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ACGF An ASEAN Infrastructure Fund Initiative

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CREAGY

CBIS Carbon Institute for Sustainability

TDR THAILAND DEVELOPMENT RESEARCH INSTITUTE

# ASEAN Taxonomy 102

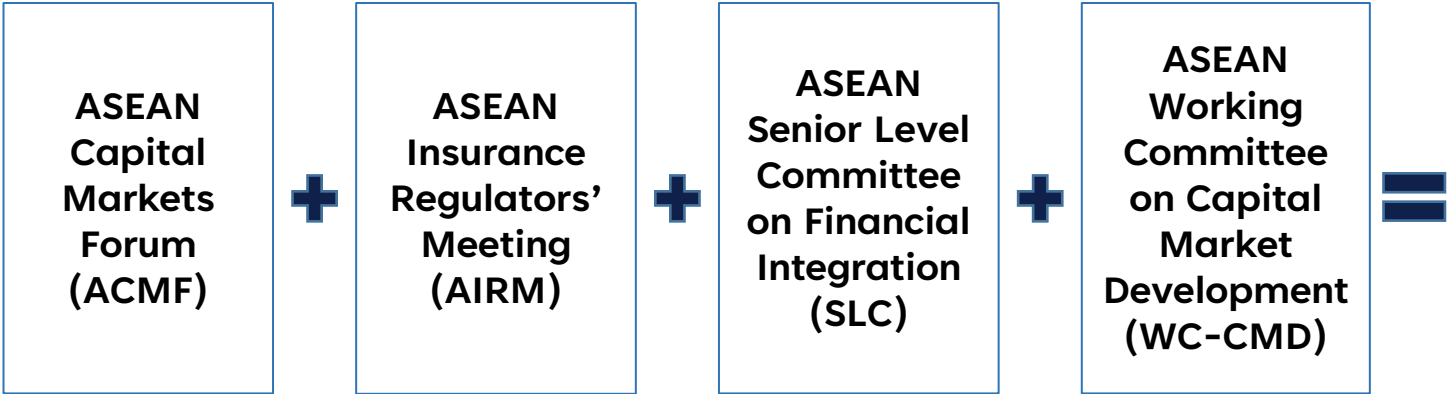
## Introduction to ASEAN Taxonomy

# Agenda

1. Introduction
2. Overview of ASEAN Taxonomy
3. Plus Standard (PS)
4. Foundation Framework (FF)
5. ASEAN and Thailand Taxonomy

# 1. Introduction

# ASEAN Taxonomy Board (ATB)



Established by: 4 sectoral bodies under the ASEAN Finance Cooperation Process:

- represents the banking, capital market and insurance sectors.
- facilitates the development of the ASEAN Taxonomy.
- The ATB was established under the auspices of the **ASEAN Finance Ministers and Central Bank Governors' Meeting (AFMGM)**.

