

FROM
FOREST ROOTS
TO THE

NET ZER

FUTURE

SUSTAINABLE SOLUTIONS
WITH WOOD-BASED MATERIALS

**VANACHAI
DOUBLE
MATERIALITY
REPORT 2025**



Vanachai Double Materiality Report 2025

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V-IMRA's Sustainability Materiality Assessment and Next Step



About This Report

The Vanachai Double Materiality Report 2025 presents the outcomes of Vanachai Group's assessment of sustainability topics that are material to the Group from both an impact perspective and a financial perspective. This report has been prepared to enhance transparency, support informed decision-making by investors and other stakeholders, and strengthen the integration of sustainability considerations into the Group's strategy, risk management, and long-term value creation.

The assessment underlying this report was conducted using the **Vanachai Integrated Materiality and Risk Assessment (V-IMRA)**, the Group's internal framework for identifying, assessing, and prioritizing sustainability-related impacts, risks, and opportunities across its operations and value chain.

This report aligns with:

- **IFRS Sustainability Disclosure Standards** (IFRS S1 and IFRS S2), for the identification of financially material sustainability-related risks and opportunities.
- **GRI 3: Material Topics 2021**, for the identification and prioritization of significant impacts on the economy, environment, and society.
- **FTSE Russell ESG Ratings framework**, as a reference for disclosure quality, governance, and evidence-based assessment.

This Double Materiality Assessment Report serves as the Group's primary reference document to support sustainability disclosures, enterprise-wide risk management, and communication on sustainable development under the Group's ESG framework for the 2025 reporting year. It is intended to complement and strengthen the Group's sustainability and annual reporting, and does not replace the Group's Sustainability Report or Annual Report.

About Vanachai Group

Vanachai Group Public Company Limited and its subsidiaries ("Vanachai Group" or "the Group") are a leader in Thailand's wood-based panel industry and a pioneer in forest resource conservation, reflecting a business philosophy that balances industrial development with long-term environmental stewardship.

The name "Vanachai," meaning "victory that preserves forests," embodies the Group's vision of creating shared value for shareholders, employees, customers, and society. Beyond production efficiency and competitiveness, the Group consistently recognizes the importance of natural resources, environmental protection, and responsible business practices.

Vanachai Group operates as a wood-based products manufacturer, sourcing raw materials from communities, small and medium-sized enterprises, and external suppliers, rather than owning forest plantations. Through efficient operations, strong governance, and responsible supply chain management, the Group delivers high-quality products while contributing to forest conservation and environmental sustainability.

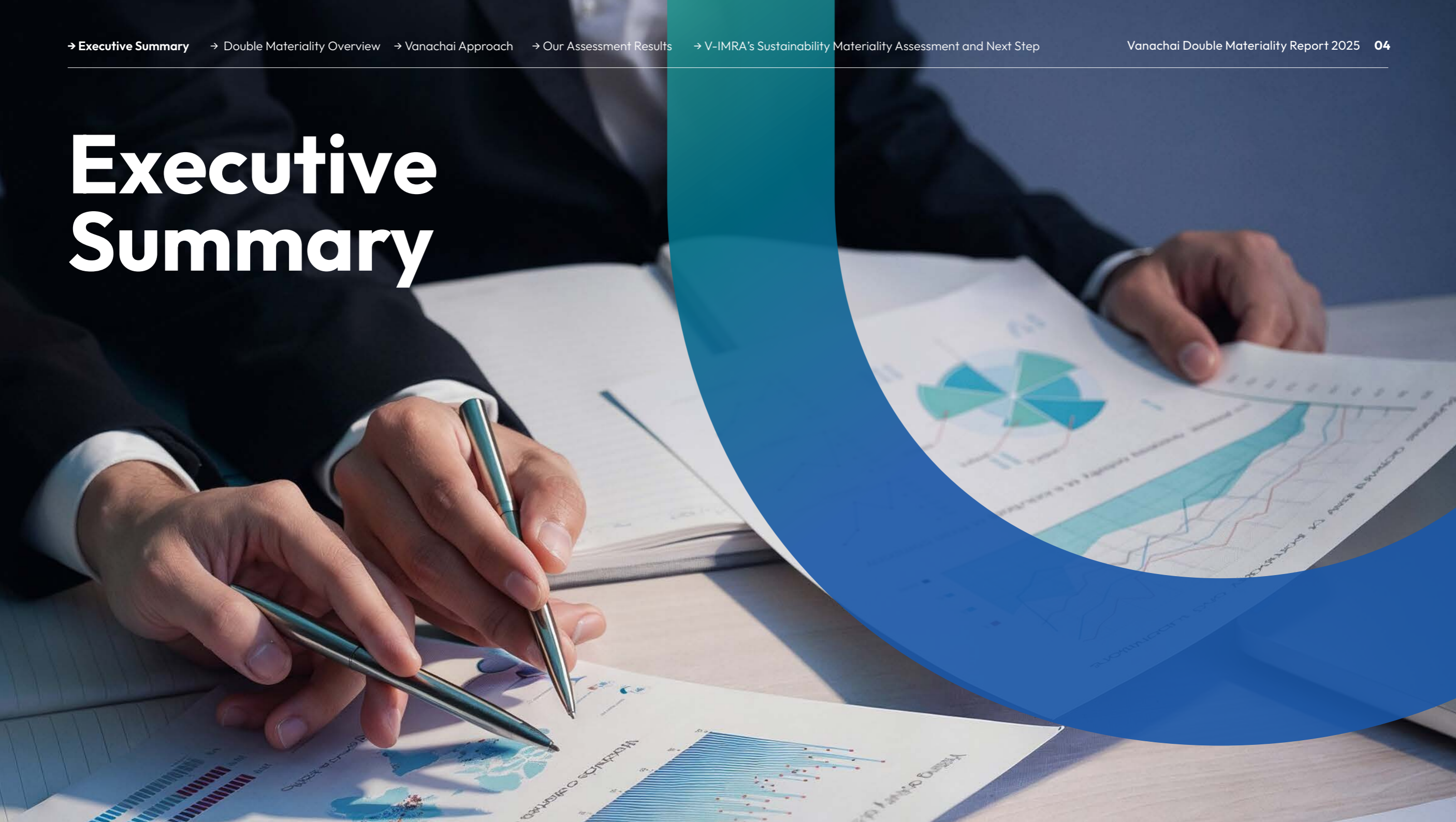
Product responsibility is a core priority for Vanachai Group, with strong emphasis on people's health and safety and environmental considerations throughout product design and manufacturing processes.

Given its export-oriented business model, the Group is exposed to evolving international regulations, customer sustainability expectations, and market dynamics. Sustainability considerations are therefore integrated into enterprise risk management, strategy, and operational decision-making, under the oversight of the Board of Directors and senior management.

Through the application of the Vanachai Integrated Materiality and Risk Assessment (V-IMRA), the Group identifies and prioritizes sustainability-related impacts, risks, and opportunities across its operations and value chain, supporting resilience, transparency, and long-term value creation.



Executive Summary



Message from our Chair of the Sustainability Committee and Chief Sustainability Officer

At Vanachai Group, sustainability is embedded in how we manage risks, make decisions, and plan for the long term. I firmly believe that understanding what truly matters to our business, our stakeholders, and society is essential to building resilience and sustainable growth.

Our approach to materiality is based on two complementary perspectives. First, we assess how environmental, social, and governance-related trends, such as climate change, resource availability, regulatory developments, and market expectations, may affect our business continuity, performance, and future prospects. Second, we examine how our operations, products, and value chain activities impact people, communities, and the environment. This dual perspective enables us to identify sustainability issues that are material both to enterprise value and to the wider society in which we operate.

The Double Materiality Assessment presented in this report reflects Vanachai Group's commitment to focusing on material sustainability issues that support informed decision-making and responsible investment. By prioritizing these issues, we are better able to allocate resources effectively, manage risks proactively, and identify opportunities that strengthen long-term competitiveness.

“Amid increasing global uncertainty and heightened sustainability expectations, Vanachai Group is committed to placing sustainability at the heart of how we plan, invest, and lead. We believe that long-term resilience cannot be achieved through incremental actions alone, but through a clear understanding of material issues, purposeful prioritization, and continuous evolution to create enduring value for both business and society.”

To ensure rigor and consistency, the Group applies the Vanachai Integrated Materiality and Risk Assessment (V-IMRA) as its internal framework. A key feature of this approach is its integration with the Enterprise Risk Management (ERM) system, ensuring that sustainability is treated as a core strategic consideration rather than a standalone initiative. This integration enhances our ability to anticipate change, respond to emerging risks, and build business resilience.

As a leader in Thailand's wood-based panel industry, Vanachai Group recognizes its responsibility to operate with respect for natural resources, people's health and safety, and the communities connected to our value chain. Materiality provides the discipline to keep our sustainability efforts focused, credible, and aligned with global market expectations, particularly in the context of our export-oriented business.

The insights gained from this assessment form the foundation for our sustainability priorities and future plans. By strengthening transparency and continuously improving our approach, we aim to create long-term value for shareholders while contributing positively to society and the environment.

Phattra Sahawat



Objective and Scope of the 2025 Vanachai DMA

The Vanachai Double Materiality Assessment (DMA) Report 2025 presents the outcome of a structured and evidence-based assessment of sustainability topics that are material to the Group from both an impact perspective and a financial perspective. The primary objective of this assessment is to enable Vanachai Group to focus on the sustainability issues that most significantly influence long-term business performance, resilience, and value creation, while also addressing the Group's most meaningful impacts on people and the environment.

The DMA has been conducted to strengthen strategic decision-making and capital allocation by clearly identifying sustainability-related risks and opportunities that may affect the Group's operations, supply chain stability, cost structure, market access, and future growth. By prioritizing material issues, the assessment supports more informed investment decisions, proactive risk management, and the efficient allocation of resources toward areas that generate the greatest business and societal value. In addition, the DMA enhances the effectiveness of the Group's sustainability governance and risk oversight by providing a consistent basis for integrating sustainability considerations into enterprise risk management, strategy development, and operational planning. The assessment also supports decision-useful and credible disclosures for investors, customers, and other stakeholders, and strengthens alignment with evolving international sustainability reporting and ESG rating expectations. The DMA has been developed in accordance with the IFRS Sustainability Disclosure Standards (IFRS S1 and IFRS S2), GRI 3: Material Topics 2021, and the FTSE Russell ESG Ratings framework, and serves as a foundational reference for the Group's sustainability and Annual reporting for the 2025 reporting year.

The scope of the assessment covers the Group's wood-based products value chain, including wood sourcing through community and SME suppliers, manufacturing and processing operations in Thailand, logistics and distribution activities, and downstream markets. Given Vanachai Group's export-oriented business model, with a significant proportion of sales to international markets, the assessment also considers sustainability impacts, risks, and opportunities arising from cross-border trade, regulatory developments, and global market expectations. This comprehensive scope ensures that the DMA reflects the full range of factors that influence Vanachai Group's competitiveness, resilience, and long-term success.



Approach to Double Materiality

Vanachai Group applies a double materiality approach that distinguishes clearly between:

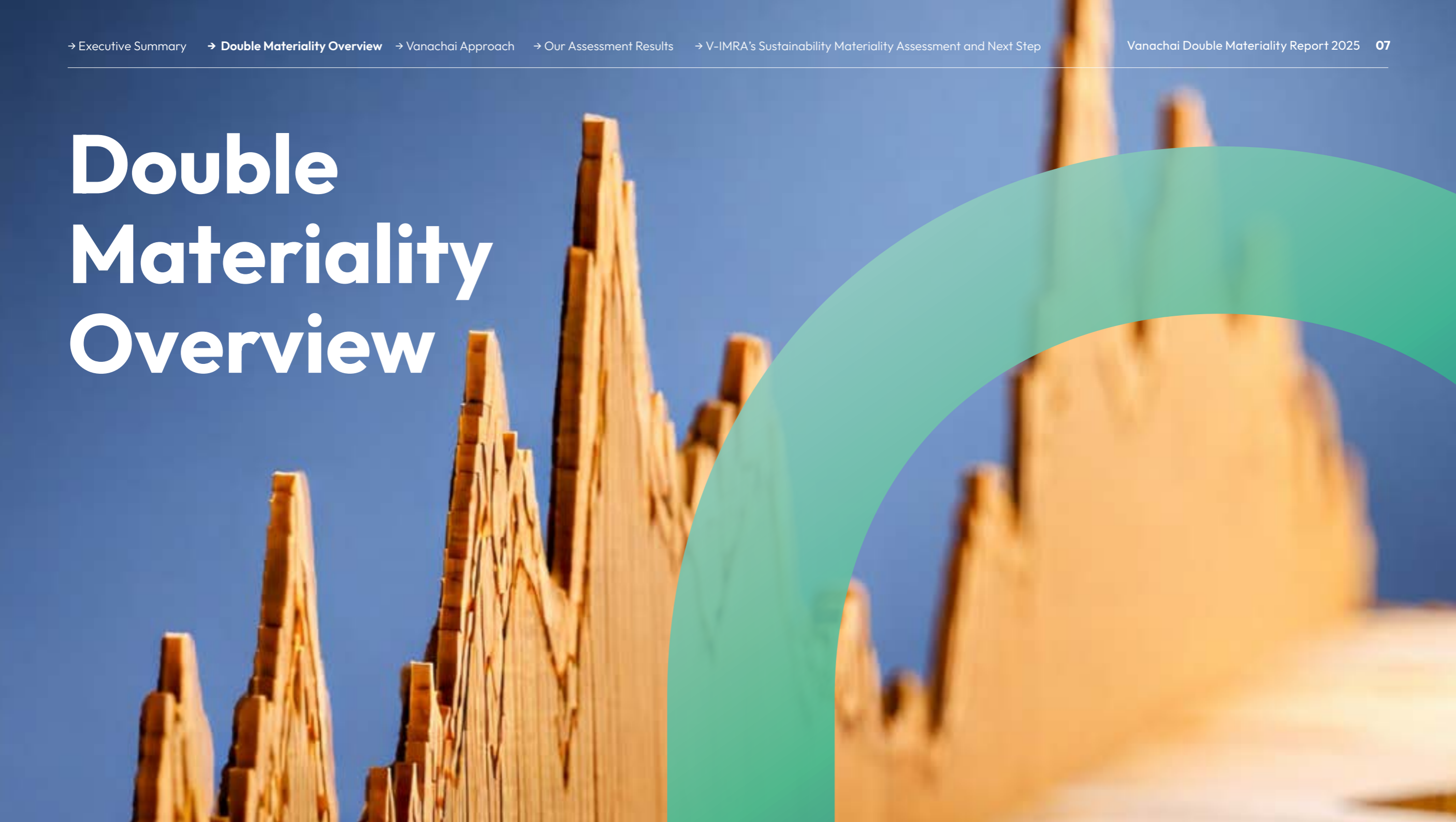
Impact materiality, which assesses the significance of the Group's actual and potential impacts on the environment and society, in line with GRI 3.

Financial materiality, which evaluates sustainability-related risks and opportunities that could reasonably be expected to affect the Group's financial position, financial performance, cash flows, or future prospects, in line with IFRS S1 and IFRS S2.

Impact materiality was assessed by identifying environmental, social, and governance impacts across the Group's operations and key business relationships and evaluating their significance based on scale, scope, irremediability, and likelihood. Financial materiality was assessed by identifying sustainability-related risks and opportunities and evaluating their potential financial effects, likelihood of occurrence, and time horizons (short, medium, and long term).

The assessment process was supported by cross-functional internal expertise, including sustainability, risk management, finance, procurement, operations, and human resources, and was informed by relevant regulatory developments, international standards, industry benchmarks, and the specific operating context of the Thai wood-based products sector.

