarbonisation that is required and practically achievable. From stakeholder consultations, the market requires entities to set a net zero target year and in the interim,

- Companies starting above the pathway must decarbonise in parallel as a minimum, with the aim of converging as soon as possible.
- Companies starting below the pathway must remain on or below the pathway, and must not target an increase in emission intensity.

[51] Glasgow Financial Alliance for Net Zero (GFANZ). Guidance on use of Sectoral Pathways for Financial Institutions. June 2022.

Exhibit 14: Illustrative minimum acceptable alignment with transition pathway



Entities are expected to articulate progress against their selected transition pathway in timebound milestones on an aggregate emissions level and by underlying decarbonisation levers; entities may define their milestones by their typical planning horizons used for strategic decision-making, including near-term, medium-term and long-term.

As a minimum, there should be an emissions target for each timeframe. This should be accompanied by targets for ancillary decarbonisation strategies or activities that demonstrate the company's willingness and ability to progress on its broader emissions target. Interim targets are expected to be more specific and detailed in the near- to medium-term until 2030, given a higher degree of visibility and understanding of feasible activities, but may be broader into the longer term.

In recognition of the difficulty of committing to longer-term targets, discretion should be exercised in the assessment of the medium- to long-term alignment of targets so long as entities clearly demonstrate near-term alignment and a clear net zero target year.

For targets to be accepted by the market, they need to be set in reference to the reference pathway and not solely with reference to the entity's Business-As-Usual performance. A company's progress is only credible where it is contextualised and comparable to the collective emissions reductions required by its transition pathway.

4.3. Element 2: Robustness of Ability to Deliver

Entities should demonstrate that they have the robust ability to deliver on their targets. As noted above, a range of global guidelines already articulates what is expected here – these are broadly consistent with each other though with subtle differences. The approach outlined here is intended to mirror global guidelines in order to maximise interoperability for globally active investors.

Key principles

- **Implementation strategy:**
  - **Action plan**: Detail a roadmap with the actions the entity intends to take to achieve its transition targets, with the following conditions:
    - Differentiation by near-term, mid-term and long-term actions aligned with target milestones.
    - Evaluation of impact of each action towards said targets.
  - **Capital allocation plan**: Establish the financial requirements to execute the action plan and achieve the entity's climate ambition, and detail how the company plans to fulfil financial requirements, including internal and external financing sources.
  - **Risk assessment and mitigation**
    - Identify climate-related opportunities and risks under different climate scenarios, and disclose relevant strategies to manage the needed changes.
    - Identify key assumptions underlying the entity's action and capital allocation plan, and assess delivery risks that may limit the entity's ability to achieve their targets.
  - **Ongoing monitoring**: Develop organisation- and activity-level processes to track ongoing progress against transition targets and adapt strategies accordingly.
  - **Governance**:
    - Establish how the company's board or key decision-makers approves and oversees its transition targets and implementation strategy.
    - Establish the management structure for execution of the implementation plan.
    - Where relevant, align incentives or remuneration for senior management with climate objectives.
    - Develop climate capabilities across the organization, through hiring skilled talent and providing climate-oriented resources and trainings.
    - Incorporate climate focus into systems and culture (e.g., communication processes on transition progress).
- **Disclosure:**
  - Disclose where the company has demonstrably accomplished the key principles for Climate Ambition and Implementation Strategy; where there are concerns on confidentiality, public disclosure may be on a higher level with full disclosure reserved for external verification and relevant financing stakeholders.
  - Report performance at least on an annual basis or in the event of any material changes.
- **Independent verification**: Seek independent external verification on the entity's overall transition credibility, which includes sustainability-related metrics and targets, as well as implementation strategy.
- **Just transition considerations**: Articulate how just transition considerations are accounted for clearly and transparently, including an assessment of impact on key environmental and social concerns from business-as-usual or transitioning activity where reasonable.

4.3.1. Implementation Strategy

This section details the sub-components of an implementation strategy, or how an entity will embed its climate ambition into its strategic planning, processes and governance.

4.3.1.1. Action Plan

An action plan should qualitatively and quantitatively detail the actions required to achieve their near-, mid- and long-term targets and their impact, preferably by 3 to 5 year intervals. Entities should demonstrate the key elements detailed in Exhibit 15.

Exhibit 15: Key elements of a robust action plan

Key elements	Illustrative details
Broad nature of activities required to achieve transition targets by key milestones	• Decarbonise existing business and operations, e.g.,: – Sourcing for low-carbon inputs – Improving energy efficiency to reduce energy requirements – Reducing existing high-carbon products or services – Phase out carbon-intensive assets (entities can refer to GFANZ Financing the Managed Phaseout of Coal-Fired Power Plants in Asia Pacific[52] for more details) – Engage upstream and downstream value chain entities to collectively drive decarbonization, particularly for entities with significant scope 3 emissions • Set up new low-carbon business and operations, e.g.,: – Providing new low-carbon products or services in existing business lines (e.g., new low-carbon cement for a cement company) – Setting up entirely new business line (e.g., solar business for a power generation company with gas plants)
Specific actions to deliver on the high-level actions	• Company internal actions, e.g.,: – Research and development plan for new low-carbon technologies – Internal policy review plan to update policies around energy usage, investment decisions etc. – Human resources plan to ensure employees have the required skills • Company engagement actions, e.g.,: – Marketing and sales plan to educate existing customers on new low-carbon products – Business development plan for new low-carbon business lines – Supplier engagement plan to collaborate on decarbonisation initiatives

Companies may consider referencing taxonomies or technology roadmaps to chart their action plan based on the commercially viable best-in-class activities per time period.

Companies seeking asset-specific financing will need to disclose provisions for maintaining alignment over time and/or managing risk of carbon lock-in and/or asset stranding over asset lifetime. In other words, it is insufficient to be transition-aligned at a point in time – companies need to demonstrate how their assessed activity or asset will be managed so that the company remains transition-aligned through to its net zero year. For interim "brown" but necessary activities, entities should consider provisions in the form of retrofitting or shortened asset lifetimes for high-emitting activities or commitments to scaling up near-zero or net-zero

[52] The Glasgow Financial Alliance for Net Zero (GFANZ). Financing the Managed Phaseout of Coal-Fired Power Plants in Asia Pacific. June 2023.

technology once commercially viable in the broader context of a transitioning portfolio. This is aligned with the guidance from OECD on how companies should manage asset stranding and risk of carbon-intensive lock-in[53].

4.3.1.2. Capital Allocation Plan

Companies should develop a capital allocation plan that details the financing required to execute their action plan. This serves to enables the entity to demonstrate their ability to achieve a transition in alignment with the objectives of the Paris Agreement while remaining profitable. This plan should address the volume of capital required by target milestones, with key capital types being:

- Capital expenditure (CapEx)
- Operating expenditure (OpEx)
- Research and development expenditure (R&D)
- Costs incurred from phase-out of emissions-intensive assets
- Other costs incurred from transitioning activity, or from the costs of managing physical risks as they materialise during the life of the transition plan.

This should be supplemented with planned financial sources, where entities should establish a clear climate-dedicated budget, and clearly disclose the proportion of financing required from internal or external sources, their resourcing plans and financial targets. If entities plan to issue new debt as a key financial source, it should also disclose its projected available cash flows to service such debt and potential implications on its credit profile. Where relevant, entities may consider establishing internal mechanisms to facilitate financial flows for transition activity, such as internal carbon pricing, and disclose relevant details.

4.3.1.3. Risk Assessment and Mitigation

Climate-related opportunities and risk assessment

Companies face various opportunities and risks in a transitioning world; depending on the speed and intentionality of change, these can significantly differ. An entity needs to demonstrate an understanding of what these climate opportunities and risks are under different scenarios and how their strategies may address them. This entails an assessment of a comprehensive list of climate-related opportunities and risks faced on an entity-level, and the prioritisation of those with the greatest degree of materiality. Where feasible, entities may also conduct a structured climate scenario or sensitivity analysis to develop a more comprehensive and robust understanding of potential climate opportunities and risks, which can then help companies evaluate their impacts on their financial position, performance and cash flows. To illustrate, physical climate risk may influence margins and working capital, and companies need to demonstrate a robust understanding of how their subsequent cash flows may support additional debt required for planned capital expenditure.

Entities may refer to existing standards on risk assessment and management for detailed guidance, in particular the International Financial Reporting Standards (IFRS) S2 on Climate-related Disclosures[54], which fully incorporates recommendations from the Task Force on Climate-Related Financial Disclosures (TCFD). For an overview of IFRS S2 and its key elements, entities may also refer to Section 3.2.

[53] OECD. OECD Guidance on Transition Finance: Ensuring Credibility of Corporate Climate Transition Plans, 3. Key challenges in transition finance, 3.2.5 Asset stranding and risk of carbon-intensive lock-in. 2022.

[54] International Financial Reporting Standards (IFRS). IFRS S2. June 2023.

For additional guidance on getting started on climate opportunity and risk assessment, users may refer to the detailed TCFD framework that serves as a foundational input into IFRS S2 in **Exhibit 16**.

Exhibit 16: TCFD framework of climate opportunities and risks

- **Overview**: TCFD has defined common climate opportunities and risks that companies might face. Companies can leverage this categorization in assessing and disclosing the most material climate opportunities and risks. A summary of common climate opportunities and risks from TCFD is as follows[55]:

Category		Common climate opportunities or risks
Climate opportunities		• Resource efficiency • Energy source • Products and services • Markets • Resilience
Climate risks	Transition risks	• Policy and legal • Technology • Market • Reputation
	Physical risks	• Acute • Chronic

- **Implementation recommendations**: The range of relevant climate opportunities and risks, and the associated impact are largely context-specific based on sector, geographic and company factors. This guidance recognises that the process of determining the specific climate opportunities and risks a company is exposed to is highly complex and uncertain. Nonetheless, as a starting point, there are a few steps a company can undertake:
  - Assess the current state and anticipated changes for each of the common climate opportunities and risks TCFD has defined in the specific locations and jurisdictions the company has presence in.
  - Develop an initial view of the strategic responses to each of the common climate opportunities and risks.
  - Estimating the financial impact of potentially realising these opportunities and mitigating these risks.
  - Prioritise efforts in performing more detailed analyses of material climate opportunities and risks based on the initial thinking around the financial impact of climate issues.

