



2024 Double Materiality Assessment Summary

May 2025



Objectives



- ❑ Identify the most significant **positive and negative impacts** that a company's business activities may have on the environment and society (**Impact materiality**)
- ❑ Identify key **risks and opportunities** that may have a significant financial impact on the company's operations (**Financial materiality**)
- ❑ Identifying **trends on the horizon (Global trend, Peer analysis)** that could significantly impact company's ability
- ❑ Highlight material topics that **require proactive management** and monitoring, even if they are not yet fully addressed.
- ❑ Support the company in effectively responding to stakeholder **expectations and concerns** by aligning sustainability priorities with stakeholder interests.
- ❑ Enabling different functions of the business to stay ahead of **emerging impacts, risks, opportunities**, and material sustainability trends.
- ❑ Driving **value creation** by integrating ESG factors into our strategic decision-making process and provides a systematic way to assess our **most critical impacts, risks, and opportunities**

Double Materiality Assessment

Indorama Ventures conducts biennial materiality assessments to determine the key ESG topics relevant to our business and to both internal and external stakeholders. This process incorporates input from external stakeholders, trend analyses, and internal engagement across business groups, reflecting both the influence of stakeholder interests and the significance of our business impacts. In addition, the material topics are reviewed annually to ensure continued relevance in a dynamic operating environment.

In 2024, the assessment is based on the principle as defined by the European Union Corporate Sustainability Reporting Directive (EU CSRD) and aligned with the European Sustainability Reporting Standards (ESRS), including the Global Reporting Initiative (GRI) Standards 2021, the International Financial Reporting Standards (IFRS) Sustainability Disclosure Standards, and the Dow Jones Sustainability Index (DJSI). It enables the company to identify and manage its most significant actual and potential positive or negative impacts on social and the environment (Impact Materiality), as well as sustainability-related risks and opportunities that may affect the company's performance and enterprise value (Financial Materiality). This enhances Indorama Ventures' understanding of its responsibilities and role in addressing sustainability challenges from direct and indirect effects across our value chain on stakeholders and the environment, that are critical for long-term sustainability and value creation.

The Double Materiality Assessment is integrated into our enterprise risk management framework, supporting the effective identification and management of sustainability-related risks. The process ensures that material topics are identified through a structured and comprehensive evaluation of stakeholder expectations, sustainability impacts, and business implications in accordance with our Stakeholder Management Guideline. The result of the materiality assessment is reviewed and endorsed by the Sustainability and Risk Management Committee (SRMC), a sub-committee of the Board of Directors. Moreover, the double materiality assessment process and result are verified by a third-party assurance.



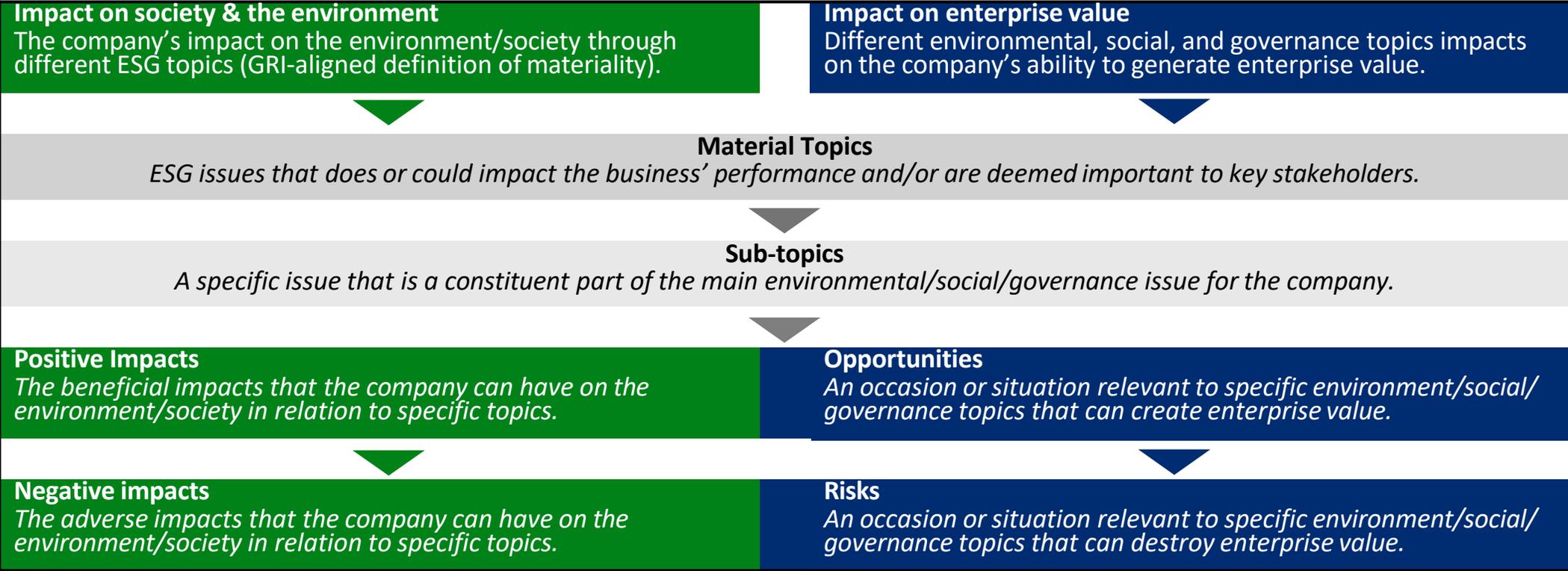
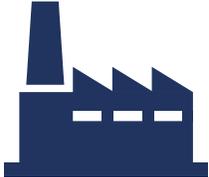
Double Materiality Assessment