Double Materiality Overview

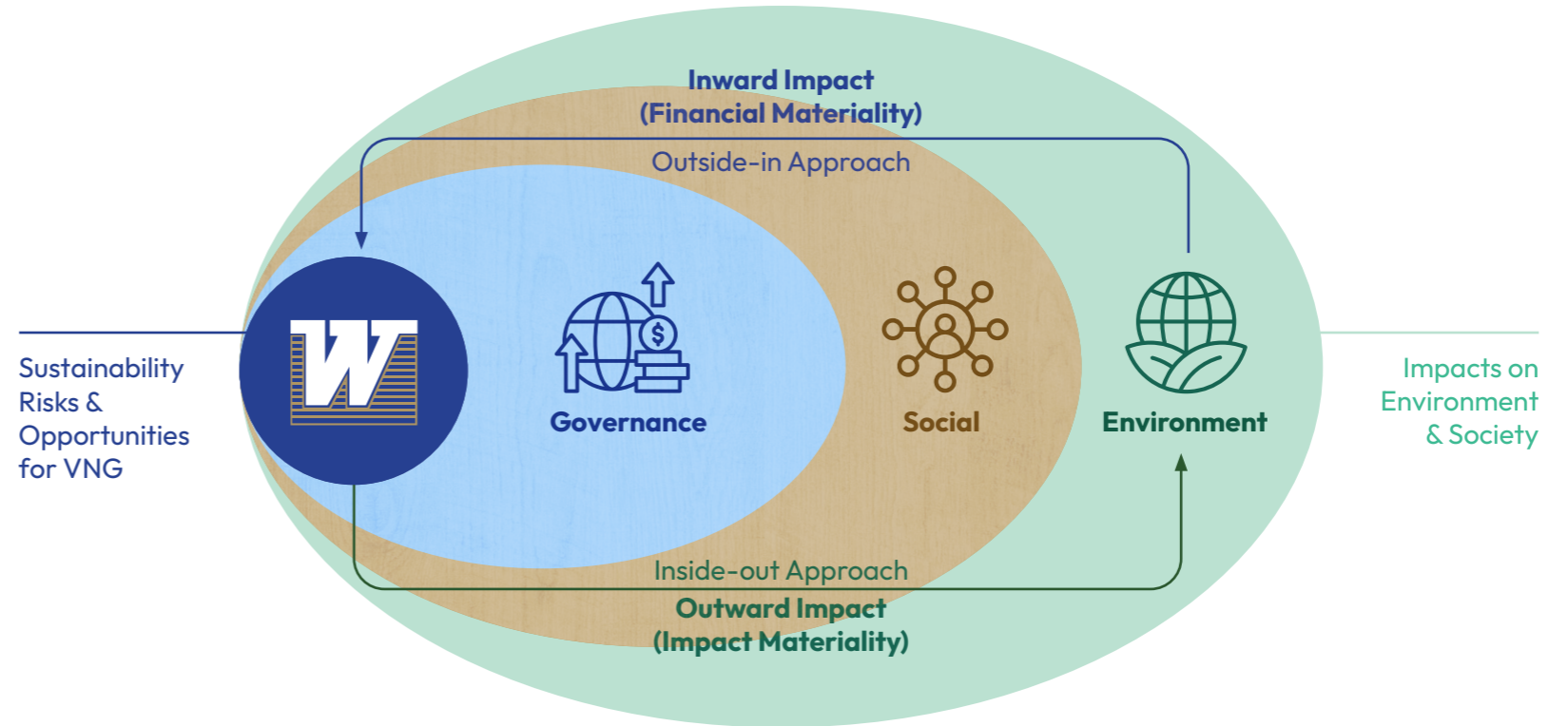


Double Materiality Overview

Vanachai Group applies a structured **Double Materiality Assessment (DMA)** as a core tool for setting sustainability priorities, strengthening decision-making, and supporting long-term business resilience. The Group uses double materiality not as a reporting exercise, but as a practical framework to embed sustainability considerations into strategy, investment decisions, and enterprise risk management.

Vanachai Group conducted its **first Double Materiality Assessment in 2022**, establishing a baseline understanding of sustainability-related impacts, risks, and opportunities across its value chain. The outcomes of this assessment were applied throughout 2024 to guide sustainability priorities and management actions. In 2025, the Group conducted a structured review of the DMA to respond to an evolving global context, including heightened uncertainty, increasing climate-related risks, and strengthening climate and sustainability regulations in key export markets.

The Group's double materiality approach considers **two complementary perspectives**. From an **impact perspective**, Vanachai Group assesses how its operations, products, and value chain activities affect people, communities, and the environment. From a **financial perspective**, the Group evaluates how environmental, social, and governance-related trends, such as climate change, regulatory developments, and market expectations, may influence business continuity, performance, and future growth. Together, these perspectives support a balanced understanding of material sustainability issues.



The 2025 assessment was conducted using the **Vanachai Integrated Materiality and Risk Assessment (V-IMRA)** and further strengthened through integration with the Group's **Enterprise Risk Management (ERM)** system. In parallel, Vanachai Group enhanced stakeholder engagement by providing stakeholders **with foundational knowledge on sustainability and the Group's business practices**, enabling more informed and value-added feedback on material topics across all ESG dimensions.

This report outlines the methodology and outcomes of the 2025 Double Materiality Assessment and explains how the identified material topics inform strategy, risk management, and sustainability planning. Through periodic review and refinement of its materiality assessment, Vanachai Group strengthens its ability to respond proactively to global developments and support sustainable value creation over the long term.

Vanachai Approach



Vanachai Approach



Commitment to Sustainability through Top-Down and Bottom-Up Integration

Vanachai Group's approach to sustainability is founded on a clear commitment from both **leadership and operational levels**. Sustainability direction and priorities are set through **top-down governance**, with oversight by the Board of Directors, the Sustainability Committee, and senior management. At the same time, **bottom-up engagement** is actively encouraged, enabling business units, operational teams, and employees to identify risks, opportunities, and improvement areas based on day-to-day operations and practical experience.

This combined approach ensures that sustainability is not only strategically driven, but also operationally embedded, fostering ownership, accountability, and continuous improvement across the organization.



Systematic Improvement through Policies and Guidelines

To ensure consistency, continuity, and systematic progress, Vanachai Group has developed the **Assessment of Key Business Operations Policies and Guidelines** (Policy No. VNG-GOV-AK-BO-PG-01).

This framework serves as a structured reference for reviewing, monitoring, and improving key operational policies and practices across the Group. It supports the identification of gaps, the prioritization of improvements, and the consistent application of sustainability principles throughout business operations. By applying this assessment framework, Vanachai Group strengthens its ability to evolve its practices in a disciplined and measurable manner.



Integration with Strategy, Risk Management, and Performance

Sustainability considerations at Vanachai Group are fully integrated into **strategy development, enterprise risk management**, and performance management. Material sustainability issues identified through the Double Materiality Assessment are used to:

- Inform strategic priorities and long-term planning.
- Identify and manage sustainability-related risks and opportunities through the Enterprise Risk Management (ERM) system.
- Guide the setting of targets, key performance indicators, and management actions.

This integration ensures that sustainability supports business resilience, investment decisions, and long-term value creation, rather than operating as a standalone or compliance-driven activity.

Vanachai Approach (Continued)



Alignment with Reporting Standards and ESG Ratings

Vanachai Group's approach is designed to ensure alignment with **international sustainability reporting standards and ESG rating methodologies**, providing clarity, comparability, and credibility for external stakeholders.

The Group's Double Materiality Assessment and related disclosures are aligned with:

- **IFRS Sustainability Disclosure Standards** (IFRS S1 and IFRS S2), for investor-focused sustainability-related risks and opportunities;
- **GRI 3: Material Topics 2021**, for the identification and prioritization of significant impacts on the economy, environment, and society.
- **FTSE Russell ESG Ratings framework**, to support transparent, evidence-based, and rateable disclosures.

This alignment enhances the quality of disclosures and supports consistent communication with investors, customers, and ESG assessors.



Definition of Double Materiality as Applied by Vanachai Group

For the purposes of this Double Materiality Assessment, Vanachai Group defines double materiality as the combination of two complementary dimensions, assessed separately but in parallel:

- **Impact materiality (inside-out perspective):** the significance of the Group's actual and potential impacts on the environment and society, arising from its operations and business relationships.
- **Financial materiality (outside-in perspective):** the significance of sustainability-related risks and opportunities that could reasonably be expected to affect the Group's financial performance, financial position, cash flows, or future prospects.

Both dimensions are assessed using aligned scopes and time horizons, ensuring a coherent, balanced, and decision-useful materiality outcome that supports governance, strategy, and long-term value creation.



Building Stakeholder Understanding to Enable Meaningful Engagement

Vanachai Group recognizes that effective stakeholder engagement requires a **shared understanding of sustainability** and the Group's operations. To enhance the quality of stakeholder input, the Group provides **foundational knowledge on sustainability and its operating context** to key stakeholders prior to engagement.

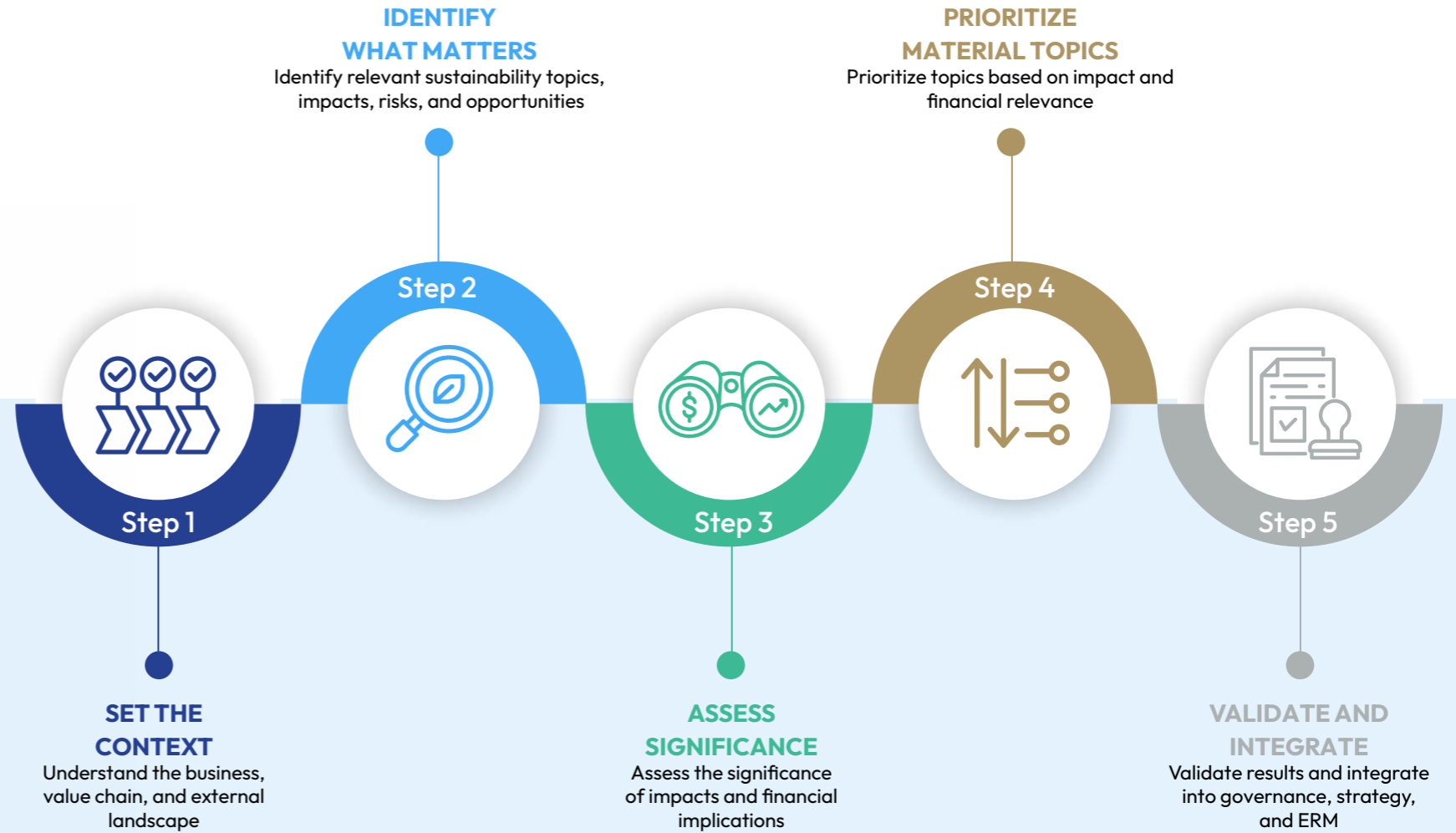
This approach supports informed dialogue with stakeholders who have a significant influence on, or are **significantly affected by, the Group's operations**. As part of the Double Materiality Assessment, **structured stakeholder interviews** are conducted to gather perspectives on the Group's operations, including **actual and potential positive and negative impacts**, as well as emerging risks and opportunities.

Stakeholder insights are used as qualitative inputs to **both impact materiality and financial materiality**, alongside internal analysis and external data, ensuring that materiality outcomes are credible, balanced, and reflective of real-world conditions.

Our Process

Vanachai Group applies a structured and systematic process to conduct its Double Materiality Assessment, ensuring that sustainability-related impacts, risks, and opportunities are identified, assessed, and prioritized in a consistent and decision-useful manner. The process is designed to reflect the Group's business context, value chain, and risk profile, while aligning with international sustainability reporting standards.

Vanachai Group applies a five-step Double Materiality Assessment process, first conducted in 2022, applied in 2023, and reviewed in early 2025 to reflect evolving global and climate-related developments.



Step 1:

Set the Context - Understanding Vanachai Group

The Double Materiality Assessment begins with establishing a clear understanding of Vanachai Group's organizational context, which forms the foundation for identifying, assessing, and prioritizing material sustainability topics. This step ensures that the assessment is grounded in the Group's actual business model, value chain, operating environment, and strategic direction, rather than treated as a standalone or theoretical exercise.

In this step, Vanachai Group reviewed its business profile and operating context, including its role as a wood-based products manufacturer with manufacturing operations in Thailand and a strong export orientation, with international markets accounting for a significant proportion of total sales. The assessment also considered the Group's seven-stage value chain, from business development and sustainable procurement through production, sales, logistics, after-sales services, and end-of-product considerations.

The external environment was analyzed to understand key trends and drivers that may influence sustainability impacts, risks, and opportunities. These include climate change and environmental regulation, evolving

customer and market expectations, geopolitical developments affecting export markets and logistics routes, digital transformation, and social expectations related to labor, community engagement, and product responsibility.

Internally, the assessment considered governance structures, strategy, enterprise risk management (ERM), and existing policies and practices, including the integration of sustainability considerations through the Vanachai Integrated Materiality and Risk Assessment (V-IMRA). Key stakeholder groups relevant to different stages of the value chain were also identified at this stage, providing the basis for targeted engagement in subsequent steps.

By setting the context in a structured and evidence-based manner, Step 1 establishes a common understanding of Vanachai Group's operating reality and ensures that subsequent steps of the Double Materiality Assessment are relevant, consistent, and decision-useful.



“Establishing a clear understanding of Vanachai’s business, value chain, governance, and external environment as the foundation for the Double Materiality Assessment.”

Value chain analysis and ESG topic set

Value Chain Analysis

Understanding Vanachai Group's value chain is a foundational step in conducting a robust and decision-useful Double Materiality Assessment. A detailed value chain analysis enables the Group to identify where sustainability-related impacts, risks, and opportunities are most likely to arise, both within its own operations and across business relationships.

For the purpose of the 2025 Double Materiality Assessment, Vanachai Group conducted a comprehensive review of **its end-to-end value chain, covering both direct activities** and indirect upstream and downstream activities. The analysis reflects Vanachai's operating reality as a wood-based products manufacturer with manufacturing operations in Thailand and a strong export orientation.



The value chain assessment encompasses seven key stages:

- 1 Business Development (Strategy Technology and Innovation)
- 2 Ethical Sourcing and Resource Conservation
- 3 Efficient Manufacturing Excellence
- 4 Sustainable Market Engagement and Sales
- 5 Low-impact Logistics and Smart Distribution
- 6 Sustainable Customer Engagement and After-Sales Support
- 7 Circular Solutions and Recovery Practices

Across each stage, Vanachai assessed how its activities, products, and business relationships interact with environmental, social, and governance factors. This included identifying actual and potential ESG touchpoints, such as resource use, emissions, workforce conditions, community interactions, customer health and safety, data use, and governance practices.

The analysis combined internal knowledge of operations and processes with structured research and external perspectives, enabling a holistic understanding of sustainability-related touchpoints across the value chain. This approach ensures that both visible operational impacts and less direct, but potentially significant, upstream and downstream considerations are captured.

Development of the ESG Material Topic Set

Building on the value chain analysis, Vanachai Group developed an initial **ESG Material Topic Set** to support the identification of impacts, risks, and opportunities in subsequent assessment steps.

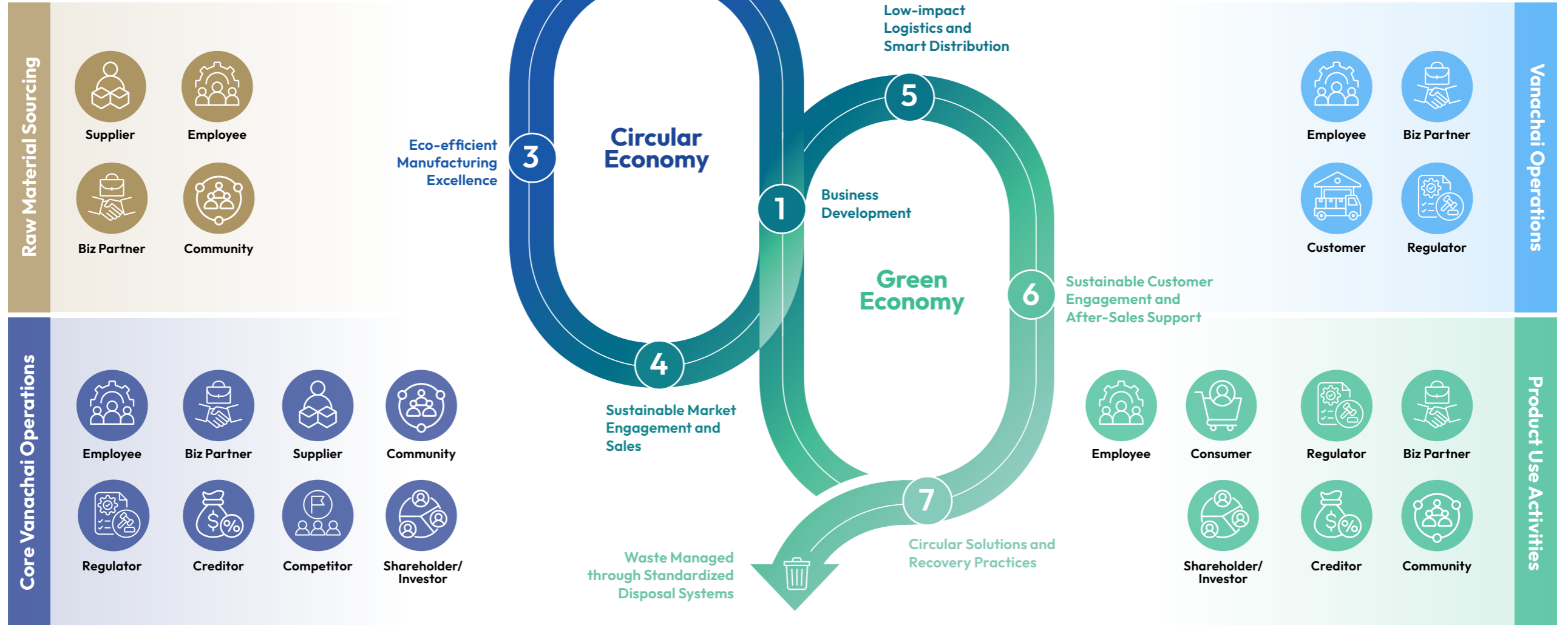
The topic set was developed through a review of internal documents, including policies, enterprise risk registers, and prior materiality assessments, together with an analysis of relevant international standards and frameworks, such as IFRS Sustainability Disclosure Standards, GRI Standards, and ESG rating criteria. Peer practices and sector-specific sustainability challenges relevant to the wood-based products industry and export-oriented businesses were also considered.