## ASEAN Taxonomy Board



Chair : Brunei Darussalam Central Bank

### Example of Members:



Brunei Darussalam Central Bank



Non-Bank Financial Services Authority, Cambodia



Otoritas Jasa Keuangan Indonesia



Bank of the Lao PDR



Bank Negara Malaysia



Securities Commission, Malaysia



Ministry of Planning and Finance, Myanmar



Securities and Exchange Commission, Philippines



Monetary Authority of Singapore



Securities and Exchange Commission, Thailand

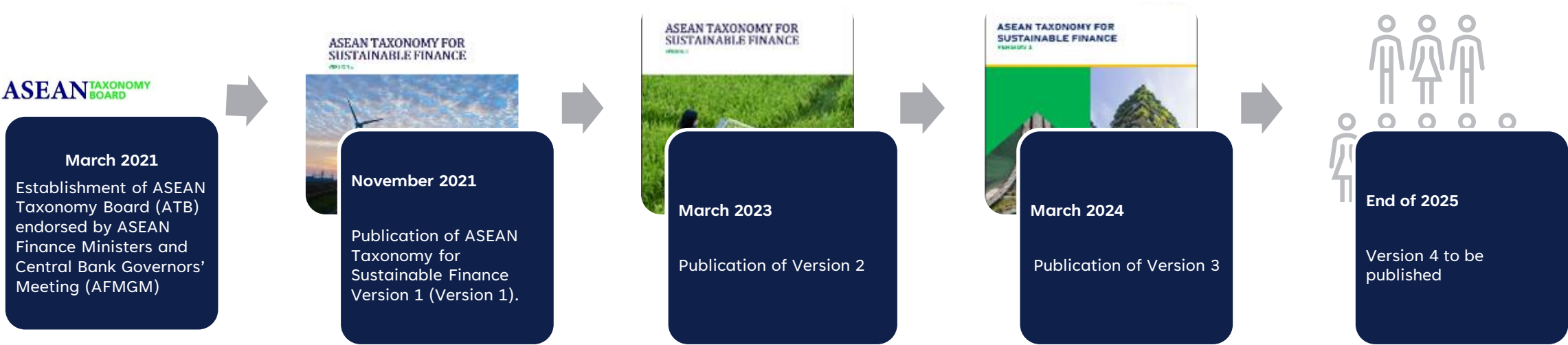


State Securities Commission of Viet Nam



Insurance Supervisory Authority of Ministry of Finance Viet Nam

# ASEAN Taxonomy Key Milestones 2021-2025





# The need for the ASEAN Taxonomy

A **regional taxonomy** is needed as a **common language** to drive sustainable finance whereas national taxonomies consider **national priorities and ambitions**.

Therefore, the ASEAN Taxonomy **facilitates equivalence** between national taxonomies as it is intended to be the **overarching guide** for ASEAN Member States.

## Why is the ASEAN Taxonomy important?

- To **minimise fragmentation**.
- **Consolidates** sustainable finance **efforts**.
- Provides **consistency, clarity, credibility** and **secures global acceptance** for businesses and investors.
- Facilitates **better allocation of capital** and **transition**.
- To **develop a sustainable ASEAN asset class**.