Delivery risk assessment

Companies should assess delivery risks of their transition plan and develop measures to mitigate these risks. Given that each forward-looking strategy is built upon key underlying assumptions (e.g., commercial viability of future technology, regulatory circumstances, demand changes), entities should evaluate and disclose how dependent the success of their plans are on whether their assumptions hold true. They are also encouraged to estimate the upside and downside impact on transition progress, should assumptions prove incorrect, and determine how their strategies will change accordingly. This demonstrates how feasible and robust the entity's plan is. Delivery risk evaluation may be best supported with a sensitivity analysis, which can vary in level of complexity and sophistication.

[55] TCFD. Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures. 2021.

Entities are expected to conduct risk assessment on the general entity-level and the level that the financing instrument is required.

4.3.1.4. Ongoing monitoring

Companies need to consistently track their transition progress, which informs their ongoing re-evaluation and adjustment of their targets and strategies. Companies are encouraged to develop and embed a systematic monitoring process into their organisational system and processes as well as on an individual activity level. Where companies make use of emissions measurement or estimation tools, they should disclose how and why they have selected these tools. Companies should also establish a systematic process for the recalibration of targets as per ongoing monitoring outcomes.

4.3.1.5. Governance

Companies should establish governance systems oriented to the accomplishment of climate targets and delivery of transition strategies. Companies are strongly encouraged to exercise discretion in the degree to which they develop climate-specific governance structures. Generally, more robust governance shifts will provide greater assurance on the entity's ability to deliver on their implementation strategy. This is more important where an entity is required to achieve a fundamental pivot in their business model to new technologies and activities as part of their transition, over cases where an entity's transition requires the scaling of efficiency improvements and/or renewable energy sources but does not entail any change to their core business operations.

Companies may also refer to GFANZ Expectations for Real Economy Transition Plans, Section 4.5 on Governance for more guidance.

4.3.2. Disclosure

Beyond developing sufficient climate ambition and the necessary qualities underlying a robust ability to deliver on such targets, companies will need to disclose these elements to relevant stakeholders. This applies both on an entity level (e.g., in a sustainability report) and where it is specific to a financing instrument. In the latter, companies may exercise discretion in the focus of the disclosure – for example, provide greater specificity on the targets and action plan during the term of the financing instrument. Broadly, all disclosure should be made in accordance with the International Financial Reporting Standards (IFRS) S1 Conceptual Foundations.

Exhibit 17: IFRS S1 Conceptual Foundations

Recommendations from IFRS S1 are built upon 4 key conceptual foundations, which are fundamental qualitative characteristics of useful sustainability-related financial information, and are aligned with other international frameworks on financial reporting and disclosure[56]. The following are the conceptual foundations:

1. Fair representation: A complete set of sustainability-related financial disclosures shall present fairly all sustainability-related risks and opportunities that could reasonably be expected to affect an entity's prospects.
2. Materiality: An entity shall disclose material information about the sustainability-related risks and opportunities that could reasonably be expected to affect the entity's prospects.
3. Reporting entity: An entity's sustainability-related financial disclosures shall be for the same reporting entity as the related financial statements.

[56] International Financial Reporting Standards (IFRS). IFRS S1. June 2023.

4. Connected information: An entity shall provide information in a manner that enables users of general purpose financial reports to understand the following types of connections:
    A. The connections between the items to which the information relates – such as connections between various sustainability-related risks and opportunities that could reasonably be expected to affect the entity's prospects; and
    B. The connections between disclosures provided by the entity:
        i. Within its sustainability-related financial disclosures – such as connections between disclosures on governance, strategy, risk management and metrics and targets; and
        ii. Across its sustainability-related financial disclosures and other general purpose financial reports published by the entity – such as its related financial statements.

Users that wish to read more about the 4 conceptual foundations can refer to the IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information published in June 2023.

For entity-level disclosure, companies should strive to align with IFRS S2 Climate-related Disclosures[57] where possible. IFRS S2 has been widely recognised by investors and other stakeholders alike and represents a global baseline for sustainability reporting. IFRS S2 consolidates existing efforts and best practices in climate-related reporting by building upon TCFD recommendations and subsuming the SASB Standards. For instance, paragraph 14 of IFRS S2 describes how companies should disclose their climate strategy and decision-making, including the key progress and underlying assumptions of their transition plans. Users intending to read more about or get started on implementing IFRS S2 can refer to the IFRS S2 Climate-related Disclosure published in June 2023.

4.3.3. Independent Verification

Market reception towards transition finance to date has been tempered in part due to greenwashing concerns amid the lack of a common international guideline for what constitutes a credible transition deserving of dedicated financing. This is more evident in developing markets, such as in many ASEAN countries, given more significant data gaps and limited track record.

Consequently, obtaining independent verification can be beneficial. Independent verification of entities' transition plans can provide investors confidence in the reliability of issuers' disclosure. An objective external assessment also facilitates entities' better understanding of the robustness of their transition plans, informing the key gaps that entities should prioritise their efforts on, especially for those just starting their transitioning journey with limited expertise in this area.

Therefore, entities are encouraged to seek third-party assessment on the robustness of their transition plan and disclosure. The scope of independent verification should include the following:

- Upfront assessment of all requisite elements of a credible transition as laid out in this guidance, including sustainability-related metrics, targets and implementation strategy.
- Annual assessment of progress against targets and justifications for anomalous over or underperformance.
- Ad-hoc assessment on continued transition credibility where any material revisions are made to targets or implementation strategy.

[57] International Financial Reporting Standards (IFRS). IFRS S2. June 2023.

ASEAN entities are additionally encouraged to publicly disclose the relevant credentials of their verifier and the verification assurance report(s) during the term of the financing instrument. External verifiers should demonstrate that they have the appropriate qualifications and experience in the sectors of assessment. This is consistent with the reporting guidance of the ASEAN Sustainability-Linked Bonds Standards.

4.3.4. Just transition considerations

While this guidance focuses on an entity's climate ambition with regards to climate change mitigation, companies are also encouraged to incorporate just transition considerations into their transition strategy where possible. This ensures that any forward-looking transition strategy sufficiently accounts for potential adverse environmental impacts (e.g., climate adaptation, biodiversity, sustainable waste and water management) and social considerations (e.g., ensuring quality jobs, preventing displacement). For example, an action plan that involves the managed phase out of coal will adversely affect the community where the entity's coal plants are based in, and should be appropriately paired with mitigation measures where reasonable.

Companies should clearly and transparently articulate how they intend to account for just transition considerations, and may also refer to existing guidance from GFANZ Expectations for Real Economy Transition Plans for recommended considerations and actions a company might undertake.

Exhibit 18: Just transition disclosures relevant for financial institutions in GFANZ Expectations for Real Economy Transition Plans published in September 2022[58, 59]

COMPONENT	DISCLOSE THE COMPANY'S	BIG	CA100+	CIC	GRICCE	IGCC	WBA
Objectives and priorities	• Overall strategy to ensure a just transition						
Activities and decision-making	• How the company is managing the phaseout of high-carbon assets with respect to affected communities and workforces						
	• How the company is incorporating the just transition into capital allocation decisions						
	• The sensitivity of the just transition to different assumptions						
Products and services	• The accessibility of new products and services offered by the transition to customers, especially vulnerable customers						
Value chain	• How the company is supporting its suppliers' just transition						
	• How the company is supporting customers that are affected by the transition plan, especially vulnerable customers						
Industry	• Current and planned engagement with industry associations on the topic of the just transition						
Government and public sector	• Current and planned engagement with the public sector to drive just transition policies						
	• Current and planned engagement with communities, including decision-making influenced by consultation						
Metrics and targets	• Targets for impact metrics and the rational for selecting such metrics • Percentage of workers or workers' representatives participating in dialogue regarding the just transition • Percentage of at-risk workers being offered retraining or redeployment • Number of dialogue sessions being held with communities within the year • Number of job losses within the company due to transition plan actions, such as closure of a facility • Number of sustainable jobs created at the company as a result of transition plan actions						
Roles, responsibilities, and remuneration	• The role the board and other stakeholders (e.g., workers) have in overseeing the just transition						
Skills and culture	• Commitments or programs for workers affected by the transition plan (e.g., retraining or redeployment)						
	• Commitments to providing equal access to opportunities for all workers (e.g., promote diversity and inclusion)						

[58] Initiatives referred to in the exhibit are abbreviated as follows: Business for Inclusive Growth (BIG), Climate Action 100+ (CA100+), Council for Inclusive Capitalism (CIC), Grantham Research Institute on Climate Change and the Environment (GRICCE), Investor Group on Climate Change (IGCC), World Benchmarking Alliance (WBA).

[59] Glasgow Financial Alliance for Net Zero (GFANZ). Expectations for Real-economy Transition Plans. September 2022.

Additionally, companies may use existing tools and methodologies to inform their approach to incorporating a just transition into their plans. To illustrate, the ASEAN Taxonomy has integrated Do No Significant Harm (DNSH) and Social criteria for any entity looking to assess their degree of taxonomy alignment with a climate change mitigation focus. Broadly, activities must not cause significant harm to key environmental or social objectives as requisite for being qualified as taxonomy-aligned, on top of specific climate change criteria. Companies in ASEAN may refer to the recommended qualitative assessment from the taxonomy to account for a just transition, primarily on an activity level. For an entity-level assessment on climate targets and strategies, users may refer to guidance from OECD on how entities may assess a just transition with reference to their existing frameworks on how to identify and mitigate sustainability and social risks[60].

