ASEAN Taxonomy for Sustainable Finance (ASEAN Taxonomy)

Frequently Asked Questions

Table of Contents

General FAQs

1.	What is the ASEAN Taxonomy for Sustainable Finance (ASEAN Taxonomy)?		
2.	What are the development principles of the ASEAN Taxonomy?		
3.	Why do we need an ASEAN Taxonomy?		
4.	Who are the intended users of the ASEAN Taxonomy?7		
5.	How has the ASEAN Taxonomy been received?		
6.	What are the focus sectors and enabling sectors and how are they selected?		
7.	What are the key differences between the ASEAN Taxonomy Version 1, 2, 3 and 4?		
8.	What is the 'stacked' and 'multi-tiered' approach of the ASEAN Taxonomy?		
9.	What are the Foundation Framework (FF) and Plus Standard (PS)?		
10.	How is the ASEAN Taxonomy interoperable with other frameworks? 12		
Versi	on 4 FAQs		
1.	What are the key new features in the ASEAN Taxonomy for Sustainable Finance (ASEAN Taxonomy) Version 4?		
2.	How were the criteria for the Agriculture, Forestry, and Fishing (AFF) sector developed? What were the main comparator taxonomies and standards used?1		
3.	The ASEAN Taxonomy pioneers the introduction of TSC for the Fishing sector, among other AFF Activities. How was this done?		
4.	Why doesn't the AFF criteria have a sunset date, unlike other sectors?		
5.	How should one understand the architecture of the AFF sector criteria and the various pathways i.e. the certification and practices pathway? How were the certifications and practices selected?		
6.	How does the ASEAN Taxonomy take into consideration smallholders in the Agriculture, Forestry, and Fishing sector?		
7.	How does the ASEAN Taxonomy take into consideration smallholders need for further flexibility across the various sectors in general?		
8.	Why do the Manufacturing TSC predominantly reference regional taxonomies such as the Singapore-Asia Taxonomy and the Thailand Taxonomy, compared to the EU Taxonomy?		
9.	Why does the Manufacturing sector in Annex 1 prioritise both Climate Mitigation (EO1) and Circular Economy (EO4)?		
10.	Why do the Manufacturing TSC predominantly rely on intensity-based thresholds rather than absolute emission caps?		

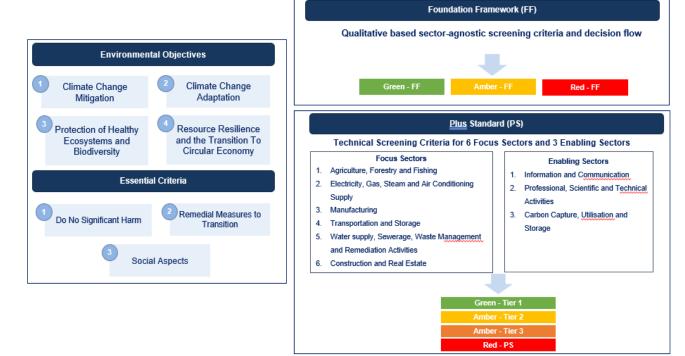
11.	hydrogen equipment or battery production as "enabling" other low carbon activities?			
12.	Why does the ASEAN Taxonomy include manufacture of refined petroleum products as an activity?			
13.	Why doesn't the activity on manufacture of pharmaceuticals and medicinal products contain TSC?			
14.	Why are the TSC for water and wastewater focused mainly qualitative process criteria rather than quantitative thresholds?			
15.	Why is Waste-to-Energy (WtE) included in the ASEAN Taxonomy when some taxonomies do not cover it?			
16.	Why does the Waste-to-Energy Activity not include TSC on bio-waste use?			
17.	How are the TSC for data centres in the Information & Communication enabling sector measured?			
18.	Why does the ASEAN Taxonomy include Professional, Scientific and Technical Activities (PSTA) and Information and Communication (IC) as enabling sectors when these do not directly reduce emissions or environmental harm?			
19.	How do the Grandfathering rules in the ASEAN Taxonomy apply?22			
20.	How does the ASEAN Taxonomy apply to Entities, Portfolios and Financial Instruments? 23			
21.	What does the ATB mean by the term "value" in application of the ASEAN Taxonomy to Entities and Portfolios and Financial Instruments?			
22.	Has the ATB consulted relevant stakeholders regarding the basis, methodology and feasibility of the ASEAN Taxonomy TSC?			
23.	With Version 4 completing the ASEAN Taxonomy, what's next for the ASEAN Taxonomy? 24			

The Frequently Asked Questions (FAQs) for the ASEAN Taxonomy, developed to address common questions and provide clarity on its application, will be continuously updated to reflect the latest developments, insights, and stakeholder feedback, ensuring they remain accurate and relevant.

General FAQs

1. What is the ASEAN Taxonomy for Sustainable Finance (ASEAN Taxonomy)?

The ASEAN Taxonomy was first published on 10 November 2021 by the ASEAN Taxonomy Board (ATB)¹ as a multi-tiered classification framework, with the latest version released on 6 November 2025. It is intended to be the overarching guide and common language used to identify and classify sustainable projects and economic activities in ASEAN Member States (AMS). In addition, it is designed to be an inclusive, credible, and where possible, science-based classification system for sustainable activities and will be one of the key building blocks in orienting capital towards sustainable activities to enable a just transition towards sustainable finance in the region. The structure of the ASEAN Taxonomy is as follows:



[ASEAN Taxonomy as of 6 November 2025]

Explanatory Information

Foundation Framework (FF)

FF is a principles-based assessment of activities that is applicable to all AMS, stakeholders in the financial sector and business enterprises. The FF uses a traffic light system, guided by a sector-agnostic decision flow to classify economic activities. The economic activities must fulfil at least one of the environmental objectives and all essential criteria.

Plus Standard (PS)

PS contains technical screening criteria (TSC) that provide additional guidance and scope for AMS to further qualify and benchmark eligible green or transitional activities and investments. Also, using a traffic light system, the PS also contains activity-level criteria and thresholds to determine if an activity contributes to the environmental objectives of the

¹ The ASEAN Taxonomy Board (ATB) is a dedicated body formed under the auspices of the ASEAN Finance Ministers and Central Bank Governors' Meeting (AFMGM) to develop, maintain and promote an ASEAN Taxonomy for Sustainable Finance (ASEAN Taxonomy). The Board Members of the ATB comprise representatives of ACMF, AIRM, SLC and WC-CMD that are selected by the members of these bodies themselves and represent all AMS.

