THAI UNION GROUP PUBLIC COMPANY LIMITED ("TU") BLUE AND GREEN FINANCE FRAMEWORK

Document Title: Second Party Opinion on TU's Blue and Green Finance Framework
Prepared By: DNV (Thailand) Co., Ltd.
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[1] Updated the "Principles & Standards" to include UNEP FI's Sustainable Blue Economy Finance Principles;

[2] Updated the SPO to align with Thailand Taxonomy Phase 2 (published in May 2025), Thailand Taxonomy Phase 1 (updated in July 2025), and the updated Framework (published in July 2025)

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Disclaimer

Our assessment relies on the premise that the data and information provided by the client to us as part of our review procedures have been provided in good faith. Because of the selected nature (sampling) and other inherent limitation of both procedures and systems of internal control, there remains the unavoidable risk that errors or irregularities, possibly significant, may not have been detected. Limited depth of evidence gathering including inquiry and analytical procedures and limited sampling at lower levels in the organization were applied as per scope of work. DNV expressly disclaims any liability or co-responsibility for any decision a person or an entity may make based on this Statement.

Statement of Competence and Independence

DNV applies its own management standards and compliance policies for quality control, in accordance with ISO IEC 17029:2019 - Conformity Assessment - General principles and requirements for validation and verification bodies, and accordingly maintains a comprehensive system of quality control, including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements. We have complied with the DNV Code of Conduct[3] during the assessment and maintain independence where required by relevant ethical requirements. This engagement work was carried out by an independent team of sustainability assurance professionals. DNV was not involved in the preparation of statements or data included in the Framework except for this Statement. DNV maintains complete impartiality toward stakeholders interviewed during the assessment process.

[3] DNV Code of Conduct is available from DNV website (www.dnv.com)

DNV'S INDEPENDENT ASSESSMENT

Scope and Objectives

Thai Union Group Public Company Limited ("TU" or the "Customer") is a global leading producer of seafood products. TU is the world's largest producer of shelf-stable tuna products with annual sales exceeding USD 3.92 billion in 2024 and a global workforce of over 44,000. Listed as a public company on The Stock Exchange of Thailand (SET), the Company has facilities in 15 locations and 13 countries. Some 90% of its sales are generated abroad, mainly in the US and Europe. TU's vision is "To become the world's leading marine health and nutrition company."

In 2016, TU launched SeaChange®, a sustainability strategy with measurable commitments to delivering impacts. SeaChange® aims to drive a positive transformation throughout the global seafood industry by being a journey that covers every aspect of the seafood business transparently. SeaChange® 2030 comprises 11 interconnected goals aligned with 10 of the United Nation's Sustainable Development Goals. It is designed to reshape sustainable seafood practices and promote harmony between the ocean, the planet, and people. TU's commitments in areas like Climate Action, Responsible Aquaculture, and Responsible Wild Caught Seafood are cross-functional initiatives aimed at amplifying their impact and advancing goals related to climate action, circularity, biodiversity, human rights, and health and wellness. TU has developed a Blue and Green Finance Framework ("Framework") with the aim to raise Blue and Green Finance Instruments ("BGFIs") to finance or refinance new and existing projects as part of its sustainable business strategies and commitment to environmental well-being, as described in the Framework. The Framework is in alignment with the stated Principles and Standards (collectively the "Principles & Standards"):

- the Green Bond Principles ("GBP")[4], issued by the International Capital Market Association (ICMA) in June 2025; and
- the ASEAN Green Bond Standards ("GBS")[5], issued by the ASEAN Capital Markets Forum (ACMF) in October 2018; and
- the Green Loan Principles ("GLP")[6] issued by the Loan Market Association (LMA) / Asia Pacific Loan Market Association (APLMA) in March 2025; and
- Bonds to Finance the Sustainable Blue Economy: A Practitioner's Guide[7], published in 2023 by the Asian Development Bank, ICMA, International Finance Corporation, UN Environmental Programme, and UN Global Compact; and
- UNEP FI's Sustainable Blue Economy Finance Principles[8]; and
- ASEAN Taxonomy for Sustainable Finance Version 3 ("ASEAN Taxonomy"); or
- Thailand Taxonomy Phase 1 and Phase 2 ("Thailand Taxonomy")

DNV will update the SPO when ASEAN Taxonomy V4 is finalized. The current version of SPO assessment has been conducted against Thailand Taxonomy Phase 1, Thailand Taxonomy Phase 2, or ASEAN Taxonomy V3.

DNV (Thailand) Co., Ltd. ("DNV") has been commissioned by TU to review its Framework and provide a Second Party Opinion on the Framework, based on the Principles & Standards.

Our methodology to achieve this is described under 'Work Undertaken' below. We were not commissioned to provide independent assurance or other audit activities.

No assurance is provided regarding the financial performance of instruments issued via the Customer's Framework, the value of any investments, or the long-term environmental benefits of the transaction. Our objective has been to provide an assessment that the Framework has met the criteria established on the basis set out below.

Responsibilities of the Management of the Customer and DNV

The management of TU has provided the information and data used by DNV during the delivery of this review. Our statement represents an independent opinion and is intended to inform TU management and other interested stakeholders in the bond/loan as to whether the BGFIs are aligned with the Principles &

[4] Green-Bond-Principles-GBP-June-2025.pdf
[5] 4.1-ASEAN-Green-Bond-Standards.pdf
[6] Green Loan Principles - LSTA
[7] Bonds to Finance the Sustainable Blue Economy: A Practitioner's Guide | Asian Development Bank
[8] The Principles – United Nations Environment – Finance Initiative

Standards. In our work, we have relied on the information and the facts presented to us by TU. DNV is not responsible for any aspect of the nominated assets referred to in this opinion and cannot be held liable if estimates, findings, opinions, or conclusions are incorrect. Thus, DNV shall not be held liable if any of the information or data provided by TU's management and used as a basis for this assessment were not correct or complete.

Basis of DNV's Opinion

We have adapted our assessment methodology to create the TU-specific Eligibility Assessment Protocol (henceforth referred to as "Protocol"). Our Protocol includes a set of suitable criteria that can be used to underpin DNV's opinion.

As per our Protocol, the criteria against which the Framework has been reviewed are grouped under the four core components:

1. **Use of Proceeds**
   The Use of Proceeds criteria are guided by the requirement that an issuer/a borrower of BGFIs must use the funds raised to finance or refinance or to repay equity of eligible activities. The eligible activities should produce clear environmental benefits.
2. **Process for Project Evaluation and Selection**
   The Project Evaluation and Selection criteria are guided by the requirements that an issuer / a borrower of BGFIs should outline the process it follows when determining eligibility of an investment using BGFIs proceeds and outline any impact objectives it will consider.
3. **Management of Proceeds**
   The Management of Proceeds criteria are guided by the requirements that BGFIs should be tracked within the organization, that separate portfolios should be created when necessary and that a declaration of how unallocated funds will be handled.
4. **Reporting**
   The Reporting criteria are guided by the recommendation that at least annual reporting should be made of the use of proceeds and that quantitative and/or qualitative performance indicators should be used, where feasible.

No assurance is provided regarding the financial performance of instruments issued via the Framework, the value of any investments, or the long-term environmental benefits of the transaction. Our objective has been to provide an assessment that the Framework has met the criteria established on the basis set out below.

Work Undertaken

Our work constituted a high-level review of the available information, based on the understanding that this information was provided to us by TU in good faith. We have not performed an audit or other tests to check the veracity of the information provided to us. The work undertaken to form our opinion included:

- Creation of a Protocol, adapted to the purpose of the bond, as described above and in Schedule 2 and 3 to this Assessment;
- Assessment of documentary evidence provided by TU on the BGFIs and supplemented by high-level desktop research. These checks refer to current assessment best practices and standards methodology;
- Review of published materials by TU and TU's website;
- Discussions with TU's management, and review of relevant documentation and evidence related to the criteria of the Protocol; and
- Documentation of findings against each element of the criteria.

Our opinion as detailed below is a summary of these findings.

Findings and DNV's Opinion

DNV's findings on the alignment with Principles & Standards are listed below:

1. Use of Proceeds

TU intends to use the net proceeds of the BGFIs to finance and/or refinance new and/or existing eligible projects.

The Framework defines the following eligible project categories.

- Responsible aquaculture and wild-caught seafood management and marine value chains; and
- Marine ecosystem management, conservation and restoration; and
- Ocean pollution prevention; and
- Sustainable water and wastewater management; and

- Renewable energy; and
- Energy efficiency and
- Pollution prevention and control; and
- Clean transportation

DNV undertook an analysis of the associated project type to determine the eligibility as Blue and/or Green and in line with the Principles & Standards. **DNV concludes that the eligible categories outlined in the Framework are consistent with the categories outlined in the Principles & Standards, and are fully aligned with Thailand Taxonomy and ASEAN Taxonomy where relevant.**

2. Process for Project Evaluation and Selection

TU has set up an evaluation and selection process that is comprised of two main steps: valuation of eligible projects by Blue and Green Finance Working Group consisting of representatives from Treasury and Finance Shared Services Team, Sustainable Development Team and other departments, and approval of eligible Blue and Green projects by Sustainability Development Committee, chaired by the CEO.
DNV concludes that TU's Framework appropriately describes the process for Project Evaluation and Selection.

3. Management of Proceeds

TU will deposit the net proceeds from BGFIs into its general account. These funds will be tracked, monitored, and documented using internal reporting systems. Unallocated funds will be held as cash or cash equivalents or invested in short-term securities in accordance with TU's cash management policies. Working capital deployed will be periodically reported to lenders to evidence eligible investments. If projects become ineligible, TU will replace them with suitable eligible Blue and Green projects.

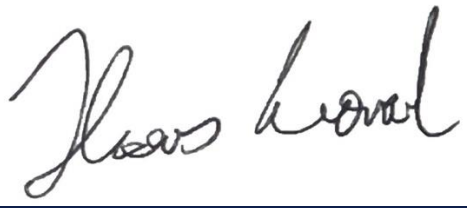
DNV has reviewed the evidence presented and concludes that the Framework appropriately describes the process for Management of Proceeds.

4. Reporting

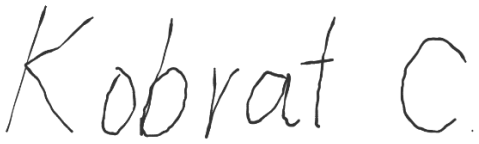
TU will publish annual reports on its website detailing how Blue and Green financing is used. The allocation report shows how much is allocated to each project category and remaining unallocated funds. Impact report will detail the expected environmental benefits of the projects, such as reduced GHG emissions (depending on available data).

On the basis of the information provided by TU and the work undertaken, it is DNV's opinion that the Framework meets the criteria established in the Protocol and that it is aligned with the stated definition of BGFIs within the Principles & Standards.

For DNV (Thailand) Co., Ltd.
Bangkok, Thailand / 5 August 2025



Thomas Leonard
Quality Reviewer



Kobrat Chotruangprasert
Lead Verifier

Schedule 1. Description of Categories to be financed or refinanced through TU's Blue and Green Finance Instruments

Eligible Green Project Categories	Eligible Criteria and Description	DNV Findings
Responsible aquaculture and wild-caught seafood management and marine value chains	Eligible Projects related to environmentally responsible aquaculture and fisheries to improve practices, and processes that negatively impact biodiversity and the environment, enhance climate resilience of the marine value chain, and support innovative solutions for low-carbon practices, include but not limited to: • Procurement or production of responsible aquaculture and wild-caught species in accordance with GSSI-recognized standards, such as the Aquaculture Stewardship Council (ASC), Best Aquaculture Practices (BAP), and Marine Stewardship Council (MSC), or credible Improver Program (IP)[9]. • Ecosystem-based, climate-resilient, or low-carbon aquaculture and wild-caught fisheries management that involves measures such as integrating renewable energy technologies into aquaculture farms and implementing smart technologies to enhance farming efficiency. • Improvement of wastewater management at shrimp farms or among other types of suppliers such as implementing advanced filtration systems, enhancing pond management techniques, and adopting best practices for treating and recycling wastewater. • Implementation of traceability systems to ensure responsible practices in supply chains within fisheries and aquaculture activities. • Implementation of responsible antibiotics use in shrimp farming, which includes establishing an early warning system for disease outbreak and collaborating with technology partners to identify viable and sustainable alternatives for antibiotics as well as promoting best practices to minimize the risk of disease, among others. • Implementation of systems, processes, assessments, or devices to reduce by-catch and protect endangered, threatened, and	DNV confirms that TU's projects meet the Principles and Standards. Responsible aquaculture meets the green criteria of the activity Sustainable Aquaculture Production indicated in Thailand Taxonomy Phase 2. Wild-caught and marine value chains meet the green EO3 criteria of ASEAN Taxonomy Foundation Framework. The result of Do No Significant Harm (DNSH) and Minimum Social Safeguard (MSS) assessment is shown in Schedule 4. Detailed assessment is shown in Schedule 5.