[60] OECD. OECD Guidance on Transition Finance: Ensuring Credibility of Corporate Climate Transition Plans, 4. Elements of credible corporate climate transition plans, Element 6: Addressing adverse impacts through the Do-No-Significant-Harm (DNSH) Principle and RBC due diligence. 2022.

4.4. Transition tiers

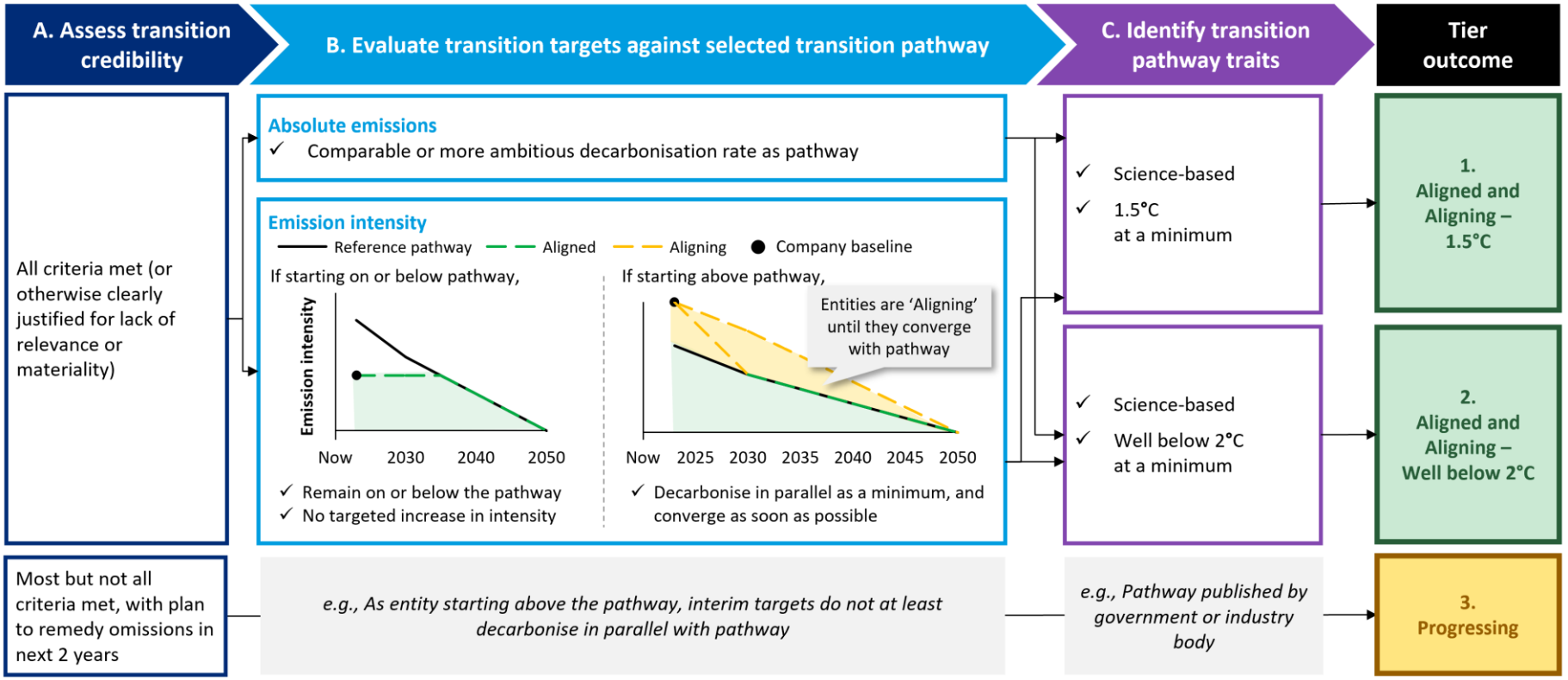
Transition plans remain a work in progress for many corporates, especially in ASEAN – whilst an encouraging number of companies now have targets and decarbonisation plans, very few would currently meet all of the requirements above. Similarly, ambition levels vary – some companies already have targets that are explicitly 1.5°C aligned or aligning, whilst others have less ambitious approaches. Concurrently, both issuers and investors recognise the need for nuance, and these principles will best serve decarbonisation if they allow a meaningful amount of finance to be provided to a meaningful number of companies, whilst simultaneously creating an incentive for companies to create and upgrade their plans.

Therefore, this guidance proposes three tiers to reflect how approaches may differ for transitioning entities by climate ambition and/or robustness of their ability to deliver, as detailed in the subsequent two exhibits. Each tier will likely face varying extents of investor demand and available supply, and the goal is to provide a framework by which differentiated market dynamics can be meaningfully represented.

Exhibit 19: Transition tiers framework

	1. ALIGNED AND ALIGNING – 1.5°C	2. ALIGNED AND ALIGNING – WELL BELOW 2°C	3. PROGRESSING
Description	Entities that demonstrate sufficient climate ambition that is already aligned or aligning with a **science-based 1.5°C trajectory** and meet **all** other criteria of transition credibility	Entities that demonstrate sufficient climate ambition that is already aligned or aligning with a **science-based well below 2°C trajectory** and meet **all** other criteria of transition credibility	Entities that demonstrate **most but not all** elements of ability to deliver and/or a climate ambition that is material but **not yet aligned or aligning to well below 2°C**, and have committed to addressing any material omissions in the next **2 years**
Rationale	• Consistent with international transition finance guidelines and market expectations • Reflective of greatest investor appetite, but likely sets an aspirational tier only achievable by select climate leaders	• Consistent with some international transition finance guidelines given that this is consistent with the objectives of the Paris Agreement, • More reflective of climate ambitions across ASEAN • Developed to facilitate realistic progress: Presently achievable by more issuers in ASEAN, and likely to have sufficient investor appetite	Developed to be inclusive and representative of the majority of ASEAN issuers that are still in the early stages of their climate journey, by: • Directing capital towards the more climate mature • Facilitating capability development

Exhibit 20: Differentiating criteria of transition tiers[61]



[61] To qualify for Tier 3, entities may either (A) achieve most criteria across all sub-elements even if they may not fully meet all criteria, or (B) meet all criteria other than that required for Independent Verification, as a less critical element of transition credibility, so long as they have a plan to remedy any omissions within the next 2 years (e.g., disclosing a clear action and capital allocation plan only for the near term may be acceptable).

The 1.5°C tier represents the gold standard for what is globally accepted as a credible transition, consistent with the common principles of the 6 reviewed international guidelines as well as GFANZ' latest guidance on how "Aligned" and "Aligning" entities' targets should compare against their selected reference pathway[62, 63]. Investor appetite will likely be the greatest for opportunities in this tier, given that many investors have set portfolio steering targets at least in line with 1.5°C, although the stringency of its criteria may limit available supply – this sets an aspirational standard pegged to global ambition for many ASEAN companies.

While retaining the robustness of almost every criteria of the previous tier, **Well below 2°C** is more reflective of regional climate ambitions, where many issuers and select countries have set targets aiming for well below 2°C. This tier aims to facilitate realistic progress, in recognition of ASEAN companies' current climate aspirations and maturity and a fair degree of investor willingness to engage with transitioning companies that have robust plans but fall short of expected climate ambition.

Lastly, **Progressing** aims to be inclusive of companies that meet most but not all criteria of transition credibility, and require financing for transitioning activity. Many ASEAN companies are in the early stages of their climate journey and may still be working towards developing relevant capabilities – where they are able to show progress across most (if not all) sub-elements of transition credibility even if they may not meet the full set of criteria and commit to addressing any gaps in the near term, they should be acknowledged for their efforts. The purpose of this tier is two-fold: facilitating capability development of real economy companies, and directing capital towards the more climate-conscious companies to facilitate decarbonisation efforts, even if they do not demonstrate the full set of characteristics expected by the market. The latter also reflects evolving investor interest in steering their full portfolio in line with their ambitious climate goals, independent of labels or how this intersects with specific financing instruments.

This also accounts for a rapidly growing segment of real economy issuers that have aligned with climate ambitions with the trajectory of the jurisdictions they operate in and/or a common industry commitment. This represents a grey area in existing guidance; these pathways are internationally recognised as credible where they incorporate inputs from science-based models. However, in absence of that, there is no consensus on whether these pathways can be meaningfully considered as having sufficient ambition required. To illustrate, scientists agree that globally, Nationally Determined Contributions (NDC) lack sufficient ambition to achieve objectives consistent with the Paris Agreement; one publicly available resource that evaluates the temperature outcome of NDCs is the Climate Action Tracker[64]. However, pathways published by countries and industry bodies can vary significantly, and where they are of sufficient ambition may be acceptable by investors as adequately credible. Therefore, in recognition of the ongoing debate on the perceived credibility of and potential differences in investor demand for such pathways, this guidance differentiates such entities under a separate tier.

Investors can adopt a portfolio approach and use a range of transition finance strategies to deliver on their climate ambitions. An investor with a stated ambition to support a transition to Net Zero consistent with 1.5C warming should avoid a narrow focus on paper decarbonisation of their portfolios. They can help drive real economy decarbonisation through investment and stewardship of companies in the 2C or progressing tiers, which may need more engagement and financing to make progress. They can combine this with other transition finance strategies such as investment in climate solutions or other low emissions companies such that the overall portfolio remains 1.5C aligned.

[62] Glasgow Financial Alliance for Net Zero (GFANZ). Defining Transition Finance and Considerations for Decarbonisation Contribution Methodologies (Consultative Document). September 2023.

[63] By GFANZ' latest guidance, entities with a credible transition plan aligned with 1.5°C that start above the reference pathway will be considered "Aligning" for as long as they have yet to converge to the pathway; correspondingly, only entities on or below the pathway (all other conditions met) can qualify as "Aligned".

[64] Climate Action Tracker. Climate Action Tracker website. n.d.