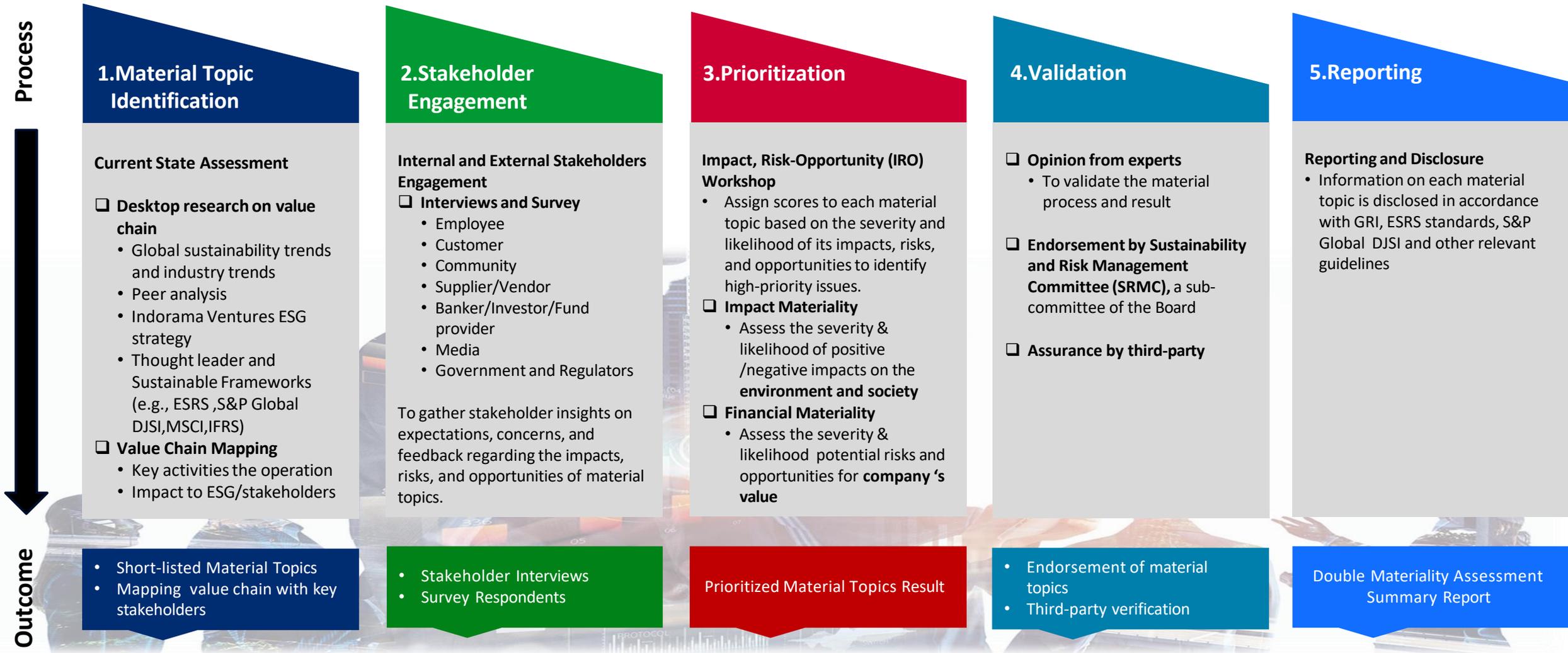
Sustainability impacts on company



Company impacts on society & the environment



Double Materiality Assessment Process



1. Material Topic Identification

Indorama Ventures initiated the material topic identification process by conducting a comprehensive assessment of the current state to understand key sustainability priorities aligned with global and industry standards.