[9] A credible Improver Program (IP) for fisheries and aquaculture operations must include a clear, timebound work plan with defined actions and tasks. The project should aim to achieve a sustainability certification recognized by GSSI or demonstrate measurable progress toward sustainability best practices. Additionally, it must ensure transparency through public reporting, providing regular updates on actions taken and improvements made.

	protected species such as electronic monitoring, bycatch reduction devices, or other fishing gear modifications. • Procurement or production of responsibly sourced aquaculture feed ingredients such as alternative proteins and deforestation- and conversion-free soy. • Exploration, development, and promotion of alternative protein for aquaculture feeds and related products to substitute for high GHG-emitting, animal-sourced ingredients.	
Marine ecosystem management, conservation and restoration *Note: All projects must be within a marine environment or within 100 km of the coast.*	Eligible Projects related to activities that contribute to sustainable marine ecosystem management, protection, and restoration to increase resiliency and support climate mitigation efforts, including but not limited to conservation or restoration of marine ecosystem that serve as habitats for marine species.	As per ASEAN Taxonomy Foundation Framework, DNV considers Marine Ecosystem Management, Conservation and Restoration projects to be substantially contributing to EO3 Protection of Healthy Ecosystems and Biodiversity. DNV notes that this activity is also contributing to EO2 Climate Change Mitigation and Climate Change Adaptation. The result of DNSH and MSS assessment is shown in Schedule 4. Detailed assessment is shown in Schedule 5.
Ocean pollution prevention *Note: All solid waste management projects must be within 50 km of the coast or a river that drains into the ocean.*	Eligible Projects related to the prevention and reduction of ocean plastic pollution, including but not limited to: • Reduction and recycling of ocean-bound plastics. • Removal of plastic from water bodies. • Recovering and repurposing of abandoned, lost, or discarded fishing gear.	As per ASEAN Taxonomy Foundation Framework, DNV considers Ocean Pollution Prevention projects to be substantially contributing to ASEAN Taxonomy EO3 Protection of Healthy Ecosystems and Biodiversity (Equivalent to Thailand Taxonomy EO5 Pollution prevention and control). The result of DNSH and MSS assessment is shown in Schedule 4. Detailed assessment is shown in Schedule 5.
Sustainable water and wastewater management *Note: All projects must be within 100 km of the coast.*	Eligible Projects related to solutions that promote sustainable water resources management to reduce water pollution and conserve water resources, including but not limited to:	Wastewater compliance programs meet EO3 criteria of the activity Construction, extension, upgrade, operation and renewal of decentralised

	• Wastewater compliance programs to comply with local regulations. • Wastewater treatment projects to improve water quality at Thai Union facilities. • Water reuse and recycling projects. • Water consumption reduction projects such as implementing a dry concepts method and recycling and reusing wastewater, and improving operational control and adopting new machinery technology in the food process, taking into account food safety standards where applicable.	wastewater collection and treatment indicated in Thailand Taxonomy Phase 2. Water reuse and recycling projects meet the EO4 criteria of the activity Construction, extension, upgrade, operation and renewal of decentralised wastewater collection and treatment indicated in Thailand Taxonomy Phase 2. The result of DNSH and MSS assessment is shown in Schedule 4. Detailed assessment is shown in Schedule 5.
Renewable energy	Eligible Projects are related to development, construction, management, operation or maintenance of renewable energy, including but not limited to: • Solar PV and solar thermal for power and heat.	Solar PV and solar thermal for power and heat projects meet the eligibility criteria of the activity Solar Energy Generation indicated in Thailand Taxonomy Phase 1, and also the eligibility criteria of the activity 351[021] Electricity generation using solar photovoltaic technology indicated in ASEAN Taxonomy V3. The result of DNSH and MSS assessment is shown in Schedule 4. Detailed assessment is shown in Schedule 5.
Energy efficiency	Eligible Projects related to the improvement of energy-efficient systems and equipment, and operations to lower energy consumption and optimize electricity, leading to an environmental footprint reduction, including but not limited to: • Engineering and administrative improvements of machine efficiency and optimization, such as cooling, steam distribution systems, and production operation control, as well as increasing the standards of operational control. • Utilization of energy-efficient equipment.	As per ASEAN Taxonomy Foundation Framework, DNV considers Energy Efficiency projects to be substantially contributing to EO1 Climate Change Mitigation. The result of DNSH and MSS assessment is shown in Schedule 4. Detailed assessment is shown in Schedule 5.
Pollution prevention and control	Eligible Projects related to waste prevention, reduction, and recycling, including but not limited to: • Waste management projects, such as waste generation reduction at source in operations, separate	Waste prevention, reduction and recycling projects meet the EO4 criteria of the activity Collection and Transport of Waste, sub-activity

	collection and transportation of non-hazardous and hazardous waste, and reduction of waste to landfill through initiatives such as soil conditioners and bricks. • Development of sustainable packaging solutions. Eligible Projects related to sustainable food waste management, including but not limited to: • Food loss minimization from the source within operations • Utilisation of food loss in the company's value chain, such as in the production of fertilizer. • Research and development of innovations to reduce food loss, such as increasing the valorisation of fish parts. Eligible Projects related to the reduction of GHG emissions and implementation of low-carbon technology, including but not limited to: • Phase out harmful materials that could have a negative impact on environment, such as hydrofluorocarbon (HFC), by using eco-friendly refrigerant. • Conversion to close-loop freezer. • Conversion of fossil fuel machines to electric machines, renewable energy or low-carbon fuels, such as from fuel boiler to electric boiler	Industrial Waste indicated in Thailand Taxonomy Phase 2. As per ASEAN Taxonomy Foundation Framework, DNV considers Sustainable Packaging Solution and Food Waste Management projects to be substantially contributing to EO4 Resource Resilience and Transition to a Circular Economy. As per ASEAN Taxonomy Foundation Framework, reduction of GHG emissions projects substantially contribute to EO1 Climate Change Mitigation. The result of DNSH and MSS assessment is shown in Schedule 4. Detailed assessment is shown in Schedule 5.
Clean transportation	Eligible Projects related to installation, operation, and maintenance of clean transportation systems, such as the installation of EV charging stations and the purchase of electric vehicles.	Clean transportation projects meet the eligibility criteria of the following activities indicated in Thailand Taxonomy Phase 1: 1. Other passenger land transport; AND 2. Freight transport by road; AND 3. Enabling infrastructure for low-emission transport. By meeting the criteria set by Thailand Taxonomy which require zero direct CO2 emissions since before 31 December 2025, the projects automatically meet the eligibility criteria of the following activities indicated in ASEAN Taxonomy V3: 1. 4924[001] Freight transport services by road

		2. 49[001] Infrastructure for road and public transport, including infrastructure to enable low-carbon land transport 3. 492[002] Transport by motorbikes, passenger cars and light commercial vehicles. The result of DNSH and MSS assessment is shown in Schedule 4. Detailed assessment is shown in Schedule 5.

Exclusion Criteria

TU's financing proceeds shall not be utilized towards the following activities:

- Development, refining, and transportation of fossil fuels (including coal, oil, and gas)
- Fossil fuel power generation
- Nuclear power generation
- Weapons and defence
- Gambling and casinos
- Alcohol and tobacco (excluding beer and wine)
- Activities with forced or child labour
- Production or trade of dangerous chemicals, radioactive materials, or engendered species
- Commercial logging in old growth or primary tropical forests
- Harmful marine or coastal fishing practices

Projects, assets, or expenditures associated with human or labour rights violations or environmental harm are also excluded.

Schedule 2. Contributions to UN SDGs

Eligible Project Categories	UN SDGs	DNV Findings
Responsible aquaculture and wild-caught seafood management and marine value chains	**Target 2.1:** End hunger, achieve food security and improved nutrition and promote sustainable agriculture. **Target 2.4:** Ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality **Target 12.2:** By 2030, achieve the sustainable management and efficient use of natural resources **Target 12.4:** By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment **Target 14.4:** By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by scientific advice.	DNV is of the opinion that the eligible category outlined in the Framework contributes to the achievement of the UN SDGs.
Marine ecosystem management, conservation and restoration	**Target 14.2:** Sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and restore them through conservation and rehabilitation efforts, as appropriate, in order to restore and maintain ecosystem function, biodiversity, and productive capacity.	
Ocean pollution prevention	**Target 14.1:** By 2025, prevent and reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.	
Sustainable water and wastewater management	**Target 6.3:** Improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally. **Target 6.4:** By 2030, substantially increase water-use efficiency across all	

	sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.	
Renewable energy	**Target 7.3:** Increase substantially the share of renewable energy in the global energy mix.	
Energy efficiency	**Target 9.4:** Upgrade infrastructure and retrofit industries to make them more resource-efficient and environmentally friendly and reduce their environmental impact. **Target 13.3:** Integrate climate change measures into national policies, strategies and planning.	
Pollution prevention and control	**Target 12.3:** By 2030, halve per capita global food waste at the retail and consumer levels, and reduce food losses along production and supply chains, including post-harvest losses. **Target 12.5:** Substantially reduce waste generation through prevention, reduction, recycling and reuse. **Target 13.3:** Integrate climate change measures into national policies, strategies and planning.	
Clean Transportation	**Target 11.2:** By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of persons with limited mobility, older persons, children and persons with disabilities.	

Schedule 3. Eligibility Assessment Protocol

1. Use of Proceeds

Ref.	Criteria	Requirements	DNV Findings
1a	Type of Bond /Loan	The Bond/Loan must fall in one of the following categories, as defined by the Principles & Standards: • Blue/Green Use of Proceeds Bond • Blue/Green Use of Proceeds Revenue Bond • Blue/Green Project Bond • Blue/Green Securitized Bond • Loan instrument made available for Blue/Green project (Blue/Green use of loan proceeds)	The Framework states that the BGFIs are Blue and Green Use of Proceeds Bond/Loan. The reviewed evidence confirms that the Blue and Green Financing Instruments meet the criteria under the Principles & Standards, and DNV confirms this process to be well aligned with the Principles & Standards.
1b	Blue/Green Project Categories	The cornerstones of Blue/Green Bonds and Loans are the utilization of the proceeds of the bonds or the loans which should be appropriately described in the legal documentation for the security.	Eligible Blue project categories are as follows: • Responsible aquaculture and wild-caught seafood management and marine value chains; • Marine ecosystem management, conservation and restoration; • Ocean pollution prevention; and • Sustainable water and wastewater management Eligible Green project categories are as follows: • Renewable energy; • Energy efficiency • Pollution prevention and control; and • Clean transportation The above-mentioned project categories meet the eligible Green Project Categories in Standards & Principles. DNV refers to Thailand Taxonomy Phase 1 or ASEAN Taxonomy V3 for the following project categories: • Solar PV and solar thermal for power and heat projects • Clean transport projects DNV refers to ASEAN Taxonomy Foundation Framework for the following project categories: • Wild-caught and marine value chains projects • Marine Ecosystem Management, Conservation and Restoration projects • Ocean Pollution Prevention projects • Energy Efficiency projects • Food Waste Management projects

Ref.	Criteria	Requirements	DNV Findings
			• Reduction of GHG emissions projects DNV refers to Thailand Taxonomy Phase 2 for the following project categories: • Responsible aquaculture projects • Wastewater compliance projects • Water reuse and recycling projects • Waste prevention, reduction and recycling projects A detailed assessment against eligibility criteria of the Taxonomies is provided in Schedule 5 of this document. Based on an online media search, a review of Code of Practice reports, TU's environmental and social policies, and TU's sustainability progress reports, DNV has found no evidence of on-going violations of Environmental Objectives DNSH or MSS. A detailed Essential Criteria assessment is provided in Schedule 4 of this document.
1c	Environmental Benefits	All designated Blue/Green Project categories should provide clear environmentally sustainable benefits, which, where feasible, will be quantified or assessed by the Issuer.	Environmental benefits from the Blue projects include increase of sustainable procurement and production of seafood products, increase of conservation coastal area, and increase of ocean-bound plastic collected from waterways and oceans. Environmental benefits from the Green projects include tonnes of GHG emissions reduced (tCO2e/year), energy savings (MWh/year), and reduction in waste and food waste. DNV confirms that the proposed use of proceeds will reasonably be expected to deliver meaningful environmental benefits.
1d	Refinancing Share	In the event that a proportion of the proceeds may be used for refinancing, it is recommended that issuers provide an estimate of the share of financing vs. re-financing, and where appropriate, also clarify which investments or project portfolios may be refinanced.	According to TU Blue and Green Finance Framework, the proceeds will be used for financing or refinancing the eligible projects.

2. Process for Project Selection and Evaluation

Ref.	Criteria	Requirements	DNV Findings
2a	Investment-Decision Process	The Issuer of a Blue/Green Bond and Loan should outline the decision-making process it follows to determine the eligibility of projects using Blue/Green Bond and Loan proceeds.	According to the Framework, TU has established a Blue and Green Finance Working Group, co-chaired by the Treasury & Finance Shared Services and Environmental Impact Senior Director and Managing Director or equivalent seniority, to oversee the use of Blue/Green finance proceeds. This group, comprising representatives from relevant departments like Sustainable Development, SHE, and Treasury and Financed Shared Services, will:

Ref.	Criteria	Requirements	DNV Findings
		This includes, without limitation: • The environmental objectives of the eligible Blue/Green Projects; • The process by which the issuer determines how the projects fit within the eligible Blue/Green Projects categories; and • Complementary information on processes by which the issuer identifies and manages perceived environmental and social risks associated with the relevant project(s).	1. **Review and select projects:** Ensure projects align with eligibility criteria, comply with regulations, and undergo environmental and social risk assessments. 2. **Monitor project progress:** Track project alignment with the Framework and replace ineligible projects as needed. 3. **Approve allocation and impact reports:** Review and approve reports on the use of Blue/Green finance proceeds. 4. **Monitor market trends:** Stay updated on evolving disclosure and reporting requirements in sustainable finance. Shortlisted projects will be further reviewed and approved by the Sustainability Development Committee. DNV confirms this process for project selection and evaluation to be well aligned with the Principles & Standards.
2b	Issuer/ Borrower's Environmental and Governance Framework	Issuers are also encouraged to: • Position the relevant information within the context of the issuer's overarching objectives, strategy, policy and/or processes relating to environmental sustainability. • Provide information, if relevant, on the alignment of projects with official or market-based taxonomies, related eligibility criteria • Have a process in place to identify mitigants to known material risks of negative environmental and/or social impacts from the relevant project(s).	To achieve its vision of being the world's most trusted seafood leader, TU has implemented a comprehensive sustainability strategy called SeaChange® 2030. This strategy focuses on environmental sustainability through several key objectives, strategies, policies, and processes. The primary objective is to revolutionize the seafood industry by creating unified solutions for people and the planet. To achieve this, TU has adopted a multi-pronged strategy that encompasses reducing carbon emissions, minimizing waste, protecting ecosystems, and promoting a healthier world. Thai Union's Sustainability Development Committee, chaired by the CEO and co-chaired by the Chief Sustainability Officer, is responsible for guiding and overseeing the company's sustainability strategy. Key responsibilities include providing strategic direction, enforcing sustainability policies, reviewing progress on critical commitments (e.g., Tuna Commitment, Packaging Commitment), and establishing sub-committees to drive implementation across the organization. The committee meets twice a year to review progress and make strategic decisions.