## 2. Overview of ASEAN Taxonomy

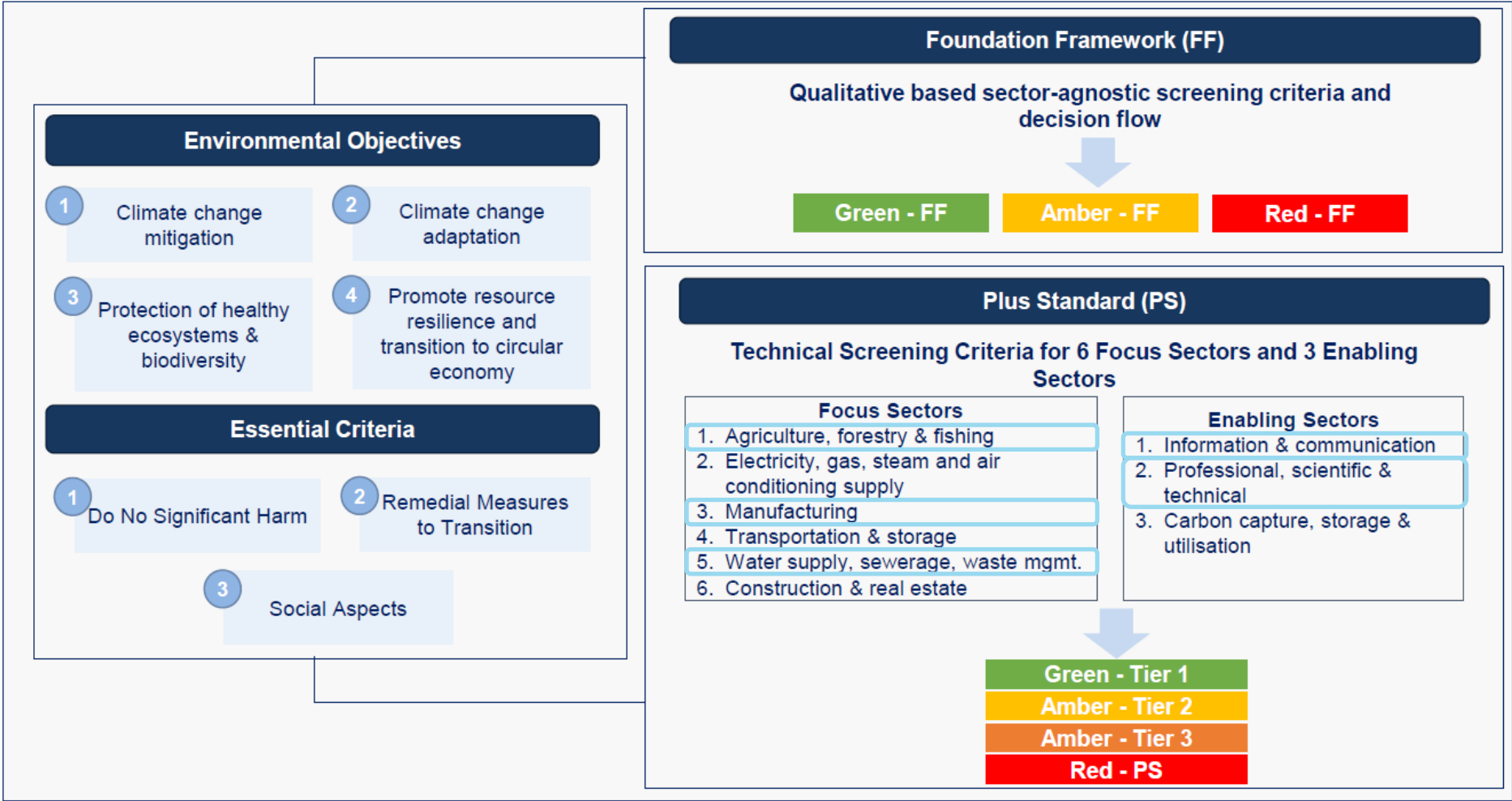
# Summary of AT V3 findings

Key findings raised from stakeholder consultation:

- 1) **Usability and Implementation** – Awareness, Interoperability and Clarity
- 2) **Transition Effort** – Transition pathways and Amber tiers' effectiveness
- 3) TSC for Construction & Real Estate
- 4) TSC for Transportation & Storage
- 5) **Do No Significant Harm** – Clarity, Lack of data, and implementation challenges