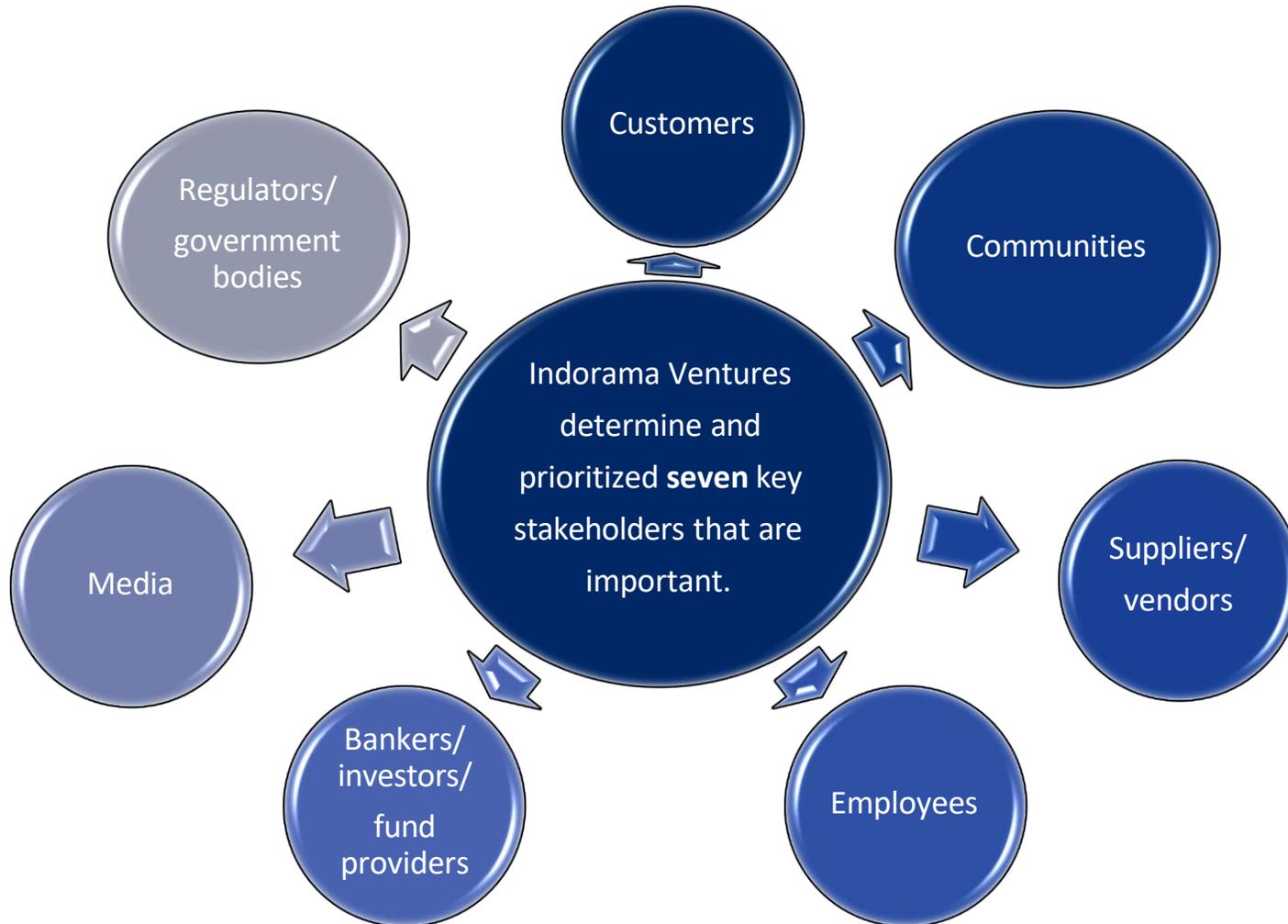
Current State Assessment : This step involved assessing the initial list of material topics to identify and prioritize key issues for further evaluation, including:

- ❑ **Desktop Research on Value Chain:**
 - Reviewed global sustainability trends and emerging industry practices.
 - Conducted peer reviews across the petrochemical industry to pre-identify potential material topics.
 - Assessed Indorama Ventures' ESG strategy and stakeholder expectations.
 - Referred to leading sustainability frameworks such as ESRS, S&P Global DJSI, MSCI, IFRS and to guide alignment with international disclosure standards.

- ❑ **Value Chain Mapping:**
 - Identified key operational activities across the value chain.
 - Mapping Indorama Ventures value chain with affected stakeholders and materiality topics

As a result of the global sustainability trend analysis and peer reviews, Indorama Ventures has developed a preliminary list of 15 material topics. These topics reflect current industry expectations and emerging ESG priorities. The list will be further validated through targeted stakeholder engagement to ensure its relevance, completeness, and alignment with both business strategy and stakeholder concerns.

2. Stakeholder Engagement : Survey/Interview



Key insights from stakeholder engagement

- ❑ **Circular Economy and Sustainable Products:**
Recognized as pivotal for reducing waste and lowering resource consumption, these emerged as key opportunities for both environmental and financial returns
- ❑ **Climate Change & Energy**
Stakeholders highlighted the need for proactive measures to reduce our carbon footprint and improve energy efficiency
- ❑ **Human Capital and Community Engagement** Emphasis was placed on ensuring employee safety and nurturing community relationships, critical to both operational success and social license to operate
- ❑ **Supply Chain Management:**
Effective governance along the supply chain was noted as essential balancing the dual imperatives of risk mitigation and capturing new market opportunities.