The identified topics were cross-checked against emerging regulatory and reporting expectations to ensure completeness and forward-looking relevance. Subject-matter expert input was used to validate the scope and applicability of the topic set.

The outcome is a **structured and comprehensive ESG material topic set**, mapped across Vanachai Group's value chain, which forms the foundation for identifying impacts, risks, and opportunities in Step 2 and for subsequent significance assessment and prioritization.

“A detailed value chain analysis was used to identify ESG touchpoints and define a comprehensive material topic set for further assessment.”

Overview of the Value Chain and Relationships with Key Stakeholder Groups of Vanachai



Key Stakeholder Groups



Employee
Employees,
Management



Customer
Wholesaler,
Construction builders,
Furniture manufacturers;
Developers,



Supplier
Local villagers,
SMEs, Raw material
providers



Business Partner
Logistics, service, and
strategic partners



Local Community
Communities
surrounding factory
locations



Consumer
End users of Vanachai
products



Creditor
Financial institutions
and Lenders



Shareholder/Investor
Shareholders and
Investment community



**Regulator/
Government**
Government agencies
and authorities



Competitor
Industry peers and
market competitors

Voices Aligned to What Matters Most

Impact on People & Planet

Vanachai Group assessed actual and potential environmental and social impacts using a structured, evidence-based approach that integrates stakeholder perspectives.

The assessment drew on internal and external sources, including industry research, regulatory guidance, corporate policies, operational and environmental data, occupational health and safety records, community engagement information, employee feedback, customer surveys, and prior risk and materiality assessments. These sources served as proxies for stakeholder perspectives across employees, customers, suppliers, communities, and society.

Internal experts reviewed and assessed identified impacts through cross-functional discussions, supported by targeted stakeholder interviews where deeper insight was required. This approach ensures consistent and transparent assessment aligned with international sustainability reporting expectations.

Outward Impact

A broad range of internal
and external sources

Expert judgment from
internal specialists

Targeted external
engagement

Inward Risk & Opportunity

A strong network of risk and
governance functions

Expert input from internal
specialists

Calibration against external
stakeholder perspectives

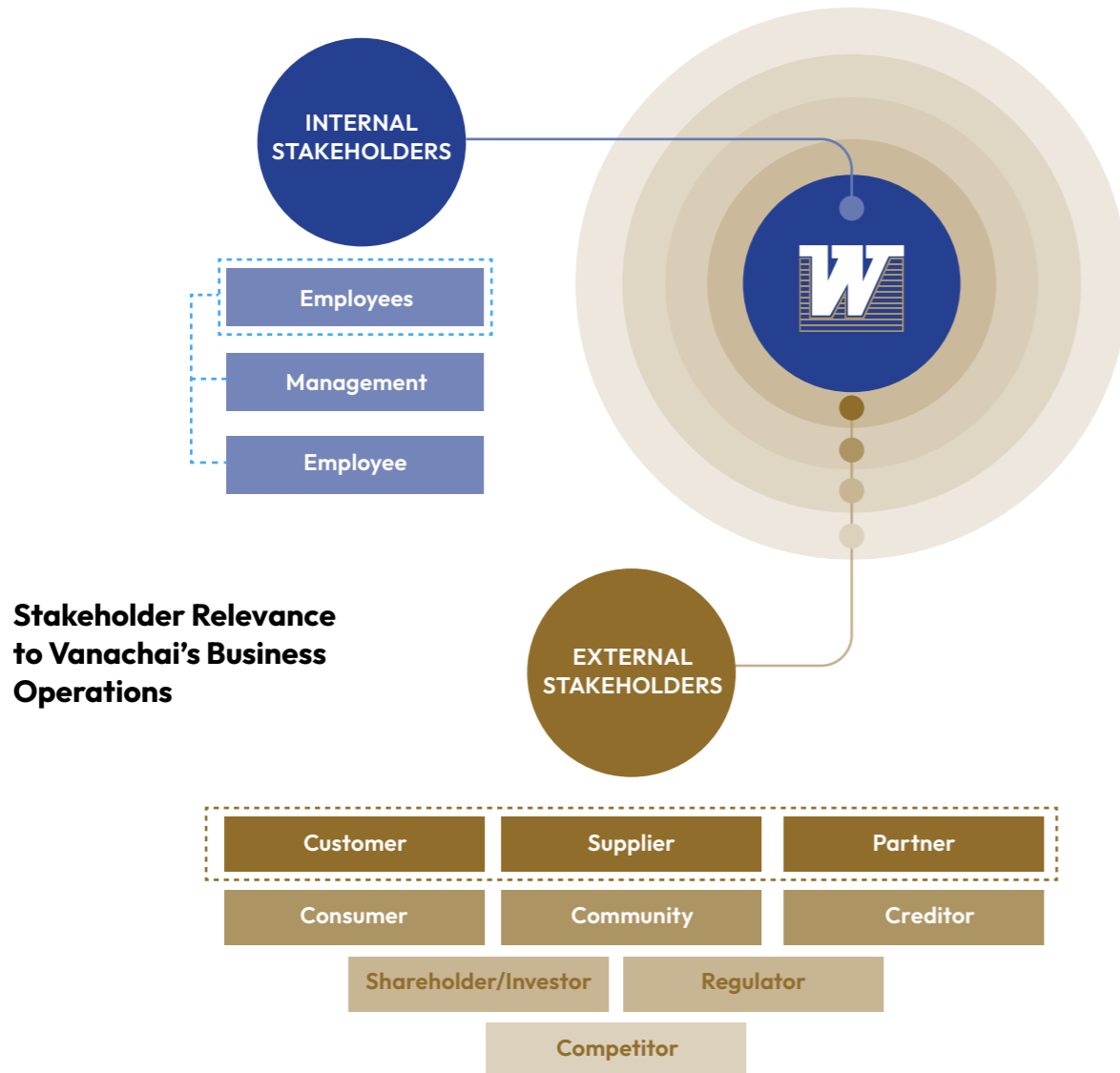
Risks and Opportunities Shaping Our Future

Vanachai Group assessed sustainability-related risks and opportunities that may affect business performance, resilience, and long-term value creation through a structured, inward-looking approach.

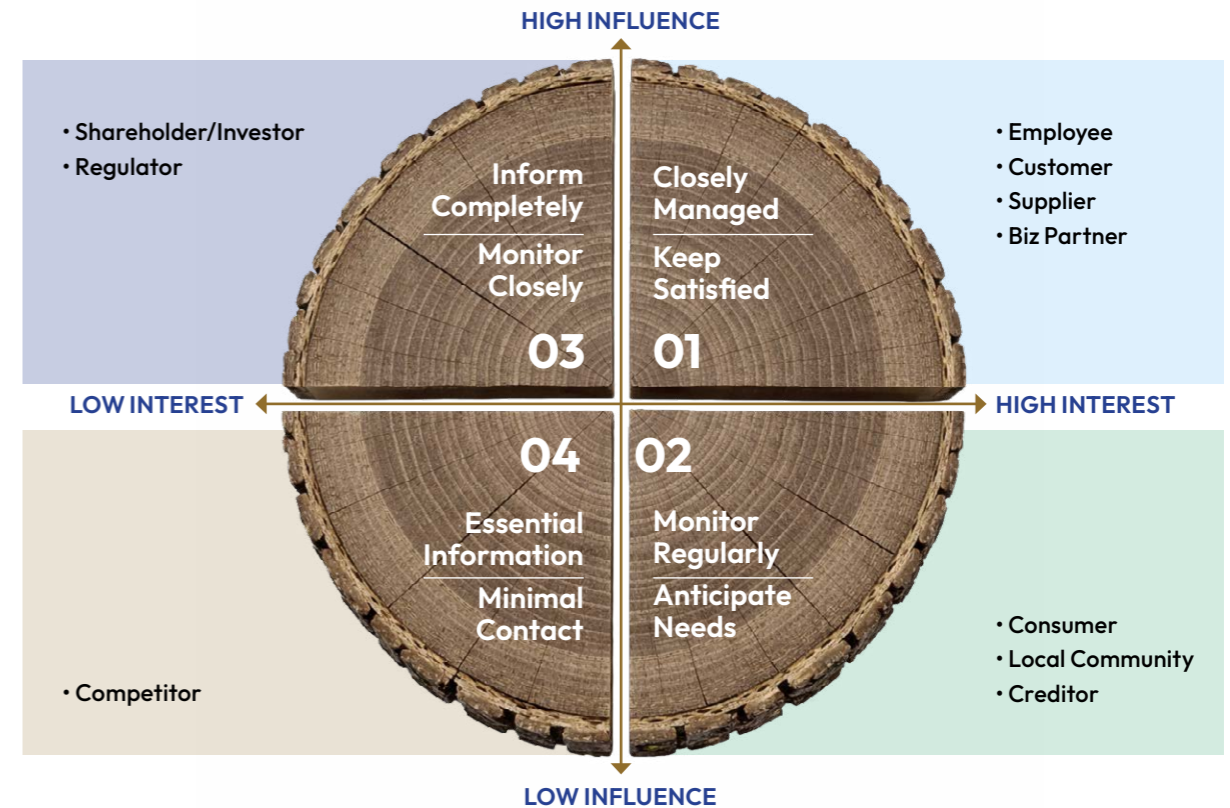
The assessment involved cross-functional teams, including enterprise risk management, strategy, operations, finance, IT and data security, legal and compliance, and sustainability teams, working with risk owners to identify and assess key risks and opportunities.

External perspectives were considered through regulatory developments, market expectations, and investor-related insights, supported by sustainability reporting standards emphasizing financial materiality. This approach ensures that identified risks and opportunities reflect factors that may reasonably influence the Group's future prospects.

Key Stakeholder Analysis



Stakeholder Relevance to Vanachai's Business Operations



Stakeholders Providing Input on Material Topics within the ESG Framework

- 01 High Influence / High Interest:** Must be closely managed to ensure this group's satisfaction is maximized
- 03 High Influence / Low Interest:** Must be adequately informed and communicated with to prevent significant or serious issues
- 02 Low Influence / High Interest:** Must be managed to maintain an appropriate level of satisfaction
- 04 Low Influence / Low Interest:** Must be monitored closely, as competitors may potentially become business partners in the future

Key Stakeholder Voices That Shape Our Priorities

Engaging with stakeholders is a critical element of Vanachai Group's Double Materiality Assessment, as it enables the Group to understand stakeholder expectations, incorporate practical insights, and ensure that sustainability priorities reflect real business and societal considerations. Stakeholder input supports **both impact materiality and financial materiality**, strengthening the relevance and credibility of the assessment outcomes.

For the 2025 assessment, Vanachai engaged a broad range of **internal and external stakeholders** who have significant interaction with the Group across its value chain. These included employees, customers, suppliers, community representatives, and other relevant stakeholders. Engagement activities were designed to capture diverse perspectives on the Group's operations, products, services, and their actual and potential impacts. Vanachai adopted a two-pronged engagement approach combining quantitative and qualitative methods.

First, stakeholder feedback was gathered through structured surveys, enabling the Group to collect input from a wide stakeholder base. Survey participants were asked to assess the relevance and importance of identified ESG topics and to highlight areas they believe should be prioritized. This approach provided a broad overview of stakeholder perceptions and helped identify topics of common concern.

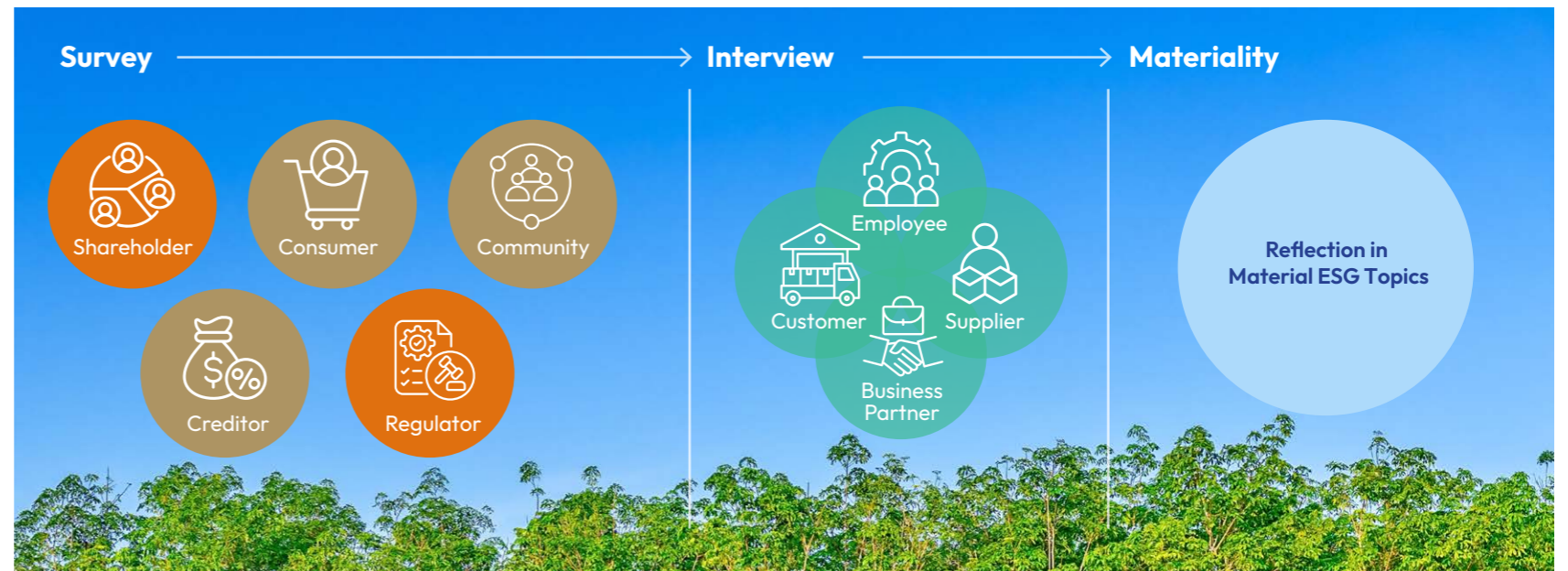
Second, **targeted interviews** were conducted with selected stakeholders to gain deeper insights into key impacts, risks, and opportunities. These discussions focused on understanding stakeholder experiences, expectations, and perspectives related to Vanachai's business practices, including environmental performance, product responsibility, workforce issues, supply chain practices, and community impacts. The interviews also served to validate and enrich the survey results by providing context and qualitative depth.

The combination of surveys and interviews allowed Vanachai to achieve both **breadth and depth of insight**, ensuring that stakeholder perspectives were meaningfully integrated into the materiality assessment. Insights gathered through this process were used to inform the identification, assessment, and prioritization of sustainability topics, supporting a balanced evaluation of both societal impacts and potential implications for business performance and long-term value creation.

By actively listening to stakeholder voices, Vanachai reinforces its commitment to transparency, informed decision-making, and shared value creation, ensuring that sustainability priorities are shaped not only by internal considerations but also by those who are directly affected by, or influence, the Group's operations.

“Stakeholder insights strengthen our understanding of what matters most for society, for our business, and for the future.”

Stakeholders Participation Process



Step 2:

Identify What Matters - Identify relevant sustainability topics, impacts, risks, and opportunities

Building on the understanding of Vanachai Group's business context and external environment established in Step 1, the second step of the Double Materiality Assessment focuses on **identifying sustainability topics that may be material** from both an impact and a financial perspective. This step aims to ensure that all relevant topics, impacts, risks, and opportunities are captured comprehensively before any prioritization takes place.