# Structure of the ASEAN Taxonomy



TSC are being added for V4

# Choice of the FF or the PS

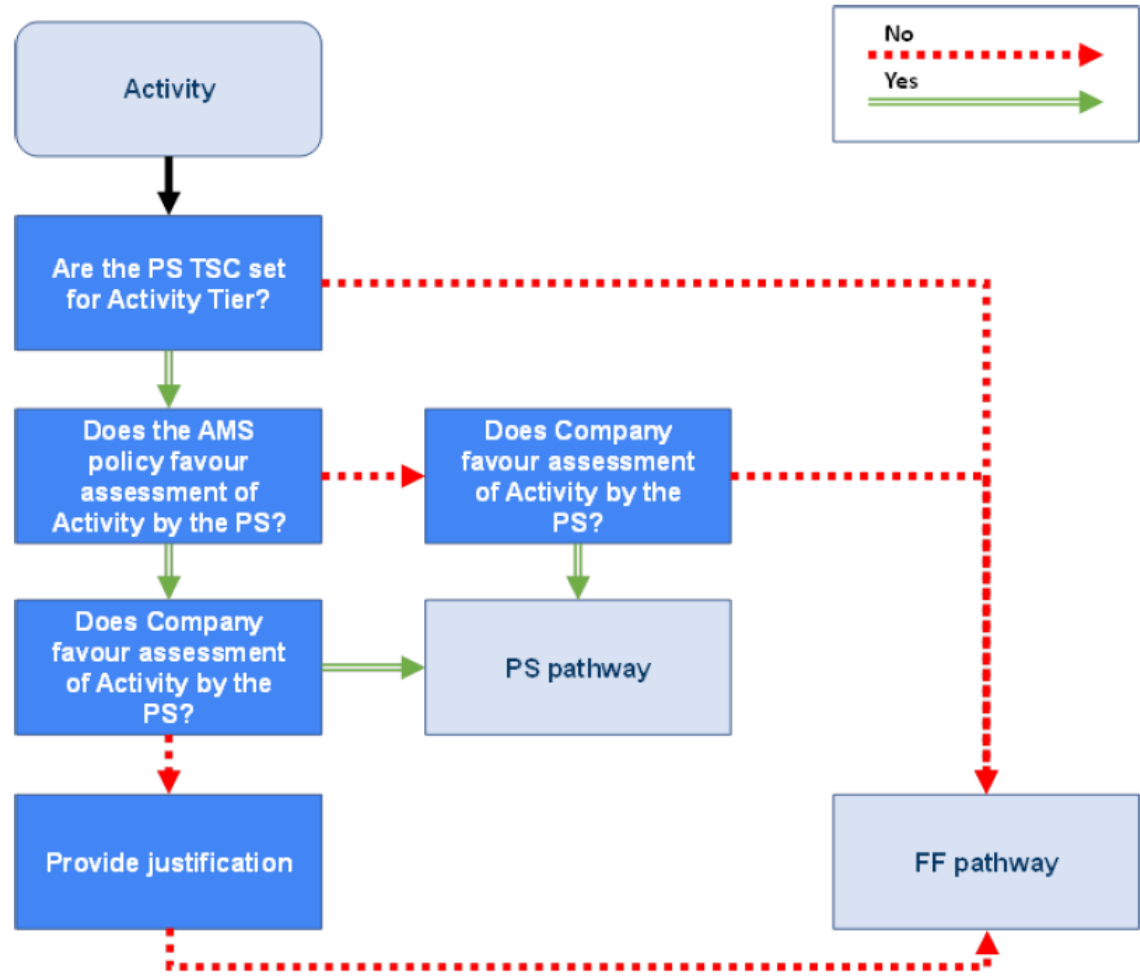
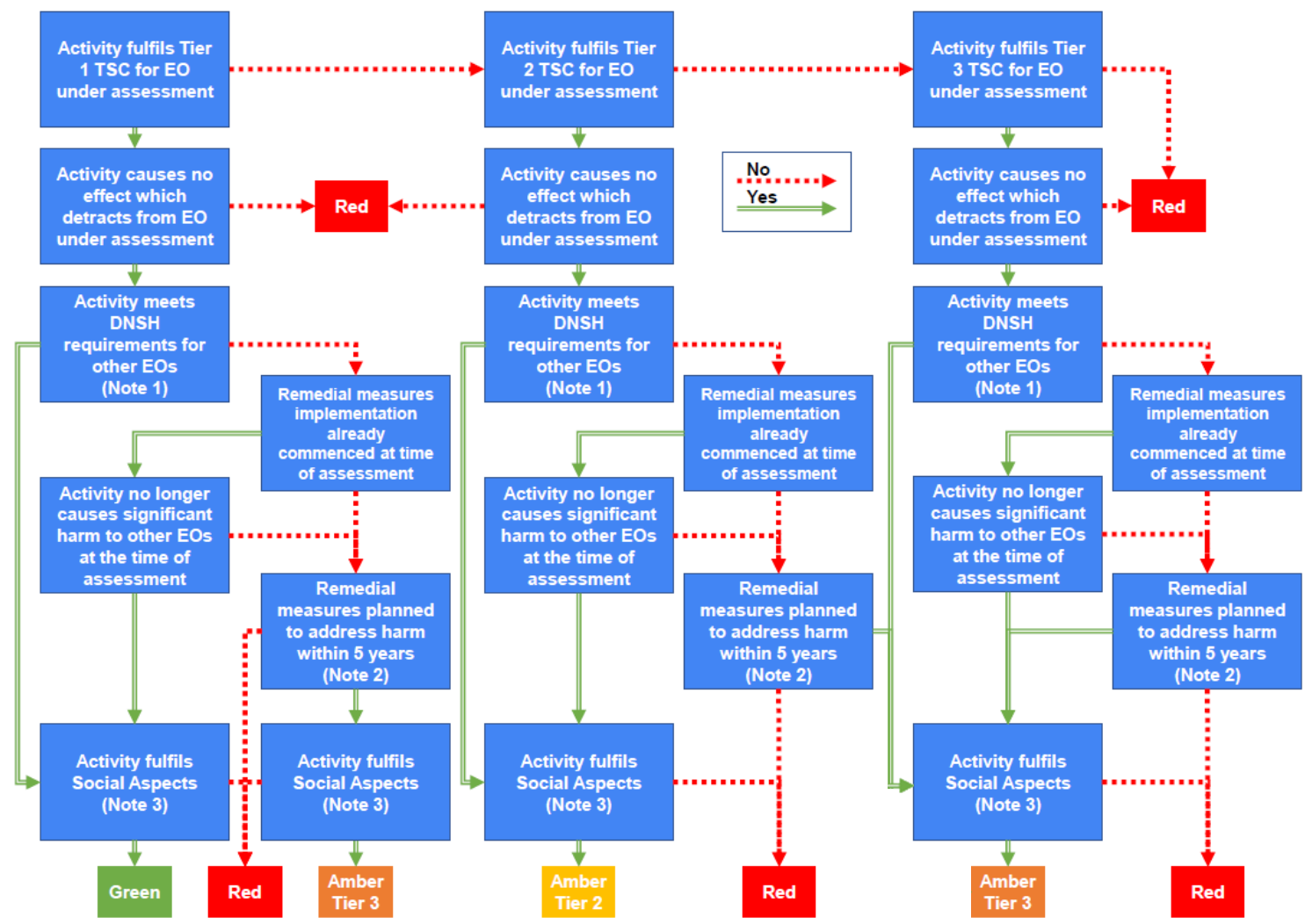