Taxonomy and can therefore be considered Taxonomy-aligned.

[See Chapter 3.1, ASEAN Taxonomy Version 1]

Environmental Objectives (EO)

The ASEAN Taxonomy was created to facilitate four EOs:

- EO1: Climate Change Mitigation.
- EO2: Climate Change Adaptation.
- EO3: Protection of Healthy Ecosystems and Biodiversity.
- EO4: Resource Resilience and the Transition to a Circular Economy.

Any Activity seeking classification under the ASEAN Taxonomy must demonstrate that it contributes to at least one of these EOs. The Activity may also not detract from the EO to which it is intended to contribute due to direct or indirect effects caused by the Activity to that EO.

[See Chapter 3.1, ASEAN Taxonomy Version 1 and Version 2]

Essential Criteria (EC)

EC consists of three components:

- Do no significant harm (DNSH) either directly or indirectly, where an economic activity that contributes substantially to an EO shall also not significantly harm any of other EOs.
- Remedial measures to transition (RMT) ensuring that any actual or potential significant harm is either mitigated or rendered insignificant.
- 3. Social aspects (SA) to be considered as part of assessment under FF and PS relating to the potential harm an activity can impose on social conditions. The three key SAs are promotion and protection of human rights, labour rights and worker protection, and impact on people living close to investments.

[See Chapter 3.2, ASEAN Taxonomy Version 1 and Version 2]

What the ASEAN Taxonomy is

- The ASEAN Taxonomy serves as a guide and common language to assist AMS in identify and classify sustainable projects and economic activities. Its adoption is voluntary.
- The ASEAN Taxonomy is a classification system to help investors and companies to make informed investment decisions on environmentally sustainable activities for the purpose of determining the degree of sustainability of an investment.
- The ASEAN Taxonomy is a living document that will be updated periodically to ensure their relevance and suitability to the varying needs of AMS, while considering developments in the sustainable finance ecosystem.

What the ASEAN Taxonomy is not

- The ASEAN Taxonomy is neither legally binding nor mandatory for adoption by all AMS.
- The ASEAN Taxonomy is not a rating tool and does not specify sustainability disclosure requirements for economic activities listed in the Taxonomy.
- The ASEAN Taxonomy does not operate in isolation and cannot be fully effective without alignment and collaboration with global taxonomies and other frameworks such as transition finance or disclosure frameworks. It does not supersede the legal and regulatory requirements nor national policy drive of respective AMS.

2. What are the development principles of the ASEAN Taxonomy?

The five high-level principles on which the ASEAN Taxonomy is being developed are:



Principle 1

The ASEAN Taxonomy will be the overarching guide for all ASEAN Member States, providing a common language and complementing their respective national sustainability initiatives.



Principle 2

The ASEAN Taxonomy will take into consideration widely used taxonomies and other relevant taxonomies, as appropriate, and shall be contextualised to facilitate an orderly transition towards a sustainable ASEAN.



Principle 3

The ASEAN Taxonomy shall be inclusive and beneficial to all ASEAN Member States.



Principle 4

The ASEAN Taxonomy shall provide a credible framework, including definitions, and where appropriate, be science-based.



Principle 5

The ASEAN Taxonomy will be aligned with the sustainability initiatives taken by the capital market, banking and insurance sectors, or at least not in conflict.

[Please see Chapter 2, ASEAN Taxonomy Version 4]

3. Why do we need an ASEAN Taxonomy?

ASEAN, which as a bloc is the fifth largest economy in the world with a total GDP of USD3.6 trillion², is committed to transitioning towards a low-carbon, climate resilient and environmentally sustainable future. It is an economic bloc comprising of diverse economic structures, as well as varying stages of development and exposures to climate change that are unique to each individual AMS. This distinctiveness creates the need for a taxonomy tailored specifically to the ASEAN context, serving as a common reference for green and transition activities across the region. The taxonomy seeks to be a

² ASEAN Statistical Brief, Volume IV, January 2024

consistent and credible reference for the classification of green and transition activities, reduce cross-jurisdictional due diligence costs for investors, and boost investor confidence in the region.

Creating an ASEAN-centric taxonomy significantly reduces the need to adopt an international framework that may not be suited to the region's distinctiveness and diversity. Developed by ASEAN central banks, capital market regulators, insurance regulators and financial agencies, the ASEAN Taxonomy provides a regional, cohesive reference, thus ensuring an integrated and holistic sustainable finance ecosystem. The taxonomy also provides consistency and credibility, thereby securing global acceptance for sustainable investments in ASEAN.

4. Who are the intended users of the ASEAN Taxonomy?

The ASEAN Taxonomy can be adopted by ASEAN government agencies and regulatory bodies, as well as participants in the financial sector and business enterprises operating in or looking to raise sustainable finance in any AMS.



[Please see Annex 7, ASEAN Taxonomy Version 4 for further information on use cases of the ASEAN Taxonomy]

Adoption of the ASEAN Taxonomy is voluntary, although it is expected that all AMS should be able to adopt the Foundation Framework to commence their sustainability journey.

5. How has the ASEAN Taxonomy been received?

The ASEAN Taxonomy has been referenced by Cambodia, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Vietnam in the development of their national taxonomies, while taking into account respective national contexts to ensure alignment and interoperability. Meanwhile, the national taxonomies of other AMS have yet to be developed or are in development, but nonetheless would or are being developed in alignment with the ASEAN Taxonomy.

Other countries/jurisdictions that have referenced the ASEAN Taxonomy include Australia, Hong Kong, India, New Zealand, South Korea, and Uzbekistan.