In this step, Vanachai Group identified a long list of potentially relevant sustainability ESG topics by reviewing internal documents, including corporate policies, enterprise risk registers, operational procedures, and previous materiality assessments. External sources were also considered,



such as international sustainability reporting standards, ESG rating frameworks, peer disclosures, and regulatory developments relevant to the wood-based products industry and export-oriented businesses.

For each sustainability topic identified, the Group mapped **associated impacts, risks, and opportunities (IROs)** across the value chain. This included identifying **actual and potential impacts** on the environment and society arising from operations and business relationships, as well as **sustainability - ESG related risks and opportunities** that could reasonably be expected to affect the Group's financial performance, position, cash flows, or future prospects.

Stakeholder perspectives were incorporated at this stage to validate the relevance of identified topics and IROs. Vanachai Group engaged with key internal and external stakeholders who have significant interaction with different stages of the value chain, ensuring that the identification process reflects both operational realities and stakeholder expectations.



“Identifying all relevant sustainability topics and mapping their impacts, risks, and opportunities across the value chain.”

The outcome of Step 2 is a **comprehensive and validated list of sustainability topics and their associated impacts, risks, and opportunities**, which forms the basis for the subsequent assessment of significance in Step 3.



Step 3:

Assess Significance - Assess the significance of impacts and financial implications

Following the identification of relevant sustainability topics, impacts, risks, and opportunities in Step 2, the third step of the Double Materiality Assessment focuses on **assessing their significance** from both an **impact materiality** and a **financial materiality** perspective. This step ensures that the assessment moves from identification to a structured evaluation based on defined criteria and evidence.

From an **impact perspective**, Vanachai Group assessed the significance of **actual and potential impacts** on the environment and society across its operations and value chain. Impacts were evaluated based on criteria such as **severity and likelihood**, including the scale and scope of impacts, the extent to which impacts could be remediated, and the probability of occurrence. This assessment reflects the Group's responsibility to understand and manage how its activities and business relationships affect people and the environment.

“Assessing the severity and likelihood of impacts, and the magnitude and likelihood of financial risks and opportunities.”

From a **financial perspective**, Vanachai Group assessed sustainability-related **risks and opportunities** that could reasonably be expected to affect the Group's financial performance, position, cash flows, or future prospects. This assessment considered factors such as **magnitude and likelihood of financial effects**, time horizons, and potential implications for costs, revenues, assets, liabilities, and access to markets. Sustainability-related risks and opportunities were assessed in alignment with the Group's enterprise risk management framework and V-IMRA methodology.

To ensure consistency and comparability, Vanachai Group applied **aligned scoring scales and thresholds** for both impact and financial assessments, while maintaining a clear distinction between the two dimensions. Inputs from internal subject-matter experts, operational data, and stakeholder feedback were incorporated to support a balanced and evidence-based evaluation.

The outcome of Step 3 is a **structured assessment of the relative significance** of each identified sustainability topic and its associated impacts, risks, and opportunities. These results provide the analytical foundation for prioritization and material topic determination in Step 4.

Impact Materiality - Inside-out

Impact Materiality: Severity Assessment				Likelihood Assessment Score (LAS*)	Total Score
Scope of Impact 1	Scale of Impact 2	Irremediably of Impact 3	SAS Severity Assessment Score		
			1 2 3 /3		SAS * LAS

Financial Materiality - Outside-in

Financial Materiality: Severity Assessment			Likelihood Assessment Score (LAS*)	Total Score
Qualitative Criteria 1	Qualitative Criteria 2	SAS Severity Assessment Score		
		1 2 /2		SAS * LAS

*LAS : Likelihood Assessment Score

Step 4:

Prioritize Material Topics - Prioritize topics based on impact and financial relevance



“Prioritizing sustainability topics based on their significance to impacts on society and the environment, and their relevance to financial performance and resilience.”

Following the assessment of impact and financial significance in Step 3, the fourth step of the Double Materiality Assessment focuses on **prioritizing sustainability topics** to determine which topics are material for Vanachai Group. This step translates analytical results into a clear set of **Priority Material Topics** that require focused management attention and disclosure.

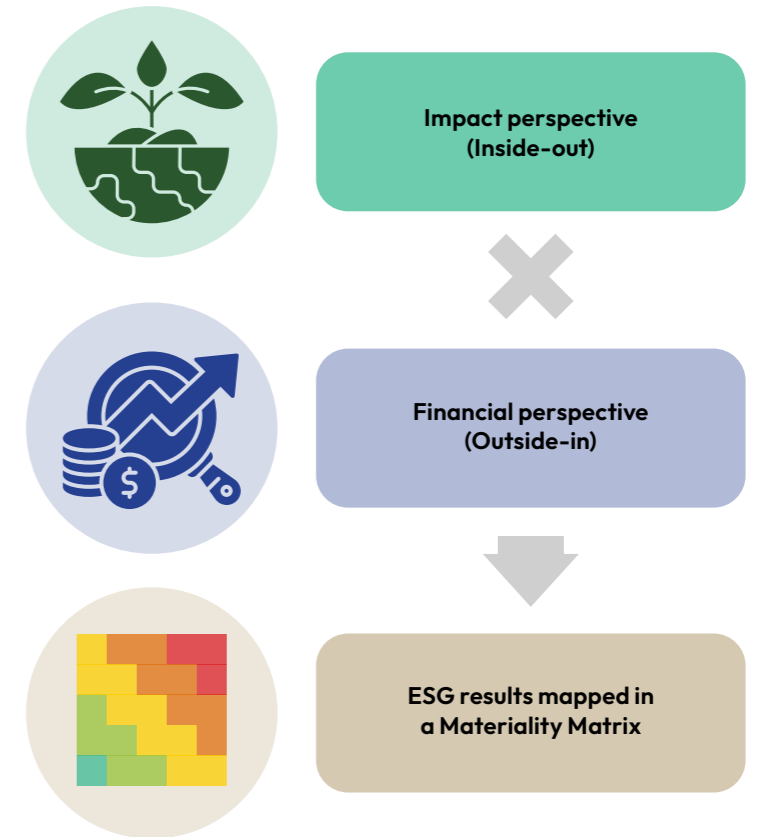
In this step, Vanachai Group consolidated the results of **the impact materiality assessment and the financial materiality assessment**. Sustainability topics were evaluated based on whether they exceeded defined significance thresholds in either dimension. Topics assessed as significant from an impact perspective, a financial perspective, or both were identified as material, consistent with the double materiality principle.

The prioritization process considered the **relative positioning of topics** across both dimensions, enabling the Group to distinguish between topics with primarily environmental or social impacts, those with direct financial implications, and those that are significant across both perspectives. This approach supports a balanced understanding of sustainability issues that affect Vanachai Group's responsibilities to society and the environment, as well as its long-term business performance and resilience.

The prioritized topics were then mapped against the Group's value chain and strategic focus areas to ensure relevance to core business activities and decision-making processes. This mapping also supports clarity on ownership, accountability, and where actions and controls are most effectively applied.

The outcome of Step 4 is a **final list of Priority Material Topics**, supported by clear rationale and evidence, which forms the basis for sustainability strategy development, performance management, and external disclosure.

Overall priority levels were determined by multiplying impact and financial materiality scores and categorizing results into five priority levels to enhance differentiation and support strategic decision-making.



Step 5:

Validate and Integrate - Validate results and integrate into governance, strategy, and ERM



V-IMRA

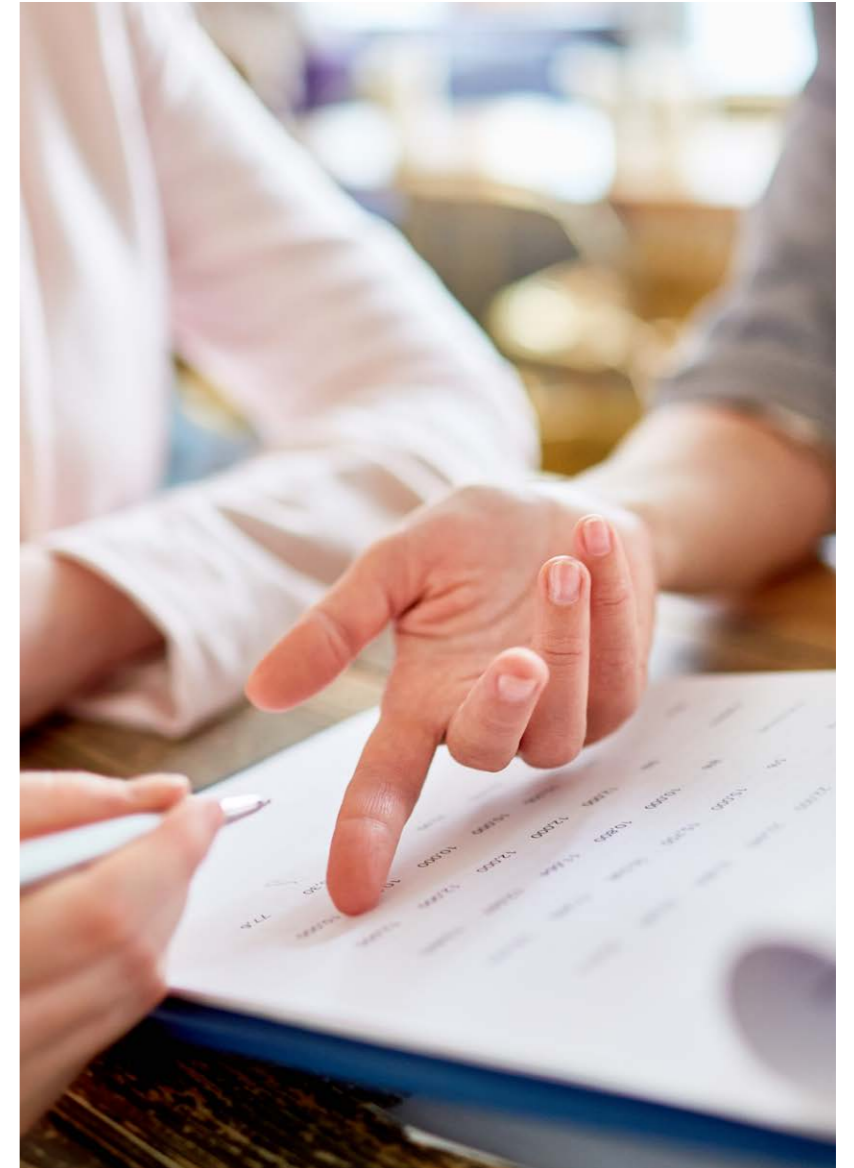
“Validating material topics through governance oversight and embedding outcomes into strategy, ERM, and performance management.”

The final step of the Double Materiality Assessment focuses on validating the assessment results and integrating the outcomes into Vanachai Group’s governance, strategy, and enterprise risk management processes. This step ensures that the DMA is not a standalone exercise, but a practical tool that informs decision-making and long-term value creation.

In this step, the prioritized material topics and their associated impacts, risks, and opportunities were reviewed and validated by senior management and relevant internal functions to confirm accuracy, completeness, and alignment with the Group’s business context. Where appropriate, the results were presented to the Board of Directors and relevant Board committees to provide oversight and ensure consistency with the Group’s strategic direction and risk appetite.

The validated outcomes of the DMA were then integrated into strategy development, enterprise risk management (ERM), and performance management, including the Vanachai Integrated Materiality and Risk Assessment (V-IMRA). Material sustainability-related risks and opportunities were incorporated into risk registers, strategic planning, and action plans, with clear ownership and accountability assigned.

Finally, the results of the DMA were used to support transparent and decision-useful disclosure in sustainability and integrated reporting, and to guide ongoing stakeholder engagement. Through this validation and integration process, Vanachai Group ensures that material sustainability issues are embedded in governance structures, management processes, and business decisions, supporting resilience, accountability, and long-term sustainable value creation.



Our Assessment Results



Our Assessment Results

From an **outward (impact) perspective**, Vanachai Group identified **actual and potential impacts on the environment and society** arising from its operations and value chain. The most significant impacts both positive and negative, are concentrated in upstream and downstream activities, including raw material sourcing, manufacturing operations, product use, and interactions with employees, customers, and local communities.

Key environmental impacts relate to **climate change, energy and resource use, waste and water management, and responsible natural resource use**, while key social impacts relate to **occupational health and safety, employee well-being, community engagement, and customer health and safety**.

These impacts are closely linked to the Group's core business activities and require ongoing management and improvement.

From an **inward (financial) perspective**, the assessment identified **sustainability-related risks and opportunities** that could reasonably be expected to affect Vanachai Group's financial performance and long-term resilience. Key risks include **climate-related transition and physical risks, geopolitical and logistics disruptions affecting export markets, supply chain reliability, evolving regulatory and customer requirements, and digital and data security risks**. While many risks are currently mitigated through governance and ERM processes, several remain material due to their potential significance if conditions change.

The assessment also identified **opportunities**, particularly in **improving energy and resource efficiency, product quality and durability, customer**

trust through strong health and safety standards, digital capability, and overall business resilience.

Overall, the Double Materiality Assessment confirms that Vanachai's material impacts, risks, and opportunities are interconnected across the value chain and provide a clear basis for prioritizing sustainability topics that are relevant to both **societal outcomes and long-term value creation**.

“Responsible products are the foundation of enduring customer trust. High standards of product quality, safety, and environmental performance reduce regulatory and reputational risks while strengthening customer confidence and long-term competitiveness.”

Product Responsibility and Customer Trust at the Core

Among the identified material topics, **Sustainable Product and Service Responsibility** emerges as a central theme from both an impact and financial perspective. Vanachai's products are used by a wide range of customers, including end users, contractors, furniture manufacturers, and developers, making **product quality, safety, and performance** critical to customer trust and business success.

Key material impacts relate to **customer health and safety**, including strict control of product-related environmental and health attributes such as formaldehyde emissions in line with international standards. At the same time, opportunities arise from **designing products that reduce waste at construction sites, extend product lifespan, and support greener and more cost-competitive buildings**.

These material impacts, risks, and opportunities are closely aligned with Vanachai Group's business strategy and innovation focus. By continuously improving product performance and working closely with customers and designers, the Group seeks to reduce negative impacts while creating positive value for customers and society. This reinforces the strategic importance of product responsibility as both a **driver of sustainability performance and a source of long-term competitiveness**.

FOREST - Transitioning Together to a Low-Carbon Future

1) Climate Change Mitigation and Adaptation

Climate Change Mitigation and Adaptation is a key material topic for Vanachai Group due to its direct relevance to business resilience, operational continuity, and long-term value creation. From a **mitigation perspective**, the Group focuses on reducing greenhouse gas emissions through energy efficiency, low-carbon energy transition, and improved operational performance across its value chain. These actions help manage transition risks related to regulation, energy costs, and market expectations, particularly in export markets.

From an **adaptation perspective**, Vanachai Group assesses and manages climate-related physical risks, such as extreme weather events and resource availability, which may affect manufacturing operations, logistics, and the stability of wood sourcing from communities and suppliers. Addressing both mitigation and adaptation enables the Group to respond proactively to climate-related impacts, protect business continuity, and align sustainability actions with strategy, risk management, and stakeholder expectations.

Key Relevant Environmental Sub-material Topics	Material Impacts				Description
	A	P	R	O	
Greenhouse Gas Emissions Reduction from Operations	●		●	●	Emissions from manufacturing processes and energy use contribute to climate change, while reductions through efficiency and fuel transition lower regulatory and cost risks and create efficiency opportunities.
Energy Transition and Fuel Switching	●	●	●	●	Continued reliance on fossil fuels poses transition risks, while investment in low-carbon or renewable energy supports emissions reduction, cost stability, and competitiveness.
Climate-Related Physical Risks to Operations		●	●		Extreme weather events, heat stress, flooding, or drought may disrupt manufacturing, logistics, or infrastructure, affecting operational continuity.
Climate Resilience of Wood Sourcing and Supply Chain		●	●	●	Climate impacts on forest productivity and supplier operations may affect raw material availability, while diversification and resilience measures strengthen supply security.
Regulatory and Policy Changes Related to Climate		●	●	●	Evolving climate regulations, carbon pricing, and disclosure requirements may increase compliance costs, while proactive alignment supports market access and investor confidence.
Climate-Related Market and Customer Expectations		●	●	●	Growing demand for low-carbon products and transparent climate performance creates market risks for non-aligned products and opportunities for differentiation.
Climate Adaptation Planning and Business Continuity		●		●	Strengthening adaptation planning and climate risk integration into ERM improves preparedness, resilience, and long-term operational stability.

(A = Actual impact P = Potential impact R = Risk O = Opportunity)

2) Greenhouse Gas Emissions and Decarbonization

Greenhouse Gas Emissions and Decarbonization is a key material topic for Vanachai Group due to its direct link to operational efficiency, cost competitiveness, regulatory exposure, and long-term transition risks and opportunities. As a wood-based products manufacturer, the Group generates greenhouse gas emissions primarily from energy-intensive manufacturing processes, purchased electricity, and value chain activities such as raw material sourcing and logistics.

Vanachai Group addresses this topic by systematically managing and reducing emissions across **Scopes 1, 2, and relevant Scope 3 categories**, while advancing a structured decarbonization pathway aligned with business strategy and enterprise risk management. Proactive emissions management supports compliance with evolving climate regulations, responds to customer and investor expectations in export markets, and strengthens resilience and value creation during the transition to a low-carbon economy.