3. Management of Proceeds

Ref.	Criteria	Requirements	DNV Findings
3a	Tracking Procedure	The net proceeds of BGFIs should be credited to a sub-account, moved to a	An amount equivalent to the net proceeds from TU's BGFIs will be tracked in the general funds.

		sub- portfolio or otherwise tracked by the Issuer/Borrower in an appropriate manner and attested to by a formal internal process that will be linked to the Issuer's/Borrower's lending and investment operations for Blue/Green Projects.	DNV confirms this process for tracking to be well aligned with the Principles & Standards.
3b	Tracking Procedure	So long as the GFIs are outstanding, the balance of the tracked proceeds should be periodically reduced by amounts matching eligible Blue/Green investments or loan disbursements made during that period.	The proceeds will be monitored and managed on a portfolio basis. As long as the BGFIs remain outstanding, the balance of the tracked net proceeds will be adjusted periodically to match allocations to Eligible Projects. Based on the conversation with TU, working capital deployed will be periodically reported to lenders to evidence eligible investments. DNV confirms this process for tracking to be well aligned with the Principles & Standards.
3c	Temporary Holdings	Pending such investments or disbursements to eligible Blue/Green Projects, the Issuer should make known to investors the intended types of temporary investment instruments for the balance of unallocated proceeds.	Any unallocated net proceeds will be temporarily invested in cash or cash equivalents or invested in short-term securities in accordance with TU's cash management policies and will not be invested in any excluded categories as defined in this Framework. DNV confirms this process for temporary holdings to be well aligned with the Principles & Standards.

4. Reporting

Ref.	Criteria	Requirements	DNV Findings
4a	Periodical Reporting	• Issuers should make, and keep, readily available up to date information on the use of proceeds to be renewed annually until full allocation, and on a timely basis in case of material developments. • The annual report should include a list of the projects to which BGFIs proceeds have been allocated, as well as a brief description of the projects, the amounts allocated, and their expected impact. • Where confidentiality agreements, competitive considerations, or a large number of	TU is committed to transparency regarding its BGFIs. They will publish Allocation and Impact reports on their website: • **Allocation Report:** This report will include total allocation by category of eligible projects, list of projects funded, brief descriptions of major projects and their locations, and share of new financing and refinancing. • **Impact Report:** This report focuses on the environmental benefits of eligible projects. It will include (when possible) tonnes or percentage of sustainable seafood procured or sourced, coastal marine that is maintained (m2), tonnes of ocean-bound plastic collected from TU's waterways, etc. These reports will be published on TU's website annually and then continue until all funds are allocated. Updates will be provided in case of significant changes of the Framework. DNV confirms that the proposed reporting is consistent with the criteria set out in the Principles & Standards.

		underlying projects limit the amount of detail that can be made available, the GBP recommend that information is presented in generic terms or on an aggregated portfolio basis (e.g. percentage allocated to certain project categories).	

Schedule 4. DNSH and MSS Assessment

4.1 Do No Significant Harm (DNSH) Assessment

Both the Thailand Taxonomy and the ASEAN Taxonomy can be used to assess the eligibility of use of proceeds and are therefore both require a Do No Significant Harm (DNSH) assessment. Whilst the ASEAN Taxonomy and Thailand Taxonomy DNSH requirements are broadly comparable, the Thailand Taxonomy sets some sector-specific DNSH requirements. Because of its specificity to the applicable sector, it was agreed to conduct the DNSH assessment using the format provided by the Thailand Taxonomy. Environmental Objectives (EO) 3, 5, and 6 of the Thailand Taxonomy can all be categorized under a single Environmental Objective (EO3, "Protection of Healthy Ecosystems and Biodiversity") in the ASEAN Taxonomy.

Table 1: Thailand Taxonomy and ASEAN Taxonomy Environmental Objectives Equivalence

Thailand Taxonomy	ASEAN Taxonomy
EO1 Climate Change Mitigation	EO1 Climate Change Mitigation
EO2 Climate Change Adaptation	EO2 Climate Change Adaptation
EO3 Sustainable Use and Protection of Marine and Water Resources, EO5 Pollution Prevention and Control, and EO6 Protection and Restoration of Biodiversity and Ecosystems	EO3 Protection of Healthy Ecosystems and Biodiversity
EO4 Resource Resilience and the Transition to a Circular Economy	EO4 Resource Resilience and the Transition to a Circular Economy

When one activity substantially contributes to one environmental objective, it must fulfill DNSH requirements against the other 5 EOs. Based on the materiality of each activity and the information available, the following DNSH Assessment was conducted via documents available to DNV in July 2025. DNV has assessed the potential significant harm which may be caused by Activities as per set out in Thailand Taxonomy. Due to TU's comprehensive policies on environmental and social safeguards which are applied consistently across all global operations, the DNSH assessment applies to all applicable locations.

DNV has conducted a gap assessment of DNSH between ASEAN Taxonomy V3.0 and Thailand Taxonomy Phase 2. The result of the gap assessment shows that the DNSH of both Taxonomies are interoperable. Both Taxonomies require materiality assessment if the harm is considered significant. When the harm is significant, mitigation measures have to be put in place. However, Thailand Taxonomy offers guidelines which are specific to the context of the applicable sectors in Thailand. Fulfilling Thailand Taxonomy DNSH requirements is considered equivalent to fulfilling ASEAN Taxonomy V3.0 DNSH requirements in the view of DNV. For the activities where the TSC is assessed against ASEAN Taxonomy, DNV refers to Thailand Taxonomy generic DNSH criteria.

As per the definition of 'Significant Harm' outlined in Thailand Taxonomy, the materiality assessment of the eligible green activities that have a potential for significant harm is stated in Table 2: Potential DNSH Materiality Assessment.

Table 2: Potential DNSH Materiality Assessment

Eligible Project Categories	EO1 Climate Change Mitigation	EO2 Climate Change Adaptation	EO3 Sustainable Use and Protection of Marine and Water Resources	EO4 Resource Resilience and the Transition to a Circular Economy	EO5 Pollution Prevention and Control	EO6 Protection and Restoration of Biodiversity and Ecosystem
Responsible aquaculture and	Agriculture DNSH (See 4.1.1)	Agriculture DNSH + Aquaculture DNSH (See 4.1.2)	Green TSC under Thailand Taxonomy Phase 2	Agriculture DNSH + Aquaculture DNSH (See 4.1.4)	Agriculture DNSH (See 4.1.5)	Agriculture DNSH (See 4.1.6)

			(See Schedule 5)			
Wild-caught seafood management and marine value chains	Agriculture DNSH (See 4.1.1)	Agriculture DNSH (See 4.1.2)	Green under ASEAN Taxonomy Foundation Framework (See Schedule 5)	Agriculture DNSH (See 4.1.4)	Agriculture DNSH (See 4.1.5)	Generic DNSH (See 4.1.6)
Marine ecosystem management, conservation and restoration	Generic DNSH (See 4.1.1)	Generic DNSH (See 4.1.2)	Green under ASEAN Taxonomy Foundation Framework (See Schedule 5)	Generic DNSH (See 4.1.4)	Generic DNSH (See 4.1.5)	Generic DNSH (See 4.1.6)
Ocean pollution prevention	Generic DNSH (See 4.1.1)	Generic DNSH (See 4.1.2)	Green under ASEAN Taxonomy Foundation Framework (See Schedule 5)	Generic DNSH (See 4.1.4)	Generic DNSH (See 4.1.5)	Generic DNSH (See 4.1.6)
Sustainable water and wastewater management – wastewater compliance	Generic DNSH + Specific DNSH (See 4.1.1)	Generic DNSH (See 4.1.2)	Green TSC under Thailand Taxonomy Phase 2 (See Schedule 5)	Generic DNSH (See 4.1.4)	Generic DNSH + Specific DNSH (See 4.1.5)	Generic DNSH (See 4.1.6)
Sustainable water and wastewater management – reclaiming water	Generic DNSH + Specific DNSH (See 4.1.1)	Generic DNSH (See 4.1.2)	Generic DNSH (See 4.1.3)	Green TSC under Thailand Taxonomy Phase 2 (See Schedule 5)	Generic DNSH + Specific DNSH (See 4.1.5)	Generic DNSH (See 4.1.6)
Renewable energy	Green TSC under Thailand Taxonomy Phase 1	Generic DNSH (See 4.1.2)	Generic DNSH (See 4.1.3)	Generic DNSH + Specific (See 4.1.4) (See Schedule 5)	Generic DNSH (See 4.1.5)	Generic DNSH (See 4.1.6)
Energy efficiency	Green TSC under ASEAN Taxonomy Foundation Framework	Generic DNSH (See 4.1.2)	Generic DNSH (See 4.1.3)	Generic DNSH + Specific DNSH (See 4.1.4) (See Schedule 5)	Generic DNSH + Specific DNSH (See 4.1.5)	Generic DNSH (See 4.1.6)
Pollution prevention and control – Waste Collection and Transport	Generic DNSH (See 4.1.1)	Generic DNSH (See 4.1.2)	Generic DNSH (See 4.1.3)	Green TSC under Thailand Taxonomy Phase 2 (See Schedule 5)	Generic DNSH + Specific DNSH (See 4.1.5)	Generic DNSH (See 4.1.6)
Pollution prevention and control – sustainable packaging	Generic DNSH (See 4.1.1)	Generic DNSH (See 4.1.2)	Generic DNSH (See 4.1.3)	Green under ASEAN Taxonomy Foundation Framework	Generic DNSH (See 4.1.5)	Generic DNSH (See 4.1.6)

				(See Schedule 5)		
Pollution prevention and control – GHG reduction	Green under ASEAN Taxonomy Foundation Framework (See Schedule 5)	Generic DNSH (See 4.1.2)	Generic DNSH (See 4.1.3)	Generic DNSH (See 4.1.4)	Generic DNSH (See 4.1.5)	Generic DNSH (See 4.1.6)
Clean Transportation	Green TSC under Thailand Taxonomy Phase 1 (See Schedule 5)	Generic DNSH (See 4.1.2)	Generic DNSH (See 4.1.3)	Generic DNSH + Specific DNSH (See 4.1.4)	Generic DNSH + Specific DNSH (See 4.1.5)	Generic DNSH (See 4.1.6)

4.1.1 EO1: Climate Change Mitigation DNSH

DNV has conducted EO1 DNSH assessment based on the documents made available to DNV in July 2025 which includes:

- Performance of key economic, governance, environmental, and social indicators 2023
- Performance of key economic, governance, environmental, and social indicators 2024
- TCFD Report July 2024
- SeaChange® Responsible Aquaculture
- 2024 TU Sustainability Report

4.1.1.1 Generic and Waste Specific EO1 DNSH

Calculation of Scope 1 & 2 & 3 GHG Emissions for each activity is impractical considering that activities listed cut across multiple company functions. DNV feels that the trend of absolute emissions at the organizational level should be used as a proxy for Generic EO1 DNSH including Waste specific EO1 DNSH assessment.

Scope 1 & 2 & 3 GHG Emissions are clearly prescribed in TU's Sustainability Reports. Scope 1 emissions calculation aligns with Thailand GHG Management Organisation (TGO), GHG Protocol, 2006 IPCC Guidelines for National GHG Inventories, and 2013 IPCC AR5. GHG Scope 2 emissions calculation aligns with Green-energy residual mix emissions rate (2018), UNFCCC Harmonised Grid Emission factor data set version 3.0 (December 2021), Institute for Global Environmental Strategies (2022), and TGO. Amendment of GHG emission calculation methodology for wastewater treatment plant, refrigerant, and domestic septic tank regarding to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories Volume 5 Waste.

As of 2024, TU achieved a 21% reduction in Scope 1 and 2 GHG emissions from 2021 to 2024, including a 7% year-on-year reduction between 2023 and 2024. Scope 1 & 2 emissions reduction was largely driven by replacing coal with cleaner energy sources.

TU achieved a 3% organic reduction in Scope 3 emissions, countable toward the SBTi target, and a further 28% reduction through improved data collection and updated emission factors, though this portion is not recognized by SBTi. Overall, Scope 3 emissions decreased by 32% from 2021 to 2024, primarily driven by reduced purchases of energy-intensive pole-and-line-caught tuna.