3. Prioritization

Following the identification of material topics, Indorama Ventures conducted a prioritization process to determine which topics are of highest priority. This was achieved through an integrated lens of Impact, Risk, and Opportunity (IRO). The assessment considered both dimensions: **Impact Materiality (inside-out)** and **Financial Materiality (outside-in)**.

Impact, Risk-Opportunity (IRO) Workshop : Based on insights from stakeholder interviews, surveys, and global trend analysis, a comprehensive list of potential **impacts, risks, and opportunities** was developed. Key stakeholders from within Indorama Ventures convened to discuss these topics and were encouraged to consider each IRO across two critical dimensions: the timeline perspective—considering short-, medium-, and long-term implications—and the scope perspective—assessing impacts across direct operations, the broader value chain, and the full product lifecycle. This structured approach ensured a holistic understanding of sustainability outcomes and supported the identification of high-priority topics.

- ❑ **Impact Materiality – Impact Assessment and Scoring**

Impact materiality was assessed using both quantitative and qualitative data obtained from internal and external stakeholder engagement. The assessment followed the Materiality Matrix approach, where the vertical axis (Y-axis) represents severity (covering scale, scope, and irremediability), and the horizontal axis (X-axis) represents the likelihood

- ❑ **Financial Materiality Assessment- Risk & Opportunity Assessment**

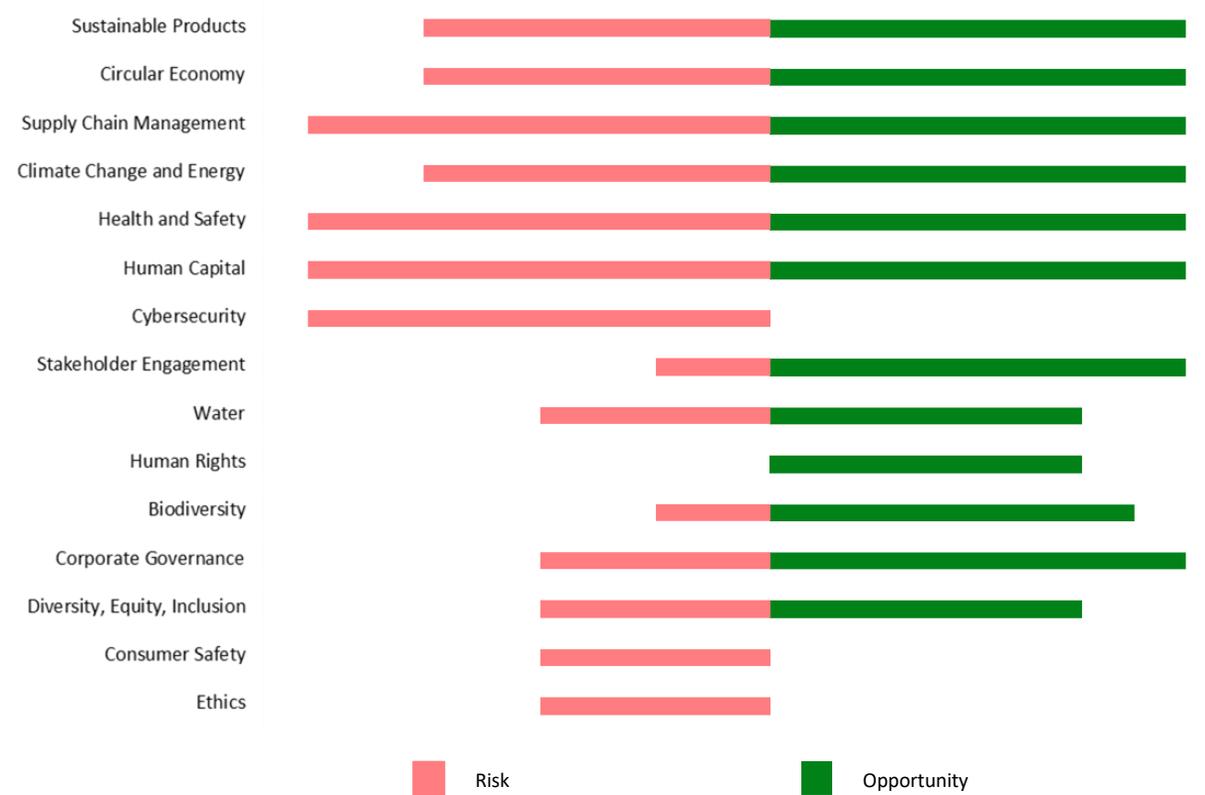
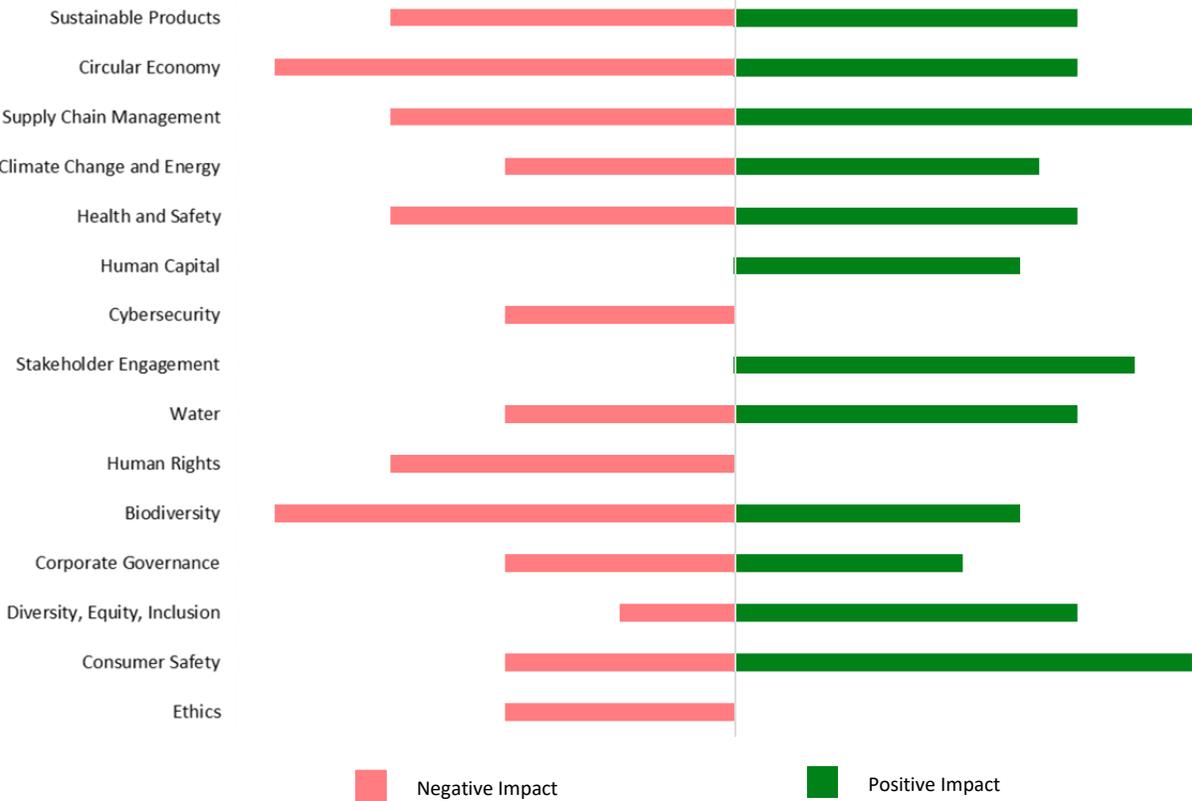
Financial materiality was assessed using an integrated enterprise risk management approach aligned with Indorama Ventures' internal risk assessment framework. The key criteria evaluated included financial impact, reputational impact, internal operations, and compliance. The assessment followed a matrix approach, where the vertical axis (Y-axis) represents severity across these criteria, and the horizontal axis (X-axis) represents the likelihood.