The ASEAN Taxonomy has been utilized in assessments by the following companies in the issuance of sustainability instruments, and verified by Second Party Opinion providers:

- Bangkok Expressway and Metro plc's Sustainable Financing Framework in September 2024, in their issuance of sustainability finance instruments using the ASEAN Taxonomy Transportation & Storage Criteria, as well as DNSH
- The Provincial Electric Authority (PEA), a Thai State Utility operator in August 2024, in their issuance
 of Sustainability Bonds using the ASEAN Taxonomy Energy Criteria and DNSH
- Wasco Berhad, a Malaysian energy infrastructure conglomerate in November 2024, in their issuance of sustainability-linked loans using the ASEAN Taxonomy Energy Criteria and DNSH
- Thai Union Group secured a landmark Blue loan in March 2025, aligned with the ASEAN Taxonomy Foundation Framework and the Thailand Taxonomy
- The Securities and Exchange Commission of the Philippines released the Green Equity Guideline (Guideline) in September 2025 to promote the use of capital markets in achieving the United Nations SDGs and Paris Agreement targets to reduce GHG emissions. One of the requirements of the Guideline is for activities to meet the eligibility criteria of the Philippine Sustainable Finance Taxonomy Guidelines or the ASEAN Taxonomy for Sustainable Finance.
- Malaysia's 2026 Budget announcement includes the expansion of the Sustainable and Responsible Investment (SRI) Sukuk and Bond Grant Scheme to include financial instruments aligned with the ASEAN Taxonomy for Sustainable Finance, covering 100% of expenses for external reviews

The ASEAN Taxonomy has also received international recognition from various entities to date:

- The ASEAN Taxonomy Version 2's Coal Phase Out (CPO) TSC has been referenced in a public consultation by the Glasgow Financial Alliance for Net Zero (GFANZ)
- Version 2 was listed as a major initiative to support CPO in Asia in the Asia Transition Finance Study Group (ATF SG)'s Annual Report in 2023
- The ASEAN Taxonomy was regarded as one of three most influential taxonomies in Natixis's report, The New Geography of Taxonomies in July 2023
- The ASEAN Taxonomy was named as one of three acceptable taxonomies by the Financial Services Regulatory Authority of the Abu Dhabi Global Market in July 2023
- The World Green Building Council Asia Pacific Network and Oversea-Chinese Banking Corporation Limited (OCBC) issued 'Unlocking Capital: Aligning Asia Pacific Green Building Rating Tools to the ASEAN Taxonomy for Sustainable Finance' in July 2025. This report benchmarks major green building rating tools against the ASEAN Taxonomy, outlining how aligning green building rating tools with the ASEAN Taxonomy can unlock investment in sustainable buildings across Asia Pacific.
- The UNDP and IFC have also made reference to the ASEAN Taxonomy in the Common Framework of Sustainable Finance Taxonomies for Latin America and the Caribbean that was released in July 2023.
- A UNDP report released on 21 February 2025 titled: Step-by-Step Guide to Developing a Sustainable Finance Taxonomy lists the ASEAN Taxonomy as one of the important benchmark taxonomies alongside the EU Taxonomy and Common Framework of Sustainable Finance Taxonomies for The Latin America and the Caribbean.

The ASEAN Taxonomy has also been referenced in the development of various transition finance frameworks, such as but not limited to:

- The ATF SG Annual Report 2024 mentions that the ASEAN Taxonomy provides clear guidance
 that accommodates different levels of readiness, as it is designed to be a practical tool to help SMEs
 understand the requirements and take the necessary steps towards sustainability.
- SMBC Group's Transition Finance Playbook 2.0 as part of SMBC Group's initiative to support its customers' transition and efforts to develop new technologies and maximize its contributions in realizing a decarbonized society. The Playbook referenced the ASEAN Taxonomy for its examples of transition activities.
- The national utility company in Malaysia, Tenaga Nasional Berhad, which referenced the ASEAN Taxonomy and the ASEAN Transition Finance Guidance in the development of its Transition Finance Framework.
- One of Indonesia's leading financial institutions, PT Bank Mandiri has referenced the ASEAN Taxonomy in both its Sustainable Finance Framework and Transition Finance Framework.
- Keppel DC REIT's Green Financing Framework makes reference to internationally-recognised sustainable finance taxonomies, including the ASEAN Taxonomy Version 3.
- The ASEAN Transition Finance Guidance Version 2 was released in October 2024 by the ASEAN Capital Markets Forum and was designed to complement the ASEAN Taxonomy as a key resource for companies to assess and demonstrate a credible transition.

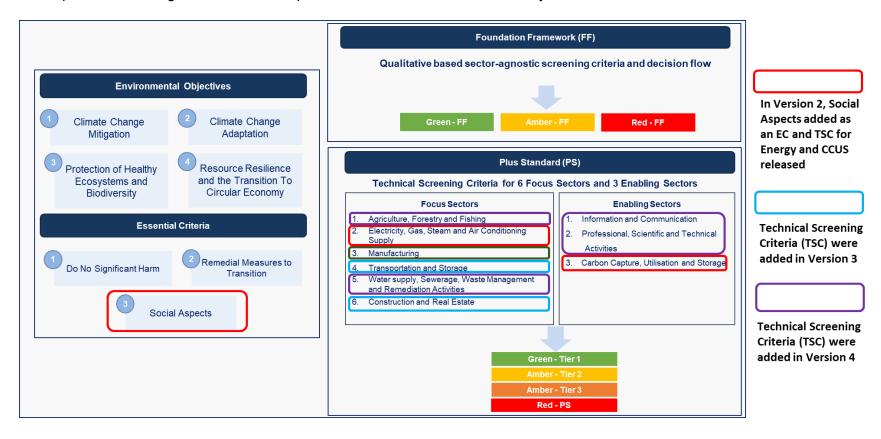
6. What are the focus sectors and enabling sectors and how are they selected?

The ASEAN Taxonomy's focus sectors were selected based on their GHG emissions profile and contribution to gross value added, both at the ASEAN and national levels. In addition, enabling sectors were identified based on the ability of their products and services to substantially contribute to climate change mitigation.

.

7. What are the key differences between the ASEAN Taxonomy Version 1, 2, 3 and 4?

The ASEAN Taxonomy is developed by the ATB progressively and reviewed periodically to ensure that the Taxonomy is relevant and reflects developments in science, technology and economic circumstances. New versions of the ASEAN Taxonomy thus far have typically expanded the scope of the taxonomy to include criteria for more focus and enabling sectors, incorporating enhancements following stakeholder consultation exercises. Other enhancements were also included to provide clarity and pertinent information is updated – true to the Taxonomy's characteristic as a living document that takes into account developments in the sustainable finance ecosystem. For example, Version 4 also updates the Social Aspects to ensure coverage of informal labour, in accordance with developments in the region. The relevant updates made to the ASEAN Taxonomy Version 1, 2, 3 and 4 are as follows:



8. What is the 'stacked' and 'multi-tiered' approach of the ASEAN Taxonomy?

The ASEAN Taxonomy's multi-tiered approach comprising the principles-based Foundation Framework (FF) and the Plus Standard (PS), facilitates inclusivity among AMS, allowing for different levels of adoption depending on individual AMS' readiness.