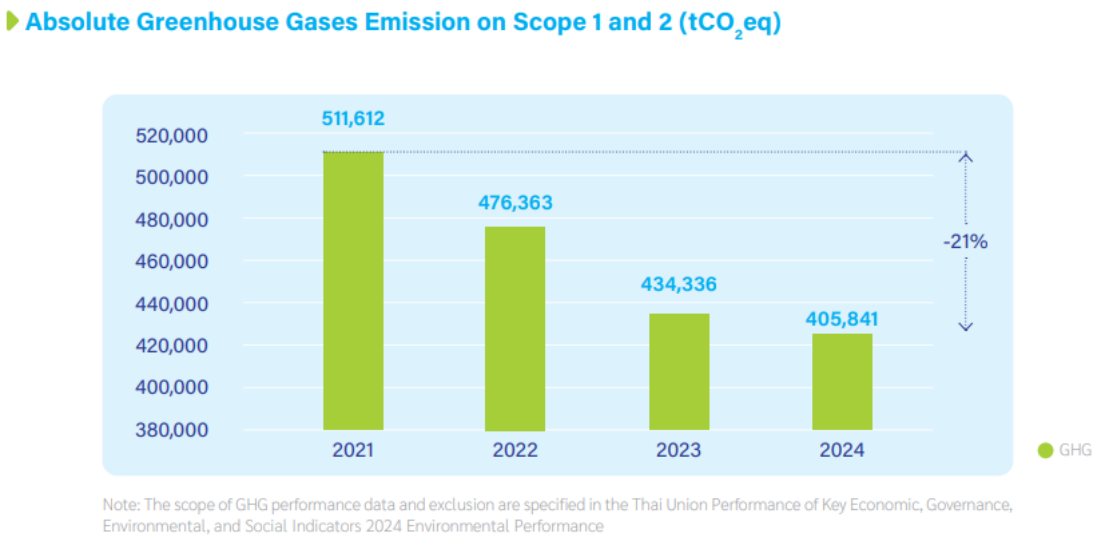


Figure 1: TU Absolute Scope 1 & 2 GHG Emissions year 2021-2024 (replicated from TU 2024 SD Report page 43)

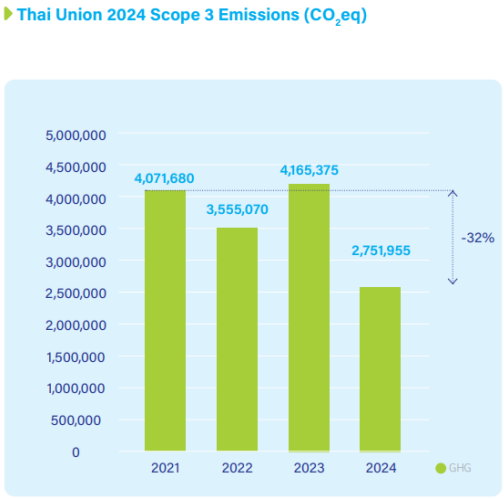


Figure 2: TU Absolute Scope 1 & 2 GHG Emissions year 2021-2024 (replicated from TU 2024 SD Report page 43)

TU has a commitment to reduce carbon intensity of finished goods from 0.64 tCO2e/tFinishedGoods in 2020 to 0.56 tCO2e/tFinishedGoods in 2026.

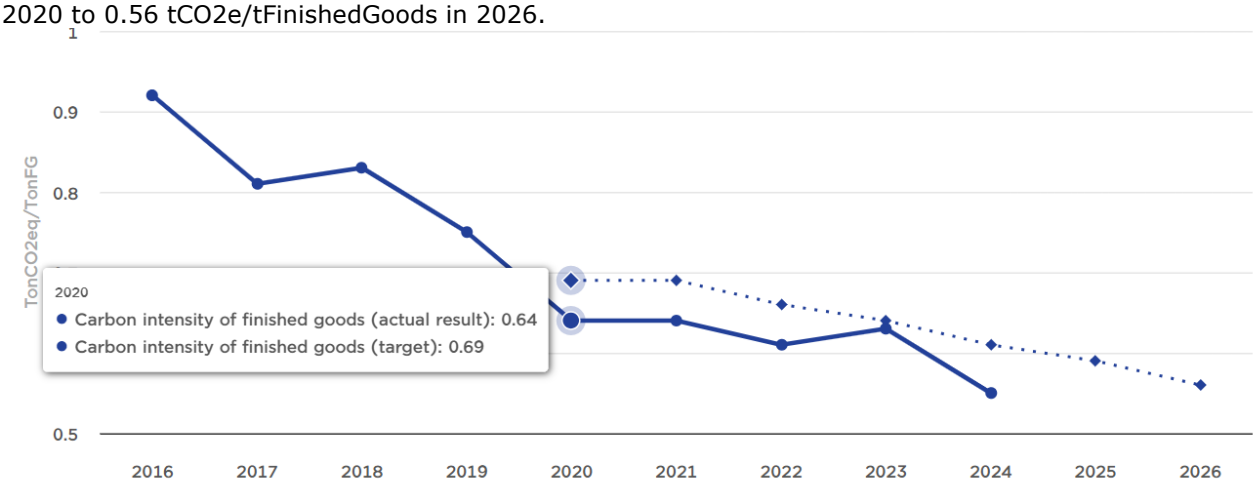


Figure 3: TU's Commitment on towards reduction of Carbon Intensity of Finished Goods (replicated from TU Investor Relation's website)

4.1.1.2 Agriculture EO1 DNSH for Responsible aquaculture and wild-caught seafood management and marine value chains

Thailand Taxonomy Agriculture EO1 DNSH requires:

(1) The project does not lead to conversion of high carbon stock lands;
(2) Slash-and-burn practices are avoided;
(3) Avoid excessive application of fertilisers; and
(4) Avoid unnecessary waste of food, maximise animal diet efficiency.

- **Aquaculture**

TU's Shrimp Decarbonization program, launched with The Nature Conservancy, Ahold Delhaize USA, and Whole Foods Market, tackles the high greenhouse gas (GHG) emissions from shrimp farming, the most popular seafood in the U.S. The initiative promotes science-based solutions, including renewable energy (e.g., solar panels), enhanced energy efficiency, and innovative technologies to improve farm performance and reduce environmental impact. Shrimp are fully traceable from hatchery to shipment, ensuring transparency. Since 2024, all participating farms use feed with 100% deforestation- and conversion-free (DCF) soy from the U.S., certified under FEFAC schemes, avoiding clearance of carbon-rich forests, wetlands, or peatlands. This feed reduces land-use-change emissions by ~70%. Using the IDH Aquaculture Environmental Footprint Tool, aligned with Marine Product Environmental Footprint Category Rules, the program achieves a 20–45% reduction in cradle-to-farm-gate GHG emissions compared to conventional practices. Additional husbandry improvements, like solar integration, further cut emissions while maintaining high product quality. The initiative supports the Thailand Taxonomy's EO1 DNSH criteria by preventing ecosystem harm, minimizing waste, and optimizing feed efficiency, with greater reductions expected as farms fully adopt renewable energy, fostering sustainable aquaculture and healthier ecosystems.

TU's SeaChange® 2030 commitment to sourcing 100% responsibly farmed shrimp and feed by 2030 supports compliance with the Thailand Taxonomy's EO1 DNSH criteria. Both ASC and BAP standards prohibit conversion of high carbon stock (HCS) lands. ASC enforces a stricter 1999 cutoff for ecosystem conversion, while BAP's restoration requirements ensure robust EO1 DNSH compliance. Both standards ban ecosystem-damaging practices, such as slash-and-burn. Nutrient efficiency is prioritised by ASC and BAP; ASC promotes biofloc systems or natural pond productivity to minimise chemical inputs, and BAP mandates responsible nutrient management to prevent eutrophication. Both ASC and BAP require farms to optimise Feed Conversion Ratios (FCR) and minimise uneaten feed, reducing waste and emissions, aligning with TU's 20–45% reduction in cradle-to-farm-gate GHG emissions.

- **Wild-caught seafood management and marine value chains**

TU's progress toward its Tuna Commitment 2025 (TC25) supports EO1 (Climate Change Mitigation) compliance. In 2024, approximately 98.9% of TU's tuna volume is certified by MSC, in MSC assessment, or in Fishery Improvement Projects (FIPs), pending verification. Through the MSC Fisheries Standard, TU ensures sustainable tuna sourcing and protects marine carbon sinks. Principle 1 (Sustainable Fish Stocks) ensures that target fish populations remain productive and healthy, preventing overfishing and supporting ecosystem stability. This, alongside Principle 2's habitat protection and TU's restoration initiatives, indirectly enhances marine carbon storage capacity.

Based on the result of EO1 DNSH assessment, DNV confirms that TU's green and blue eligible activities fulfill EO1 DNSH requirements.

4.1.2 EO2: Climate Change Adaptation DNSH

DNV has conducted EO2 DNSH assessment based on the documents made available to DNV in July 2025 which includes:

- Draft Report of "Abridged Climate Risk Assessment for Thai Union Climate-Smart Shrimp Aquaculture Blue Loan"
- TCFD Report July 2024
- 2023 TU Sustainability Report
- 2024 TU Sustainability Report

4.1.1.2 Generic EO2 DNSH

Similar to EO1 DNSH, conducting CRVA for each activity is impractical considering that activities listed cut across multiple company functions. DNV feels that TCFD disclosure should be used as a proxy for Generic EO2 DNSH.

Climate Adaptation and Resilience has been identified as one of the most important material topics. TU has conducted physical risk assessment analysing atmospheric and other data related to various hazards (temperature, precipitation, flooding, etc.) and asset vulnerability to estimate risk exposure. Financial impacts are measured using Modelled Average Annual Loss (MAAL). MAAL measures the annual financial losses from climate change. It's calculated by analysing the hazards facing specific assets, determining each asset's vulnerability to those hazards (considering asset type and specific impact pathways), and then using impact functions (based on hazard and vulnerability) to model the overall risk. For Thai Union, the assessment found that while most assets have low risk, Temperature Extremes and Coastal Flooding are the key contributors to potential financial impact, accounting for over 80% of the total. Thailand holds the maximum absolute risk due to asset concentration, while Ghana has the highest relative risk. The assessment informs potential financial exposure from asset impairment, value changes, and business interruptions, using impact functions to estimate losses across various scenarios and timeframes. These functions consider multiple impact pathways for a single hazard, such as high temperatures affecting cooling costs, HVAC systems, and employee productivity at a manufacturing facility.

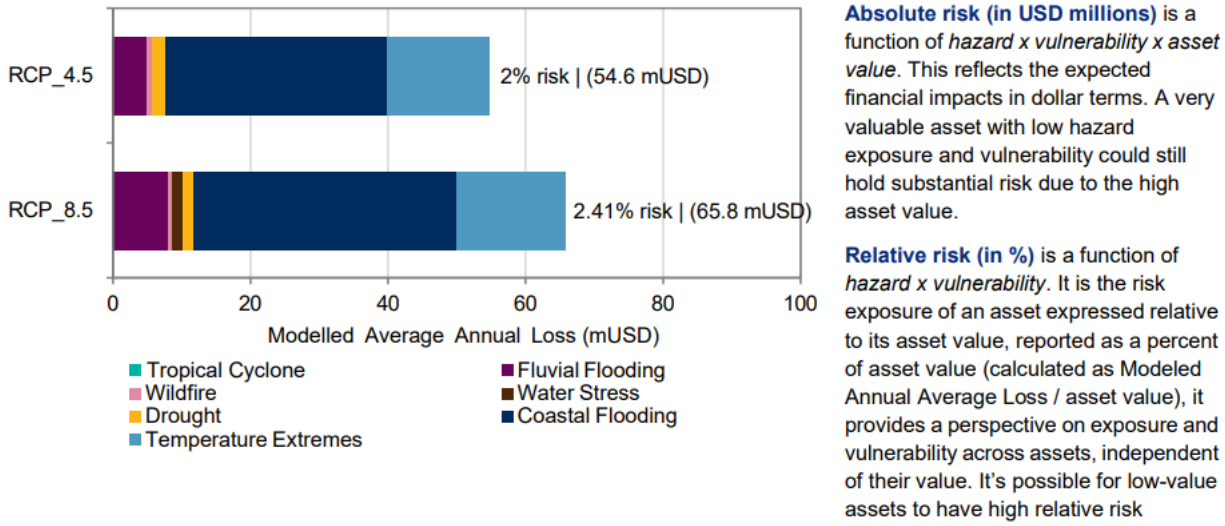


Figure 4: TU's Modelled Average Annual Loss by Physical Risk Hazard according to TU TCFD Report 2024 (Reproduction of Figure 7)

4.1.1.2 Agriculture EO2 DNSH for Responsible aquaculture and wild-caught seafood management and marine value chains

Thailand Taxonomy Agriculture EO2 DNSH also requires:

1. Clear boundaries and critical interdependencies between the agricultural production unit and the ecosystem within which it operates must be identified.
2. An assessment has been undertaken to identify the key physical climate hazards to which the production unit will be exposed and vulnerable over its operating life.
3. The measures that have been or will be taken to address those risks mitigate them to a level so that the production unit is able to manage changing climatic conditions over its operational life.
4. Aquaculture only: Avoid using species that are intolerant and/or vulnerable to temperature fluctuations, salinity changes, and other climate-related stressors to reduce vulnerability to climate change impacts.

- **Aquaculture**

TU's CRA Draft Report on Climate-Smart Shrimp Aquaculture Blue Loan provides a detailed information on boundaries and critical dependencies between shrimp production and the ecosystem, potential climate risks to the shrimp farms in Thailand including impacts and also adaptive measures.

An example of hazards includes extreme floods and droughts, temperature extremes, sea level rise and increased risk of diseases due to heating which impacts the changes on immune systems. Increased

frequency and intensity of tropical storms and cyclones can damage infrastructure and disrupt farming operations. Rising temperatures can lead to heat stress in shrimp, affecting growth rates and survival. Changes in rainfall patterns can lead to salinization of water sources, impacting shrimp health and productivity. In total, 34 adaptive measures proposed were proposed. They need to be tailored to meet the context of individual shrimp farm. The adaptive measures include adopting good feed and good disease management practices, preparing shade roof over hatchery tanks, and switching to climate resilient species. The point on avoiding using intolerant species confirm that TU complies with Thailand Taxonomy EO2 Climate Change Adaptation DNSH.

- **Wild-caught seafood management and marine value chains**

TU's assessment of climate vulnerabilities in tuna fisheries recognises interdependencies with marine ecosystems affected by rising water temperatures and acidification. Rising water temperatures may result in the migration of tuna stocks and breeding grounds, and acidification which are correlated with decreased growth and survival of yellowfin tuna. TU will conduct more in-depth assessments in order to implement mitigation measures.

Based on the result of EO2 DNSH assessment, DNV confirms that TU's green and blue eligible activities fulfill EO2 DNSH requirements.

4.1.3 EO3: Sustainable Use and Protection of Marine and Water Resources DNSH

DNV has conducted EO3 DNSH assessment based on the documents made available to DNV in July 2025 which includes:

- 2023 TU Sustainability Report
- 2024 TU Sustainability Report
- TCFD Report July 2024
- TU's Safety, Health and Environment-Preview webpage

4.1.3.1 Generic EO3 DNSH

For the activities where TSC do not substantially contribute to EO3, DNV has conducted EO3 DNSH materiality assessment to identify the potential to cause harm to EO3.