3. Prioritization

The combined analysis of the evaluation of the impacts across the material topics on the environment and society and the business

Impact on Environment and Society

Impact on Business

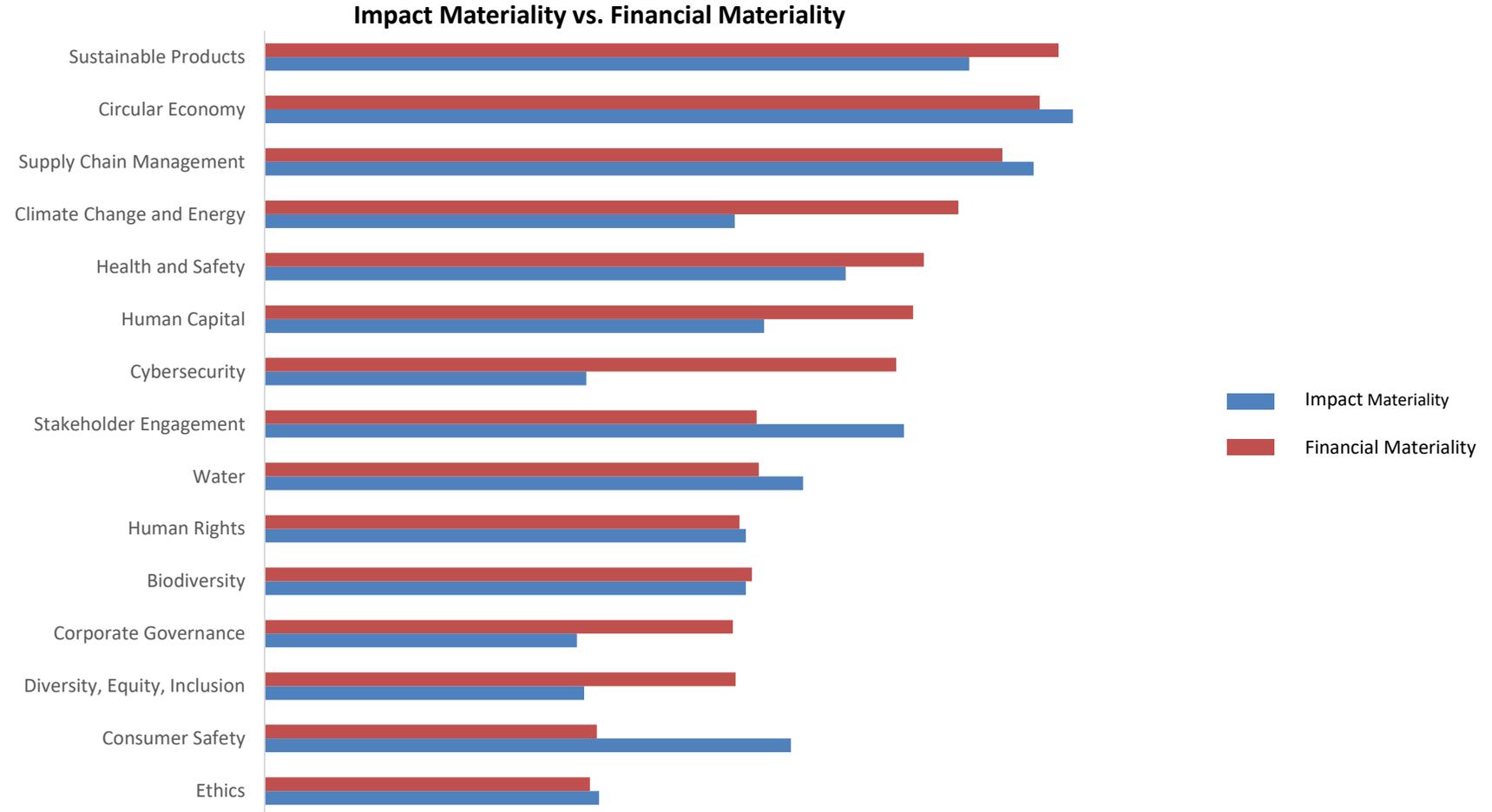


Remark: The Double Materiality Assessment (DMA) process followed a structured approach, combining interviews and surveys with a carefully selected, limited sample of stakeholders. Survey results were used to supplement the data gathered from interviews, forming the foundation of our materiality assessment. It is important to note that the absence of identified impacts, risks, or opportunities for certain topics does not imply they were overlooked. Rather, it reflects relatively lower stakeholder relevance in this assessment cycle. The absence of IRO scores indicates limited stakeholder concern at this time—not a lack of importance. These priorities may evolve in future cycles.