The 'stacked approach' is used to determine thresholds and technical screening criteria under the Plus Standard, which will be developed progressively.

The Plus Standard will take a 'stacked approach' in developing activity-level thresholds. This means that for each activity, there are multiple decarbonisation pathways and hence there could be more than one threshold referenced at a single point in time.

The main motivation for multiple thresholds is to cater to the diverse characteristics and readiness of entities across ASEAN undertaking a particular activity, taking into account the different economic circumstances, financial systems, and transition paths of each AMS.

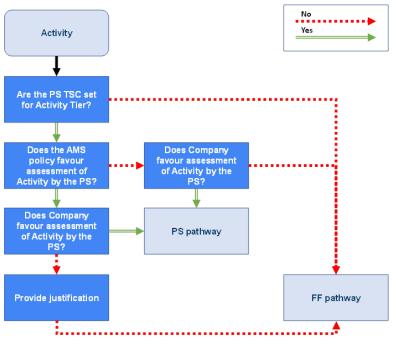
9. What are the Foundation Framework (FF) and Plus Standard (PS)?

The FF and PS refer to the same set of four environmental objectives and three essential criteria. The classification of activities can be assessed through the FF or the PS. This reflects the multitiered nature of the ASEAN Taxonomy, where the FF provides for a qualitative assessment of activities while the PS uses metrics and thresholds (Technical Screening Criteria (TSC))³ to further qualify and benchmark eligible green and transitional activities and investments. AMS and relevant entities can refer to the PS according to their respective readiness to do so, including but not limited to national policies regarding the mandatory use of national and/or other taxonomies, and the availability of data necessary to facilitate a PS assessment.

Users of the ASEAN Taxonomy can also utilise the illustrative assessment flow for the FF and PS respectively, to determine whether activities should be assessed under the PS and/or FF. If an AMS policy designates the PS as the primary assessment frame, activities may only be assessed under the FF in exceptional cases where assessment via the PS is not possible due to a lack of data, criteria or activity coverage of the PS, or other limitations. In addition, the FF is sector-agnostic and can be used for applications beyond the 6 focus sectors and 3 enabling sectors available at present. The FF can also be used in cases where data is not available or sufficient for a PS assessment. For more information on applying the FF and PS, please see Chapter 4 of the ASEAN Taxonomy Version 4, as well as the Supplementary Document: Foundation Framework Use Cases.

11

³ TSC classify Activities based on their contributions to EOs using quantitative, qualitative, or nature of Activity-based criteria. Under the ASEAN Taxonomy, "classification" refers to an Activity's contribution to an EO, while "Tier" refers to the different levels of TSC. PS has Tiers 1-3 aligned with Green, Amber Tier 2, and Amber Tier 3 classifications, while the FF does not use the Tier system and only has Green and Amber classifications. In all cases, a Red classification means that an Activity is not aligned with the ASEAN Taxonomy.



[Figure 4: Recommended process for Choice of the FF or the PS. Please see Chapter 4.1.2. of the ASEAN Taxonomy Version 4]

10. How is the ASEAN Taxonomy interoperable with other frameworks?

The ASEAN Taxonomy is designed to be interoperable with other widely used international taxonomies, such as the EU Taxonomy for Sustainable Activities and Climate Bonds Taxonomy. It also aligned with procedures under the ASEAN Green Bond Standards, ASEAN Social Bond Standards, and ASEAN Sustainability Bond Standards. For example, the ASEAN Taxonomy Plus Standard's Green Tier is also largely aligned with the EU Taxonomy.

As developers of the national taxonomies of AMS are also represented in the ATB, their respective national taxonomies have been developed alongside or following issuance of the ASEAN Taxonomy, albeit contextualized to meet domestic needs. This also applies to AMS that are developing or have yet to develop their national taxonomies, to facilitate interoperability and avoid fragmentation of sustainable finance frameworks globally.

Among the AMS – Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Vietnam have introduced national taxonomies, or consultation papers for their national taxonomies. The framework of these taxonomies is consistent with that of the ASEAN Taxonomy, particularly on key design features such as environmental objectives, essential criteria, classification system, transition imperative and coverage of focus sectors and activities.

Version 4 FAQs

- 1. What are the key new features in the ASEAN Taxonomy for Sustainable Finance (ASEAN Taxonomy) Version 4?
- Version 4 of the ASEAN Taxonomy for Sustainable Finance (ASEAN Taxonomy) provides complete coverage including the principles-based Foundation Framework and Technical Screening Criteria for the six focus and three enabling sectors in the Plus Standard. The ASEAN Taxonomy Version 4 is intended to facilitate mobilising capital towards sustainable activities – a taxonomy that is responsive to the diverse circumstances of AMS while remaining interoperable with other international frameworks and guidance.
- Version 4 adds Technical Screening Criteria (TSC) for the following focus sectors:
 - o Agriculture, Forestry, and Fishing
 - Manufacturing
 - Water Supply, Sewerage, Waste Management and Remediation Activities
- And the following enabling sectors:
 - Information and Communication
 - Professional, Scientific and Technical Activities
- Version 4 strengthens the role of Amber Tiers by:
 - Linking taxonomy classifications with ASEAN Transition Finance Guidance (ATFG) for practical decarbonization pathways.
 - Reinforcing Amber Tier 2, Amber Tier 3, and its related sunset dates as providing a progressive, credible pathway to Green
- 2. How were the criteria for the Agriculture, Forestry, and Fishing (AFF) sector developed? What were the main comparator taxonomies and standards used?
- The AFF criteria were developed to reflect the sector's importance to ASEAN economies and its major environmental impacts. Because emissions and practices vary widely in agriculture and forestry, the ASEAN Taxonomy also uses a practice-based approach, in addition to a certification approach.
- Forestry activities in AFF may contribute to multiple EOs and users have the flexibility to define
 the primary EO based on the main purpose of the forest and additional EOs can be selected
 as secondary EOs depending on the goals of the activity. Regardless of which EO is chosen
 as primary, the generic TSC apply across all relevant EOs, ensuring that all applicable
 objectives are covered.
- Agriculture and Fishing Activities are classified by default under EO3 due to their critical primary function as food/feed, where natural resources must be optimised to minimise

possible impact to biodiversity and ecosystems. In addition to meeting EO3, users may classify the Activity under another EO if they can demonstrate that the Activity applies relevant core or non-core practices aligned with that EO. Hence, meeting EO3 is a minimum requirement for these Activities and is reflected in most of the practices listed.