Activity	Potential harm to EO3
(1) Sustainable water and wastewater management – reclaiming water	Zero wastewater discharge's aim is to protect marine and water resources by preventing pollutant discharge. Potential harm is when wastewater sludge is not disposed of properly, it may leach into groundwater and contaminate soil and ground water. TU confirms that the wastewater sludge is either repurposed into soil conditioners or disposed of by a competent waste processor. Potential harm to EO3 is minimal and is already mitigated.
(2) Renewable Energy	TU does not operate a large-scale solar farm. Solar photovoltaic (PV) and Concentrated Solar Power (CSP) projects are for their own manufacturing or for their suppliers. The wastewater generated during regular cleaning of solar PV and solar thermal for power and heat projects is considered not significant. Potential harm to EO3 is minimal and is already mitigated.
(3) Energy Efficiency (4) Pollution prevention and control – GHG Reduction	Improvements of machine efficiency and optimization, increasing the standards of operational control, Utilization of energy-efficient equipment, and introduction of eco-friendly refrigerant does not

	lead to any change in water usage, hence does not cause harm to EO3. TU has integrated water-related risks into their normal operation. TU conducted a comprehensive assessment of water-related risks using the Aqueduct Water Risk Atlas. The analysis revealed that 3% of the facilities are located in water-stressed regions. TU responds by improving water use efficiency, increasing water reuse and recycling and by diversifying water sources. This activity does not cause significant harm. Even if it does, water-related risks have been proactively mitigated.
(5) Pollution prevention and control – Waste Collection and Transport	TU selects the waste transportation vehicles that are equipped with water tank to control potential leachate leakage. Potential harm to EO3 is minimal and is already mitigated.
(6) Pollution prevention and control – sustainable packaging	Sustainable packaging does not cause significant harm to EO3.
(7) Clean Transport	Clean Transport does not cause significant harm to EO3.

4.1.3.2 Agriculture EO3 DNSH for Responsible aquaculture and wild-caught seafood management and marine value chains

- **Aquaculture**

As this activity is substantially contributing to EO3, DNSH assessment against EO3 is not required. However, DNV notes that the percentage of shrimp produced responsibly dropped from 71.45% in 2023 to 60.9% in 2024. The decline in percentage was primary driven by lower overall business demand, which resulted in smaller order volumes placed in 2024. This does not impact TU's commitment in sourcing 100% responsibly produced shrimps by 2030.

- **Wild-caught seafood management and marine value chains**

As this activity is substantially contributing to EO3, DNSH assessment against EO3 is not required. DNV notes that the percentage of MSC certified tuna constantly increases over time.

Category	2022 Actual	2023 Actual	2024 Actual
MSC	31.0%	39.4%	71.4%
In-assessment	14.0%	14.6%	14.1%
FIP	36.0%	31.4%	13.4%
Total	81.0%	85.5%	98.9%
Not in a FIP or MSC	19.0%	14.5%	1.3%

Figure 5: Total tuna volume for all tuna sourced by TU (replicated from 2024 Sustainability Report page 33)

Based on the result of EO3 DNSH assessment, DNV confirms that TU's green and blue eligible activities fulfill EO3 DNSH requirements.

4.1.4 EO4: Promotion of resource resilience and transition to a circular economy

An activity is considered to do significant harm to EO4 if it uses materials and natural resources inefficiently at any stage of a product's lifecycle, or significantly increases the production, burning, or disposal of waste.

DNV has conducted EO4 DNSH assessment based on the documents made available to DNV in July 2025 which includes:

- 2023 TU Sustainability Report
- 2024 TU Sustainability Report
- TU SeaChange® Sustainable Packaging Guidelines

4.1.4.1 Generic, Renewable Energy, Clean Transport, and Manufacturing EO4 DNSH

For the activities where TSC do not substantially contribute to EO4, DNV has conducted EO4 DNSH materiality assessment to identify the potential to cause harm to EO4.

Activity	Potential harm to EO4
(1) Marine ecosystem management, conservation and restoration	This activity does not cause significant harm to EO4.
(2) Ocean pollution prevention	This activity does not cause significant harm to EO4.
(3) Sustainable water and wastewater management – wastewater compliance	This activity may cause significant harm to EO4 if the water after treatment is mixed with wastewater before treatment. TU confirms that water after treatment is not mixed with wastewater before treatment.
(4) Renewable energy	This activity may cause significant harm to EO4 if components are of low durability, or is not reparable. TU confirms that the components for solar PV and CPS are of high durability, is reparable. End-of-life components will be disposed of according to national legislation.
(5) Energy efficiency	This activity may cause significant harm to EO4 if material use, especially hazardous manufacturing waste is not minimised or managed. TU confirms that material use including hazardous waste is minimised and managed according to national legislation, taking into consideration of waste hierarchy.
(6) Pollution prevention and control – GHG reduction	This activity does not cause significant harm to EO4.
(7) Clean Transportation	This activity may cause significant harm to EO4 if waste management at use phase and the end-of-life for the rolling stock does not comply with international and national legislation on hazardous waste management. TU confirms that the waste management at use phase and at the end-of-life complies with national legislation on hazardous waste management.

DNV notes that TU is ISO 14001 certified, which includes an obligation to consider

- a lifecycle perspective in its Environmental Management System (EMS);
- identify and manage environmental impacts, and comply with environmental regulations, such as those related to EIAs or ESIAs.

For these reasons, DNV feels that TU sufficiently demonstrates adherence to the principles of DNSH for this EO in a manner which is appropriate and practical at this time.

4.1.4.2 Agriculture EO4 DNSH for Responsible aquaculture and wild-caught seafood management and marine value chains

- **Aquaculture**

Thailand Taxonomy Aquaculture-related DNSH requires to ensure minimal use of antibiotics in line with the latest FAO guidelines, SeaBOS or scientific publications.

As part of its commitment to sourcing 100% responsibly produced shrimp by 2030, TU's antibiotic use policies align with the WHO's List of Critically Important Antimicrobials for Human Medicine. These policies restrict antibiotic use to prevent antimicrobial resistance that could impact human health. ASC and BAP standards impose strict controls on antibiotic use in shrimp farming, prohibiting prophylactic use, restricting WHO-classified critically important antimicrobials, and requiring compliance with international and national regulations.

- **Wild-caught seafood management and marine value chains**

As sustainable livestock leads to GHG emissions reduction, EO4 DNSH is considered similar to EO1 DNSH for wild-caught seafood management.

Based on the result of EO4 DNSH assessment, DNV confirms that TU's green and blue eligible activities fulfill EO4 DNSH requirements.

4.1.5 EO5: Pollution prevention and control DNSH

An activity is considered to do significant harm to EO5 if it leads to a significant increase in emissions of pollutants into air, water or land.

DNV has conducted EO5 DNSH assessment based on the documents made available to DNV in July 2025 which includes:

- 2023 TU Sustainability Report
- 2024 TU Sustainability Report
- Performance of key economic, governance, environmental, and social indicators 2023
- TU's Safety, Health and Environment-Preview webpage
- TU's Food Quality&Safety Accreditations

4.1.5.1 Generic, Renewable Energy, Clean Transport, and Manufacturing EO5 DNSH

For the activities where TSC do not substantially contribute to EO5, DNV has conducted EO5 DNSH materiality assessment to identify the potential to cause harm to EO5.

Activity	Potential harm to EO5
(1) Marine ecosystem management, conservation and restoration	This activity does not cause significant harm to EO5.
(2) Ocean pollution prevention	This activity does not cause significant harm to EO5.
(3) Sustainable water and wastewater management – wastewater compliance (4) Sustainable water and wastewater management – reclaiming water	This activity may cause significant harm to EO5 if water quality and/or water consumption is not in accordance with national standards. TU confirms that the water quality and/or water consumption aligns with national standards.
(5) Pollution prevention and control – Waste Collection and Transport	This activity may cause significant harm to EO5 if emissions to air, water and soil are not prevented. TU confirms that during the collection and transportation of waste, leachate and odour is being controlled and prevented as per required by national standards. TU's Safety, Health and Environment-Preview webpage mentions how waste to landfill is being minimized. TU reduces manufacturing waste through audits and by applying a waste hierarchy approach prioritizing source reduction, recycling before diverting. Despite increased waste in 2023, 14 of 32 sites achieved zero-waste-to-

	landfill. Sludge from wastewater treatment is composted to soil conditioner or fertilizer instead of being landfilled.
(6) Renewable energy (7) Energy efficiency (8) Pollution prevention and control – GHG reduction	Manufacturing activity may cause significant harm to air, water and soil. TU is ISO 14001 certified.
(9) Pollution prevention and control – sustainable packaging	This activity does not cause significant harm to EO5.
(10) Clean Transportation	This activity does not cause significant harm to EO5. EVs automatically comply with air emissions requirements as they produce no tailpipe emissions. EVs are likely to comply with IFC thresholds due to their low noise profile.

4.1.5.2 Agriculture EO5 DNSH for Responsible aquaculture and wild-caught seafood management and marine value chains

Thailand Taxonomy EO5 DNSH requires:

- Prevent physical degradation, e.g., erosion and soil compaction.
- Prevent chemical degradation, e.g. salinisation, acidification, alkalinisation and pollution.
- Avoid biological degradation, e.g. loss of organic matter, imbalance of biological activity and mineralisation processes.
- Avoid uncontrolled discharge of wastewater into natural water bodies, uncontrolled and excessive release of nutrients, chemicals, and organic matter.

- **Aquaculture**

TU's commitment to ASC and BAP standards requires farms to minimize land disturbance and maintain natural habitats, reducing erosion risks. These standards mandate site selection criteria to avoid ecologically sensitive areas. Strict antibiotic policies, zero-discharge systems, and ASC/BAP standards reduce pollution and acidification, though coastal salinisation remains a challenge. Zero-discharge projects and Dry Concept Strategy minimize nutrient and chemical release, with ASC/BAP ensuring regulatory compliance, though supply chain gaps persist.

- **Wild-caught seafood management and marine value chains**

MSC Standard prohibits fishing practices that cause significant physical degradation, such as destructive gear types. It also prohibits practices that introduce chemical pollutants into marine environments. MSC Fishery Standard indicator 2.5.1 requires that fishery does not cause serious or irreversible harm to ecosystem structure and function, which includes avoiding practices that contribute to chemical, physical, and biological degradation.

Based on the result of EO5 DNSH assessment, DNV confirms that TU's green and blue eligible activities fulfill EO5 DNSH requirements.

4.1.6 EO6: Protection and Restoration of Biodiversity and Ecosystems DNSH

An activity is considered to do significant harm to the protection and restoration of biodiversity and ecosystems if it is significantly detrimental to the good condition and resilience of ecosystems, or detrimental to the conservation status of habitats and species, including those of Union interest. DNV has conducted EO6 DNSH assessment based on the documents made available to DNV in July 2025 which includes:

- 2023 TU Sustainability Report
- 2024 TU Sustainability Report
- Performance of key economic, governance, environmental, and social indicators 2023
- TU's Safety, Health and Environment-Preview webpage
- TU's Feed mill: Policy on No Deforestation and Conversion

4.1.6.1 Generic EO6 DNSH

An Environmental Impact Assessment (EIA) was conducted in accordance with national regulations including Enhancement and Conservation of National Environmental Quality Act, B.E. 2535 (1992). In cases where an EIA is not strictly required, activities related to TU's operations are subject to permissions

under other national regulations, such as Factory Act, B.E. 2535 (1992), and the National Water Act, B.E. 2561 (2018), ensuring compliance with environmental and operational standards.

According to Thai legislation, once environmental impacts have been assessed, specific mitigation measures are identified to minimize their significance, and, where necessary, appropriate compensatory measures are implemented. These measures address impacts from aquaculture (e.g., water quality, soil degradation), manufacturing (e.g., energy use, emissions), and waste management (e.g., wastewater, solid waste disposal). In Thai Union's 2024 Sustainability Report, the main Environmental Impact Assessments conducted during the year are publicly disclosed, detailing progress on sustainability commitments under the SeaChange® 2030 strategy, including zero-discharge aquaculture systems, energy-efficient manufacturing, and waste-to-landfill reduction. Additionally, Thai Union maintains transparency by publishing EIA-related information for its aquaculture farms, manufacturing plants, and waste management facilities on its corporate website, ensuring stakeholder access to environmental performance data.

For projects located within or near ecologically sensitive areas, such as mangrove forests, coral reefs, or other protected areas under Thailand's National Park Act, B.E. 2504 (1961) or the Ramsar Convention, special assessments are conducted to evaluate the significance of potential impacts from planned activities. These activities include shrimp farming (e.g., pond construction, water use), manufacturing processes (e.g., emissions, effluent discharge), and waste management operations (e.g., sludge repurposing, recycling).

4.1.6.2 Agriculture EO6 DNSH for Responsible aquaculture and wild-caught seafood management and marine value chains

Thailand Taxonomy EO6 DNSH requires:

- Avoid habitat destruction: burning, felling or fragmentation of natural vegetation.
- Protect areas of natural forest. Set aside at least 40% of the forest for regeneration or conservation
- Avoid the introduction of non-native species. Native species are allowed. Naturalised species with proven benefits in restoration programmes are allowed.
- Control the use of agrochemicals (fertilisers and pesticides) because, in excess, they cause the decline of populations of beneficial organisms in terrestrial and aquatic ecosystems

- **Aquaculture**

Protection and restoration of biodiversity and ecosystems from aquaculture activity has been demonstrated via the commitment of 100% farmed shrimp produced responsibly and 100% responsibly produced feed ensuring zero deforestation and conversion supply chain by 2030. The certifications adopted by TU (ASC, BAP, and RSPO for example) have a clear cut-off date for deforestation, High Conservation Value and also requirements on High Carbon Stock conversion. In 2024 TU is the first feed mill in Asia to receive ASC Feed Standard certificate. TU feed mill has a separate policy on No Deforestation and Conversion which focuses on all plant-based aquafeed ingredients such as wheat flour, soy and palm oil to be compliant with ASC requirements. Compliance of deforestation free supply chain is demonstrated through a third-party audit and/or a second-party supplier due diligence including the farm level. The audit by the third-party, and also supplier due diligence by TU provides the safeguard that habitat destruction is avoided and that natural forest including peat land is protected.