Key Relevant Environmental Sub-material Topics	Material Impacts				Description
	A	P	R	O	
Direct GHG emissions from manufacturing operations	●		●	●	Emissions arising from fuel combustion and energy use in production processes represent actual impacts and potential cost and regulatory risks, while efficiency improvements and fuel optimization create opportunities to reduce emissions and operating costs.
Indirect GHG emissions from purchased electricity	●		●	●	Emissions associated with grid electricity consumption are an actual impact influenced by grid emission factors. Transitioning to lower-carbon electricity sources and improving energy efficiency present opportunities to reduce exposure to emissions and energy price volatility.
Value chain GHG emissions (Scope 3)		●	●	●	Emissions from upstream sourcing, transportation, and downstream activities represent potential impacts and transition risks, while supplier engagement and logistics optimization offer opportunities to reduce overall value chain emissions.
Emissions intensity and operational efficiency	●			●	Managing emissions per unit of production supports continuous improvement in energy and resource efficiency, enables benchmarking, cost savings, and improves competitiveness.
Decarbonization pathway and transition planning		●		●	Developing a structured decarbonization pathway supports long-term emissions reduction, capital planning, and alignment with climate transition expectations, strengthening business resilience.
Regulatory exposure and carbon-related compliance		●	●		Evolving climate regulations, carbon pricing mechanisms, and disclosure requirements in export markets may increase compliance costs and operational constraints if not proactively managed.

(A = Actual impact P = Potential impact R = Risk O = Opportunity)

3) Energy Efficiency and Low-Carbon Energy Transition

Energy Efficiency and Low-Carbon Energy Transition is a key material topic for Vanachai Group due to its direct impact on operational costs, greenhouse gas emissions, and long-term competitiveness. As a wood-based panel manufacturer, the Group's operations rely on energy-intensive processes, making energy efficiency and fuel choices critical factors in managing environmental impacts and exposure to energy price volatility.

Vanachai Group focuses on improving energy performance across manufacturing operations while gradually transitioning toward lower-carbon and renewable energy sources. These efforts support emissions reduction, enhance cost efficiency, and strengthen resilience against regulatory, market, and energy supply risks, while aligning energy management with business strategy and enterprise risk management.

Key Relevant Environmental Sub-material Topics	Material Impacts				Description
	A	P	R	O	
Energy consumption and efficiency in production processes	●		●	●	Energy use in manufacturing represents an actual impact and cost risk, while efficiency improvements reduce consumption, lower operating costs, and support emissions reduction.
Thermal energy use and fuel mix	●		●	●	The choice of fuels for heat generation affects emissions intensity and cost exposure, while transitioning to lower-carbon fuels improves efficiency and reduces transition risks.
Renewable and low-carbon energy sourcing		●		●	Increasing the share of renewable or low-carbon energy creates opportunities to reduce emissions, enhance energy security, and align with customer and regulatory expectations.
Energy cost management and price volatility	●		●		Exposure to fluctuating energy prices can affect operating costs and margins, highlighting the importance of efficiency measures and diversified energy sourcing.
Energy performance monitoring and data management	●			●	Accurate monitoring and analysis of energy consumption support continuous improvement, informed decision-making, and performance benchmarking.
Energy transition planning and investment		●		●	Structured planning for energy transition supports long-term cost efficiency, capital allocation, and readiness for future energy and climate requirements.

(A = Actual impact P = Potential impact R = Risk O = Opportunity)

4) Circular Economy and Resource Efficiency

Circular Economy and Resource Efficiency is a key material topic for Vanachai Group due to its relevance to raw material efficiency, cost management, waste reduction, and long-term resource security.

As a wood-based products manufacturer, the efficient use of wood raw materials and other inputs is essential to minimizing environmental impacts, reducing pressure on natural resources, and improving operational performance.

Vanachai Group promotes circular practices across its value chain by improving material efficiency in production, maximizing the use of by-products, and reducing waste generation. Advancing circularity supports cost efficiency, enhances supply resilience, and aligns the Group's operations with evolving regulatory, customer, and sustainability expectations, while contributing to sustainable value creation.

Key Relevant Environmental Sub-material Topics	Material Impacts				Description
	A	P	R	O	
Efficient use of wood raw materials	●		●	●	Inefficient use of wood raw materials represents an actual impact and cost risk, while improved yield and optimization reduce material loss, lower costs, and support sustainable resource use.
By-product and residue utilization	●			●	The use of production residues and by-products creates opportunities to reduce waste, improve resource efficiency, and generate additional value through reuse or alternative applications.
Waste reduction and material recovery	●		●	●	Waste generation from production processes has actual environmental impacts, while improved recovery, reuse, and recycling reduce disposal risks and support circular operations.
Product design supporting circularity		●		●	Designing products with durability, efficient material use, and end-of-life considerations enhances circularity and creates opportunities for reduced lifecycle impacts.
Resource efficiency in production processes	●			●	Improving resource efficiency across production processes supports cost savings, operational performance, and continuous improvement in material use.
Circular economy compliance and market expectations		●	●	●	Evolving circular economy regulations and customer expectations may create compliance risks, while proactive alignment supports market access and competitive advantage.

(A = Actual impact P = Potential impact R = Risk O = Opportunity)

5) Waste, Wastewater, and Pollution Prevention

Waste, Wastewater, and Pollution Prevention is a key material topic for Vanachai Group due to its direct relevance to environmental compliance, operational efficiency, and stakeholder expectations. As a wood-based panel manufacturer, the Group generates waste, wastewater, and emissions that require effective management to prevent environmental impacts and ensure compliance with applicable regulations.

Vanachai Group focuses on minimizing waste generation, managing wastewater responsibly, and preventing pollution through improved operational controls, treatment systems, and continuous improvement initiatives. Effective pollution prevention supports environmental protection, reduces regulatory and operational risks, and enhances the Group's reputation and long-term sustainability performance.

Key Relevant Environmental Sub-material Topics	Material Impacts				Description
	A	P	R	O	
Waste generation and disposal management	●		●		Waste generated from production processes represents an actual environmental impact and regulatory risk if not properly managed, highlighting the need for effective segregation, handling, and disposal practices.
Wastewater treatment and discharge quality	●		●		Wastewater generated from manufacturing operations requires appropriate treatment to meet discharge standards and prevent adverse impacts on water resources and surrounding communities.
Air emissions and process-related pollutants	●		●		Emissions from production processes may affect air quality if not adequately controlled, creating environmental and compliance risks that require effective monitoring and mitigation.
Pollution prevention and process control	●			●	Improved process controls and preventive measures reduce the likelihood of pollution incidents and create opportunities to enhance environmental performance and operational efficiency.
Hazardous materials and chemical management	●		●		The use and storage of chemicals present actual risks to the environment and human health, requiring strict controls, training, and monitoring to prevent spills and exposure.
Compliance with environmental regulations		●	●		Changes in environmental regulations and standards may increase compliance requirements and operational constraints if not proactively addressed.
Waste reduction and pollution prevention initiatives		●		●	Investments in waste minimization, recycling, and cleaner production initiatives create opportunities to reduce environmental impacts, improve efficiency, and lower long-term costs.

(A = Actual impact P = Potential impact R = Risk O = Opportunity)

6) Biodiversity and Responsible Natural Resource Use

Biodiversity and Responsible Natural Resource Use is a key material topic for Vanachai Group due to its close linkage to wood sourcing practices, resource efficiency, and long-term supply resilience. While the Group does not own or manage forests, its business relies on responsible sourcing of wood raw materials from communities, small and medium-sized enterprises, and external suppliers, making biodiversity considerations relevant across upstream activities.

Vanachai Group addresses this topic by promoting responsible sourcing practices, improving material efficiency, and reducing pressure on natural resources through circular use of materials. These actions support biodiversity conservation, strengthen supply chain resilience, and align the Group's operations with regulatory, market, and stakeholder expectations related to natural resource stewardship.

Key Relevant Environmental Sub-material Topics	Material Impacts				Description
	A	P	R	O	
Responsible wood sourcing from suppliers and communities	●		●	●	Sourcing wood from external suppliers and communities represents an actual impact on natural resources, while responsible procurement practices reduce biodiversity risks and support long-term supply stability.
Traceability and legality of raw materials	●		●		Ensuring traceability and legal compliance of wood raw materials is critical to preventing illegal sourcing, avoiding regulatory and reputational risks, and maintaining market access.
Resource efficiency and reduced pressure on natural resources	●			●	Efficient use of wood and other inputs reduces demand on natural resources, supporting biodiversity conservation while improving material efficiency and cost performance.
Supply chain biodiversity-related risks		●	●		Climate change, land-use change, and ecosystem degradation may affect wood availability and quality, posing potential risks to supply continuity and cost stability.
Supplier engagement on responsible resource use		●		●	Engaging suppliers on sustainable sourcing practices creates opportunities to strengthen supply chain resilience, improve transparency, and align with biodiversity expectations.
Regulatory and market expectations on biodiversity		●	●	●	Evolving biodiversity-related regulations and customer requirements may increase compliance risks, while proactive alignment supports market confidence and long-term competitiveness.

(A = Actual impact P = Potential impact R = Risk O = Opportunity)

7) Water Stewardship and Water Security

Water Stewardship and Water Security is a key material topic for Vanachai Group due to its relevance to manufacturing continuity, regulatory compliance, and relationships with surrounding communities. As a wood-based panel manufacturer, the Group relies on water for production processes and wastewater management, making reliable access to water and responsible water use critical to operational resilience.

Vanachai Group addresses this topic by managing water consumption efficiently, ensuring appropriate wastewater treatment, and monitoring water-related risks at its operating sites. Strengthening water stewardship supports long-term water availability, reduces operational and regulatory risks, and aligns the Group's practices with stakeholder expectations and evolving water-related regulations.

Key Relevant Environmental Sub-material Topics	Material Impacts				Description
	A	P	R	O	
Water consumption and efficiency in operations	●		●	●	Water use in manufacturing represents an actual impact on local water resources, while efficiency improvements reduce consumption, lower costs, and support long-term water security.
Wastewater treatment and discharge management	●		●		Wastewater generated from production processes requires effective treatment and monitoring to meet discharge standards and prevent adverse impacts on water quality.
Water availability and local water stress		●	●		Changes in water availability, seasonal variability, or local water stress may affect operational continuity and increase competition for shared water resources.
Water-related regulatory compliance		●	●		Evolving water regulations and discharge requirements may increase compliance obligations and operational constraints if not proactively managed.
Water risk assessment and monitoring		●		●	Systematic assessment and monitoring of water-related risks support early identification of vulnerabilities and improve preparedness for future water challenges.
Water stewardship engagement with stakeholders		●		●	Engaging with local communities, authorities, and other water users creates opportunities to strengthen water stewardship, enhance trust, and support shared water security.

(A = Actual impact P = Potential impact R = Risk O = Opportunity)

FUTURE - Strengthening Responsible and Resilient Governance

8) Business integrity and Anti-corruption

Business Integrity and Anti-Corruption is a key material topic for Vanachai Group due to its fundamental importance to ethical business conduct, regulatory compliance, and long-term trust with stakeholders. As a publicly listed company with complex operations, supply chains, and business relationships, maintaining high standards of integrity is essential to safeguarding the Group's reputation and financial sustainability.

Vanachai Group addresses this topic through a robust governance framework, clear policies and codes of conduct, and ongoing risk management and internal controls. Promoting ethical behavior and preventing corruption across operations and business relationships strengthens corporate governance, reduces legal and reputational risks, and supports sustainable value creation.

Key Relevant Environmental Sub-material Topics	Material Impacts				Description
	A	P	R	O	
Ethical business conduct and corporate culture	●		●	●	The Group's culture and leadership behavior directly influence ethical conduct. Strong ethical values reduce misconduct risks and support trust, while weaknesses may lead to compliance and reputational issues.
Anti-corruption policies and controls	●		●		Clear policies, procedures, and internal controls are essential to prevent bribery and corruption and to ensure compliance with applicable laws and regulations.
Corruption risks in operations and business relationships		●	●		Complex operations and interactions with external parties may expose the Group to potential corruption risks if not properly assessed and managed.
Third-party integrity and due diligence		●	●	●	Effective due diligence of suppliers, contractors, and partners reduces corruption risks and creates opportunities to strengthen responsible business relationships.
Whistleblowing mechanisms and grievance channels		●		●	Accessible and trusted reporting channels enable early detection of misconduct and reinforce a culture of transparency and accountability.
Training and awareness on integrity and anti-corruption		●		●	Regular training and communication increase awareness, strengthen compliance, and empower employees to act ethically in daily operations.

(A = Actual impact P = Potential impact R = Risk O = Opportunity)

9) Enterprise Risk Management and Oversight

Enterprise Risk Management and Oversight is a key material topic for Vanachai Group due to its critical role in supporting strategic decision-making, business resilience, and long-term value creation. Operating in a dynamic environment shaped by sustainability, regulatory, market, and geopolitical factors, the Group relies on effective risk management to identify, assess, and manage uncertainties that may affect performance and future prospects.

Vanachai Group integrates enterprise-wide risk management into governance, strategy, and operations, with oversight by the Board of Directors and senior management. Through a structured risk management framework, including the integration of sustainability-related risks and opportunities, the Group enhances transparency, strengthens accountability, and ensures that material risks are systematically considered in planning, investment, and performance management.

Key Relevant Environmental Sub-material Topics	Material Impacts				Description
	A	P	R	O	
Governance and oversight of enterprise risks	●		●	●	Clear governance structures and defined oversight responsibilities support effective risk management and accountability, while weaknesses may expose the Group to unmanaged strategic and operational risks.
Integration of sustainability and ESG risks into ERM	●			●	Embedding sustainability-related risks and opportunities into the ERM process strengthens decision-making and ensures alignment between sustainability priorities and business strategy.
Risk identification, assessment, and prioritization	●		●		Systematic identification and assessment of risks enable the Group to prioritize material risks and allocate resources effectively, reducing exposure to unforeseen disruptions.
Risk appetite, tolerance, and escalation mechanisms		●	●		Well-defined risk appetite and escalation processes help ensure timely responses to emerging risks and prevent misalignment between risk-taking and strategic objectives.
Monitoring, reporting, and risk disclosure	●			●	Regular monitoring and transparent reporting enhance management oversight, support regulatory compliance, and improve stakeholder confidence.
Emerging and forward-looking risk management		●	●	●	Assessing emerging risks and future trends supports proactive planning, resilience, and the identification of new opportunities in a changing business environment.

(A = Actual impact P = Potential impact R = Risk O = Opportunity)

10) Tax Transparency and Responsible Tax Practices

Tax Transparency and Responsible Tax Practices is a key material topic for Vanachai Group due to its importance in supporting good corporate governance, regulatory compliance, and trust with stakeholders. As a company operating and paying taxes primarily in Thailand, the Group's tax practices are closely linked to national regulations, public policy objectives, and stakeholder expectations regarding transparency and responsible contribution to public finances.

Vanachai Group is committed to complying with applicable tax laws and regulations and to conducting its tax affairs in a transparent and responsible manner. The Group lawfully utilizes tax incentives and benefits provided by the Thai government, including those related to innovation development and other approved programs, in accordance with applicable rules and policy intent. Responsible tax practices support regulatory compliance, reduce governance and reputational risks, and reinforce the Group's commitment to ethical business conduct.

Key Relevant Environmental Sub-material Topics	Material Impacts				Description
	A	P	R	O	
Compliance with tax laws and regulations	●		●		Full compliance with Thai tax laws and regulations is essential to avoid legal penalties, financial losses, and reputational damage.
Tax transparency and disclosure practices	●			●	Transparent reporting of tax-related information enhances stakeholder confidence and supports strong corporate governance.
Use of government tax incentives and benefits	●		●	●	The lawful use of tax incentives related to innovation development and other government programs supports investment and competitiveness, while requiring careful compliance to manage regulatory and reputational risks.
Tax governance and internal controls	●		●		Effective governance structures and internal controls ensure consistent tax compliance and reduce the risk of errors or misinterpretation of tax requirements.
Changes in tax legislation and policy		●	●		Future changes in tax laws or government policy may affect tax liabilities, incentives, and compliance obligations.
Stakeholder expectations on responsible taxation		●	●	●	Increasing stakeholder focus on responsible tax practices may create reputational risks if expectations are not met, while transparent engagement supports trust and credibility.

(A = Actual impact P = Potential impact R = Risk O = Opportunity)

11) Responsible Supply Chain and Partner Responsibility

Responsible Supply Chain and Partner Responsibility is a key material topic for Vanachai Group due to its close connection to operational continuity, product quality, regulatory compliance, and social and environmental impacts across the value chain. The Group's supply chain relies primarily on **small and medium-sized enterprises (SMEs) and local community suppliers**, particularly for wood raw materials and related services, making responsible sourcing and partner engagement critical to sustainable operations.

Vanachai Group promotes responsible supply chain practices through supplier standards, engagement, and monitoring, with a focus on legal compliance, ethical conduct, environmental stewardship, and respect for human rights. Strengthening supply chain responsibility supports long-term supplier relationships, reduces operational and reputational risks, and contributes to shared value creation for business partners and local communities.