• The criteria draw on comparator taxonomies and standards such as the EU Taxonomy for Sustainable Activities (EU Taxonomy), Thailand Taxonomy, Indonesia Taxonomy for Sustainable Finance, Singapore-Asia Taxonomy, and the ASEAN Regional Guidelines on Sustainable Agriculture (2022), along with international and national certifications and best practice frameworks such as but not limited to Forest Stewardship Council (FSC), Roundtable Sustainable Palm Oil (RSPO), and GLOBALG.A.P.

3. The ASEAN Taxonomy pioneers the introduction of TSC for the Fishing sector, among other AFF Activities. How was this done?

- The capture fisheries sector is important in Southeast Asia, sustaining many economic livelihoods and producing an integral part of local diets. The development of the TSC thus took a comprehensive examination of existing issues and challenges with capture fisheries, regional and national organizations' mandates on fisheries, fishing-related definitions in the AMS, the scope of existing national fisheries standards, certifications, and best practices.
- The Fishery TSC needed to be broad enough to cover the varied use of different types of fishing gear, habitats, target species, non-target species, and fishery governance in the region. It also needed to address various common environmental issues related to the sector.
- As such, references used had to be internationally recognised, while being regionally contextualised. A key reference scheme that the ATB considered is that of the Marine Stewardship Council (MSC) due to its international market access and recognition, familiarity and adoption within ASEAN, and applicability to ASEAN's fishery challenges including overfishing, illegal, unreported, and unregulated (IUU) fishing, and ecosystem degradation. The TSC development process also referenced frameworks developed at the regional level, such as by the ASEAN Sectoral Body on Fisheries to ensure its alignment across key elements of the TSC.
- Akin to other activities in the AFF sector, both certification and practice-based criteria were developed such that their application could be proportionate to the size of the fishery and underlying activity, while providing an alternative to costlier certifications. Embedded within both pathways is the use of a Fishery Improvement Project (FIP) Action Plan a collaborative, multi-stakeholder program designed to improve the sustainability of a fishery through a structured work plan that addresses key performance indicators aligned with internationally recognised sustainable fisheries standards.

4. Why doesn't the AFF criteria have a sunset date, unlike other sectors?

- The ASEAN Taxonomy does not primarily mandate use of quantitative TSC for the AFF sector criteria given large heterogeneity in emissions and data limitations in the AFF sector. Instead, it provides users with the option of using certification or practice-based criteria. As such, it differs from other sector criteria which refer to specific decarbonisation pathways, and thus, require sunset dates to remain credible. This does not however, preclude AFF criteria from having sunset dates in the future, if and when circumstances necessitate it.
- However, it is important for AFF users to still show credible efforts towards improving and achieving the Green Tier. Whilst sunset dates may be considered in a future review cycle, for this TSC period, the ASEAN Taxonomy's AFF criteria impose a 5-year transition period for the Amber Tier from the point of assessment. The rationale for 5 years being the threshold for Amber is to facilitate agricultural activities that need time to obtain certifications or transition to better practices. Feedback from agriculture practitioners in the industry consulted indicated a typical range of 3-5 years to do so, depending on the activity transformation and certification scheme pursued.
- 5. How should one understand the architecture of the AFF sector criteria and the various pathways i.e. the certification and practices pathway? How were the certifications and practices selected?
- The AFF criteria offer two pathways for Green classification: a Certification Pathway and a Practices Pathway. Both aim to ensure credibility of ambition while giving users flexibility.
- The Certification Pathway accepts both national and international certification schemes, as long as they meet credible assurance standards (e.g. accredited under ISO/IEC 17011:2017).
 This supports interoperability across ASEAN and is consistent with national taxonomies in the region that already recognise both national and international certification schemes as Green.
- The Practices Pathway is an alternative for producers, using core sustainability practices aligned with major schemes such as FSC, PEFC, RSPO, GlobalG.A.P., IFOAM, and SRP. These schemes were selected based on ASEAN relevance and market recognition. Core practices are required, while additional practices remain voluntary to allow broader adoption.
- 6. How does the ASEAN Taxonomy take into consideration smallholders in the Agriculture, Forestry, and Fishing sector?
- The ASEAN Taxonomy builds flexibility for smallholders by using a practice-based assessment instead of complex emissions thresholds and by offering a practices pathway as an alternative to costlier certifications.
- Requirements are scaled by farm size: small farms may use simplified assessments and proxy
 indicators, while medium and large farms use progressively more detailed assessments.
 Practice adaptation to local conditions is allowed with justification, and monitoring and

reporting requirements are proportionate to resources and capacity, making the criteria inclusive for smallholders.

 In terms of defining farm sizes, smallholders can be defined firstly by national law within individual AMS, or by the certification scheme the farm is aligned with or transitioning to. If no clear distinction is available in either case, the ASEAN Taxonomy also provides defined farm size thresholds.

7. How does the ASEAN Taxonomy take into consideration smallholders need for further flexibility across the various sectors in general?

- Across the Taxonomy, if users find the need for more flexibility for users who are only just starting on their sustainability journey, including smaller micro-enterprises and firms, the ASEAN Taxonomy provides the principles-based Foundation Framework as an alternative to the Plus Standard TSC.
- Individual AMS may opt to convey to their stakeholders the availability and use of the ASEAN
 Taxonomy Plus Standard and Foundation Framework, as tailored according to local
 circumstances and readiness.
- 8. Why do the Manufacturing TSC predominantly reference regional taxonomies such as the Singapore-Asia Taxonomy and the Thailand Taxonomy, compared to the EU Taxonomy?
- The Manufacturing TSC reference AMS' national taxonomies compared to the EU Taxonomy to ensure they are relevant and practical for ASEAN's diverse development stage, energy mix, and industrial reality, taking into consideration as well that many ASEAN manufacturers are still in early transition.
- However, credibility is maintained because:
 - o The Green (Tier 1) TSC still aligned with the Paris Agreement ambition.
 - They include timebound transition tiers (Amber) that sunset to minimise lock-in and risk for greenwashing.
 - Do No Significant Harm (DNSH) safeguards prevent harm to other environmental objectives.
 - Criteria reference existing ASEAN national taxonomies and vice versa to ensure alignment.
- So, while tailored to ASEAN, the Manufacturing TSC remain credible, transition-focused, and internationally recognised.