It is important to note that the additional efforts by TU to restore the ecosystem includes the activities such as mangrove restoring, coral reef protection and rainforest preservation in the other areas outside the supply chain activities.

- **Wild-caught seafood management and marine value chains**

As healthy ecosystem is highly related to Ecosystem degradation prevention, EO6 DNSH is considered similar to EO5 DNSH for wild-caught seafood management.

Based on the result of EO6 DNSH assessment, DNV confirms that TU's green and blue eligible activities fulfill EO6 DNSH requirements.

4.2 Minimum Social Safeguard (MSS) Assessment

To be taxonomy-compliant, an asset or activity must avoid negative social impacts and adhere to minimum social safeguards (MSS). This requires compliance with Thai regulations, international principles, and a robust social management system at the enterprise level.

DNV has conducted MSS assessment based on the online media research, and documents made available to DNV in January 2025 which includes:

- 2023 TU Sustainability Report
- 2024 TU Sustainability Report
- 2024 TU One Report
- Vessel Code of Conduct V3.0
- Supplier's Business Ethics and Labor Code of Conduct
- Business Ethics and Labor Code of Conduct
- Human Rights Due Diligence Framework Update as of July 2023
- TU's Biodiversity Annual Progress Update July 2024
- Thailand ratifies convention to tackle forced labour: EJF Response
- Labour Unions and CSOs call on the Royal Thai Government to halt rollbacks to the Fisheries Act and Strengthen Labour Inspections of fishing vessels
- TU's audit shows progress, but work still needed on many commitments - Greenpeace
- TU's Ethical Migrant Recruitment Policy
- Environmental and Social Assessment Report by Pacific Risk Advisors

TU offers multiple reporting channels for labour violations, ensuring confidentiality and protection against retaliation. Globally, reports can be made via thaiunion.ethicspoint.com. In Thailand, workers can contact Issara Institute, the Ministry of Labour, or the National Human Rights Commission.

Thailand's history with illegal, unreported and unregulated (IUU) fishing has been a long and complex issue. For years, Thailand was known for its IUU fishing activities. IN 2015 EU issued a yellow card to Thailand due to its failure to meet international standards for fisheries oversight and governance. Since then, Thailand has been undertaking reforms including revising fisheries laws, strengthening control systems for fishing vessels, and improving port controls. In 2019 the EU lifted the yellow card on Thailand. The article published by EJF in 2024 noticed the progress in Thailand's advancements in reforming fisheries sector. Responding to the concerns on migrant workers, TU's updated Ethical Migrant Recruitment Policy was made effective from July 2022 to ensure that recruitment processes meet the requirements set out by UN Global Compact, the United Nations Guiding Principles on Business and Human Rights, and TU's Business Ethics and Labor Code of Conduct.

A review of Thai Union's progress on its agreement with Greenpeace in 2020 to improve sustainability and worker rights shows significant progress. The audit by the third party (MRAG) has shown that TU has advanced in policy development, supplier requirements, and Fishery Improvement Projects (FIPs). However, TU still lags in achieving 100% observer coverage on vessels and reducing FAD use. TU's progress update in 2023 shows that the percentage of tuna purchased from vessels equipped with electronic and/or human observers increased from 71% baseline in 2021 to 90% in 2023, and TU's 2023 sustainability report shows that as of 2023, TU has achieved 90% human or electronic observer coverage on vessels. Two of TU's FIPs have implemented 100% observer coverage in their fleets. By 2025 TU will demonstrate 100% observer coverage.

Environmental and Social Assessment Report by Pacific Risk Advisors points out rooms for improvement for IFC Performance Standard 2: Labour and working conditions and IFC Performance Standard 3: Resource efficiency and pollution prevention.

Based on DNV's desktop research, there is no evidence suggesting that there is a violation of national or international regulations on social issues.

Schedule 5: Detailed TSC Assessment

DNV will update the SPO when ASEAN Taxonomy V4 are published. The current version of the SPO refers to ASEAN Taxonomy V3 and Thailand Taxonomy Phase 1 and Phase 2.

5.1 Activities assessed against Thailand Taxonomy and ASEAN Taxonomy V3 Plus Standard

The following activities have been assessed against Thailand Taxonomy and ASEAN Taxonomy V3 Plus Standard:

- Responsible Aquaculture
- Wastewater compliance
- Reclaiming water
- Renewable Energy
- Waste collection
- Clean Transportation

Table 3 Projects Assessed Against Thailand Taxonomy and ASEAN Taxonomy V3 Plus Standard

Activity Sector	Activity and ISIC (UNSD)	Description and Eligibility Criteria	DNV Findings
Agriculture	Sustainable Aquaculture Production	There are 2 options under which the farm can align their project with the taxonomy. The first option is through the preparation of Integrated Farm Management Plan (IFMP) adopting at least 2 sustainable agricultural practices. At least one of the selected practices needs to be intermediate or advanced. The second option is through getting a credible international or national certification. If the farm is certified under ASC or BAP, the manager does not need to provide an IFMP but still needs to implement at least 2 practices. The 2 practices which automatically become eligible with the adoption of ASC and BAP standards are Compliance with agricultural standards (Basic Practice), and Traceability and quality certification standards for aquatic products (Intermediate practice)	The activity meets the following criteria of the activity Sustainable Aquaculture Production indicated in Thailand Taxonomy Phase 2: 1. Aquaculture related activity will obtain ASC and/or BAP as proxy certification. 2. Where certification is not feasible, compliance can be shown through adoption of relevant sustainable aquaculture practices listed in Table 16 of Thailand Taxonomy Phase 2: Agriculture Sector including 'Precision aquaculture system' (Advanced Practice), 'Energy saving and the use of clean energy' (Intermediate Practice), 'Production and feeding to produce low-carbon aquatic animals' (Intermediate Practice) and 'Traceability and quality certification standards for aquatic products' (Intermediate Practice).
Waste Management	Collection and Transport of Industrial Waste (381) as per Thailand Taxonomy Phase 2	Separate collection and transport of hazardous and non-hazardous waste aimed at preparing for re-use or recycling, including the construction, operation and upgrade of facilities involved in the collection	The activity meets the following criteria indicated in Thailand Taxonomy Phase 2: 1. Waste is segregated at source; AND 2. Waste is to be transported to a location with the intention of preparation for material

Activity Sector	Activity and ISIC (UNSD)	Description and Eligibility Criteria	DNV Findings
		and transport of such waste, as a means for material recovery or appropriate treatment which includes all the eligible activities (Taxonomy eligible Waste-to-Energy: WtE). The activity includes operation of waste collection containers, transfer stations, all types of transportation vehicles, ICT solutions, and other related infrastructure.	recovery (reuse or recycling) or energy recovery, ensuring material recovery is prioritised over energy recovery; AND 3. The transportation vehicle conforms to national emission regulations TU has conducted waste audits and performance reviews. In 2024, 23 out of 32 manufacturing and distribution sites achieved zero waste to landfill.
	Reclaiming water - Construction, extension, upgrade, operation and renewal of decentralised wastewater collection and treatment (3700) as per Thailand Taxonomy Phase 2	Construction, extension, upgrade, operation and renewal of decentralised wastewater infrastructure including treatment plants, sewer networks, connections to the wastewater infrastructure, decentralized wastewater treatment facilities, including individual and other appropriate systems, and discharge structures for treated effluent. The activity may include innovative and advanced treatments, including the removal of micropollutants. Decentralised treatment plants consist of on-site and cluster wastewater treatment plants. Sources of wastewater include human, industrial, and agricultural wastewater.	The activity meets the following criteria indicated in Thailand Taxonomy Phase 2: 1. Water is for purposes other than human consumption; 2. Water is suitable for reuse after proper treatment depending on the level of contamination and subsequent reuse purposes in accordance with national regulations. In 2024 TU has piloted Zero Discharge Project at the fish processing plant in Samut Sakhon. TU plans to expand the initiative to the facility in Songkhla, one of TU's largest manufacturing sites.
	Wastewater Compliance - Construction, extension, upgrade, operation and renewal of decentralised wastewater collection and treatment (3700) as per Thailand Taxonomy Phase 2		The activity meets the following criteria indicated in Thailand Taxonomy Phase 2: 1. The wastewater treatment system fulfils the discharge requirements and size-specific requirements, contributes to the achievement of good status of the water bodies, in accordance with applicable national law or international standards which pursue objectives of good water status

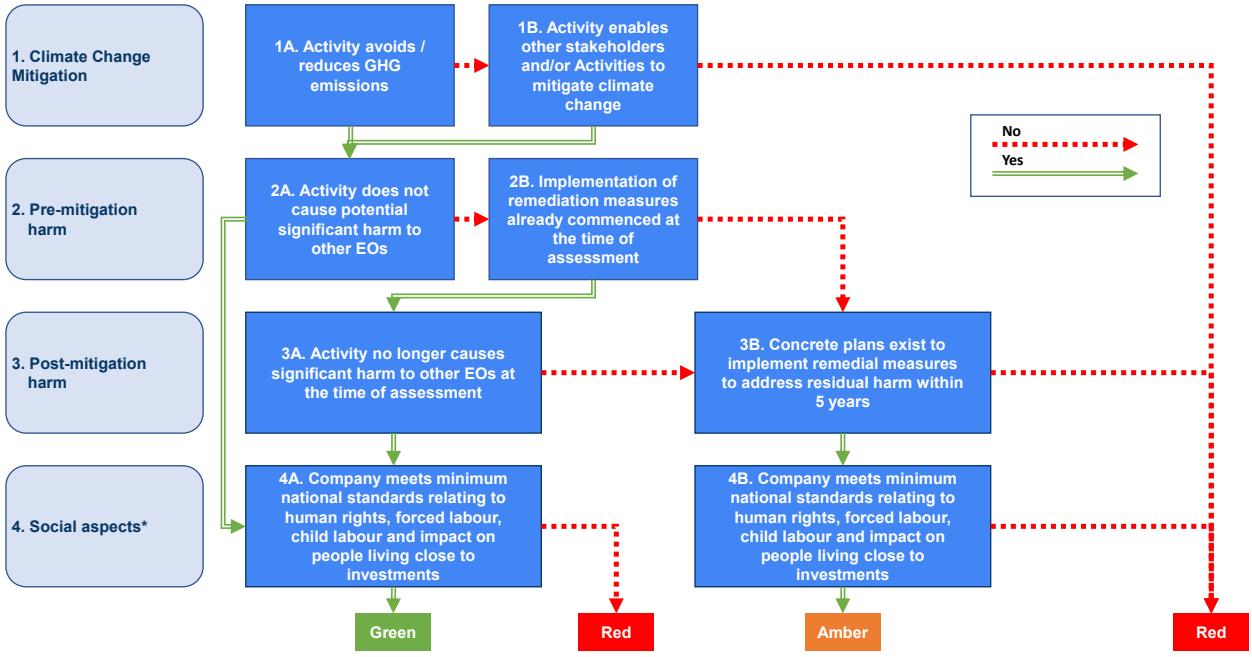
Activity Sector	Activity and ISIC (UNSD)	Description and Eligibility Criteria	DNV Findings
			and good ecological potential; AND 2. The river basin or water use and protection management plan contains at least the information related to the status of water bodies, the activities potentially impacting the status, and the measures taken to avoid or minimize such impacts.; AND 3. Where the wastewater treatment plant has a capacity of 100,000 population equivalent (20,000 m3/day) or more, or of a daily inflow of a five-day biochemical oxygen demand (BOD5) load of more than 6,000 kg, it uses a sludge treatment such as anaerobic digestion or a technology with the same or a lower net energy demand (considering both energy generation and consumption), to stabilise the sludge.
Transportation	Other passenger land transport (4932) as per Thailand Taxonomy Phase 1, and 492[002] Transport by motorbikes, passenger cars and light commercial vehicles as per ASEAN Taxonomy V3	This class includes: • scheduled long-distance bus services; • charters, excursions and other occasional coach services; • taxi operation; • passenger cars; • airport shuttles. • other renting of private cars with driver; • operation of school buses and buses for transport of employees; • passenger transport by man- or animal-drawn vehicles.	Direct (tailpipe) CO2 emissions of the vehicle are zero as per indicated in Thailand Taxonomy Phase 1 The activity meets the following criteria indicated in ASEAN Taxonomy V3: a. for vehicles of category M1 and N1: • until 31 December 2025, direct emissions of CO2 are < 50 gCO2e/v-km23; • from 1 January 2026, direct emissions of CO2 are 0 gCO2e/vkm; b. for vehicles of category L, tailpipe CO2 emissions are 0 gCO2e/vkm. For this activity, TU refers to the eligibility criteria set out in Thailand Taxonomy Phase 1.

Activity Sector	Activity and ISIC (UNSD)	Description and Eligibility Criteria	DNV Findings
	Freight transport by road (4933) as per Thailand Taxonomy Phase 1, and 4924[001] Freight transport services by road as per ASEAN Taxonomy V3	This class includes: • all freight transport operations by road • motorbikes and three-wheelers • logging haulage • stock haulage • refrigerated haulage • heavy haulage • bulk haulage, including haulage in tanker trucks • haulage of automobiles • transport of waste and waste materials, without collection or disposal This class also includes: • furniture removal • renting of trucks with driver • freight transport by man or animal-drawn vehicles	The activity has zero direct (tailpipe) CO2 emissions of vehicles, and the vehicles are not dedicated to fossil fuel transport as per indicated in Thailand Taxonomy Phase 1 and ASEAN Taxonomy V3.
	Enabling infrastructure for low-emission transport (No specific ISIC available) as per Thailand Taxonomy Phase 1, and 49[001] Infrastructure for road and public transport, including infrastructure to enable low-carbon land transport as per ASEAN Taxonomy V3	Various types of infrastructure and activities that enable and support low-carbon transportation	The activity meets the following criteria indicated in Thailand Taxonomy Phase 1: Road transport: • electric charging points, electricity grid connection upgrades, hydrogen fuelling stations or electric road systems (ERS). • the infrastructure and installations are dedicated to transhipping freight between the modes: terminal infrastructure and superstructures for loading, unloading and transhipment of goods. The activity meets the following criteria indicated in ASEAN Taxonomy V3: • the infrastructure is dedicated to the operation of vehicles with zero tailpipe CO2 emissions: electric charging points, electricity grid connection upgrades, hydrogen fuelling stations or electric road systems (ERS);
Energy	Solar energy generation (3510) as per Thailand	Construction and operation of electricity generation facilities that produce electricity, heating and cooling from Solar Photovoltaic,	All energy generation is eligible as indicated in Thailand Taxonomy Phase 1 and ASEAN Taxonomy V3.