Key Relevant Environmental Sub-material Topics	Material Impacts				Description
	A	P	R	O	
Responsible sourcing from SMEs and local communities	●		●	●	Sourcing from SMEs and community suppliers creates actual social and economic impacts, while responsible sourcing practices reduce supply disruption risks and support inclusive and sustainable local development.
Supplier standards, codes of conduct, and compliance	●		●		Clear supplier expectations and compliance mechanisms are essential to prevent environmental, social, and ethical risks within the supply chain.
Environmental and social risks in the supply chain		●	●		Potential risks related to labor practices, environmental management, and legal compliance among suppliers may affect business continuity and reputation if not properly managed.
Supplier engagement and capacity building		●		●	Engaging and supporting suppliers to improve sustainability performance creates opportunities to strengthen supply reliability, improve quality, and build long-term partnerships.
Traceability and transparency of key raw materials	●		●		Ensuring traceability of key raw materials is critical to managing legality, sustainability, and market access risks, particularly in export markets.
Long-term supplier relationships and resilience		●		●	Building stable, long-term relationships with suppliers enhances supply chain resilience and supports mutual growth and shared value creation.

(A = Actual impact P = Potential impact R = Risk O = Opportunity)

12) Geopolitical and Global Business Resilience

Geopolitical and Global Business Resilience is a key material topic for Vanachai Group due to its increasing impact on export markets, logistics operations, and overall business continuity. While this topic was **not assessed as highly material in previous assessment cycles**, recent global developments have elevated geopolitical risk to an **emerging and increasingly significant concern** for the Group. As **approximately 80% of total sales are derived from international markets**, Vanachai Group is particularly exposed to changes in the global geopolitical landscape.

In recent years, armed conflicts, political unrest, and geopolitical tensions have intensified and expanded across multiple regions, affecting trade flows, market stability, and transportation routes. These developments have led to disruptions in logistics networks, increased freight and insurance costs, and heightened uncertainty in key export markets.

In response, Vanachai Group has placed greater focus on monitoring geopolitical developments and integrating these risks into enterprise risk management and strategic planning. Strengthening global business resilience enables the Group to anticipate emerging risks, adapt to changing conditions, and safeguard long-term competitiveness in an increasingly uncertain global environment.

Key Relevant Environmental Sub-material Topics	Material Impacts				Description
	A	P	R	O	
Geopolitical instability in key export markets	●		●		Political unrest, conflict, or instability in export markets can directly affect customer demand, contract fulfillment, and payment risks, posing actual threats to export revenues.
Trade restrictions, sanctions, and policy changes		●	●		Changes in trade policies, tariffs, or sanctions may restrict market access or increase compliance burdens, potentially affecting sales volumes and margins.
Disruption of logistics routes and transportation networks	●		●		Geopolitical tensions and regional conflicts may disrupt shipping routes, ports, or transport corridors, causing delivery delays and operational challenges.
Logistics cost volatility and supply chain reliability	●		●		Increased fuel prices, insurance premiums, and rerouting of shipments may lead to higher logistics costs and reduced supply chain efficiency.
Market diversification and export resilience		●		●	Expanding and diversifying export markets and customer bases creates opportunities to reduce dependency on specific regions and enhance overall resilience.
Geopolitical risk monitoring and scenario planning		●		●	Systematic monitoring of geopolitical developments and scenario analysis supports proactive planning, informed decision-making, and faster response to emerging risks.

(A = Actual impact P = Potential impact R = Risk O = Opportunity)

13) Digital Transformation and Data Security

Digital Transformation and Data Security is a key material topic for Vanachai Group due to its growing importance in operational efficiency, business continuity, and the protection of critical business and customer information. Since **2022, the Group has invested significantly in the implementation of SAP as its enterprise resource planning (ERP) system**, strengthening data integration, process standardization, and decision-making across operations, supply chain, and commercial functions.

As Vanachai Group increasingly relies on digital systems and data-driven processes, particularly those involving customer and consumer-related information, effective data governance and cybersecurity have become essential. The Group addresses this topic by enhancing data security controls, strengthening cybersecurity measures, and building employee competencies through targeted training for personnel who interface with critical data and digital systems.

Effective digital transformation and robust data protection support operational resilience, safeguard stakeholder trust, and ensure that the Group remains competitive in an environment where data and digital capabilities are central to business performance.

Key Relevant Environmental Sub-material Topics	Material Impacts				Description
	A	P	R	O	
Digitalization of core business processes through ERP systems	●			●	Digital systems supporting production, supply chain, and sales enhance efficiency, accuracy, and decision-making, creating opportunities to improve operational performance and competitiveness.
Data security and protection of sensitive information	●		●		The handling of operational, customer, and business data creates actual exposure to data breaches and unauthorized access, requiring strong security measures to protect confidentiality and trust.
Cybersecurity threats and system resilience		●	●		Increasing cyber threats and system vulnerabilities may disrupt operations and compromise data integrity if preventive and response measures are not adequately implemented.
Data governance and access management	●		●	●	Clear data governance frameworks and access controls reduce security risks while enabling effective data use and compliance with regulatory and contractual requirements.
Digital risk management and controls		●	●		Failure to identify and manage digital and cyber risks may expose the Group to operational disruptions and compliance issues.
Digital competency building and data security training		●		●	Developing digital skills and encouraging adoption across the organization create opportunities to maximize the value of digital investments and support long-term transformation.

(A = Actual impact P = Potential impact R = Risk O = Opportunity)

14) Green and Inclusive Innovation

Green and Inclusive Innovation is a key material topic for Vanachai Group due to its role in **enhancing product performance, operational efficiency, and long-term competitiveness** while reducing environmental impacts.

In recent years, the Group has invested in innovation initiatives focused on improving product quality and functionality, including breakthrough performance beyond standard industry norms, such as enhanced moisture resistance suitable for wet-area applications (excluding direct exposure to rain or standing water).

Vanachai Group also **promotes an inclusive innovation culture by encouraging employees to continuously improve products, services, and processes based** on their daily work experience. Through the use of digital tools, process simplification, and cross-functional collaboration, employees contribute ideas that reduce costs, shorten process time, and improve operational effectiveness. Green and inclusive innovation supports safer product use, improved resource efficiency, and sustainable value creation across the value chain.

Key Relevant Environmental Sub-material Topics	Material Impacts				Description
	A	P	R	O	
Product innovation for enhanced performance and durability	●			●	Innovations that improve product performance, such as increased moisture resistance, enhance product reliability and reduce damage risks during use, creating value for customers and strengthening market differentiation.
Innovation supporting reduced environmental impacts		●		●	Developing products and solutions that improve efficiency or reduce material and resource use creates opportunities to lower environmental impacts across the product lifecycle.
Process innovation and operational improvement	●			●	Continuous improvement of production and service processes helps reduce waste, save time, and lower costs, supporting operational efficiency and competitiveness.
Digital-enabled innovation and process simplification	●			●	The use of digital tools and simplified workflows enables faster decision-making, improved accuracy, and more efficient use of resources across operations.
Employee-driven innovation and idea generation		●		●	Encouraging employees to contribute ideas based on their roles fosters a culture of continuous improvement and unlocks innovation potential at multiple stages of the value chain.
Inclusive innovation and capability development		●		●	Providing opportunities for employees to develop innovation-related skills supports broader participation, strengthens organizational capability, and sustains long-term innovation performance.

(A = Actual impact P = Potential impact R = Risk O = Opportunity)

15) Product Longevity and Lifecycle Performance

Product Longevity and Lifecycle Performance is a key material topic for Vanachai Group due to its direct contribution to waste reduction, resource efficiency, and sustainable consumption.

Vanachai Group believes that **extending product lifespan is one of the most effective ways to reduce waste generation and environmental impacts** associated with frequent replacement and disposal, which remain significant global challenges.

Vanachai Group **applies innovation and quality-focused design to develop durable wood-based products with enhanced performance and reliability**. At the same time, the Group is actively studying end-of-product-life management options through collaboration with research and development partners. **Integrating lifecycle performance considerations into product design and innovation supports responsible resource use, reduces waste over time, and strengthens long-term value creation.**

Key Relevant Environmental Sub-material Topics	Material Impacts				Description
	A	P	R	O	
Product durability and extended service life	●			●	Durable products with longer service life reduce the need for frequent replacement, lowering waste generation and improving overall resource efficiency.
Innovation-driven product quality improvement	●			●	Continuous innovation enhances product performance and reliability, supporting longevity and reinforcing customer confidence in product quality.
Waste reduction through longer product lifespan		●		●	Extending product lifespan creates opportunities to reduce waste volumes and environmental impacts associated with disposal and replacement.
Lifecycle performance assessment and monitoring		●		●	Assessing product performance across its lifecycle supports better design decisions and continuous improvement in durability and sustainability outcomes.
End-of-product-life research and solutions		●		●	Research into reuse, recycling, or recovery options at the end of product life creates opportunities to further reduce waste and advance circular economy practices.
Customer awareness of product use and maintenance		●		●	Providing guidance on appropriate product use and maintenance supports optimal performance, extends product life, and reduces premature disposal.

(A = Actual impact P = Potential impact R = Risk O = Opportunity)

16) Sustainable Product and Service Responsibility

Sustainable Product and Service Responsibility is a key material topic for Vanachai Group due to its direct impact on product quality, customer satisfaction, environmental performance, and long-term competitiveness. As a wood-based products manufacturer serving both end users and business customers, the Group places strong emphasis on delivering products and services that meet evolving design, performance, and sustainability requirements.

Vanachai Group focuses on responsible product development across the entire lifecycle, from design and customization to customer support. Products for end consumers, contractors, and builders are designed to fit diverse applications and construction designs, helping to reduce waste at job sites. For business-to-business customers, such as furniture manufacturers and property developers, the Group provides **tailored product sizes and specifications** to minimize unnecessary material waste. Through close collaboration with customers, designers, and partners, Vanachai Group continuously improves product quality, performance, and environmental and social attributes, including strict control of formaldehyde emissions in line with international standards. These efforts support greener buildings, cost competitiveness, and responsible value creation.

Key Relevant Environmental Sub-material Topics	Material Impacts				Description
	A	P	R	O	
Product quality and performance management	●		●	●	Consistent product quality and performance are essential to meeting customer expectations and maintaining trust, while continuous improvement creates opportunities for differentiation and long-term competitiveness.
Design-for-fit and waste reduction at customer sites	●			●	Designing products to fit construction needs helps reduce cutting losses and waste at job sites, supporting cost efficiency and environmental performance.
Tailored products for B2B customers	●			●	Customizing product sizes and specifications for furniture manufacturers and developers minimizes unnecessary material waste and improves production efficiency for customers.
Customer collaboration and co-development		●		●	Working closely with customers to co-develop products enables faster response to changing requirements and supports innovation in design and performance.
Environmental and social product safety standards	●		●		Strict control of product-related environmental and health impacts, including formaldehyde emissions in line with international standards, is critical to protecting end users and maintaining regulatory compliance.
Designer and partner engagement for sustainable buildings		●		●	Collaboration with designers and partners supports the development of greener, more cost-competitive building solutions and strengthens long-term market relevance.

(A = Actual impact P = Potential impact R = Risk O = Opportunity)

TOGETHER - Empowering People and Ensuring Safe Workplaces

17) Employee Well-being, Engagement, and Development

Employee Well-being, Engagement, and Development is a key material topic for Vanachai Group, reflecting the Group's strong belief that **people are central to sustainable business success**. A healthy, engaged, and capable workforce is essential to maintaining operational performance, driving innovation, and supporting long-term organizational resilience.

Vanachai Group emphasizes **fairness, mutual respect, and two-way communication** between employees and the organization. Structured performance appraisal processes, supported by **360-degree feedback**, are designed to promote transparency, constructive dialogue, and continuous improvement. These processes help ensure that expectations are clear and feedback is meaningful.

Employee development is further supported **through Individual Development Plans (IDPs)**, jointly defined by employees and the organization. IDPs align individual career aspirations with organizational needs, supporting capability development, engagement, and workforce readiness. Through ongoing investment in people development and leadership capability, Vanachai Group aims to strengthen employee motivation, retention, and long-term performance.

Key Relevant Environmental Sub-material Topics	Material Impacts				Description
	A	P	R	O	
Fair employment practices and equal opportunity	●		●	●	Fair treatment, non-discrimination, and equal opportunity contribute to employee trust and well-being, while failures in these areas may lead to legal, reputational, and morale-related risks.
Employee engagement and two-way communication	●			●	Regular dialogue and two-way communication channels enable employees to share feedback, concerns, and ideas, fostering engagement, trust, and a culture of continuous improvement.
Performance appraisal and feedback mechanisms	●			●	Performance appraisal processes, supported by 360-degree feedback, provide clarity on expectations and performance outcomes, while encouraging constructive discussions and development-oriented feedback.
Individual Development Plans (IDPs) and continuous learning	●			●	IDPs jointly agreed by employees and the organization support targeted skill development, career progression, and alignment between individual growth and business priorities.
Leadership development and talent management		●		●	Investing in leadership development and talent pipelines creates opportunities to strengthen organizational capability, succession planning, and long-term performance.
Employee retention, motivation, and workforce stability		●	●	●	High levels of engagement and development opportunities support retention and workforce stability, while disengagement or limited growth opportunities may increase turnover risks.

(A = Actual impact P = Potential impact R = Risk O = Opportunity)

18) Occupational Health and Safety

Occupational Health and Safety is a key material topic for Vanachai Group, reflecting the Group's belief that **employees are its most valuable asset**. Ensuring a safe, healthy, and supportive working environment is essential not only to protect employees from work-related injuries and illnesses, but also to sustain productivity, engagement, and long-term organizational performance.

Vanachai Group's approach to occupational health and safety extends beyond physical safety to **include mental health and overall well-being**. The Group seeks to create a working environment that supports employee safety, psychological well-being, and creativity, recognizing that a positive and inclusive workplace contributes to better performance, innovation, and employee satisfaction. By integrating health and safety management into daily operations and fostering a culture of prevention and care, Vanachai Group aims to reduce risks, enhance well-being, and support sustainable workforce performance.

Key Relevant Environmental Sub-material Topics	Material Impacts				Description
	A	P	R	O	
Workplace safety and accident prevention	●		●		Managing workplace hazards and preventing accidents are essential to protecting employees from injury and ensuring compliance with health and safety regulations.
Occupational health risk management	●		●		Identifying and managing occupational health risks, including exposure to physical, chemical, and ergonomic hazards, reduces the likelihood of work-related illnesses.
Mental health and psychological well-being	●			●	Supporting mental health and managing work-related stress contribute to employee well-being, engagement, and sustained performance.
Safe and healthy working environment	●		●	●	Providing safe facilities, appropriate equipment, and healthy working conditions reduces safety risks while creating opportunities for improved morale and productivity.
Health and safety training and awareness	●			●	Training and awareness programs enhance employees' understanding of safety practices and empower them to take responsibility for their own and others' safety.
Safety culture and employee participation		●		●	Encouraging employee participation in safety initiatives strengthens safety culture, improves risk identification, and supports continuous improvement.

(A = Actual impact P = Potential impact R = Risk O = Opportunity)

19) Respect for Human Rights and Community Development

Human Rights and Community Development is a key material topic for Vanachai Group due to its close connection to local communities surrounding the Group's manufacturing facilities and its responsibility to respect human rights throughout its operations and business relationships.

With multiple factories operating in different locations, the Group recognizes the importance of maintaining constructive relationships with communities and ensuring that its activities do not adversely affect the rights and well-being of local stakeholders.

Vanachai Group addresses this topic through dedicated **corporate social responsibility (CSR)** teams at factory level, which engage regularly with community representatives, local authorities, and other stakeholders. These teams support ongoing dialogue, identify community needs, and implement development initiatives that contribute to social well-being. By integrating respect for human rights and community development into daily operations and engagement practices, the Group seeks to foster trust, mitigate social risks, and create shared value for communities and the business.

Key Relevant Environmental Sub-material Topics	Material Impacts				Description
	A	P	R	O	
Respect for human rights in operations	●		●		Ensuring respect for human rights in daily operations is essential to prevent adverse impacts on employees, contractors, and communities and to comply with legal and ethical standards.
Community engagement and dialogue	●			●	Regular communication and engagement with local communities support mutual understanding, trust, and effective identification of community concerns and expectations.
Local community development initiatives	●			●	Community development activities implemented through CSR teams contribute to social well-being, strengthen relationships, and support sustainable local development.
Social impact management around factories		●	●		Manufacturing activities may create potential social impacts, such as noise, traffic, or other disturbances, requiring proactive management to prevent community-related risks.
Grievance mechanisms and complaint handling	●		●	●	Accessible grievance channels enable communities to raise concerns, support timely resolution, and reduce the risk of escalation while strengthening trust.
Human rights due diligence in business relationships		●	●		Assessing human rights risks in supply chains and partnerships helps prevent indirect impacts and protects the Group from reputational and compliance risks.

(A = Actual impact P = Potential impact R = Risk O = Opportunity)

20) Customer Responsibility and Trust

Customer Responsibility is a key material topic for Vanachai Group due to its direct link to customer trust, product quality, health and safety, and long-term business success. Serving a diverse customer base that includes end consumers, contractors, builders, furniture manufacturers, and developers, the Group recognizes that understanding and responding to customer needs is essential in a rapidly evolving market environment.