9. Why does the Manufacturing sector in Annex 1 prioritise both Climate Change Mitigation (EO1) and Circular Economy (EO4)?

- The Manufacturing TSC are designed around two core environmental priorities: decarbonisation and resource sustainability. Manufacturing in ASEAN accounts for a significant share of industrial emissions—especially from cement, ferrous and non-ferrous metals, and petrochemicals—while also driving high material use and industrial waste. Because of this dual footprint, the TSC consider EO1 and EO4 as co-primary objectives for the sector. Emission intensity criteria (e.g. tonnes of CO2 per tonne of cement) support the path to net zero, while material efficiency criteria (e.g. minimum recycled content in steel and plastics) support resource circularity.
- This dual approach aligns with ASEAN's industrial strategy: economic growth and industrial
 competitiveness must proceed alongside environmental safeguards. It also avoids the risk of
 "greenwashing by partial performance", where companies might reduce emissions while still
 using unsustainable raw material extraction. Instead, it encourages full supply-chain
 sustainability—addressing carbon, materials, and waste at the same time.

10. Why do the Manufacturing TSC predominantly rely on intensity-based thresholds rather than absolute emission caps?

- Manufacturing output in ASEAN is expected to grow significantly as the region continues to industrialise. If the Taxonomy used absolute emission limits, rapidly growing economies would not be able to meet compliance requirements simply by expanding capacity, even if they were improving efficiency. Therefore, Annex 1 follows intensity-based metrics—like energy per tonne of product or GHG per production unit—because these:
 - o Reward efficiency gains and cleaner production technologies
 - Are compatible with production growth
 - Support technology-neutral benchmarking
 - Reduce risk of penalising emerging economies
- This makes the ASEAN Taxonomy inclusive—allowing responsible industrialisation while still supporting decarbonisation.

11. Why does Annex 1 of the ASEAN Taxonomy refer to some Manufacturing activities such as hydrogen equipment or battery production as "enabling" other low carbon activities?

- Annex 1 deliberately classifies certain manufacturing activities as "enablers of system transition". These include:
 - Hydrogen production equipment
 - Battery manufacturing
 - Renewable energy components
 - Grid and storage technologies

- These activities may not always be low emission in production themselves, but they enable decarbonisation across other sectors—such as transport, power grids, and heavy industry. Including enabling activities:
 - Accelerates supply-chain development for clean technology
 - Encourages investment in strategic green industries
 - Supports ASEAN's role in global clean energy manufacturing

12. Why does the ASEAN Taxonomy include manufacture of refined petroleum products as an activity?

- As with other activities, the ASEAN Taxonomy looks at the activity's contribution to each
 environmental objective (EO) and addresses the process by which that activity conducts itself,
 to classify it as sustainable. In the case of refined petroleum products, the ASEAN Taxonomy
 does not completely omit the activity as some widely used products including polyester, and
 lubricants for example, would fall under this category and should be encouraged to improve
 their production processes towards greater sustainability.
- With the manufacture of refined petroleum products, the AT addresses key environmental
 considerations during the process of manufacturing including the intensity of GHG emissions
 and recommends the use of a transition plan that aligns with supporting NDC reduction targets
 of the AMS jurisdiction in which it operates.

13. Why doesn't the activity on manufacture of pharmaceuticals and medicinal products contain TSC?

- This activity is unique in the ASEAN Taxonomy, in that it is not assessed against any specific EO. Instead, it is the ATB's view that this activity is assessed solely based on meeting DNSH requirements and would therefore be excluded from the guidance on Plus Standard assessment flow in Chapter 4.4 (Assessment using the PS) of the ASEAN Taxonomy.
- As with any activity in the Taxonomy, the basis for its assessment would be whether and how
 it can make a substantial contribution towards the environmental objectives of the Taxonomy,
 while fulfilling the DNSH and Essential Criteria.
- Following extensive discussions with technical partners, the ATB took a position that the sustainable nature of pharmaceutical and medicinal activities is best-defined by their social impact on human / animal health and wellbeing, while potential substantial contributions to climate change mitigation, adaptation, biodiversity, and resource resilience are are less apparent given that the pharmaceutical industry is a highly regulated industry with strict regulatory obligations that limits flexibility to alter production processes, materials or formulations for sustainability purposes. In addition, the general approach of existing pharmaceutical standards focuses on the potential harm (and benefits) to health and wellbeing.

- The ATB would like to emphasize however that the ASEAN Taxonomy is not a social taxonomy. The focus of including this Activity in the Taxonomy is on positive social outcomes i.e. ensure availability, safety and efficacy of the products.
- Specific to this Activity only, the environmental aspects of the manufacturing process is covered by the DNSH Essential Criteria i.e. even if this Activity not able to contribute substantially to the Environmental Objectives for reasons mentioned above, the manufacture of pharmaceuticals and medicinal products should also not result in the significant harm to any of the Environmental Objectives (EO1, EO2, EO3, or EO4). For example, if the Activity is found to have, through waste disposal processes caused significant and/or long-term environmental harm, the Activity would not meet the DNSH criteria.
- The ATB looks forward to receiving more feedback on this via the stakeholder consultation exercise for Version 4, details of which will be announced later.

14. Why are the TSC for water and wastewater focused mainly on qualitative process criteria rather than quantitative thresholds?

- At present, there is a lack of universally recognised / established standards or thresholds for some Activities within this focus sector, even beyond ASEAN. This consideration is not unique to the ASEAN Taxonomy, as the EU Taxonomy also uses qualitative criteria for certain Activities. For example, quantitative thresholds for emissions or water loss are challenging to standardize across ASEAN due to:
 - o Wide variation in climate conditions (monsoon vs dry zones),
 - Differing levels of water infrastructure maturity,
 - Variability in local water scarcity risks, and
 - Significant urban–rural inequality in water and sanitation services.
- Due to these reasons, the ASEAN Taxonomy uses performance-based and risk-based qualitative criteria aside from numerical thresholds. In fact, qualitative and practice-based criteria have the added benefit of capturing broader sustainability aspects (e.g. pollution prevention, risk management, circulatory), which quantitative criteria lone cannot fully represent. Some examples include:
 - Leakage reduction programmes in water networks,
 - Effluent discharge compliance based on AMS environmental laws,
 - Energy efficiency actions in treatment systems,
 - Wastewater reuse plans where feasible,
 - Resilience planning for floods, droughts and sea-level rise.
- This approach maintains credibility and flexibility, ensuring progress without excluding developing AMS with infrastructure gaps—in tune with the Taxonomy's "just transition" philosophy.