Activity Sector	Activity and ISIC (UNSD)	Description and Eligibility Criteria	DNV Findings
	Taxonomy Phase 1, and 351[021] Electricity generation using solar photovoltaic technology	Concentrated Solar Power (CSP) or any other types of solar energy-based technologies	

5.2 Activities assessed against ASEAN Taxonomy Foundation Framework

- Wild-caught and marine value chains - DNV considers obtaining MSC certification or credible Improver Programs as being substantially contributing to EO3 Protection of Healthy Ecosystems and Biodiversity.
- Marine Ecosystem Management, Conservation and Restoration projects substantially contribute to EO3 Protection of Healthy Ecosystems and Biodiversity. DNV notes that the projects also contribute to Climate Change Mitigation and Climate Change Adaptation.
- Ocean Pollution Prevention projects substantially contribute to EO3 Protection of Healthy Ecosystems and Biodiversity.
- Energy Efficiency projects to be substantially contributing to EO1 Climate Change Mitigation.
- Sustainable Packaging and Food Waste Management projects substantially contribute to EO4 Resource Resilience and Transition to a Circular Economy.
- Reduction of GHG emissions projects substantially contribute to EO1 Climate Change Mitigation.



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

Figure 6 The EO1 Decision Tree

EO1 Decision Tree was deployed for the following projects:

(1) Energy efficiency

Eligible Projects related to the improvement of energy-efficient systems and equipment, and operations to lower energy consumption and optimize electricity, leading to an environmental footprint reduction, including but not limited to:

- Engineering and administrative improvements of machine efficiency and optimization, such as cooling, steam distribution systems, and production operation control, as well as increasing the standards of operational control; AND

- Utilization of energy-efficient equipment; AND

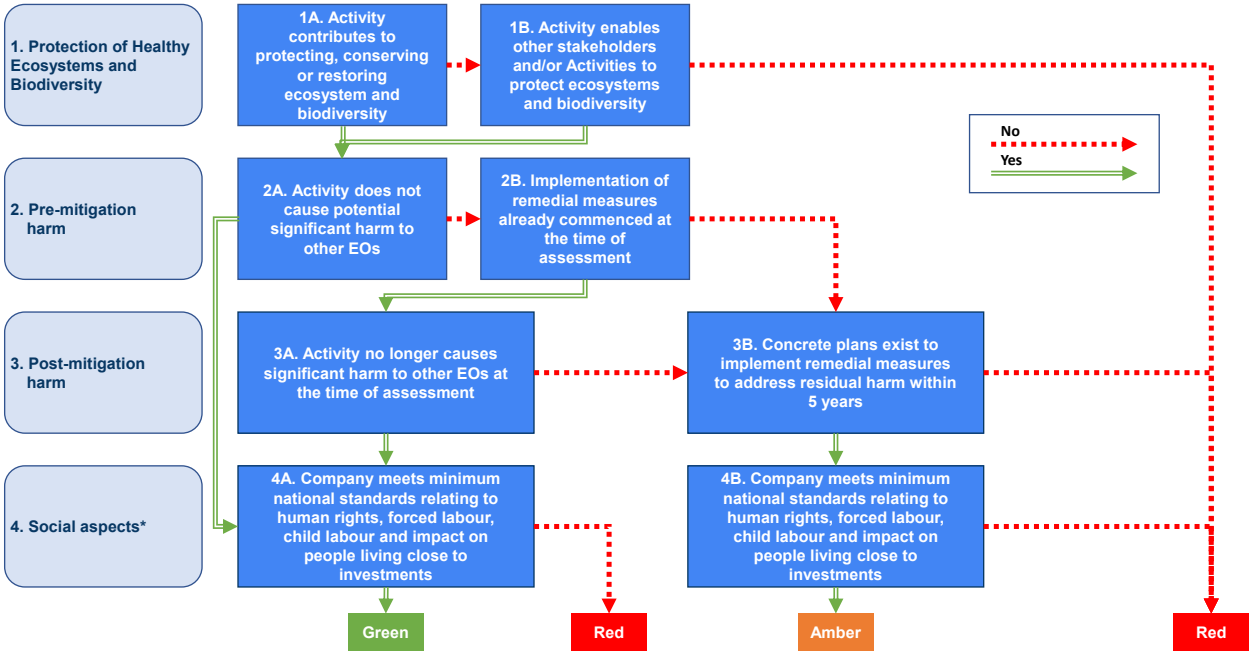
(2) Reduction of GHG emissions projects

Eligible Projects related to the reduction of GHG emissions and implementation of low-carbon technology, including but not limited to:

- Phase out harmful materials that could have a negative impact on environment, such as hydrofluorocarbon (HFC), by using eco-friendly refrigerant; AND
- Conversion to close-loop freezer; AND
- Conversion of fossil fuel machines to electric machines, renewable energy or low-carbon fuels, such as from fuel boiler to electric boiler

S/N	Guiding questions – EO1 (Climate Change Mitigation)	Assessment
1A	Does the Activity avoid / reduce GHG emissions? 1. How does the Activity avoid or help reduce emissions? (e.g., generation of electricity through renewables.) ○ Does the Activity avoid locking in high-carbon activity? (i.e., delaying or preventing the transition towards low carbon alternatives.) ○ Does the Activity avoid leading to significant GHG emissions, including CO2, CH4, N2O, SF6, NF3 and/or HFCs? ○ Does the Activity avoid leading to or causing extensive deforestation practices? 2. Do the Company's policies and business strategy generally avoid contradicting or impeding alignment with the specified EO1 principles? 3. Where applicable and relevant, is a 3rd party certification or verification of alignment of Activity with EO1 available? 4. Does the Activity fulfil relevant environmental law(s) applicable to EO1? 5. Are the effects of climate change mitigation efforts measurable and observable? (e.g., data on amount of carbon emissions avoided.)	Energy efficient and GHG emissions reduction project directly aims to reduce energy consumption, which in turn lowers GHG emissions associated with energy generation. By improving efficiency and transitioning to electric machines, renewable energy, or low-carbon fuels, TU actively avoids dependence on fossil fuels These projects do not directly contribute to deforestation. Replacing HFCs with eco-friendly refrigerants directly reduces emissions of potent GHGs. As of March 2025, TU is currently using carbon-based refrigerants, which have a GWP of 1 and is committed to transitioning to nitrogen or ammonia, which have a GWP of 0. Conversion to close-loop freezer prevents the release of harmful refrigerants, further minimizing GHG emissions. By transitioning to electric machines, renewable energy, or low-carbon fuels, the project actively avoids dependence on fossil fuels. TU is committed to reporting the data on amount of annual GHG emissions reduced in their annual Impact Report which will be published on TU's website.
1B	Does the Activity enable other stakeholders and/or other Activities to mitigate climate change? 1. Does the Activity help other stakeholders (including the community) to mitigate climate change? (e.g., construction of a building that facilitates urban planting.) ○ Does the Activity avoid impeding upstream and/or downstream stakeholders from reducing their GHG emissions? 2. Does the Activity promote intersectoral collaborations for climate change mitigation without negatively affecting other sectors? 3. How does the Activity enable other Activities to mitigate climate change? (e.g., operation of power transmission and distribution equipment that enables the incorporation of solar power.) 4. Are the effects of climate change mitigation efforts by the enabled Activity measurable and observable? (e.g., data on amount of carbon emissions avoided.)	The activities have significant direct impact on TU's Scope 1 & 2 reduction but the impact on other stakeholders is less direct. Switching to new technologies often necessitates collaboration with suppliers, installers, and other businesses. This can create a network of expertise and drive innovation in the low-carbon sector. These projects do not impede other stakeholders' mitigation efforts.

• Once evaluation is complete, evaluate the Activity under DNSH and RMT.	(See Schedule 4)



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

Figure 7: The EO3 Decision Tree

EO3 Decision Tree was deployed for the following projects:

(1) Responsible wild-caught seafood management and marine value chains projects

Eligible Projects related to environmentally responsible fisheries to improve practices, and processes that negatively impact biodiversity and the environment, enhance climate resilience of the marine value chain, and support innovative solutions for low-carbon practices, including but not limited to:

- Procurement or production of responsible wild-caught species in accordance with GSSI-recognized standards, such as the Marine Stewardship Council (MSC), or credible Improver Programs (IP).
- Ecosystem-based, climate-resilient or low-carbon wild-caught fisheries management
- Implementation of traceability systems to ensure responsible practices in supply chains within fisheries and aquaculture activities.
- Implementation of systems, processes, assessments or devices to reduce by-catch and protect endangered, threatened and protected species such as electronic monitoring, bycatch reduction devices, or other fishing gear modifications.

S/N	Guiding questions - EO3 (Protection of Healthy Ecosystems and Biodiversity)	Assessment
1A	Does the Activity contribute to protecting, conserving, or restoring ecosystems and biodiversity? 1. Which specific principles under EO3 does the Activity meet or contribute to? ○ How does the Activity contribute to these principles? 2. Does the Activity minimise or eliminate negative effects of operations on the natural ecosystem and biodiversity? ○ Is the Activity significantly detrimental to the good condition and resilience of ecosystems? ○ Does the Activity avoid leading to a significant increase in pollutant emissions into the air, land and/or natural bodies of	Procuring or producing seafood according to the requirements of credible Improver Program (IP) and GSSI-recognized standards and Ecosystem-based fisheries management directly supports sustainable fishing and aquaculture practices as these standards consider the entire marine ecosystem, and the criteria of these standards consider maintaining fish stocks, minimizing bycatch, and protecting habitats. Traceability systems help ensuring that seafood comes from responsible sources. Bycatch reduction and protected species

	water? ○ Does the Activity avoid involving the over-exploitation of natural resources? ○ Does the Activity avoid involving prohibited land use? ○ Is the Activity detrimental to the natural ecosystem's physical, chemical and biological quality, thus impeding self-reproduction and self-restoration capability of the occupying species? ○ Does the Activity avoid impairing natural species composition, ecosystem structure and ecological functions? ○ Is the Activity detrimental to the conservation status of habitats and species within the natural ecosystem? (e.g., inhibitions to the dynamic complex of plant, animal and microorganism communities and their non-living environment interacting as a functional unit.) 3. Do the Company's policies and business strategy generally avoid contradicting or impeding alignment with the specified EO3 principles? (e.g., employment of services from subcontractors, suppliers and/or third-parties with practices detrimental to the natural ecosystem and biodiversity.) 4. Is a 3rd party certification or verification of alignment of Activity with EO3 available? 5. Does the Activity fulfil relevant environmental law(s) applicable to the specified EO3 principles? 6. Is the protection of ecosystems and biodiversity measurable and observable? (e.g., number of trees reforested, land area of habitats protected.)	protection prevents the unintended capture and death of non-target species, which can disrupt food webs and harm vulnerable mammal populations. The projects are designed to improve ecosystem health, to protect habitats and species. One of the principles by MSC is to avoid overfishing and maintain healthy fish stocks. MSC certification is a third-party verification. Independent auditors assess a fishery against the MSC standard. If the fishery passes, it can use the MSC label on its products, assuring consumers that the seafood comes from a sustainable source. MSC certification requires fisheries to comply with all relevant local, national, and international laws. This helps ensure that certified fisheries are operating within a legal framework that protects the environment. The MSC standard includes specific criteria and indicators that are used to measure the performance of a fishery. These can include fish stock assessments, bycatch-rates, habitat mapping and ecosystem health indicators such as water quality or the diversity of species.
1B	Does the Activity enable other stakeholders and/or other Activities to protect ecosystems and biodiversity? 1. Does the Activity help other stakeholders (including the community) to protect ecosystems and biodiversity? ○ Does the Activity avoid impeding upstream and/or downstream stakeholders from protecting ecosystems and biodiversity? 2. Does the Activity promote intersectoral collaborations for protecting biodiversity and ecosystems without negatively affecting other sectors? 3. How does the Activity enable other Activities to protect ecosystems and biodiversity? 4. Is the protection of ecosystems and biodiversity by enabled Activity measurable and observable? (e.g., number of trees reforested, land area of habitats protected.)	By demanding MSC certification and supporting their vessels in achieving it, TU directly incentivizes better fishing practices among upstream suppliers (fishers). MSC certification often requires collaboration between fishers, scientists, NGOs, and even governments. Supporting vessels in the certification process helps improve their practices and build their capacity for sustainable fishing. TU's commitment to responsible sourcing and MSC certification has a significant enabling effect, driving positive change throughout their supply chain and the wider seafood industry. TU's impact report on responsible wild-caught seafood management will aim to report on tonnes or percentage of certified seafood procured or sourced. TU's 2023 SD Report shows that in 2023 the tuna sourced by TU is 39.44% MSC certified, 14.62% in assessment, and 31.42% in FIPs. Commitment of TU toward EO3 is clearly

		stated in TU's SeaChange® commitment. TU collaborates with NGOs and other partners to track progress and drive industry-wide change, supporting their customers' ESG efforts as well.
• Once evaluation is complete, evaluate the Activity under DNSH and RMT.		(See Schedule 4)

(2) Marine ecosystem management

Eligible Projects related to activities that contribute to sustainable marine ecosystem management, protection and restoration to increase resiliency and support climate mitigation efforts, including but not limited to conservation or restoration of marine ecosystem that serve as habitats for marine species.