5. Next steps

Version 1.0 provides guidance on how companies may assess their transition credibility and suggests tiers to better reflect entities' differentiated climate ambitions and robustness of transition plans as well as the corresponding difference in investor demand. This is intended as a living document and will be continuously refined with stakeholder feedback. This guidance will be updated to reflect evolving global climate expectations and/or regional maturity over time, which includes adaptation of transition tier criteria and/or phasing out of tiers as needed.

Additionally, there are four potential areas of consideration for subsequent versions:

A. ASEAN Transition Certification

This document currently provides principles-based guidance for investors and real economy companies alike to interpret in their respective contexts. With increasing investor demand for robust third-party assurance for sustainability-related capital markets instruments, future versions may consider facilitating regional certification for select transition-labelled financing instruments through the development of standardised robust criteria.

B. Guidance on transition-labelled financing instruments

As Version 1.0, this ASEAN guidance has focused on how transition credibility may be assessed as the foundational basis for all financing instruments may be steered, but does not explicitly provide principles on how stakeholders may use this to secure or assess specific financing instruments. Future versions may incorporate specific guidance on how these principles may be applied to select financing instruments, such as the recommended approach and requirements for issuing transition-labelled use-of-proceeds or general corporate loans.

C. Government- and Industry-published transition pathways

The current tier system recommends that transition pathways published by governments and industry bodies be considered as less credible than those from science-based models, although some pathways may reasonably be considered as ambitious and oftentimes more well considered with respect to national or sectoral constraints. Given the significant variability of such pathways on ambition (i.e., degree to which they meaningfully contribute to the objectives of the Paris Agreement) and speed at which climate commitments evolve, more consideration is required to develop guidance on identifying market-accepted credible pathways that do not originate from science-based models.

D. Guidance for transitioning enablers

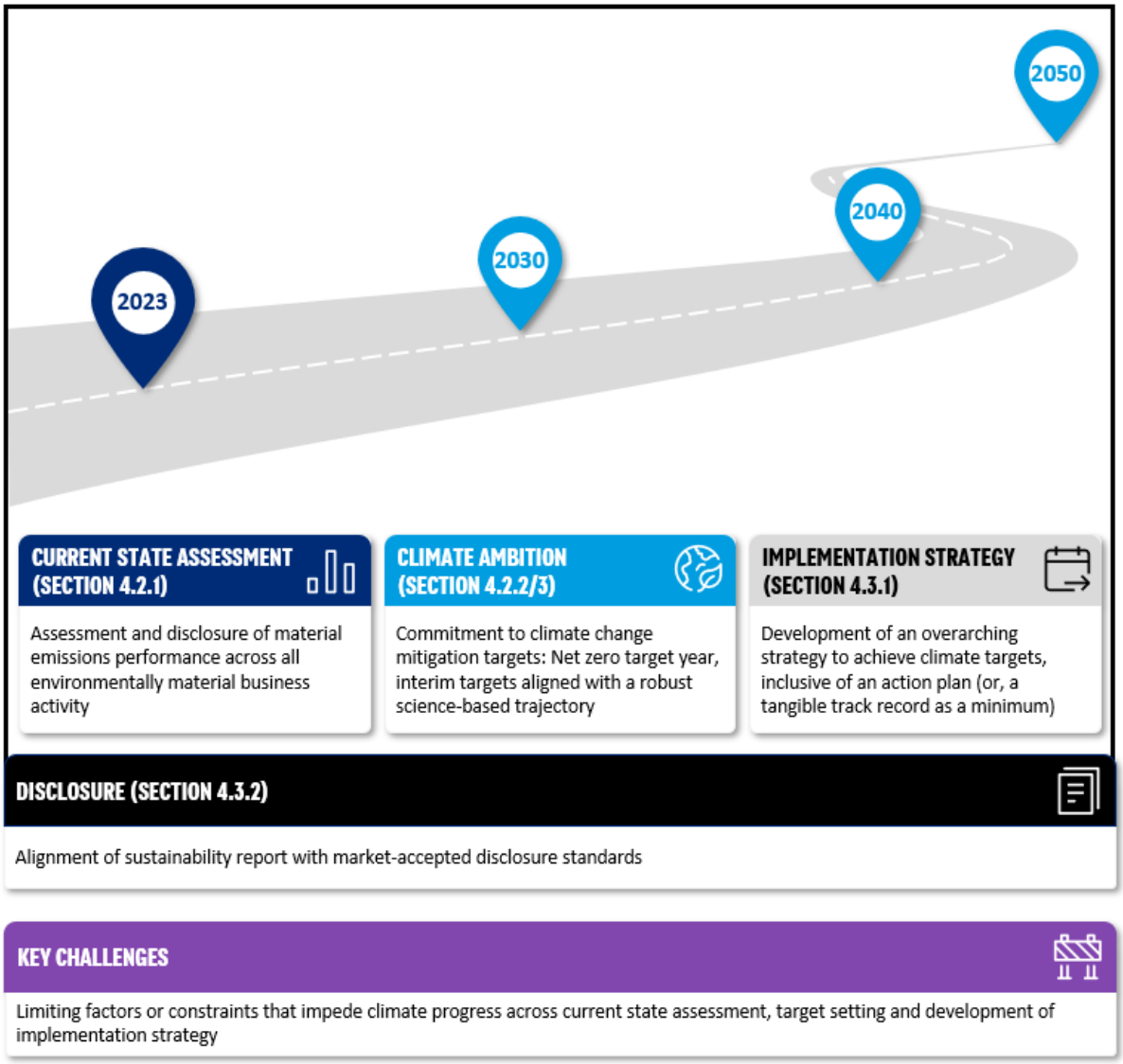
Transitioning enablers refer to real economy companies that contribute to but do not have material control over sectoral emissions, such as power transmission and distribution operators, airports and shipping ports. These companies often lack comparable science-based transition pathways or suitable climate tools, and may find it challenging to assess their near- and mid-term climate ambition. Future iterations may consider developing guidance on what constitutes transition credibility for such companies to provide clarity for and enable them to better secure transition-labelled financing.

Appendix A. Current state of market in ASEAN

A.1. Real economy companies / issuers

Global decarbonisation in line with the objectives of the Paris Agreement is contingent upon the progress of real economy companies. For many, this translates into a significant paradigm shift in their strategic priorities and operations – to transition from an emissions-intensive business model to net zero will be incredibly challenging, and requires a strong foundation in understanding (1) where they currently are, (2) where they need to be, and (3) how to get there.

Exhibit 21: Key points of evaluation for ASEAN real economy companies



While ASEAN real economy companies can vary significantly in climate maturity and face materially different operating contexts and constraints, developing an understanding of how they are performing across these three elements and the key challenges that might undermine progress will serve as a

useful foundation for targeted guidance to address key capability gaps. This research focuses on select elements of climate maturity that can be meaningfully assessed from publicly disclosed information, and will not constitute a comprehensive assessment of all dimensions (see **Exhibit 22** for key points of evaluation).

Desktop research was conducted on 94 companies based in ASEAN from five broad sectors of Energy, Agriculture, Transport, Real Estate & Construction, and Industry. These companies were selected as a representative sample of the largest ASEAN-based entities by latest available revenue data, headquartered across varied countries as well as operating within different sectors and across parts of the value chain. Key sources include sustainability reports, press releases and third-party assessment initiatives (e.g., Climate Action 100+, Transition Pathway Initiative). This was also supplemented stakeholder consultations with select issuers.

Exhibit 22: Breakdown of researched ASEAN companies by sector and country

Sector	Markets represented						No. of researched companies
Energy	✓	✓	✓	✓	✓	✓	26
Agriculture	✓	✓	✓	✓		✓	6
Transport	✓	✓	✓	✓	✓	✓	22
Real Estate & Construction	✓	✓		✓	✓	✓	10
Industry	✓	✓	✓	✓	✓	✓	30

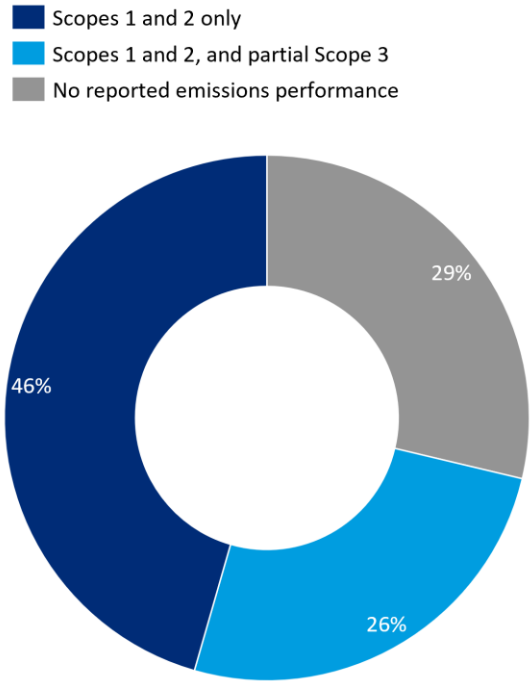
The following findings represent an outside-in perspective of large ASEAN real economy companies' climate ambitions and capabilities. As this research effort relies heavily on latest available publicly disclosed data, this may not be indicative of full issuer capabilities nor recent progress. This also reflects only an evaluation of large companies, which will be more well-resourced and on average, advanced than vast majority of remaining companies - small and medium enterprises - in ASEAN.

A.1.1. Current state assessment

While most ASEAN companies have publicly disclosed their historical emissions performance, this may be limited in scope. A comprehensive baseline emissions assessment includes all material emissions that a company directly generates (Scope 1 and 2) and enables upstream or downstream in the value chain (Scope 3). While approximately 7 in 10 researched ASEAN companies have disclosed their Scope 1 and 2 emissions as a minimum, many entities may still be scaling up their assessment capabilities and may not have included the full scope of all emissions-intensive business activities in their reported figures nor all material sources of emissions. Commonly, such entities report direct emissions only for core business activities or assets in select geographic segments, which can represent material omissions and therefore serves an inaccurate representation of the entity's baseline emissions.