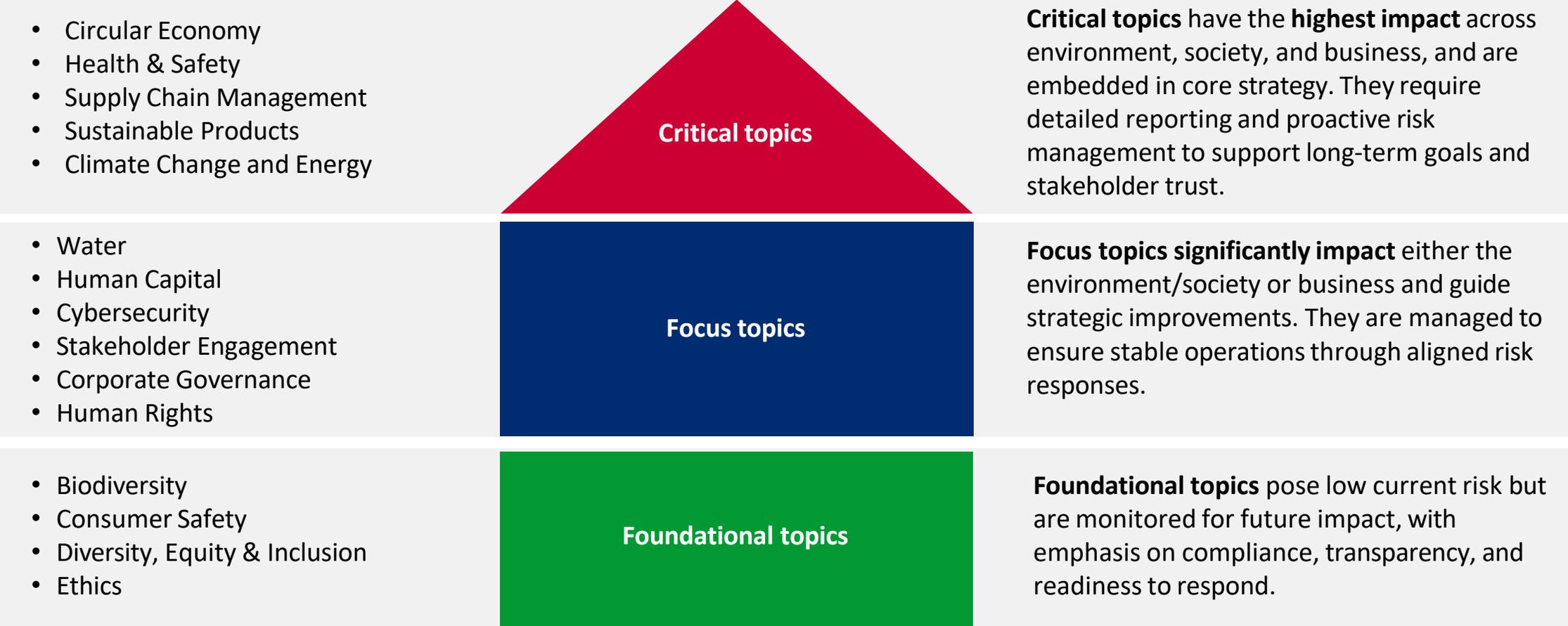
3. Prioritization

In our materiality analysis, we follow a prioritization-based approach, by considering the level of significance to both Impact Materiality and Financial Materiality



Materiality Assessment Outcomes for Enterprise Value Creation

Prioritized material topics are categorized into three groups based on their significance to both business performance and societal impact.



Materiality Assessment Outcomes Aligned with the UN SDGs

Impact Level	Material Topic	Sustainable Development Goals (SDGs)	Impact Level	Material Topic	Sustainable Development Goals (SDGs)	Impact Level	Material Topic	Sustainable Development Goals (SDGs)
Critical topics	Circular Economy		Focus topics	Water		Foundational topics	Biodiversity	
	Health & Safety			Human Capital			Consumer Safety	
	Supply Chain Management			Cybersecurity			Diversity, Equity & Inclusion	
	Sustainable Products			Stakeholder Engagement			Ethics	
	Climate Change and Energy			Corporate Governance				
				Human Rights				



Materiality Assessment Outcomes: Material Issues for External Stakeholders

Customers	Suppliers and Vendors	Bankers / Investors / Fund Providers	Government / Regulators	Media	Communities
Sustainable Products	Sustainable Products	Climate Change and Energy	Sustainable Products	Circular Economy	Health & Safety
Circular Economy	Circular Economy	Sustainable Products	Supply Chain Management	Sustainable Products	Circular Economy
Climate Change and Energy	Climate Change and Energy	Circular Economy	Circular Economy	Supply Chain Management	Climate Change and Energy
Health and Safety	Water	Corporate Governance	Climate Change and Energy	Climate Change and Energy	Stakeholder Engagement
Supply Chain Management	Supply Chain Management	Supply Chain Management	Health and Safety		

Common Topics

Climate Change and Energy

Sustainable Products

Circular Economy

Supply Chain Management



4. Validation

To ensure the credibility, transparency, and robustness of the double materiality assessment, Indorama Ventures implemented a validation process as follows.

- ❑ **Opinion from experts:**
Independent sustainability experts in petrochemical industry were consulted to validate the materiality process and its outcomes, ensuring alignment with international standards and stakeholder expectations.
- ❑ **Endorsement:**
The finalized material topics and assessment methodology were formally endorsed by the Sustainability and Risk Management Committee (SRMC), a sub-committee of the Board of Directors. This reflects the strategic importance of material topics in guiding the company's sustainability direction and risk oversight.
- ❑ **Assurance by third-party:**
The double materiality assessment process was verified by an independent third party

5. Reporting

The results of the Double Materiality Assessment are transparently disclosed through centralized reporting channels. Information on each material topic is presented in the Sustainability Report and is aligned with internationally recognized standards, including the Global Reporting Initiative (GRI), European Sustainability Reporting Standards (ESRS), and S&P Global DJSI guidelines. This ensures consistency, comparability, and credibility in sustainability disclosures, enabling stakeholders to make informed decisions based on relevant environmental, social, and governance (ESG) topics.

A Double Materiality Assessment Summary Report has also been prepared to clearly and effectively communicate the methodology, stakeholder engagement process, and prioritized material topics.