15. Why is Waste-to-Energy (WtE) included in the ASEAN Taxonomy when some taxonomies do not cover it?

- The ASEAN Taxonomy recognises different starting points of AMS waste systems. While some regions (like the EU) discourage WtE due to high emissions, the ASEAN Taxonomy alongside AMS taxonomies such as the Singapore-Asia Taxonomy and Thailand Taxonomy cover this Activity in the respective taxonomies, given that in ASEAN:
 - o Many countries lack sanitary landfills or recycling systems,
 - Waste volumes are rising rapidly from urbanisation,
 - o Methane from landfills is a major emissions source
- Therefore, the Taxonomy includes WtE as a transition activity under strict conditions, such as:
 - Energy recovery efficiency thresholds,
 - o Compliance with emissions standards,
 - Priority for recycling before incineration.
- This pragmatic approach balances environmental risk with the urgent need for waste infrastructure in ASEAN and improving credibility by embedding DNSH controls.

16. Why does the Waste-to-Energy Activity not include TSC on bio-waste use?

The Waste-to-Energy Activity includes the use of residual waste streams to generate energy through pre-sorted residual waste (non-recyclable fraction of waste) incineration. However, it excludes bio- waste (not including residual organic waste from domestic and small commercial sources, which cannot be easily sorted); namely agricultural residues, large-scale commercial food waste, or waste from industrial food processing are not acceptable inputs. Processing of biowaste from these sources should not be classified under this Activity but under other Activities, including:

- 3821[001] Anaerobic digestion of bio-waste;
- 3821[002] Composting of bio-waste;
- 351[014] Electricity generation from bioenergy, including co-firing with fossil fuels.

17. How are the TSC for data centres in the Information & Communication enabling sector measured?

- The TSC for Information & Communication data centres in the ASEAN Taxonomy are measured using quantitative efficiency metrics to control their environmental impact, as data centres are large and growing energy users.
- The ASEAN Taxonomy applies a threshold-based approach for data centres, setting specific targets to guide energy efficiency improvements as follows:
 - Power Usage Effectiveness (PUE) is used to classify a data centre as Green or Amber based on energy efficiency thresholds.

- Water Usage Effectiveness (WUE) is used to ensure responsible water use for cooling systems and reduce environmental impact.
- Global Warming Potential (GWP)' is a measure of how much heat a greenhouse gas traps in the atmosphere compared to carbon dioxide (CO2), over a specific time period (usually 100 years). CO2 has a GWP of 1. Gases with higher GWPs contribute more to global warming. The GWP limit in the ASEAN Taxonomy was developed in consideration of alignment to global sustainability goals while addressing varied AMS regulations. The ASEAN Taxonomy's GWP 675 limit indicates that the refrigerants used in data centre cooling should have a GWP that is no more than 675 times that of CO2. This is to minimise the cooling system's contribution to global warming.
- All metrics must be monitored, reported once every 3 years, and verified as part of TSC compliance.
- For large data centres, the ASEAN Taxonomy apply the same PUE threshold as the Singapore Asia Taxonomy which makes reference to the BCA-IMDA Green Mark Scheme. AT also references the Green Building Certification Scheme (GBC).
- The ASEAN Taxonomy provides flexibility for small and medium data centres by allowing different PUE thresholds tailored to their scale and operational characteristics.

18. Why does the ASEAN Taxonomy include Professional, Scientific and Technical Activities (PSTA) and Information and Communication (IC) as enabling sectors when these do not directly reduce emissions or environmental harm?

- Unlike the Electricity, Gas, Steam and Air Conditioning Supply sector, Transportation and Storage sector, and Manufacturing sector, the PSTA enabling sector does not generate significant direct environmental impacts. Instead, it plays a critical system-level enabling role by providing the expertise, tools and advisory support that allow other sectors to decarbonise and align with the taxonomy. Activities such as environmental engineering, sustainability consulting, R&D in climate technologies, and ESG data services are essential to planning, implementing and verifying sustainability improvements.
- The ASEAN Taxonomy recognises that industries across the region need capacity-building and technical assistance to transition. Without this enabling sector, many companies—especially SMEs and organisations in early transition stages—would not have the resources or expertise to meet TSC requirements. Including PSTA reflects a practical, inclusive transition approach, ensuring that sustainability services are eligible for green finance where they are verifiably linked to environmental outcomes. This mirrors the approach taken in taxonomies from Singapore, Malaysia and the EU, where enabling activities can be eligible for assessment if they make a substantial contribution to environmental objectives indirectly.

19. How do the Grandfathering rules in the ASEAN Taxonomy apply?

What is Grandfathering?

- Grandfathering allows certain financial instruments (e.g. green bonds), that funds the underlying economic activities, classified as Green or Amber, to retain their original label for a period of time in the event the TSC for the underlying economic activities change to reflect changing scientific, technological or economic circumstances. A TSC change may refer to predetermined tightening of thresholds, sunset dates of an Activity Tier, or undergo periodic revisions. This would ensure market stability and provide confidence to buyers of these financial instruments when there are revisions to the Taxonomy criteria.
- As a measure to encourage transparency, the ASEAN Taxonomy also require issuers to inform investors/lenders at the outset about TSC changes during the grandfathering period.
- The same grandfathering rules apply for Green and Amber to maintain stability and encourage development of the transition asset class.
- Illustrated examples can be seen in Annex 7 of the ASEAN Taxonomy Version 4.

Key Grandfathering Rules

Topic	Rule Summary	
Scope	Applies to financial instruments only , not to activities or assets. Activities must always meet current TSC.	
Start of grandfathering period	Begins when there is a TSC change which causes an underlying Activity to lose its classification.	
Duration	Up to 7 years after TSC changes.	
Transparency	Issuers must inform investors/lenders at the outset about TSC changes.	
Alignment	Instruments retain their label immediately prior to TSC change for a prescribed amount of time if they still align to the use-of-proceeds commitments .	