While a quarter of ASEAN companies have disclosed some degree of Scope 3 emissions, this may also be insufficient. For example, of all researched power generation companies, none have included Scope 3 upstream emissions (e.g., use of raw materials), which can be a material contributor of lifecycle emissions particularly for renewable energy generation assets.

Exhibit 23: Proportion of researched ASEAN companies by emission scopes reporting



Inconsistency in the comprehensiveness of entities' disclosed emissions performance gives rise to challenges in comparability and usability of such data. Given how varied entities' disclosed emissions data may be, this poses an additional burden of data quality evaluation for both the entities themselves and external parties before this can be meaningfully used for assessment or other purposes (e.g., benchmarking), if at all. Companies with an insufficiently comprehensive emissions assessment may find that their climate targets may be perceived as less credible, given that it is based on a limited baseline, and may also find it challenging to use existing tools with specific quantitative criteria. For example, the EU and ASEAN taxonomies have largely defined the quantitative thresholds by which to identify green or transition activities based on lifecycle emissions; companies that have only assessed direct emissions may not be able to directly evaluate their activities per these thresholds and may consider alternative proxy methods to refer to these taxonomies in the interim[65].

A.1.2. Climate ambition

ASEAN real economy companies are increasingly climate aware, with half of researched entities committing to net zero targets and/or decarbonising in line with transition pathways. Degree of climate ambition can vary significantly depending on what predominantly motivates these entities to act. In ASEAN, many are strongly incentivised by national commitments and regulations in the jurisdictions they operate, which often represents the impetus for large state-owned or affiliated entities to lead climate action in their respective sectors. Nearly half of the companies with climate ambition have committed to decarbonising in line with national targets to achieve net zero. For the remaining companies, climate urgency may be buoyed by shareholder pressures on climate change,

[65] For companies that have assessed only direct emission intensity to still evaluate their activities by such taxonomies' quantitative thresholds based on lifecycle emission intensity, they may potentially approximate their lifecycle emission intensity by applying a simple scaling factor based on the sector industry average ratio of lifecycle to direct emission intensity. This will represent an estimation of what their respective activities' lifecycle emission intensity could be, and should serve strictly as an interim measure prior to their assessment of all emission scopes. This ratio should be developed with reference to reliable science-based sources, such as IPCC or peer-reviewed research papers. Where companies have done so with the intention of disclosing their degree of alignment with taxonomies, they should clearly disclose their methodology and expected measurement uncertainty.

particularly for large public companies with a global operating footprint, and accelerating industry momentum, with sectoral bodies pushing for collective commitment and action. For the few climate leaders, such as in Agriculture with the recent joint commitment by the largest companies to COP27 Agricultural Sector Roadmap 1.5°C, they may also be at the forefront of driving sectoral progress.

Exhibit 24: Proportion of researched ASEAN companies with net zero targets by year

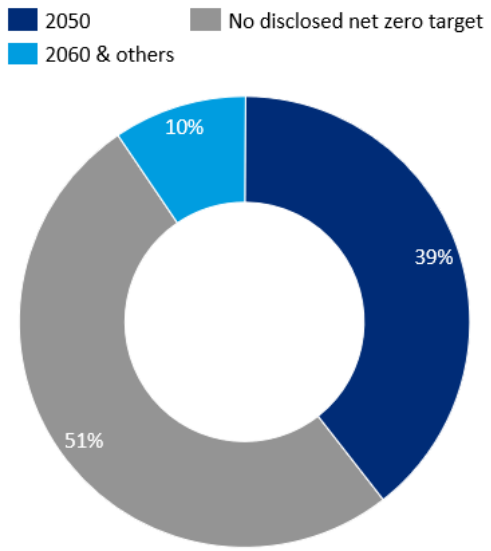
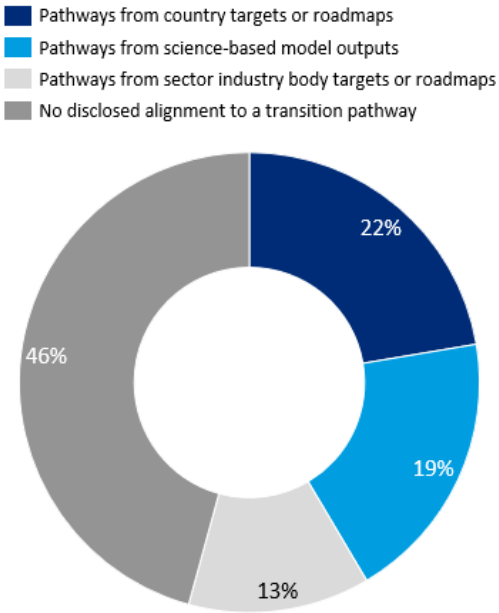


Exhibit 25: Proportion of researched ASEAN companies aligned with transition pathways by pathway type

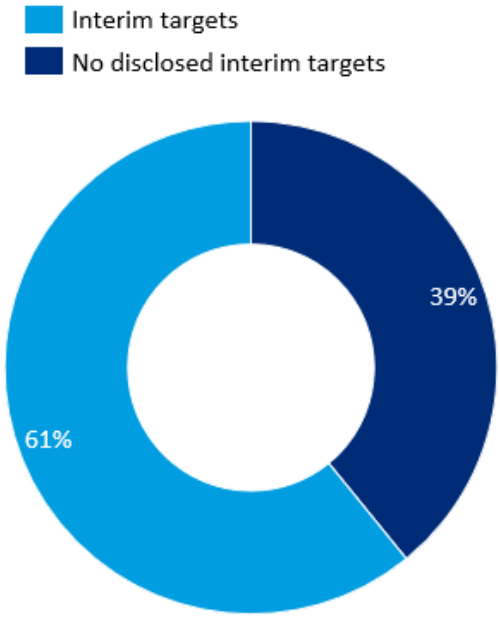


However, ASEAN companies lack interim targets that indicate how they intend to achieve this ambitious transition. Of those with net zero targets, only 6 in 10 have explicitly committed to interim targets that illustrate how they intend to align with these pathways over time. Even so, these targets

tend to focus on the near term until 2030, with the vast majority having yet to commit to medium to longer term targets.

Given that transition is assessed by progress over time, having timebound targets through to the net zero year is a critical element of transition credibility. Companies that have not disclosed a net zero target year nor any interim targets cannot be meaningfully assessed on their forward-looking progress, which will significantly undermine how credible their transition is.

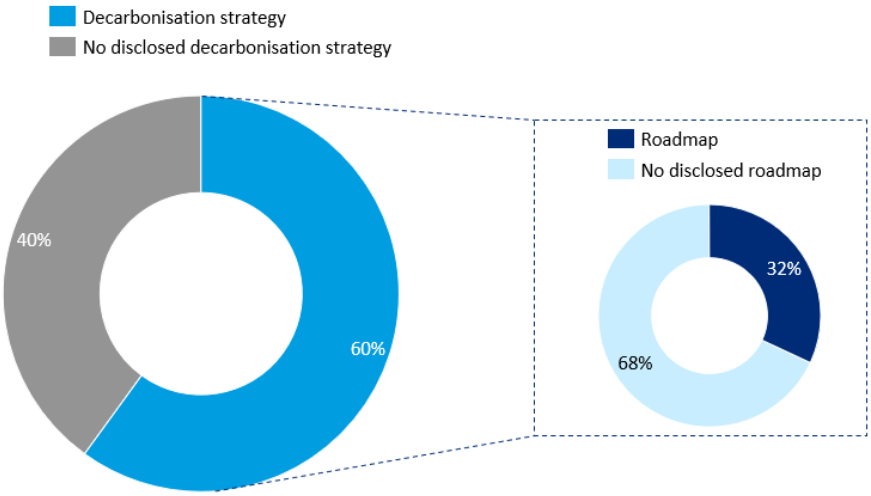
Exhibit 26: Breakdown of companies committed to net zero by whether they have disclosed interim targets



A.1.3. Implementation strategy

Although most ASEAN companies have disclosed their broad decarbonisation strategies, their disclosure often lacks specificity on how this translates into action. Of the 6 in 10 companies that have disclosed their main decarbonisation levers, only one-third has publicly disclosed a concrete roadmap that lays out the entity's plan to invest in decarbonisation activities or technologies or otherwise pivot away from emissions-intensive operations. Even so, the level of detail of their action plan can vary significantly, with only a select few climate leaders committing to clear time-bound actions and investments in the near-term, medium-term and long-term.

Exhibit 27: Proportion of researched ASEAN companies with disclosed broad decarbonisation strategy, of which proportion with a specific near-term action roadmap



Notably, more companies are likely to have developed an action plan for internal reference only. From stakeholder consultations, this is attributable in part to the lack of clarity and certainty on the availability of commercially viable technologies, where companies are understandably concerned about the feasibility of future decarbonisation solutions and may not be willing to publicly disclose any commitments in the absence of a clear timeline by which such solutions become commercially viable.

In the absence of an action plan, external parties (e.g., investors) might assess ASEAN companies' past decarbonisation efforts as an indicator for ability to deliver on future action but track records have largely been limited in impact. For track records to hold weight in lieu of a clear near-term action roadmap, they must be of sufficient scale and ambition. While many ASEAN companies have disclosed decarbonisation initiatives, majority have focused on alignment with mandatory requirements or cost saving efficiency improvements. Such activities do not materially lead to incremental emissions reductions beyond business-as-usual operations, and are not considered to be credible indicators of progress. Only a select few advanced companies have robust track records indicative of meaningful climate action. For example, several entities have disclosed trial pilots for commercially viable low emissions technologies and investments in significant efficiency improvements (e.g., asset retrofitting, fleet renewal), as well as assessed and communicated their contribution towards decarbonisation targets.

A.1.4. Disclosure

There are 3 major disclosure standards by which many ASEAN entities have historically reported aligning their public sustainability reporting to. Each represent comprehensive recommendations on high-quality climate-related data disclosure, but fundamentally differ in their focus areas as illustrated in Exhibit 27. Given the largely discretionary nature of these standards, entities may also differ in which topics they adhere to and the degree to which they provide all recommended disclosures. This contributes to significant variability in reporting quality across entities.