Figure 7: Recommended process for Choice of the FF or the PS

# 3. Plus Standard (PS)

# Plus Standard Assessment Tree



# Plus Standard – Use Case (1/2)

## 351[050] Electricity generation from geothermal energy

- Includes:
  - Power generation as part of cogeneration.
- Excludes:
  - Power generation through a combination of geothermal and a combustion process (refer to 351[011], 351[012], 351[014], as applicable).

Tiers	EO1: Climate Change Mitigation TSC
Tier 1 (Green)	Lifecycle GHG emissions from the generation of electricity by the entire facility <100 gCO <sub>2</sub> e/kWh.
Tier 2 (Amber T2)	Lifecycle GHG emissions from the generation of electricity by the entire facility: ≥100 and <425 gCO <sub>2</sub> e/kWh.
Tier 3 (Amber T3)	Lifecycle GHG emissions from the generation of electricity by the entire facility: ≥425 and <510 gCO <sub>2</sub> e/kWh.
Applicable standards	<ul style="list-style-type: none"> <li>Calculation of Lifecycle Emissions ISO 14067: 2018 or ISO 14064-1: 2018.</li> <li>For estimating GHG intensity in cogeneration, 1 MJ of heat energy shall be deemed to be equivalent to 0.277778 kWh of electricity:               <ul style="list-style-type: none"> <li>If used for heating, calculated at the point of discharge from the heat producing facility.</li> <li>If used for cooling, calculated at the point of discharge to the equipment for producing a cooling medium.</li> </ul> </li> </ul>

Tiers	EO2: Climate Change Adaptation TSC
Tier 1 (Green)	No TSC available.
Tier 2 (Amber T2)	No TSC available.
Tier 3 (Amber T3)	No TSC available.

Tiers	EO3: Protection of Healthy Ecosystems and Biodiversity TSC
Tier 1 (Green)	No TSC available.
Tier 2 (Amber T2)	No TSC available.
Tier 3 (Amber T3)	No TSC available.

Tiers	EO4: Resource Resilience and the Transition to a Circular Economy TSC
Tier 1 (Green)	No TSC available.
Tier 2 (Amber T2)	No TSC available.
Tier 3 (Amber T3)	No TSC available.

Significant Harm	Category for Assessment	Relevance	If Relevant, Reference for Assessment
EO1	Climate Change Mitigation	Relevant	Annex 2, Section 2
EO2	Climate Change Adaptation	Relevant	Annex 2, Section 3
EO3	Protection of Healthy Ecosystems and Biodiversity	Relevant	Annex 2, Section 4
EO3	Impact on Water Resources	Relevant	Annex 2, Section 4.3
EO3	Impacts Related to Noise	Relevant	Annex 2, Section 4.4
EO3	Impact on Air	Relevant	Annex 2, Section 4.5
EO3	Impact on Soil	Relevant	Annex 2, Section 4.6
EO3	Impact on Biodiversity	Relevant	Annex 2, Section 4.7

Table 2: Template for CRVA checklist

Step	Item	Description	Explanation	Status
1A	Lifespan of the Activity equipment and materials	Activity description.	What is the proposed Activity?	
1B		Equipment and materials description	What equipment and materials will be used to perform this Activity?	
1C		Activity start	When will the Activity start operations?	
1D		Activity end	When will the Activity cease operations (either through deterioration of components or reduced demand for Activity)?	
1E		Operational life >10 years?	Will the operational life of the Activity be more than 10 years?: <ul style="list-style-type: none"> <li>If no, conduct assessment using current IPCC climate scenarios and trends based on extrapolated current climate data.</li> <li>If yes, conduct current and future assessment using both IPCC climate scenarios and trends.</li> </ul>	
2A	Climate related hazards	Potential climate risks to the Activity	Identify and list potential risks to the Activity from Table 1, considering location of the Activity and applicable scenarios and trends as described in 1E.	
2B		Evaluate most common potential risks	Consider the likelihood of the risk based on the location of the Activity.	
3A	Risk assessment	Projection of climate hazards	If activity has operational life >10 years, what potential hazards may occur based on	
3B				