Vanachai Group places strong emphasis on listening to customers and continuously improving products and services. The Group conducts **customer satisfaction surveys on an annual basis** to assess service quality, identify areas for improvement, and gather feedback and suggestions for product development. Beyond meeting customer expectations, Vanachai Group is committed to delivering value beyond expectations, with particular **focus on customer health and safety**. Through ongoing innovation, quality improvement, and responsible product development, the Group aims to provide safe, reliable, and high-performance products that strengthen long-term customer relationships and market confidence.

Key Relevant Environmental Sub-material Topics	Material Impacts				Description
	A	P	R	O	
Customer satisfaction and service quality	●		●	●	High levels of customer satisfaction support repeat business and reputation, while service failures may lead to customer dissatisfaction and competitive risks.
Customer feedback and engagement mechanisms	●			●	Annual customer satisfaction surveys and regular engagement provide valuable insights that support service improvement and product development.
Customer health and safety	●		●		Ensuring product safety and minimizing health-related risks, including compliance with applicable standards, are essential to protecting customers and maintaining trust.
Product and service improvement based on customer needs		●		●	Using customer feedback to guide innovation and improvement creates opportunities to deliver solutions that better meet evolving requirements.
Responsible marketing and communication	●		●		Accurate and transparent communication about product performance and use is critical to preventing misuse and maintaining customer confidence.
Long-term customer trust and loyalty		●		●	Consistently delivering quality, safety, and value beyond expectations strengthens customer relationships and supports sustainable business growth.

(A = Actual impact P = Potential impact R = Risk O = Opportunity)

Summary: Impacts, Risks, and Opportunities (IROs)

Vanachai Group's Double Materiality Assessment (DMA) provides a structured understanding of the most significant sustainability-related **Impacts, Risks, and Opportunities (IROs)** across the Environmental, Governance, and Social pillars. The assessment considers both **impact materiality**, reflecting the Group's effects on the environment and society, and **financial materiality**, reflecting sustainability-related risks and opportunities that may influence business performance, resilience, and long-term value creation.





From **an impact perspective**, the Group's most significant actual impacts arise from energy use, greenhouse gas emissions, waste and wastewater generation, occupational health and safety conditions, and product quality and safety. These impacts are primarily concentrated within manufacturing operations and downstream product use. Potential impacts are associated with climate change, biodiversity pressures in the supply chain, water security near operating sites, community well-being around factories, and end-of-product-life considerations.

From **a risk and opportunity perspective**, the DMA identifies several external and internal factors that may affect Vanachai Group's financial performance and strategic objectives. Key risks include climate-related transition and physical risks, geopolitical instability affecting export markets and logistics routes, regulatory changes related to environmental and product standards, supply chain reliability risks involving SMEs and community suppliers, and digital and data security risks. At the same time,

the Group is well positioned to capture opportunities through energy and resource efficiency, product innovation and durability, customer-centric product development, workforce capability enhancement, and strengthened governance and risk management practices.

The identified IROs are integrated into **Vanachai Group's strategy development, Enterprise Risk Management (ERM), and performance**

management processes, including the Vanachai Integrated Materiality and Risk Assessment (V-IMRA). This integration enables informed decision-making, prioritization of investments, and proactive management of sustainability-related challenges and opportunities. Overall, the DMA reinforces that sustainability considerations are integral to Vanachai Group's business strategy and long-term resilience.

Main Stakeholders	Perspective on the Prioritization of Impacts, Risks, and Opportunities				
	Ranking 1	Ranking 2	Ranking 3	Ranking 4	Ranking 5
 Employee	Employee Well-being	Workplace Safety	Business Integrity	Risk Governance	Digital & Data Security
 Customer	Product Responsibility	Customer Trust	Business Integrity	Product Durability	Geopolitical Resilience
 Supplier	Business Integrity	Responsible Supply Chain	Product Responsibility	Nature & Biodiversity	Human Rights & Community
 Biz Partner	Business Integrity	Product Responsibility	Responsible Supply Chain	Sustainable Innovation	Digital & Data Security

Summary of Key IROs by Material Topic

Legend: A = Actual impact P = Potential impact

ESG Material Topic	Key Impacts (A/P)	Key Risks	Key Opportunities
1) Climate Change Mitigation and Adaptation	A/P: Emissions, Climate Impacts on Operations	impacts on Operations, Climate Regulation, Extreme Weather	Resilience Planning, Emissions Reduction
2) Greenhouse Gas Emissions and Decarbonization	A: Operational Emissions	Carbon Costs, Compliance	Efficiency, Decarbonization Pathway
3) Energy Efficiency and Low-Carbon Energy Transition	A: Energy Consumption	Energy Price Volatility	Cost Savings, Low-carbon Energy
4) Circular Economy and Resource Efficiency	A: Material Use, Waste	Resource Inefficiency	Waste Reduction, Circular Practices
5) Waste, Wastewater, and Pollution Prevention	A: Waste and Effluent Generation	Environmental Non-compliance	Cleaner Production, Efficiency
6) Biodiversity and Responsible Natural Resource Use	A/P: Resource Sourcing Impacts	Supply Disruption, Legality Risks	Responsible Sourcing, Resilience
7) Water Stewardship and Water Security	A/P: Water Use and Discharge	Water Scarcity, Regulation	Efficiency, Stakeholder Engagement
8) Business Integrity and Anti-Corruption	A: Ethical Conduct	Legal and Reputational Risks	Trust, Strong Governance
9) Enterprise Risk Management and Oversight	A: Risk Governance	Unmanaged Emerging Risks	Strategic Resilience
10) Tax Transparency and Responsible Tax Practices	A: Tax Compliance	Regulatory and Reputational Risks	Stakeholder Trust
11) Responsible Supply Chain and Partner Responsibility	A/P: Supplier Practices	Supply Disruption, ESG Risks	Supplier resilience, Shared value
12) Geopolitical and Global Business Resilience	A/P: Export and Logistics Exposure	Market Access, Cost Volatility	Market Diversification
13) Digital Transformation and Data Security	A/P: Data and System Reliance	Cyber and Data Breaches	Efficiency, Data-driven Decisions
14) Green and Inclusive Innovation	A/P: Product and Process Innovation	Innovation Gaps	Differentiation, Cost Efficiency
15) Product Longevity and Lifecycle Performance	A/P: Product Lifespan Impacts	Premature Disposal	Waste Reduction, Circular Value
16) Sustainable Product and Service Responsibility	A: Product Safety and Quality	Product Liability	Customer Trust, Greener Buildings
17) Employee Well-being, Engagement, and Development	A/P: Workforce Impacts	Talent Retention	Capability, Engagement
18) Occupational Health and Safety	A: Workplace Safety	Accidents, Health Issues	Safe, Productive Workforce
19) Human Rights and Community Development	A/P: Community Impacts	Social Conflict	Trust, Social License
20) Customer Responsibility	A/P: Customer Safety and Satisfaction	Loss of Trust	Loyalty, Long-term Growth

ESG Material Topic Progression

Vanachai Group regularly reviews and updates its material topics to ensure continued relevance to the Group's business context, stakeholder expectations, and the evolving external environment. The 2025 Double Materiality Assessment reflects a deliberate progression of material topics compared with prior assessment cycles, rather than a static continuation of previous results.

Addition of New Material Topics in 2025

In 2025, **three new material topics** were introduced to reflect emerging risks, opportunities, and strategic priorities that have become more prominent in the current operating environment. These additions are driven by changes in global conditions, regulatory developments, and business realities, including increased geopolitical uncertainty, accelerated digitalization, and heightened expectations related to resilience and governance. The inclusion of new topics ensures that the materiality framework remains forward-looking and responsive to emerging sustainability-related impacts, risks, and opportunities.

Removal of Previously Identified Topics

Two material topics identified in earlier assessment cycles (2022) were removed in 2025 following a structured review:

- Sustainable Value Chain**
 This topic was removed as Vanachai Group has significantly strengthened its sustainable value chain practices, integrating them into core business operations and supplier management. These practices are now embedded and are expected to remain fit for purpose over the next planning horizon, reducing the need for separate material topic treatment.
- Consumer Insights and Emerging Expectations**
 This topic was incorporated into **Emerging Risk Management**, enabling a clearer and more structured assessment of evolving customer expectations, market trends, and behavioral changes. This integration enhances visibility of emerging issues while avoiding duplication across material topics.

Refinement of Topic Names and Scope

In addition to additions and removals, several material topic names were refined in 2025 to improve clarity and precision. These refinements were made to better reflect the underlying impacts, risks, and opportunities, ensure consistency with international sustainability standards, and enhance understanding for internal and external stakeholders. While the core issues remain substantively similar, clearer naming improves transparency and decision-usefulness.

Overall Outcome

The progression of material topics in 2025 demonstrates Vanachai Group's commitment to a **dynamic and adaptive materiality process**. By adding new topics, consolidating or removing others, and refining topic definitions, the Group ensures that its materiality framework continues to reflect actual business priorities, emerging risks, and long-term sustainability considerations. This approach strengthens the relevance of sustainability governance, strategy alignment, and disclosure quality.

“ Material topics are reviewed annually to reflect emerging risks, embedded practices, and clearer issue definition.”

ESG Material Topic Progression

▲ Increased importance / Expanded scope ● Neutral / Continued focus
 ▼ Decreased importance / Merged ↔ Reframed / Evolved topic (not reduced)

Pillar	Vanachai Sustainability Strategic Moves	ESG Material Topic 2025		ESG Material Topic 2022
ENVIRONMENT (FOREST)	Transitioning Together to a Low-Carbon Future	1) Climate Change Mitigation and Adaptation	▲	1) Climate Action and Greenhouse Gas Emissions
		2) Greenhouse Gas Emissions and Decarbonization	▲	
		3) Energy Efficiency and Low-Carbon Energy Transition	▼	2) Energy Management
	Advancing Circular and Resource-Responsible Manufacturing	4) Circular Economy and Resource Efficiency	●	3) Responsible Resource Management
		5) Waste, Wastewater, and Pollution Prevention	↔	4) Waste and Materials Management
		6) Biodiversity and Responsible Natural Resource Use	▼	5) Air Pollution Management
	Safeguarding Water Resources for the Future	7) Water Stewardship and Water Security	▼	6) Biodiversity Conservation
GOVERNANCE (FUTURE)	Strengthening Responsible and Resilient Governance	8) Business Integrity and Anti-Corruption	▲	8) Business Ethics and Integrity
		9) Enterprise Risk Management and Oversight	↔	9) Economic Growth and Value Creation
		10) Tax Transparency and Responsible Tax Practices	▲ ^{NEW}	
	Driving Digital and Sustainable Innovation	11) Responsible Supply Chain and Partner Responsibility	▲	10) Sustainable Supply Chain
		12) Geopolitical and Global Business Resilience	▲	11) Geopolitical Factors and International Relations
		13) Digital Transformation and Data Security	▲ ^{NEW}	
	Designing Durable and Responsible Products	14) Green and Inclusive Innovation	▼	12) Green and Inclusive Innovation
		15) Product Longevity and Lifecycle Performance	▲ ^{NEW}	
		16) Sustainable Product and Service Responsibility	▲	13) Product and Service Responsibility
			REMOVED	14) Sustainable Value Chain
SOCIAL (TOGETHER)	Empowering People and Ensuring Safe Workplaces	17) Employee Well-being, Engagement, and Development	▲	15) Employee Wellbeing and Skills Development
		18) Occupational Health and Safety	▲	16) Occupational Health Safety and Wellbeing
	Creating Shared Value for Society and Customers	19) Respect for Human Rights and Community Development	▲	17) Local Development and Shared Value Creation
			▲	18) Diversity, Equity and Inclusion (DEI)
		20) Customer Responsibility	▲	19) Customer Satisfaction
		REMOVED	20) Consumer Insights and Emerging Expectations	

Results Across Each Assessment Step:

“ Material topics were determined through a structured assessment that integrates Tier 1 stakeholder priorities with impact and financial considerations, and were validated by executive management and approved by the Board. ”

The Group’s material topics for 2025 were determined by integrating stakeholder priorities with sustainability impact and financial materiality. This approach ensures that the selected topics reflect the Group’s most significant impacts on the environment and society, as well as sustainability-related risks and opportunities affecting business performance and long-term value creation, with particular focus on “Tier 1” stakeholders.

The consolidated results were reviewed through dedicated workshops involving the Sustainability Committee, the Executive Committee, and the Sustainability Development Working Group, where management agreed on materiality thresholds and confirmed the topics consistently ranked high across all dimensions.

The final list of material topics was subsequently reviewed and approved by the Board of Directors, ensuring appropriate governance oversight and alignment with the Group’s strategy and enterprise risk management framework.

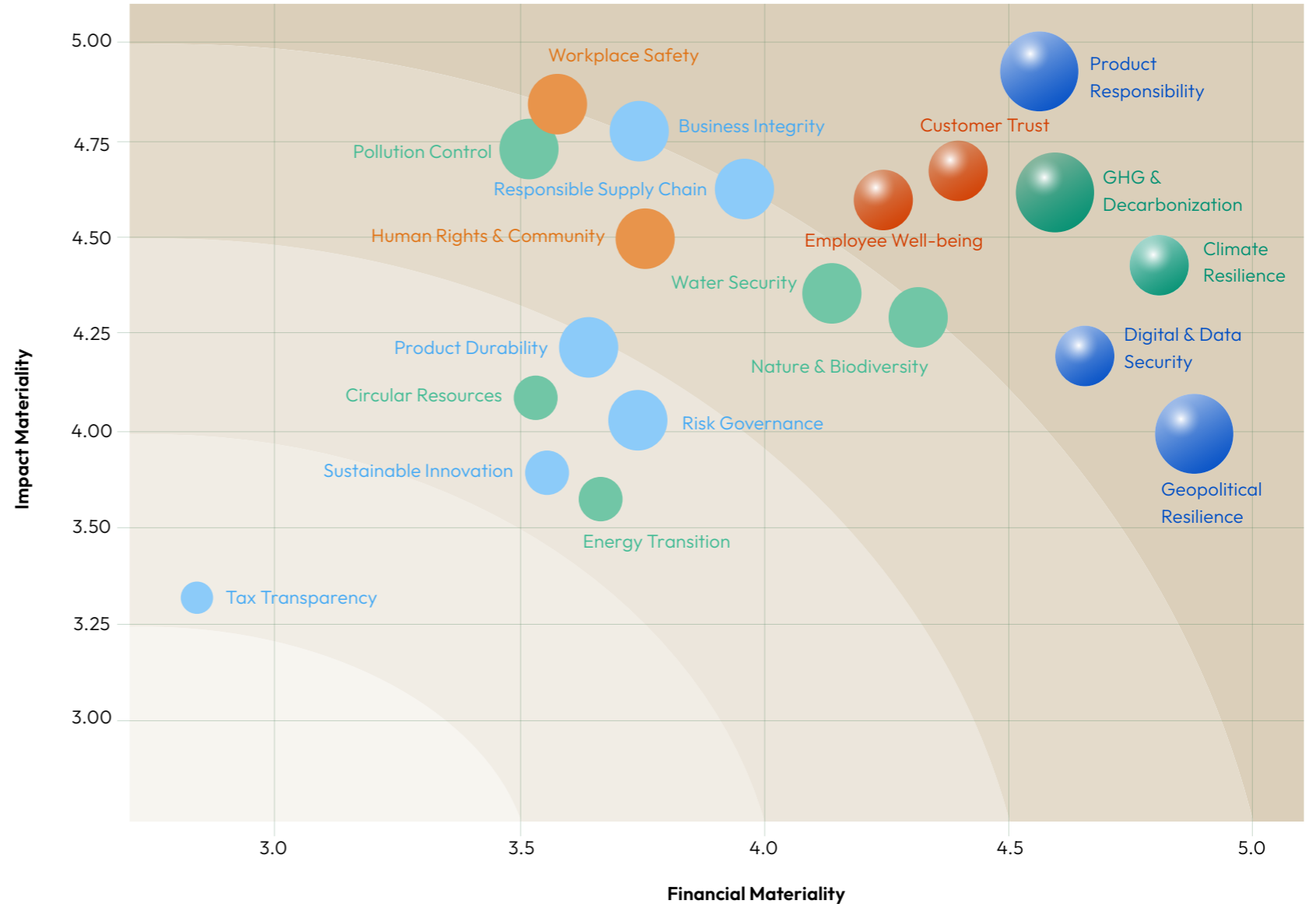
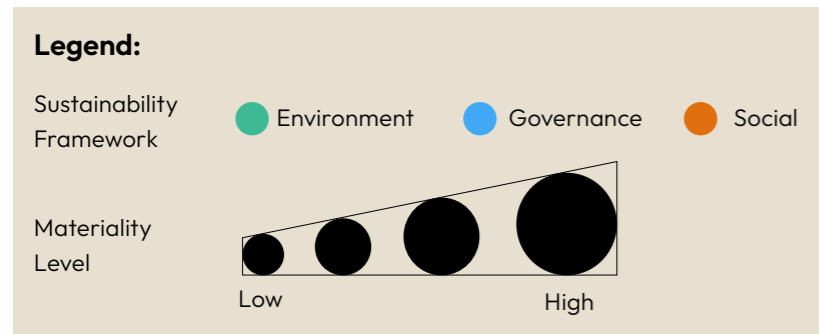
Legend: ● High ● Medium ● Low ★ Very High Combined Materiality ★ High Combined Materiality

Pillar	ESG Material Topic 2025	Stakeholder’s priorities	Sustainability Impact Materiality	Financial Materiality	Material topic
ENVIRONMENT (FOREST)	1) Climate Change Mitigation and Adaptation	●	●	●	★
	2) Greenhouse Gas Emissions and Decarbonization	●	●	●	★
	3) Energy Efficiency and Low-Carbon Energy Transition	●	●	●	
	4) Circular Economy and Resource Efficiency	●	●	●	
	5) Waste, Wastewater, and Pollution Prevention	●	●	●	★
	6) Biodiversity and Responsible Natural Resource Use	●	●	●	★
	7) Water Stewardship and Water Security	●	●	●	★
GOVERNANCE (FUTURE)	8) Business Integrity and Anti-Corruption	●	●	●	★
	9) Enterprise Risk Management and Oversight	●	●	●	
	10) Tax Transparency and Responsible Tax Practices	●	●	●	
	11) Responsible Supply Chain and Partner Responsibility	●	●	●	★
	12) Geopolitical and Global Business Resilience	●	●	●	★
	13) Digital Transformation and Data Security	●	●	●	★
	14) Green and Inclusive Innovation	●	●	●	
	15) Product Longevity and Lifecycle Performance	●	●	●	
	16) Sustainable Product and Service Responsibility	●	●	●	★
SOCIAL (TOGETHER)	17) Employee Well-being, Engagement, and Development	●	●	●	★
	18) Occupational Health and Safety	●	●	●	★
	19) Respect for Human Rights and Community Development	●	●	●	★
	20) Customer Responsibility	●	●	●	★

Materiality Matrix 2025

The outcomes of Vanachai Group's Double Materiality Assessment are presented in a Materiality Matrix, which visually maps the relative importance of sustainability topics. Impact materiality is shown on the Y-axis, reflecting the significance of the Group's actual and potential impacts on the environment and society, while financial materiality is shown on the X-axis, reflecting risks and opportunities that may affect the Group's financial performance and future prospects.