Exhibit 28: Overview of major climate-related disclosure standards

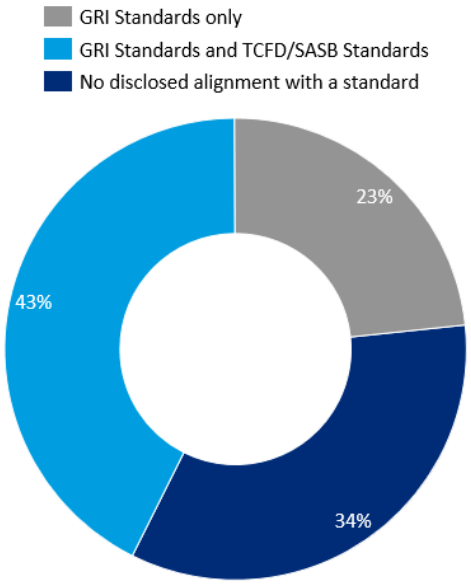
Comparison metric	Global Reporting Initiative Standard (GRI Standards) [66,67]	Task Force on Climate-related Financial Disclosures (TCFD) [68]	Sustainability Accounting Standards Board Standards (SASB Standards) [69,70]
Year of release	2000	2015	2018
Topical coverage	Comprehensive range of ESG issues	Climate-related financial risks and opportunities	Financially material sustainability topics specific to industries
Sector specificity	Available for 6 sectors	Available for 5 sectors	Available for 11 sectors (and 77 industries)
Traction	More than 10,000 companies globally	More than 4,000 companies globally	More than 2,800 companies globally

Insofar as companies align as closely as possible with market-accepted climate disclosure standards, they tend to be more well-recognised as credible. Close to two-thirds of companies have reported some degree of alignment to these major climate-related disclosure standards, which provides the basis for a more consistent assessment and comparison of entities' climate maturity:

- Two-thirds of researched ASEAN companies are aligned with the broader market-accepted Environmental, Social and Governance (ESG) disclosure standard for their sustainability reports (Global Reporting Initiative Standard; GRI).
- Some 40% of researched ASEAN companies have additionally aligned or committed to aligning to more specific climate-oriented disclosure standards like the Task Force on Climate-related Financial Disclosures (TCFD).

[66] Global Reporting Initiative (GRI). The GRI Standards: Enabling transparency on organizational impacts. 2022.
[67] Global Reporting Initiative (GRI). Sector Program. n.d.
[68] Financial Stability Board. TCFD overview. n.d.
[69] Sustainability Accounting Standards Board Standards (SASB Standards). Global use of SASB Standards. n.d.
[70] Global Reporting Initiative (GRI) and Sustainability Accounting Standards Board Standards (SASB Standards). A Practical Guide to Sustainability Reporting Using GRI and SASB Standards. April 2021.

Exhibit 29: Proportion of researched ASEAN companies by disclosure standard alignment[71,72,73]



A.1.5. Key challenges to climate progress

While ASEAN companies recognise the need to evolve with a transitioning world, they face varied challenges that collectively hinder progress, characterised by:

1. Nascency of the climate space
    - Lack of robust data sources or climate-related systems.
    - Limited climate-related capabilities regionally e.g., low understanding of how to assess emissions and feasible decarbonisation strategies.
    - Complexity of navigating an abundance of guidelines, resources and initiatives that may not be fully interoperable nor directly relevant to ASEAN.
2. Potential trade-offs with climate progress
    - Maintaining / maximising profitability and commercial viability of decarbonisation efforts.
    - Allocating limited resources across other just transition priorities (e.g., commitment to energy security, climate change adaptation).
3. Structural factors intrinsic to emerging markets
    - Ever-evolving national regulations, ambitions and support.
    - Dependence on support from multilateral agencies to drive ambitious change.

The latter two types of challenges are reflective of enduring concerns that will be most meaningfully addressed by an all-stakeholder effort, inclusive of government and multilateral actors. What real economy companies can meaningfully address, and what this guidance seeks to support on, is the short-term challenges on capability gaps and mismatched expectations that arise in a rapidly evolving nascent climate space.

[71] GRI: Global Reporting Initiatives.
[72] TCFD: Task Force on Climate-related Financial Disclosures.
[73] SASB: Sustainability Accounting Standards Board.

A.2. Financial institutions

Financial institutions play a critical role in enabling the transition of the real economy, and many have recognised the importance of channelling financing to credibly transitioning companies. However, investors can differ significantly in their appetite for sustainable finance and how they evaluate and identify credibly transitioning companies. Understanding whether investors value "transition finance" as an asset class, and if so, how their approaches differ sets the basis of what investors will accept as credible and inform the development of useful guidance for real economy companies.

With the main objectives of understanding (1) investor demand for transition finance and (2) how they evaluate such opportunities, interviews were conducted with a range of international and Asia-based banks and asset owners or managers. This was supplemented by desktop research on publicly disclosed climate commitments and frameworks across different types of financial institutions, including sovereign wealth funds, pension funds and insurers.

A.2.1. Investor demand for a "transition" label

Investors increasingly view "transition finance" as an important asset class, given that the most common market-accepted sustainability-oriented financing instruments of today are insufficient to support a world transitioning to net zero. Many investors have focused on financing "green" activity in the past decade, of which its definition and qualifying criteria have been generally well-established and backed by robust science-based institutions. While this remains critical to global decarbonisation, many investors also recognise that this precludes much of the real economy from realistically accessing such financing – transitioning companies, particularly those operating in hard to abate sectors, will require support to achieve ambitious climate targets and can be no less credible than already green companies.

However, a new definition and set of principles geared towards this new asset class of "transition finance" will be required to assess these transitioning real economy companies meaningfully and robustly. In the absence of clear market guidelines, advanced climate mature investors have developed their own approaches and products (e.g., sustainability-linked loans or bonds, transition frameworks) that may meaningfully advance their goals and address this gap. These can vary in level of depth and specificity, though they broadly align by the following key principles.

A.2.2. Investors' approaches to evaluating transition credibility

Many investors have publicly disclosed climate targets and portfolio steering strategies, which informs their considerations when evaluating real economy companies. International investors have increasingly committed to net zero targets for their financed portfolios, with many publishing their methodology and strategies for achieving such targets publicly. Any new investment, and especially for those that are sustainability-labelled, will come under scrutiny by the degree to which it contributes towards overall progress. At the bare minimum, this pertains to greenhouse gas emissions performance and climate change mitigation of the entity or financing instrument. For example, interviewed international investors often have committed to steering their investments to achieve net zero by 2050 and therefore, show the greatest demand for issuers that can credibly demonstrate ambition that is at least 1.5°C aligned.

Investors' targets and strategies may also reflect other considerations, such as:

- Entity-specific: Just transition concerns, including management of other environmental objectives (e.g., biodiversity, water and waste management) and social considerations.

- Whole-of-economy: Strategic financing based on which decarbonisation activities meaningfully supports a global transition– e.g., in a country with a highly emissions-intensive power sector, financing may be best directed first at scaling up renewable energy capacity over investing in the electrification of other sectors.
- Specific investment priorities: e.g., National directives from the jurisdictions from which the financial institution is based, strategic opportunities of interest like critical minerals.

Investors' assessment approaches are materially aligned with market-accepted standards or initiatives. Investors are keenly interested in adopting an approach to assessing credibility that is robust and interoperable with existing standards, and have often incorporated existing guidance directly in developing their internal climate assessment systems and processes. Many have developed specific quantitative and qualitative evaluation metrics to operationalise the broad principles of existing international guidelines (e.g., climate scoring system based on degree of alignment with pathway, capital expenditure (CapEx) deployment plan, regional considerations).

They also value market-accepted third-party initiatives that provide an additional layer of assurance on the credibility of transitioning real economy companies, such as the Science-based Targets Initiative (SBTi) and the Transition Pathway Initiative (TPI). For some investors, they may directly consider entities that have been verified by or otherwise explicitly demonstrate alignment with specific standards as credible without conducting additional checks on what the standards have verified.

However, assessment approaches can vary significantly by the degree to which it is bespoke to any given entity. Investors tend to fall along the spectrum of global (i.e., adopting the same consistent approach to all opportunities) to bespoke (i.e., assessing issuers in their individual operating contexts).

For the global approach, investors prioritise consistency across their portfolio in recognition that money has no geographic or sectoral boundaries. In the purest sense, the same emission thresholds and risk tolerance requirements are applied to all investment opportunities to ensure a minimum common standard for credibility. This is also likely easier to operationalise across the institution.

For the bespoke approach, investors prioritise assessing individual nuances in recognition that real economy companies face vastly different headwinds and tailwinds depending on their operating contexts. Factors that influence entities' climate ambition and ability to decarbonise include:

- Commercial viability of decarbonisation strategies e.g., degree to which sectoral progress is reliant on technologies not presently available.
- Ambition of local governments and relevant measures i.e., asking companies to outperform the Nationally Determined Contributions (NDC) of the jurisdictions where they operate will be challenging, particularly if there are measures to support the continued operations of emissions-intensive activities.
- Alternative priorities e.g., in developing markets where rapid economic growth is required to raise standards of living, energy demand will necessarily increase and have to be supported in part by traditional but cheaper emissions-intensive fossil fuels.
- Dependencies on the operating environment e.g., While many sectors rely on electrification as a key decarbonisation lever, their power consumption mix must first be of no to low emissions for meaningful progress overall.

While more investors have expressed a preference for conducting bespoke assessments where possible, this is difficult to operationalise. With limited existing guidance or resources (e.g., regional or national transition pathways from science-based models), investors find it challenging to ensure that transition credibility assessments are standardised and sufficiently robust across all opportunities. In the interim, many have aligned to a more global standardised approach but remain

flexible – broadly, investors are unlikely to strictly enforce any strict requirements so long as the assessed real economy company is transparent and able to clearly articulate why they deviate from the ideal standard.