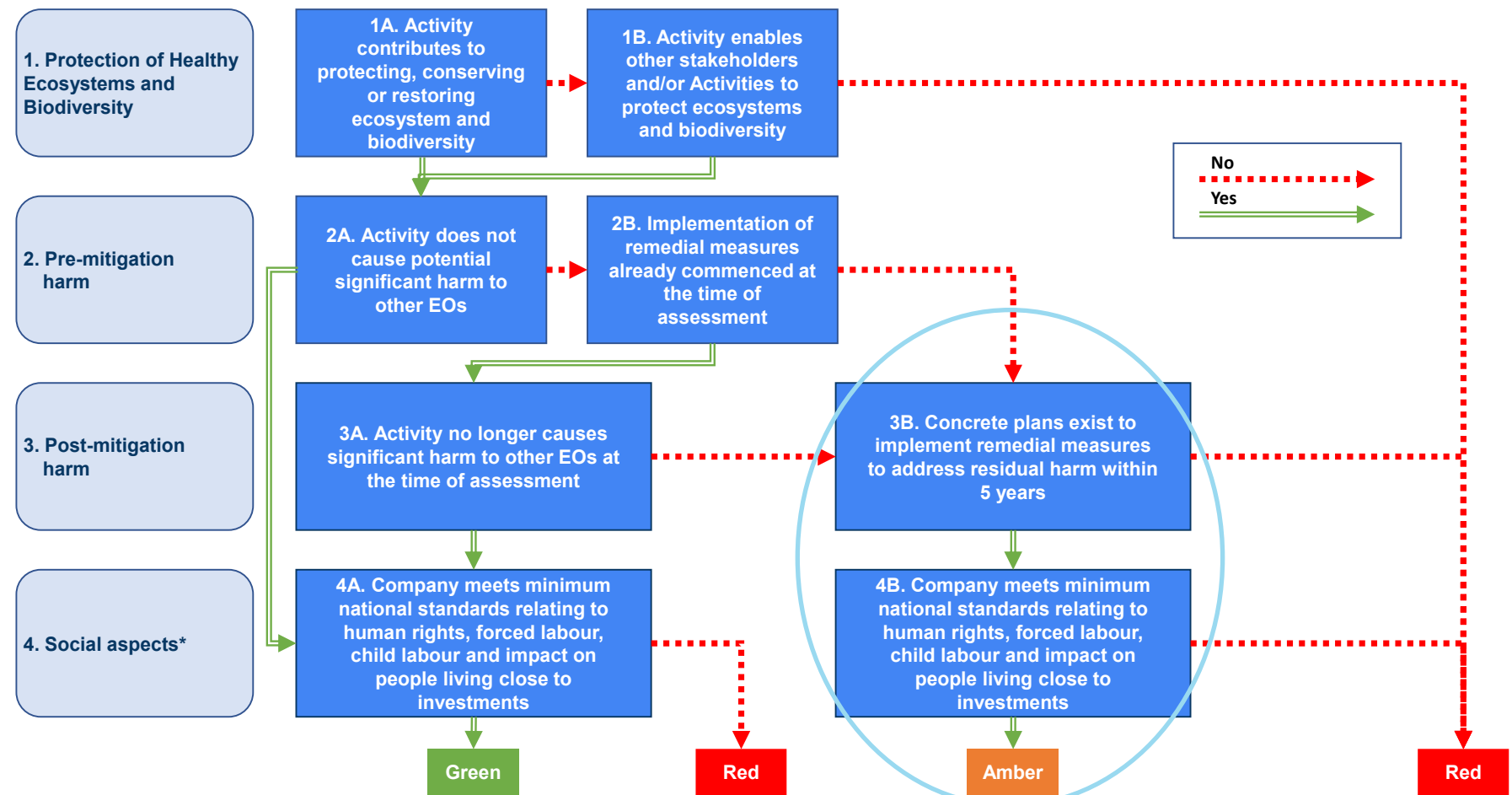






# 4. Foundation Framework (FF)

# Foundation Framework



\* Social Aspects (4) assessment is done at Company-level, while all other assessments (1 – 3) are conducted at Activity level.