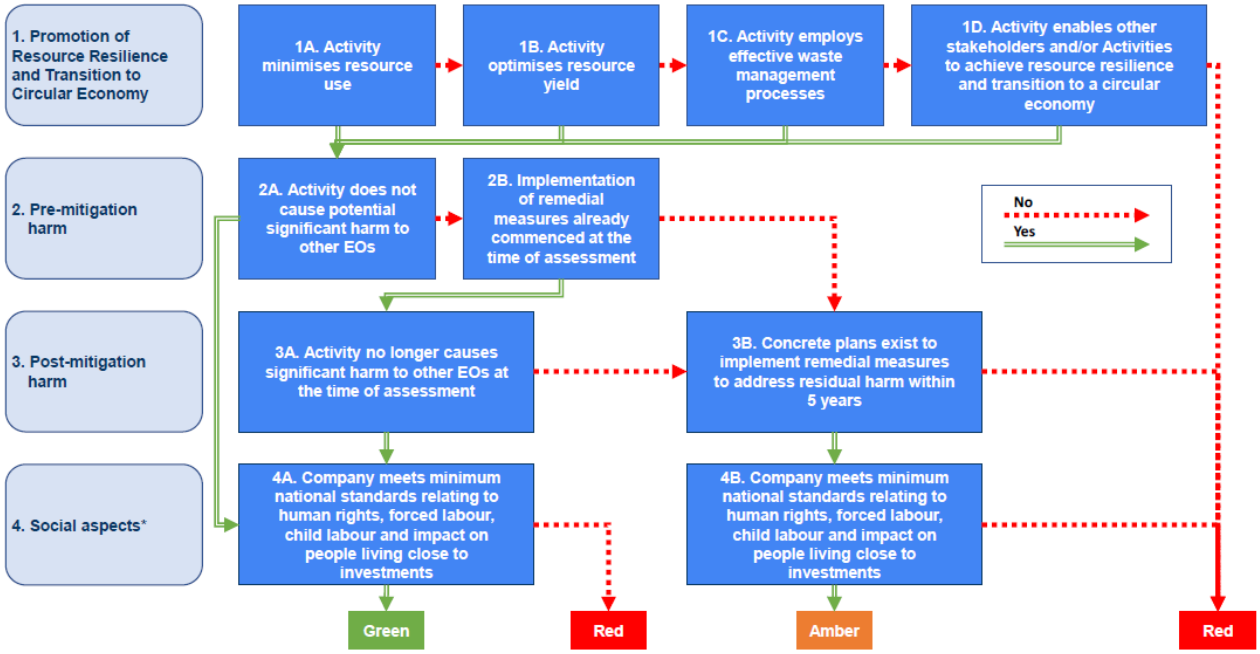
(3) Ocean pollution prevention

Eligible Projects related to the prevention and reduction of ocean plastic pollution, including but not limited to:

- Reduction and recycling of ocean-bound plastics.
- Removal of plastic from water bodies.
- Recovering and repurposing of abandoned, lost, or discarded fishing gear.

S/N	Guiding questions - EO3 (Protection of Healthy Ecosystems and Biodiversity)	Assessment
1A	Does the Activity contribute to protecting, conserving, or restoring ecosystems and biodiversity? 1. Which specific principles under EO3 does the Activity meet or contribute to? ○ How does the Activity contribute to these principles? 2. Does the Activity minimise or eliminate negative effects of operations on the natural ecosystem and biodiversity? ○ Is the Activity significantly detrimental to the good condition and resilience of ecosystems? ○ Does the Activity avoid leading to a significant increase in pollutant emissions into the air, land and/or natural bodies of water? ○ Does the Activity avoid involving the over-exploitation of natural resources? ○ Does the Activity avoid involving prohibited land use? ○ Is the Activity detrimental to the natural ecosystem's physical, chemical and biological quality, thus impeding self-reproduction and self-restoration capability of the occupying species? ○ Does the Activity avoid impairing natural species composition, ecosystem structure and ecological functions? ○ Is the Activity detrimental to the conservation status of habitats and species within the natural ecosystem? (e.g., inhibitions to the dynamic complex of plant, animal and microorganism communities and their non-living environment interacting as a functional unit.) 3. Do the Company's policies and business strategy generally avoid contradicting or impeding alignment with the specified EO3 principles?	Marine Ecosystem Management is done according to DMCR's Mangrove Restoration Handbook for Carbon Credit Benefits B.E. 2565 (2022). The guideline produced by the Department of Marine and Coastal Resources (DMCR) is to provide interested parties with an understanding of the principles, methods, and procedures for mangrove reforestation projects aimed at generating carbon credits. One of TU's marine ecosystem management project has already been registered on TGO's website under the methodology of T-VER-S-METH-13-01 Version 1. The total project area is 101.31 rai, located in Samut Songkhram Province. Estimation of 263 tons of carbon dioxide is sequestrated per year. The tree species planted are Rhizophora apiculata and Rhizophora mucronata. The planting operation is in accordance with academic principles and regulations of the Department of Marine and Coastal Resources, with expert foresters and staff overseeing the project. The project is verified by a third-party called VGreen KU. TU's marine ecosystem management projects are monitored by DMCR to ensure that the Activity does not involve prohibited land use, is not detrimental to the natural ecosystem, avoids impairing natural species composition, and is not detrimental to the conservation status of habitats. Ocean plastic pollution project site selection criteria are based on proximity to TU's operational areas and alignment with TU's SeaChange® commitment

	(e.g., employment of services from subcontractors, suppliers and/or third-parties with practices detrimental to the natural ecosystem and biodiversity.) 4. Is a 3rd party certification or verification of alignment of Activity with EO3 available? 5. Does the Activity fulfil relevant environmental law(s) applicable to the specified EO3 principles? 6. Is the protection of ecosystems and biodiversity measurable and observable? (e.g., number of trees reforested, land area of habitats protected.)	which aims to divert 1,500 tons of ocean-bound plastic from waterways and oceans. This will be achieved through land-based initiatives (improving waste management, engaging local communities, etc.) and Ocean-based initiatives (partnering with the Global Ghost Gear Initiative to recover and repurpose lost fishing gear which is a major source of marine debris). Alignment of projects with TU's SeaChange® commitment assures that the projects promote sustainability of marine ecosystem, do not involve over-exploitation of natural resources or prohibited land use or are detrimental to natural ecosystem or the conservation status of habitats and species. TU aims to report on coastal or marine area restored or maintained (m2), carbon sequestered (tCO2e), and tonnes of plastic collected from waterways and oceans and treated through reuse or recycle.
1B	Does the Activity enable other stakeholders and/or other Activities to protect ecosystems and biodiversity? 1. Does the Activity help other stakeholders (including the community) to protect ecosystems and biodiversity? ○ Does the Activity avoid impeding upstream and/or downstream stakeholders from protecting ecosystems and biodiversity? 2. Does the Activity promote intersectoral collaborations for protecting biodiversity and ecosystems without negatively affecting other sectors? 3. How does the Activity enable other Activities to protect ecosystems and biodiversity? 4. Is the protection of ecosystems and biodiversity by enabled Activity measurable and observable? (e.g., number of trees reforested, land area of habitats protected.)	Marine ecosystem management and Ocean pollution prevention projects do not impede upstream and/or downstream stakeholders from protecting ecosystems. Marine ecosystem restoration in Thailand is regulated by DMCR. The project developer can be a private company or can be the communities. A project can be jointly implemented with the communities. Similar to ocean pollution prevention project, TU partners with Global Ghost Gear Initiative to recover and repurpose lost fishing gears. The project does not impede upstream and/or downstream stakeholders from protecting ecosystems and biodiversity, and it promotes intersectoral collaborations. TU is partnering with several organizations, including the Earth Agenda Foundation and SCG, on the Rak Talay Project to restore coral reefs. TU have installed 140 3D-printed coral reef structures and plan to expand to 210 by 2025 at Koh Racha Yai, Phuket, using innovative technology to combat climate change's impact on marine life.
• Once evaluation is complete, evaluate the Activity under DNSH and RMT.		(See Schedule 4)



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

Figure 5: The EO4 Decision Tree

EO4 Decision Tree was deployed for the following projects:

(1) Waste prevention, reduction and recycling projects

Eligible Projects related to waste prevention, reduction, and recycling, including but not limited to:

- Development of sustainable packaging solutions.

(2) Sustainable food waste management projects

Eligible Projects related to sustainable food waste management, including but not limited to:

- Food loss minimization from the source within operations
- Utilisation of food loss in the company's value chain, such as in the production of fertilizer.
- Research and development of innovations to reduce food loss, such as increasing the valorisation of fish parts.

S/N	Guiding questions – EO4 ((Promotion of Resource Resilience and Transition to Circular Economy))	Assessment
1A	Does the Activity minimise resource use? (e.g., operation of a manufacturing plant that uses alternative fuels from waste material.) 1. Does the Activity use renewable energy, bio-based resources or other recovered materials to reduce the rate of resource extraction? 2. Is the building of resource resilience and transition to circular economy measurable and observable?	Sustainable packaging aims to replace virgin materials with recycled or renewable alternatives, thus minimizing resource extraction. Sustainable food waste management optimizes the use of resources invested in production. The impact could be demonstrated in terms of number or percentage of total processing facilities with zero waste sent to landfills and number or percentage of total processing facilities with zero food loss.
1B	Does the Activity optimise resource yield? (e.g., operation of a plantation that employs fertilizer application techniques to optimise crop yield.) 1. Does the Activity extend the use of products through reuse, repurposing, refurbishing, remanufacturing, disassembly, upgrades and repair, and/or sharing of products?	TU has a commitment for 100% of branded packaging to be reusable, recyclable or compostable by 2025. The activity increases resource efficiency by increasing the use of reusable packaging and/or recyclable and/or compostable packaging. Sustainable packaging solutions are aligned with circular

	2. Does the Activity increase resource efficiency by ensuring recovered materials are recycled as high quality secondary raw material? 3. Is the Activity made available as product-as-a-service to reduce the demand for new products and their embedded raw materials? (e.g., inter alia, leasing, pay-per-use, subscription or deposit return schemes.) 4. Does the Activity involve the use of products, assets or process technologies designed and produced based on circular economy principles? (e.g., designing for longevity, resource efficiency, durability, functionality, modularity, upgradability, easy disassembly and repair, using recyclable or biodegradable materials.) 5. Does the Activity avoid leading to significant inefficiencies in the use of materials or in the direct or indirect use of natural resources at one or more stages of the product lifecycle? 6. Is the building of resource resilience and transition to circular economy measurable and observable?	economy principles by focusing on resource efficiency. The activity avoids inefficiencies in material use and minimize environmental impact. Packaging is not product-as-a-service. Sustainable food waste management project reduces food loss and utilize by-products, optimizes the use of resources needed for food production. Reducing waste and finding new uses for by-products increases resource efficiency. The activity is aligned with circular economy principles by minimizing waste and maximizing resource utilization.
1C	Does the Activity employ effective waste management processes? (e.g., operation of a manufacturing plant with systems that minimise the leaching out of nutrients from the production system into the environment, refurbishment and recycling features.) 1. Does the Activity reduce waste generation, including through: ○ replacement of virgin materials with secondary ○ raw materials or by-products, either fully or ○ partially? ○ repair, reuse, donation, resale, upcycling activities or on-site composting? 2. Is the building of resource resilience and transition to circular economy measurable and observable? 3. Does the Activity apply the waste hierarchy of priority orders in the prevention and management of waste material? ○ Prevention ○ Preparing for re-use ○ Recycling ○ Other forms of recovery, e.g., energy recovery ○ Disposal 4. Does the Activity avoid leading to a significant increase in the generation, incineration or disposal of waste? 5. Does the long-term disposal of waste resulting from the Activity avoid causing significant and long-term harm to the environment?	Sustainable packaging projects align with waste hierarchy (waste prevention over reuse, or recycling). Sustainable packaging reduces long-term environmental harm associated with unsustainable packaging or single-use plastic. The primary goal of food waste management projects is to reduce waste generation. The activities align with the higher levels of the waste hierarchy (prevention over reuse or recycling). Reducing food waste minimizes the long-term environmental impacts associated with food waste disposal.
1D	Does the Activity enable other stakeholders and/or Activities to achieve resource resilience and transition to a circular economy? 1. Does the Activity help other stakeholders (including the community) to build resource resilience and transition to a circular economy? ○ Does the Activity avoid impeding upstream and/or downstream stakeholders	TU has a commitment toward 30% recycled content in branded packaging by 2025. As of 2024, TU has already achieved 36.96% recycled content in TU's branded packaging. TU encourages its suppliers and customers to adopt more sustainable packaging. It promotes intersectoral collaboration by

	from building resource resilience and transition to a circular economy? 2. Does it promote intersectoral collaborations for resource resilience and circular economy transitions without negatively affecting other sectors? 3. How does the Activity enable other Activities to build resource resilience and transition to a circular economy? 4. Is the building of resource resilience and transition to circular economy of the enabled Activity measurable and observable? (e.g., recovery, reuse and recycle rates.)	collaborating with material suppliers, recyclers, and other stakeholders. TU is actively working to reduce waste throughout its production process, from optimizing raw material use to responsible post-production waste management. In 2023, TU continued investing in community education on food waste, including partnering with the Scholars of Sustenance Foundation to teach students and teachers in Thailand about sustainable practices like composting through the School of Sustenance Program.
• Once evaluation is complete, evaluate the Activity under DNSH and RMT.		(See Schedule 4)

About DNV

Driven by our purpose of safeguarding life, property and the environment, DNV enables organisations to advance the safety and sustainability of their business. Combining leading technical and operational expertise, risk methodology and in-depth industry knowledge, we empower our customers' decisions and actions with trust and confidence. We continuously invest in research and collaborative innovation to provide customers and society with operational and technological foresight. With our origins stretching back to 1864, our reach today is global. Operating in more than 100 countries, our 16,000 professionals are dedicated to helping customers make the world safer, smarter and greener.