Grandfathering of Bonds

- There are two scenarios further defined for bonds:
 - o Bond is issued and proceeds are allocated before a change in TSC
 - They keep their label until bond maturity.
 - Bond is issued and proceeds are not vet allocated before a change in TSC
 - Proceeds allocated after the TSC change can continue to align with the TSC applicable immediately prior to the change, for up to seven years from the effective date of the TSC change.
 - After the end of this 7-year period, TSC applicable at that time must be applied. This means issuers have up to seven years to bring all unallocated proceeds in line with the new TSC or the bond will not retain its label.

 As a measure to encourage transparency, the ASEAN Taxonomy also require issuers to inform investors/lenders at the outset about TSC changes during the grandfathering period.

Grandfathering for Other Financial Instruments

- These apply to other financial instruments other than bonds. These other financial instruments are principally, but not necessarily exclusively, loans.
- Financial instruments continue to retain their label for 7 years after a TSC change causes the underlying Activity to lose its classification.
- As a measure to encourage transparency, the ASEAN Taxonomy also require issuers to inform investors/lenders at the outset about TSC changes during the grandfathering period.

20. How does the ASEAN Taxonomy apply to Entities, Portfolios and Financial Instruments?

The Taxonomy is primarily designed to classify economic activities, not entire entities or portfolios. Chapter 6 of the Main Report introduces a methodology to assess and voluntarily disclose taxonomy alignment at entity and portfolio levels for the purposes of transparency, based on the Plus Standard. Nevertheless, should users want to use the Foundation Framework, they can do so separately without mixing Activities assessed under the PS or FF while reporting. This methodology also explains how taxonomy alignment interacts with the ASEAN Transition Finance Guidance (ATFG).

Application to Companies and Operating Entities

Companies can report taxonomy alignment using the following three financial metrics:

Metric	Recommended for use by			
Revenue	Mature companies already generating income from sustainable activities			
CapEx	Companies transitioning toward sustainability			
OpEx	Service-based or asset-light firms			

- The reporting should show the proportion (%) of business aligned with Tier 1 (Green), Tier 2 (Amber T2), Tier 3 (Amber T3), Red, and out-of-scope activities (e.g. Activities not covered by the taxonomy, such as retail services). An illustrative example of reporting is shown in Chapter 6 of the Main Report.
- Application to Portfolios and Financial Instruments
 - This section explains taxonomy reporting for:
 - Funds (e.g., mutual funds, private equity funds)
 - Banks (loan portfolios)
 - Asset managers
 - The reporting method:
 - Assess each investment's exposure to taxonomy-aligned activities.

- Calculate alignment by value weighting.
- Disclose alignment by Tier (Green, Amber T2/T3, Red, out-of-scope).
- o An illustrative example of reporting is shown in Chapter 6 of the Main Report.

21. What does the ATB mean by the term "value" in application of the ASEAN Taxonomy to Entities and Portfolios and Financial Instruments?

- In Chapter 6.3 of the Main Report, the ASEAN Taxonomy provides guidance for the reporting
 of portfolios and financial instruments. It specifies that entities can disclose their entire
 investment portfolio across all asset classes, to determine the extent to which investments fall
 within the traffic light classification of the ASEAN Taxonomy. This involves calculating the
 weightage of each investment in the portfolio by "value".
- The ATB has chosen to use the general term "value" as different financial instruments may
 capture value differently. Users' calculation of value will thus depend on the asset class and
 the nature of the asset. For example, calculations could involve the book value (debt) or
 market value (equity) of the underlying activity. Users may choose to specify this accordingly
 when performing such calculations.

22. Has the ATB consulted relevant stakeholders regarding the basis, methodology and feasibility of the ASEAN Taxonomy TSC?

• The ATB conducts a Stakeholder Consultation exercise after the issuance of a version. These consultations are generally targeted and feedback is obtained from financial institutions, government ministries and agencies, real economy participants, international organizations and civil society organizations on matters including interoperability, transition efforts and implementation. Input obtained from these consultations are then considered by the ATB to ensure that there is a credible basis to warrant a revision in the TSC. In addition, the ATB also consults technical experts e.g. industry associations, subject matter experts from relevant ministries, research institutions, etc. before a version is released to assess the reasonableness of the basis and methodology of the TSC that have been developed.

23. With Version 4 completing the ASEAN Taxonomy, what's next for the ASEAN Taxonomy?

- The ATB continues to fulfil its mandate of maintaining and promoting the ASEAN Taxonomy, in addition to the development of the ASEAN Taxonomy.
- For example, as the ASEAN Taxonomy is a living document, TSC will be reviewed and possibly be adjusted over time, in line with technological developments within AMS.

- Going forward, the maintenance of the Taxonomy will be an important, ongoing aspect of the ATB's work. The ATB will establish a TSC Review Body (TRB), which may propose setting, review, adjustment and sunsetting of TSC.
- The TRB functions as an expert advisory group to the ATB, and will comprise the ATB and its Working Group members, nominated Workstream members (i.e. ACMF, AIRM, SLC, and WC-CMD), and past ATB members to preserve institutional knowledge.
- The Tier and TSC Maintenance Cycle for an activity is set out below:

#	Task Cycle	Description	Time	
1	TSC1 Set	The first TSC are established for Activity and	Start of Tier / TSC.	
		become applicable. At this time, the duration of the		
		first TSC Period (TSC1 Period) is set. Future TSC		
		may be set for each Activity Tier until sunset date.		
2	Start of TSC2	The TRB commences review of TSC.	30-36 months before	
	Review		end of TSC1 Period.	
3	TSC2	TRB proposes adjustments to TSC1 (i.e., the	24 months before end	
	published for	proposed TSC2). With ATB approval, the	of TSC1 Period.	
	comments	proposed adjustments are published for		
		stakeholder consultation.		
4	TSC2 final	TSC2 are published following ATB approval.	12 months before end	
	version		of TSC1 Period.	
	published			
5	TSC2	TSC1 is no longer extant and has been replaced		
	becomes	by TSC2.		
	extant			
	For subsequent TSC periods, repeat steps 2 – 5 in a five-year cycle.			

Further details can be found in Section 2, Annex 6 of the ASEAN Taxonomy.

-- END OF DOCUMENT --