# Foundation Framework – Use Case

## Use Case 2 - Agriculture

Company introduction	The Company cultivates and produces palm oil. It has operations across multiple Southeast Asian countries, owning both oil palm plantations and on-site processing facilities.	
Case context	The Company is hoping to expand their cultivation footprint within Indonesia, by seeking new project financing for palm oil plantation expansion. The expansion involves reclaiming previously degraded soil and planting new oil palm trees on the restored land.	
Sustainability efforts	<ul style="list-style-type: none"> <li>Adherence to Indonesian Sustainable Palm Oil (ISPO) standards.</li> <li>Development of water control structures to regulate plantation water levels for the protection of peatlands.</li> <li>Water categorisation and optimisation, as well as conservation efforts.</li> <li>Monitoring and disclosure of carbon emissions, in line with the Carbon Disclosure Project (CDP).</li> </ul>	
User entry point	Which EO is the nature of the Activity most relevant to?	Assessment of the Company's sustainability strategy and disclosures showed that the Company's environmental principles include peatland protection, soil health maintenance, water accountability and emissions reduction. Both EO1 Climate Change Mitigation and EO3 Protection of Healthy Ecosystems and Biodiversity are applicable.
	Which EO(s) is most aligned to the Company's strategic focus?	Given the heavy focus on ecosystem protection (i.e., peatland protection, soil health maintenance and water accountability), EO3 was selected as the primary EO for assessment.
EO3 Assessment	1A. Does the Activity contribute to protecting, conserving or restoring ecosystems and biodiversity?	
	Which specific principles under EO3 does the Activity meet or contribute to?	'Implementation of necessary measures to protect ecosystems and biodiversity'. While the Activity conventionally involves extensive deforestation and loss of biodiversity, several policies are already in place, including measures that prevent soil erosion and runoff into watercourses. An internal policy prohibiting peatland conversion is also in place. The expansion will involve reclaiming previously degraded soil and planting new oil palm trees on the restored land, which has less significant impact on the biodiversity of the area, relative to clearing of peatlands and forests. The clearing and reclamation of the degraded soil area will not involve land burning practices.

DNSH / RMT Assessment	Does the Activity minimise or eliminate negative effects of operations on the natural ecosystem and biodiversity?	Yes. The Activity avoids unsustainable peatland use through its policy that prohibits planting on new peatlands regardless of depth.
	Is a 3rd party certification or verification of alignment of Activity with EO3 available?	Yes. The Company adheres to the Indonesia Sustainable Palm Oil (ISPO) standard.
	Yes, the Activity contributes to protecting ecosystems and biodiversity by minimising or eliminating negative effects of its operations.	
	2A. Does the Activity avoid causing potential significant harm to other EOs?	
	Has an EIA been conducted and approved on the Activity?	Yes.
	What are the results of the EIA and where do the impact of the Activity lie?	The results of the EIA highlight the following: 1) Existing plantations on peatlands and wastewater treatment of palm oil mill effluents (POME) are significant sources of emissions with no established mitigation efforts in place; 2) Lack of internal policies that prohibit deforestation practices in the pursuit of new plantation projects.
	(EO1) Does the Activity avoid leading to significant GHG emissions, incl. CO2, CH4, N2O, SF6, NF3 and/or HFCs?	No. As reflected in the EIA, emissions from peat and wastewater treatment of POME are significant sources of GHG emissions.
	(EO1) Does the Activity avoid leading to or causing extensive deforestation practices?	No. While there has not been any record of deforestation activities by the Company since 2018, a No Deforestation policy is not yet in place.
	No. The Activity causes potential significant harm to EO1.	
	2B. Has the implementation of remedial measures already commenced at the time of assessment?	Yes. A recent internal environmental review has highlighted the high emission potential of the Company's peat emissions and POME wastewater treatment, and the planning and implementation of remedial measures have just begun. These measures include offsetting carbon emissions by emission credits from the export of electricity and palm kernel shells.