To enhance interpretability, bubble sizes are used to indicate overall priority, with larger bubbles representing topics that scored higher across stakeholder input, impact severity, and financial relevance. This visual approach enables a clear comparison of material topics and supports informed decision-making, strategic prioritization, and transparent disclosure.



The Group Strategy | ESG Strategic Imperatives

Following the Group's Double Materiality Assessment and Materiality Matrix, which identify ESG issues material to environmental and social impacts as well as financial risks and opportunities, the Group has used these results to guide its strategic direction.

The Group prioritizes the most significant issues and translates the assessment results into core ESG strategies linked to corporate strategy, the value chain, and enterprise risk management, enabling clear action plans, targets, and KPIs.

FOREST Sustain the Environment	Transitioning Together to a Low-Carbon Future	Advancing Circular and Resource-Responsible Manufacturing	Safeguarding Water Resources for the Future
FUTURE Govern with Integrity and Resilience	Strengthening Responsible and Resilient Governance	Driving Digital and Sustainable Innovation	Designing Durable and Responsible Products
TOGETHER Grow with People and Society	Empowering People and Ensuring Safe Workplaces	Creating Shared Value for Society and Customers	

FOREST

reflects Vanachai Group's commitment to **safeguarding natural resources and strengthening environmental resilience across its value chain**. The Group recognizes that long-term business success depends on responsible environmental stewardship and the sustainable use of resources.

Vanachai focuses on reducing greenhouse gas emissions, improving energy and resource efficiency, and advancing circular manufacturing practices. The Group also prioritizes responsible water management to ensure operational continuity and protect shared water resources. Through these actions, Vanachai aims to mitigate environmental risks, support regulatory readiness, and contribute to a low-carbon and resource-responsible future.

: Protecting the environment that sustains our business

FUTURE

reflects Vanachai Group's commitment to building a **well-governed, resilient, and forward-looking organization** in an increasingly complex global environment. The Group recognizes that strong governance, ethical conduct, and effective risk management are essential foundations for sustainable growth and long-term value creation.

Vanachai strengthens its future by embedding responsible governance across strategy, enterprise risk management, and operations. This includes integrating sustainability, geopolitical, digital, and regulatory risks into decision-making, enhancing transparency and accountability, and maintaining high standards of business integrity and responsible tax practices. At the same time, the Group invests in digital transformation and innovation to improve efficiency, data-driven decisions, and responsiveness to changing market expectations.

: Governing today to remain strong tomorrow

TOGETHER

reflects Vanachai Group's belief that sustainable success is achieved through **strong relationships with people, partners, customers, and communities**. The Group places people at the center of its operations, recognizing that engagement, trust, and shared value are essential to long-term performance.

Vanachai promotes employee well-being, development, and safe workplaces that support both physical and mental health. The Group also works closely with customers and communities to deliver responsible products, listen to stakeholder feedback, and contribute positively to society. Through inclusive practices and ongoing engagement, Vanachai seeks to grow alongside the people and communities it serves.

: Succeeding by growing with people and society.



V-IMRA's Sustainability Materiality Assessment and Next Step



The Final V-IMRA Sustainability Materiality Assessment

The final outcomes of the **Vanachai Integrated Materiality and Risk Assessment (V-IMRA)** provide a structured and forward-looking view of sustainability-related **impacts, risks, and opportunities that could reasonably be expected to affect the Group's enterprise value, financial performance, and future prospects**. The assessment applies the principle of double materiality by considering both **impact materiality and financial materiality**, consistent with the requirements of **IFRS S1 and IFRS S2**.

The 2025 V-IMRA builds on prior assessment cycles and incorporates a relevance review reflecting **changes in the external environment**, including strengthened climate-related regulation, heightened geopolitical uncertainty affecting export markets, increasing volatility in logistics and energy costs, accelerated digitalization, and evolving stakeholder expectations. These developments have been assessed across relevant time horizons to understand their potential implications for revenue, costs, assets, liabilities, and operational resilience.

The final set of Priority Material Topics represents sustainability-related matters that may influence Vanachai Group's **ability to create value over the short, medium, and long term**. These topics span Environmental, Governance, and Social dimensions and reflect the Group's operating context as a wood-based products manufacturer with a strong export orientation, reliance on SMEs and community suppliers, and close engagement with employees, customers, and local communities.

The V-IMRA outcomes provide a **decision-useful foundation** for management and the Board to assess how sustainability-related risks and opportunities interact with business strategy and financial planning.

The results inform forward-looking disclosures and support management's evaluation of resilience under changing market, regulatory, and climate conditions, consistent with IFRS sustainability disclosure objectives.

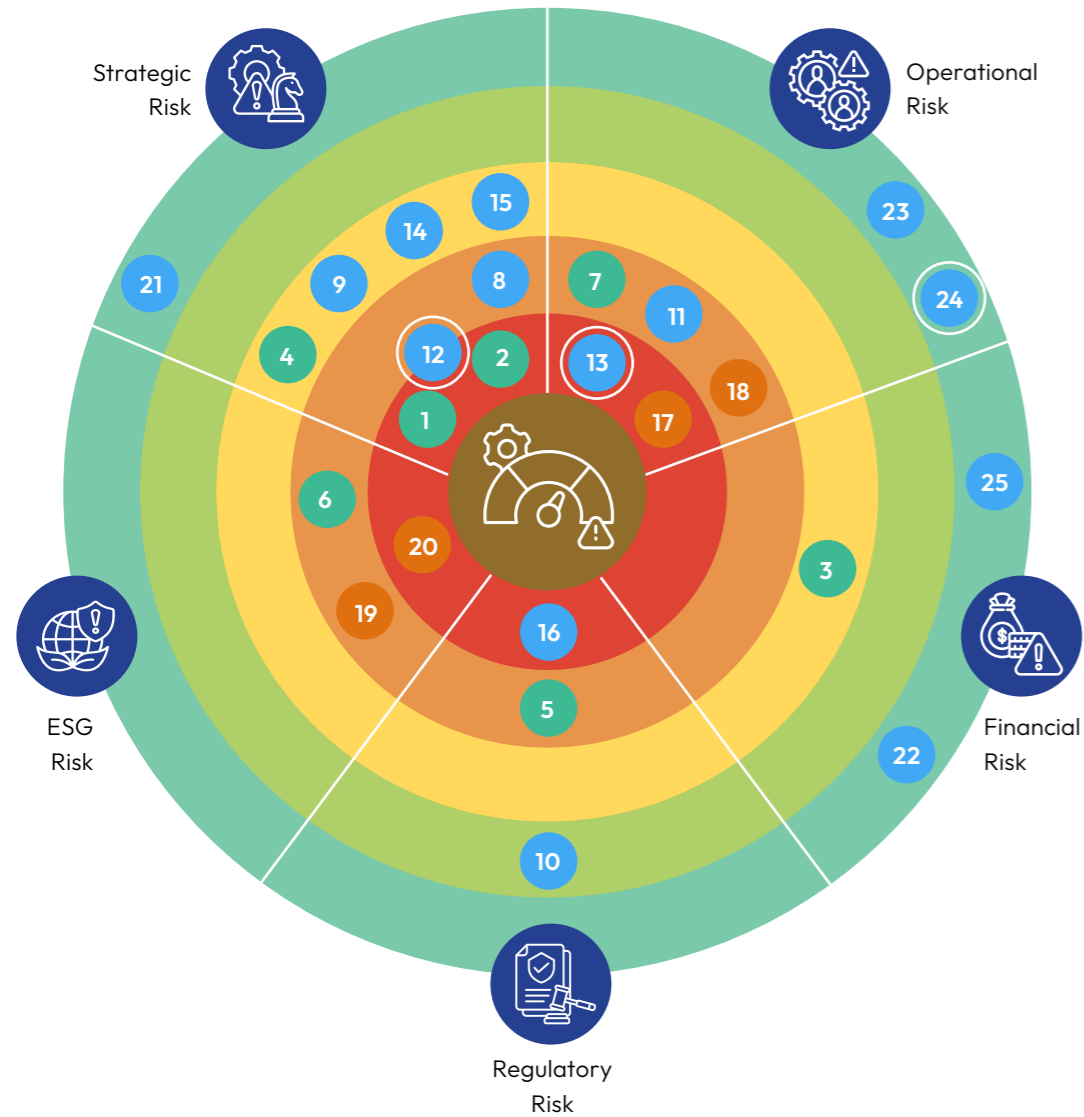


Somprasong Sahavat
Director and Chief
Financial Officer

As a **Director and Chief Financial Officer**, I view V-IMRA as a critical tool for integrating sustainability-related risks and opportunities into enterprise risk management, strategy, and capital allocation. In an increasingly volatile global environment, this integration plays a vital role in protecting cash flows, maintaining market access, and supporting long-term enterprise value.

The integration of the 2025 double materiality assessment outcomes into the Enterprise Risk Management (ERM) process and financial planning ensures that climate, resource, geopolitical, digital, and governance-related risks are evaluated through the same disciplined framework as other business risks. This shared approach aligns objectives across the organization, supports consistent and informed decision-making, and enables the Group to manage risks proactively while strengthening resilience and sustainable long-term growth.

Integrated Corporate Risk and Materiality Radar: V-IMRA



Sustainability Dimension

- Environmental Dimension
- Social Dimension
- Governance Dimension

Company Risk Profile

- Emerging Risk

Severity Risk Level

- Critical Risk Level
- High Risk Level
- Moderate Risk Level
- Low Risk Level;
- Very Low Risk Level

Risk Topics

- 1) Greenhouse Gas Emissions and Decarbonization
- 2) Climate Change Mitigation and Adaptation
- 3) Energy Efficiency and Low-Carbon Energy Transition
- 4) Circular Economy and Resource Efficiency
- 5) Waste, Wastewater, and Pollution Prevention
- 6) Biodiversity and Responsible Natural Resource Use
- 7) Water Stewardship and Water Security
- 8) Business Integrity and Anti-Corruption
- 9) Enterprise Risk Management and Oversight
- 10) Tax Transparency and Responsible Tax Practices
- 11) Responsible Supply Chain and Partner Responsibility
- 12) Geopolitical and Global Business Resilience
- 13) Digital Transformation and Data Security
- 14) Green and Inclusive Innovation
- 15) Product Longevity and Lifecycle Performance
- 16) Sustainable Product and Service Responsibility
- 17) Employee Well-being, Engagement, and Development
- 18) Occupational Health and Safety
- 19) Human Rights and Community Development
- 20) Customer Responsibility
- 21) Marketing and Sales
- 22) Production Cost Control
- 23) Human Capital Management
- 24) Emerging Infectious Disease Risk
- 25) Foreign Exchange Risk

Next Steps: From Assessment to Action

The completion of the 2025 V-IMRA marks a transition from assessment to **ongoing integration and execution**, reinforcing sustainability as a core input to Vanachai Group's strategy, governance, and enterprise risk management. In line with **IFRS S1 and IFRS S2**, the Group focuses on how identified sustainability-related risks and opportunities may **affect future cash flows, access to markets, cost structures, and long-term resilience**.

Following validation by senior management and oversight by the Board and relevant committees, the V-IMRA results are integrated into **strategic planning, capital allocation, and ERM processes**, including the Group's risk registers and performance management frameworks. Material sustainability-related risks and opportunities are evaluated alongside other business risks, ensuring consistency with the Group's risk appetite and strategic objectives.

Looking forward, Vanachai Group will prioritize actions and investments in areas where sustainability-related matters may have the **greatest potential impact on financial performance and enterprise value**.

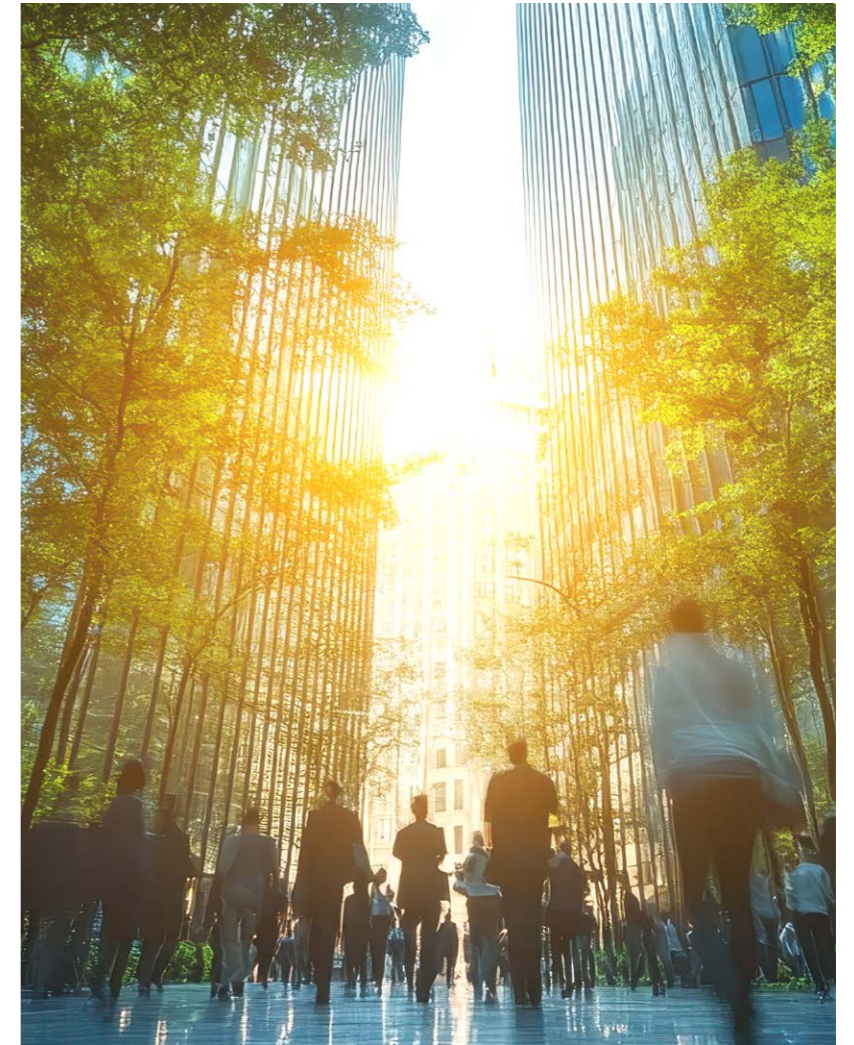
This includes strengthening climate and resource efficiency initiatives, enhancing governance and digital resilience, managing geopolitical and supply chain risks, advancing product responsibility and innovation, and continuing to invest in workforce capability and customer trust.

The Group recognizes that sustainability-related risks and opportunities are **dynamic and subject to uncertainty**. Accordingly, V-IMRA will continue to be reviewed and refined as external conditions evolve, supporting adaptive decision-making and transparent disclosure. Stakeholder engagement remains an important input to this process, informing management's understanding of emerging issues and expectations.

Through this forward-looking approach, Vanachai Group aims to enhance its **capacity to anticipate change, respond to uncertainty, and protect long-term value creation**, consistent with the objectives of IFRS sustainability disclosure standards.

“V-IMRA transforms insight into action—strengthening resilience today and shaping sustainable growth for the future.”

* Further details are available in the 2025 Sustainability Report under the section on Enterprise Risk Management and Oversight.





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