Investors recognise the importance of dynamism. The climate landscape is rapidly evolving, and real economy companies are not expected to strictly deliver on their plans, particularly in the longer-term. Most investors will prioritise the delivery of near-term activities, but recognise that medium to longer-term plans will and must adapt with changing market conditions and technology. Consequently, investors actively monitor their investments on an annual basis and expect full transparency in the event of any material changes or deviations from initial commitments.

A.3. Implications

ASEAN transition finance flows are limited by two main challenges: the fundamental credibility gap of ASEAN real economy companies, and the need to facilitate a consistent and comparable bespoke assessment of ASEAN opportunities that factors in regional considerations.

ASEAN real economy companies must develop more credible climate ambitions and capabilities

To unlock access to significant financing and effectively adapt to a transitioning world, real economy companies must as a minimum demonstrate the fundamental tenets of transition credibility. For the average issuer, this means that they must clearly develop and commit to a Paris Agreement-aligned climate ambition for their material business operations, both in the long term and their interim trajectory. To the extent possible, they must also understand how to achieve these targets and disclose all underlying strategies, processes and other qualities that enable their ability to deliver on these targets.

This guidance will map out the core recommendations for a credible transition, as laid out in Section 5, as well as provide targeted advice on areas of ambiguity or in need of the greatest capability building (e.g., understanding material sources of emissions).

Additionally, while individual investors will vary in approaches, ASEAN issuers may benefit from prioritising capability development in areas that investors broadly look out for in their assessment approaches. For example:

- Align with investor climate targets and overall strategic priorities where possible: Many investors have publicly disclosed their targets and frameworks; issuers that endeavour to disclose specific details on how they align with investors' approaches will facilitate the assessment process. Real economy companies can also seek opportune financing with investors that have expressed clear strategic interest in select activities, particularly if specific activities may not have an immediate or direct emissions impact (e.g., critical minerals, enabling infrastructure).
- Demonstrate clear indicators of credibility: Where real economy companies specifically align with and/or get verified by third-party market-accepted initiatives (e.g., Science-Based Targets Initiative; see Section 4.2 for more details), this provides a meaningful signal of credibility that investors will weigh favourably in their assessment.
- Be transparent: Most investors are keen to assess companies' transition credibility with respect to their local contexts and broadly adopt a holistic assessment where some deviations from their requirements may be accepted, particularly where clearly justified and contextualised by the company (e.g., power companies might justifiably have lower near-term ambition due to national energy security constraints, particularly if paired with a concrete action plan for more ambitious medium to longer-term action).

At the same time, there must be a consistent guidance for climate ambition upon which ASEAN companies should be assessed

While investors recognise the need to evaluate opportunities in their respective contexts and constraints and support their clients through a realistic just transition, many adopt global assessment criteria across all opportunities in the absence of ASEAN principles and difficulty of operationalising bespoke assessments for diverse issuers. A common ASEAN definition for credibility will provide a consistent and robust reference for investors to align their varied assessment approaches and decision making processes to, with confidence that this reflects the regional market-accepted perspective. Correspondingly, with more investors aligning to a common approach, this also enables ASEAN real economy companies to set targets and develop climate capabilities more effectively in line with what investors look out for.

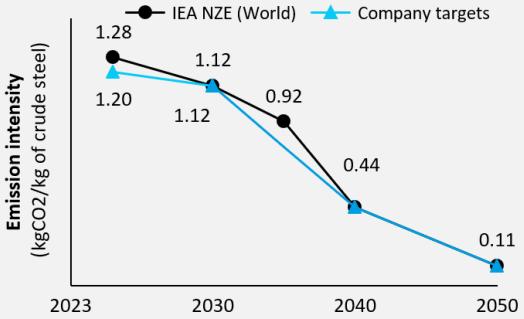
Appendix B. Case studies

Exhibit 30: Case study A on how a company may assess their climate ambition (Tier 1: Aligned and Aligning – 1.5C) [74]

Context of illustrative case study
A crude steel producer based in Southeast Asia has developed ambitious transition targets and aims to raise transition-labelled financing, and hence is looking to assess its credibility per guidance principles

How real economy companies that have already developed targets may assess their alignment with guidance principles

Company's climate targets



- Company has developed ambitious transition targets with reference to the **IEA NZE Pathway for Steel (World)**, to:
  - Meet climate expectations of international shareholders and increasingly stringent regulations in the jurisdictions it operates
  - Reflect a comparable trajectory given it operates steel plants across the world
- Therefore, the company has committed to setting **targets** to stay on the pathway through to 2050, which involves decarbonising as a minimum by:
  - **6%** from 2023 to 2030
  - **60%** from 2030 to 2040
  - **75%** from 2040 to 2050

Sub-element	Tier identification principles	Company evaluation
Transition pathway	**Pathway source** Science-based or from government/industry body	✓ Science-based pathway
	Temperature outcome 1.5°C or well below 2°C as a minimum	✓ 1.5°C
Transition targets	Remain on or below the pathway*	✓ Demonstrated; as company's targets remain consistently on or below the pathway, it is 'Aligned'
	No targeted increase in intensity*	✓ Demonstrated
ALIGNED AND ALIGNING – 1.5°C *If the company meets all of the other criteria for transition credibility (or otherwise clearly justified for lack of relevance or materiality)*		

*: Principles for companies starting below the pathway

Source: International Energy Agency (IEA)

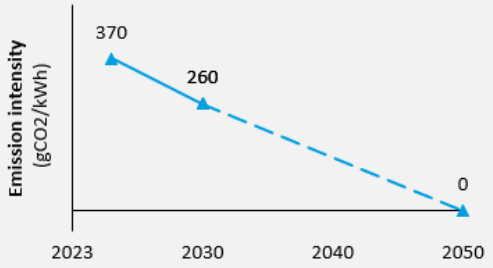
[74] Interim and long-term targets: Decarbonisation trajectory from 2023 to 2050 is linearly interpolated based on 2023 baseline emissions, and 2030 and 2050 targets.

Exhibit 31: Case study B on how a company may assess their climate ambition (Tier 3: Progressing)[75]

Context of illustrative case study
A power generation company operating in Singapore has already developed targets based on Singapore's decarbonisation commitments, and is looking to assess its credibility per guidance principles

How real economy companies that have already developed targets may assess their alignment with guidance principles

Company's climate targets



- Company aims to **support Singapore's climate targets**, of which the following are most relevant:
  - Achieve net zero emissions by 2050
  - Increase solar capacity by 2GW by 2030
  - Improve efficiency of gas plants
- Therefore, the company has committed to the following targets:
  - Net zero by 2050
  - Reduction of emission intensity by 30% by efficiency improvements of current gas plants and developing solar capacity
- The company has also committed to developing medium to long-term targets in the next year

Sub-element	Tier identification principles	Company evaluation
Transition pathway	**Pathway source** Science-based or from government/industry body	✓ Government-published pathway
	Temperature outcome 1.5°C or well below 2°C as a minimum	*Not assessed; no pathway has been selected*
Transition targets	No targeted increase in intensity	✓ Demonstrated
	Setting of targets by near-, medium- and long-term	✓ Demonstrated with interim 2030 target and commitment to set longer term targets
PROGRESSING *If the company meets most but not all other criteria and commits to addressing any material omissions in the next 2 years*		

Source: National Climate Change Secretariat Singapore

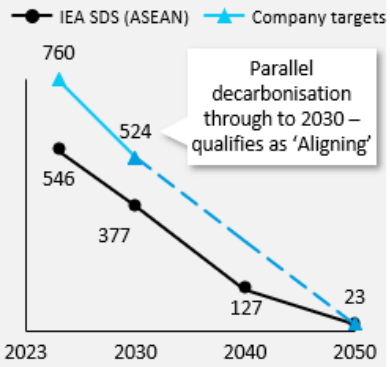
[75] Interim and long-term targets: Decarbonisation trajectory from 2023 to 2050 is linearly interpolated based on 2023 baseline emissions, and 2030 and 2050 targets.

Exhibit 32: Case study C1 on how a company can get started on selecting a transition pathway and target setting[76,77,78]

Context of illustrative case study
A power generation company operating in Southeast Asia is looking to develop sufficiently ambitious transition targets to meet increasing stakeholder expectations, and may reference guidance principles

How a real economy company may select a transition pathway and set targets with reference to guidance principles

Sub-element	Guiding principles	Company considerations	Decision point
Transition pathway	**Pathway source** Science-based or from government/industry body	A **science-based** reference trajectory would best meet the expectations of international shareholders and climate bodies	**IEA SDS Pathway for Power (ASEAN)**
	Temperature outcome 1.5°C or well below 2°C as a minimum	A **well below 2°C** aligned trajectory is most feasible, given its high baseline emissions and understanding of regional ambition	
	Level of specificity Reflective of their individual circumstances by geography and sector	A representative pathway should be specific to the **Power** sector in **ASEAN**, since the company only operates power generation plants in ASEAN	
Transition targets	**Metric type** Absolute emissions or emission intensity	**Intensity targets** is the most practical, as it enables the company's ambition to grow its business and is less volatile / sensitive to fluctuations in annual activity	**Company emission intensity targets** gCO_2/kWh
	Interim targets (intensity) • Differentiated by near-term, medium-term and long-term milestones • Convergence with pathway by 2050 • Companies starting above the pathway must decarbonise in parallel as a minimum • Must represent reduced intensity over time	• Company commits to converging with the pathway by 2050, but decides that it can only commit to a **2030 target in the interim**, given limited visibility on viable longer-term decarbonisation strategies • As the company starts above the IEA SDS pathway, it needs to decarbonise by **31%** as a minimum from 2023 to 2030 in parallel with this trajectory by guidance principles	



ALIGNED AND ALIGNING – WELL BELOW 2°C
If the company meets all of the other criteria for transition credibility (or otherwise clearly justified for lack of relevance or materiality)

Potential use of tools

- The company's overall 2030 target represents a composite of the emissions performance of all its future activities
- Given that the company's choice of transition pathway aligns with a similar regional well below 2°C ambition as in the **ASEAN taxonomy**, it may refer to its **thresholds for transitional activity** (i.e., Amber Tiers 2 and 3) to better understand **what type of activities and respective performance levels** are required to achieve and therefore affirm the feasibility of its 2030 target.
- Users may refer to **Case Study C2** for more details on how this company may reference these tools to develop an action plan.