	3A. Does the Activity no longer cause significant harm to other EOs at the time of assessment?	No. The remedial measures that have been implemented are insufficient as there is still a significant amount of emissions, so the Activity still causes significant harm to EO1.
	3B. Are there concrete plans to implement remedial measures to address residual harm within 5 years?	Yes. Methane capture facilities will be installed at palm oil processing facilities. The Company has also pledged to commit to 'no deforestation, no peat and no exploitation (NDPE)' within the next 3 years.
Initial Classification	Amber	
Social Aspect Assessment	4B. Does the Company meet minimum national standards relating to human rights, forced labour, child labour and impact on people living close to investments?	<p>The Activity is solely carried out by the Company. Therefore, the social aspect assessment will only cover the Company which will be assessed according to Indonesian legislations and regulations.</p> <ul style="list-style-type: none"> <li>The Company's operations meet the relevant Indonesian legislations and regulations on: <ul style="list-style-type: none"> <li>Respect human rights (Constitution of the Republic of Indonesia Year 1945).</li> <li>Prevention of forced and child labour (Labour Law 2003).</li> <li>Impact on people living close to investments (Decree of Ministry of Environment No. 17/2012 on Community Participation and Information Disclosure in Environmental Impact Assessment).</li> </ul> </li> <li>The Company also upholds the rights and principles indicated in the AHRD, ACPPRMW, and ADSSP such as but not limited to the following: <ul style="list-style-type: none"> <li>Employment of policies and guidelines to overcome discrimination in line with Paragraph 2 of the AHRD on entitlement of every person to rights and freedoms "without distinction of any kind, such as race, gender, age, language, religion, political or other opinion, national or social origin, economic status, birth, disability or other status".</li> <li>Employment of policies and guidelines that set out measures taken to prevent and eliminate violence and abuse in line</li> </ul> </li> </ul>
Final Classification	Amber	
		Yes, the Company meets minimum national standards relating to human rights, forced labour, child labour and impact on people living close to investments and has demonstrated improvement of their operations to prevent a repeat of violations.

# 5. ASEAN and Thailand Taxonomy



# AT&TT Comparison

	Thailand Taxonomy (TT) Phase 1 & 2	ASEAN Taxonomy (AT) Version 3.0
Applicability	Voluntary	Voluntary
Assessment Approaches	1 Approach – PS	2 Approaches – FF & PS
Sector Coverage (PS)	<b>6 Focus Sectors:</b> <ul style="list-style-type: none"> <li>• Energy,</li> <li>• Transport,</li> <li>• Agriculture,</li> <li>• Construction &amp; Real Estate</li> <li>• Manufacturing, and</li> <li>• Waste Management</li> </ul> Enabling activities (CCS/CCUS) are a subset of Manufacturing Sector.	<b>3 Focus Sectors:</b> <ul style="list-style-type: none"> <li>• Energy,</li> <li>• Transport,</li> <li>• Construction &amp; Real Estate</li> </ul> 1 Enabling Sector which is CCUS.

# AT&TT Comparison

	Thailand Taxonomy (TT) Phase 1 & 2	ASEAN Taxonomy (AT) Version 3.0
Environmental Objectives (EO)	6 EOs	<ul style="list-style-type: none"> <li>4 EOs</li> <li>However, AT's EO3 covers TT's EO3, EO5 and EO6.</li> </ul>
Do-No-Significant-Harm (DNSH)	More prescriptive, requiring less auditor's judgement	<ul style="list-style-type: none"> <li><b>PS:</b> Less prescriptive, requiring more auditor's judgement.</li> <li><b>FF:</b> May refer to AT's PS or TT's DNSH Annex for relevant activities</li> </ul>
Social Aspects	Company Level <b>Minimum Social Safeguard (MSS)</b> Compliance of: <ol style="list-style-type: none"> <li>(1) National laws;</li> <li>(2) ILO core conventions;</li> <li>(3) International Bill of Human Rights Convention; and</li> <li>(4) IFC Performance Standards</li> </ol>	Company Level <b>Essential Criteria (EC3)</b> Compliance of <b>national laws</b> on: <ol style="list-style-type: none"> <li>(1) Human rights;</li> <li>(2) Labour and children's rights; and</li> <li>(3) people affected by the investment</li> </ol>



# AT&TT Comparison

	Thailand Taxonomy (TT) Phase 1 & 2	ASEAN Taxonomy (AT) Version 3.0
Remediation	Harm to EOs and MSS (beyond national regulations) must be remediated within <b>3 years</b> from the assessment date.	Harm to EOs must be remediated within <b>5 years</b> from the assessment date.
Assessment Result	<ul style="list-style-type: none"> <li>Green, Amber, Red, Out of Scope</li> </ul> <p><u>Note:</u></p> <ul style="list-style-type: none"> <li>The status of Amber depends on TSC only.</li> <li>“limited taxonomy compliance” for Remediation period</li> </ul>	<ul style="list-style-type: none"> <li><b>FF:</b> Green, Amber, Red</li> <li><b>PS:</b> Green, Amber Tier 1, Amber Tier2, Red</li> </ul> <p><u>Note:</u> The status of Amber depends on TSC and/or Remediation.</p>



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