Source: International Energy Agency (IEA)

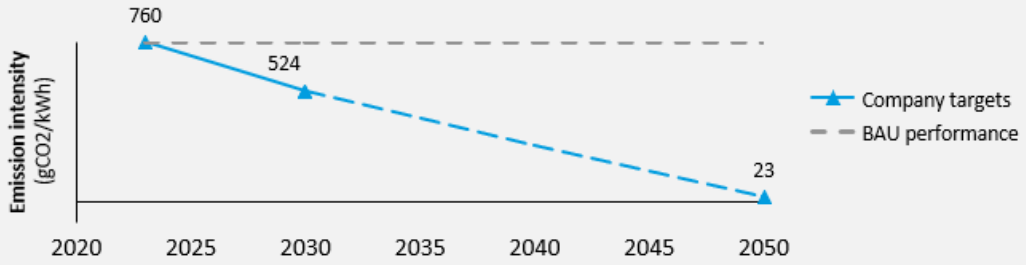
[76] SDS (ASEAN) Scenario for Power: Pathway developed by the IEA.
[77] IEA SDS (ASEAN) Emission intensity: 2023 data point is linearly interpolated based on 2020 and 2030 data points.
[78] Company's emission intensity targets: decarbonisation trajectory between targets is linearly interpolated.

Exhibit 33: Case study C2 on how the taxonomy and other tools can be used to support in action plan development

Context of illustrative case study
A power generation company operating in Southeast Asia is looking to develop an action plan to achieve its ambitious climate targets, and reference existing tools

Company profile

- Power generation company currently operating 1 GW of newly commissioned coal-fired power plants in ASEAN
- In the absence of any action, the company will maintain its current emissions intensity through to 2050 and will need to take significant action to achieve its ambitious targets (see Case Study B1 for how this was developed)



This company may refer to existing tools to support its development of an action plan to achieve its 2030 and 2050 targets, such as the ASEAN Taxonomy:

1. Understand what activities are transition-aligned through to 2030 and might serve as potential decarbonisation strategies

By referencing ASEAN Taxonomy Plus Standard for Electricity, Gas, Steam and Air Conditioning, the company may identify the following transition-aligned activities as potential near-term decarbonisation strategies:

Taxonomy tiers (2023-2030)	Transition-aligned electricity generation activities
Green tier	• Solar PV or concentrated solar power • Wind • Ocean energy • Low emissions hydro or geothermal energy
Amber Tier 2 & 3	• Fossil gas • Bioenergy

2. Evaluate the emissions impact of each activity

The company may cross-reference existing science-based reports to estimate the impact of investing in these transition-aligned activities e.g., from IPCC AR5:

Type	Emission intensity ranges (gCO2/kWh)	
	Direct (Scope 1 / 2)	Lifecycle (Scopes 1, 2 & 3)
Solar PV	0	18 to 180
Fossil gas	350 to 490	410 to 650

3. Develop decarbonisation strategies to achieve its interim targets

The company may evaluate how much capacity and in which transition-aligned activities is required to achieve its emission intensity targets, based on its current starting point. For example, to meet its 2030 target:

Strategy	Required capacity by 2030
A. Invest only in Green tier activities (e.g., Solar PV)	At least 900 MW (or approximate doubling of current capacity)
B. Invest only in Amber tier activities (e.g., best-in-class fossil gas)	At least 2 GW (or approximate tripling of current capacity)

4. Evaluate potential implications to identify the most suitable strategy

Asset lifespan

Where the company decides to invest in transitional emission-intensive assets, as with Strategy B, it should also consider the lifespan of such assets and how it affects the company's longer-term decarbonisation trajectory.

All else constant, in Strategy B, to adequately 'offset' the emissions intensity of the 2 GW of new gas plants built by 2030 to meet the 2050 net zero target, the company needs to:

- Invest in approximately **40 GW** no to low emission Green tier activities by 2050 OR
- Invest in appropriate abatement technology retrofitting for these 2 GW of gas plants

Oher considerations

Any strategy must also be considered cohesively with other priorities and constraints, e.g.:

- Overall energy demand in the jurisdictions that the company operates informs the degree to which low-emission power generation capacity can be scaled
- Technological considerations and infrastructure readiness can influence the relative attractiveness of select activities (e.g., intermittency of renewable energy)

5. Develop an action plan to implement these strategies

Refer to Section 4.3.1.1 on more guidance on suggested actions.

Methodological assumptions

This case study is derived from direct emission intensity factors from IPCC on unabated coal (760gCO2/kWh), most efficient combined cycle gas (350gCO2/kWh) and solar PV (rooftop / utility; 0 gCO2/kWh) and utilization factors from the International Energy Agency (IEA) Sustainable Development Scenario (SDS) for unabated coal (61%), unabated natural gas (43%) and renewables (32%).

Source: IEA Sustainable Development Scenario (SDS), IPCC AR5

Appendix C. Summary checklist

To qualify for Tiers 1 and 2, companies should meet all criteria or provide clear justification where any criteria may not be met (e.g., if it is irrelevant to the specific financing instrument). For Tier 3, companies should meet most criteria for all sub-elements, or all criteria for most sub-elements other than Independent Verification, and demonstrate a plan to address any remaining gaps within the next 2 years.

		Checklist of actions by transition tier		
Element	**Sub-element**	**1. Aligned and Aligning – 1.5°C**	**2. Aligned and Aligning – Well below 2°C**	**3. Progressing**
Climate Ambition	Current state assessment	• Identify and report GHG emissions from material parts of the entity's business model • Include all material sources of emissions - Scopes 1, 2 as well as 3 where material, from identified business segments • Select and justify emissions metrics to quantify the entity's current state (i.e., use of absolute or intensity) • Disclose use and impact of carbon credits, if applicable		
	Transition pathway	• Select level of global warming ambition aligned with 1.5°C temperature outcome	• Select level of global warming ambition aligned with well below 2°C temperature outcome	• Select a science-based reference pathway, or country or industry body-led commitments with a clear rationale • Disclose characteristics of pathway (e.g., global warming ambition) and any additional assumptions in interpreting existing commitments into a pathway
		• Select a reference pathway to inform the decarbonisation trajectory; this should ideally be science-based and may be region-specific where relevant		
	Transition targets	• Set targets that demonstrate how the entity will transition from its current state to align with the choice of transition pathway, with the following conditions: – Absolute emissions targets must show a decarbonisation trajectory equivalent or more ambitious to the reference pathway through to their net zero year		Set targets that demonstrate how the entity will transition from its current state to align with the choice of transition pathway, where the plan must result in reduced absolute emissions or emissions intensity

			Checklist of actions by transition tier		
Element	**Sub-element**		**1. Aligned and Aligning – 1.5°C**	**2. Aligned and Aligning – Well below 2°C**	**3. Progressing**
			– Emission intensity targets must converge with the selected transition pathway by 2050 and in the interim: - Companies starting above the pathway must decarbonise in parallel as a minimum - Companies starting below the pathway must remain on or below the pathway • Plan must result in reduced absolute emissions or emissions intensity		
Robustness of Ability to Deliver	Implementation strategy	Action plan	• Detail a roadmap with broad nature of activities and specific actions the entity intends to take to achieve its transition targets, with the following conditions: – Differentiation by near-term, mid-term and long-term actions aligned with target milestones – Evaluation of impact of each action towards said targets		
		Capital allocation plan	• Establish the financial requirements to execute the action plan and achieve the entity's climate ambition • Detail how the company plans to fulfil financial requirements, including internal and external financing sources		
		Risk assessment and mitigation	• Identify climate-related opportunities and risks under different climate scenarios, and disclose relevant strategies to manage the needed changes • Identify key assumptions underlying the entity's action and capital allocation plan, and assess delivery risks that may limit the entity's ability to achieve their targets		
		Ongoing monitoring	• Develop organisation- and activity-level processes to track ongoing progress against transition targets and adapt strategies accordingly		
		Governance	• Establish how the company's board or key decision-makers approves and oversees its transition targets and implementation strategy • Establish the management structure for execution of the implementation plan • Align incentives or remuneration for senior management with climate objectives where relevant • Develop climate capabilities across the organization, through hiring skilled talent and providing climate-oriented resources and training • Incorporate climate focus into systems and culture		

		Checklist of actions by transition tier		
Element	**Sub-element**	**1. Aligned and Aligning – 1.5°C**	**2. Aligned and Aligning – Well below 2°C**	**3. Progressing**
	Disclosure	• Disclose where the company has demonstrably accomplished the key principles for Climate Ambition and Implementation Strategy; where there are concerns on confidentiality, public disclosure may be on a higher level with full disclosure reserved for external verification and relevant financing stakeholders • Report performance at least on an annual basis or in the event of any material changes		
	Independent verification	• Seek independent external verification on the credibility of the entity's sustainability-related metrics and targets, as well as its implementation strategy		
	Just transition considerations	• Disclose how the entity has accounted for just transition considerations, including an assessment of impact on key environmental and social concerns from business activity where reasonable		

Limitations

Information furnished by others, upon which all or portions of this guidance are based, is believed to be reliable but has not been independently verified, unless otherwise expressly indicated. Public information and industry and statistical data are from sources deemed to be reliable; however, no representation is made as to the accuracy or completeness of such information. The findings contained in this guidance may contain predictions based on current data and historical trends. Any such predictions are subject to inherent risks and uncertainties. ACMF accepts no responsibility for actual results or future events.

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