Key Initiatives

Material Topic	Environmental
Circular Economy	<ul style="list-style-type: none"> • Indorama Ventures Investments & Holdings (IVIH), based in Milan, is driving innovation in the circular economy by actively scouting and investing in startups specializing in advanced recycling technologies. These pioneering efforts focus on Recycling of packaging materials, and Textile-to-textile recycling of polyester fibers and filament products • Collaboration for Circularity – Partnered with industry groups, customers, and policymakers to drive systemic change and support the transition toward a circular economy. • ISCC PLUS Certification – Supports circular feedstocks through mass balance approaches for chemical and mechanical recycling, promoting closed-loop systems and responsible sourcing of waste-based materials.
Climate Change and Energy	<ul style="list-style-type: none"> • Developing our decarbonization strategies, it is essential to achieve our long-term climate ambitions by significantly reducing our carbon footprint across our operations and value chain • Renewable Energy Expansion – Increased solar energy adoption across sites, including the installation of new solar farms and rooftop panels to reduce GHG emissions. • Energy Efficiency and Projects – Indorama Ventures’ CPET Packaging team in Ghana installed a 1,000 kW rooftop solar unit, generating 1.3 million units of clean energy annually, cutting GHG emissions by 394.68 tCO₂e, and reducing energy costs by 12%, reinforcing its sustainability commitment.
Sustainable Products	<ul style="list-style-type: none"> • Recycled PET (rPET) Integration – Increased use of post-consumer recycled PET in product lines to support circularity and reduce environmental impact. • Sustainable Products– Expanded life cycle assessments and expanded ISCC PLUS certification coverage to support customers’ Scope 3 emission reductions, net-zero targets, and enhance traceability of circular and renewable materials across the supply chain. • Sustainable Product Classification – Developed internal criteria and processes to classify and track sustainable products, enhancing transparency and aligning with customer and regulatory expectations.
Water	<ul style="list-style-type: none"> • Water Risk Assessment – Conducted site-level water risk assessments to identify and mitigate water-related risks, especially in high-stress regions. • Water Efficiency Projects – Wellman Neufchateau Recyclage S.A. reduced wash line water use by 30% through recycling and process improvements, saving 34,503 m³ of water and €600,000 annually while maintaining production quality and enhancing sustainability.



Key Initiatives

Material Topic	Social
Health & Safety	<ul style="list-style-type: none"> • Corporate EHS Audits – Conducted 22 audits focused on compliance and maturity, resulting in 154 findings and 1,525 corrective actions, of which 1,137 were completed. Audits now cover 45% of operational sites. • EHS Leadership Boot Camp – Launched the first global program, training 155 leaders across AMER, APAC, and EMEA with 56 hours of content on Safety Culture, Process Safety Management, Industrial Hygiene, and Crisis Management, including 360-degree leadership evaluations. • EHS Digitalization – Rolled out MOC and Industrial Hygiene modules in EHS software and deployed a tool for standardized Process Hazard Analyses (PHA), enhancing data-driven insights through dashboards and reporting tools.
Human Capital	<ul style="list-style-type: none"> • Future Leaders Program – Launched in 2023 and continued in 2024, this 12-month program focuses on developing the next generation of young leaders. • Golden Globe Tigers Award – Received the award for Best in Training and Organizational Development for fostering a culture of continuous learning, innovation, and sustainability through the “DNA of Knowledge” initiative. • HR Excellence Awards – Earned the Bronze Award at the 4th Human Resources Excellence Awards 2024 for outstanding employee advocacy and brand ambassadorship, reinforcing a commitment to corporate excellence.
Human Rights	<ul style="list-style-type: none"> • Human Rights Due Diligence – Strengthened company-wide efforts to identify, prevent, and mitigate human rights risks. • Human Rights Training – The Corporate Governance Policy Awareness Campaign (CGPAC) team conducted both onsite and online training sessions on the Human Rights Policy, focusing on employee roles in preventing violations and understanding reporting mechanisms. • Our Commitment – 100% of business and site heads signed human rights declarations, reinforcing accountability at all levels.
Stakeholder Engagement	<ul style="list-style-type: none"> • Stakeholder Management Guideline – Developed a standardized guideline aligned with the AA1000 Stakeholder Engagement Standard (AA1000SES) to enhance engagement processes across the organization. • Double Materiality Assessment Engagement – Applied the Stakeholder Management Guideline to engage eight key stakeholder groups—employees, customers, communities, suppliers and vendors, bankers, investors and fund providers, media, and regulators. The insights gathered will inform the development of the 2024 Sustainability Report.



Key Initiatives

Material Topic	Governance
<p>Supply Chain Management</p>	<ul style="list-style-type: none"> • ESG Supplier Assessments – Conducted ESG assessments for all Tier-1 suppliers using the EcoVadis platform as part of the Sustainable Supply Chain Program. • Supplier Audits – Performed onsite audits of selected suppliers by approved third-party auditors in alignment with Together for Sustainability (TfS) standards. • Capacity Building – Enhanced ESG capabilities of suppliers and buyers through training sessions and the TfS Academy to support sustainable practices. • Responsible Sourcing Policy – Embedded ESG principles throughout the value chain, covering areas such as product and environmental stewardship, decarbonization, and Diversity, Equity, and Inclusion (DEI). Suppliers are required to follow the more stringent standard when differences arise.
<p>Corporate Governance</p>	<ul style="list-style-type: none"> • Board Diversity and Independence – Strengthened the board composition with diverse skills and perspectives. • Enhanced Risk Management – Integrated ESG factors into the company-wide risk management framework. • Code of Conduct Training – Rolled out ethics training to reinforce responsible business practices.
<p>Cybersecurity</p>	<ul style="list-style-type: none"> • Strengthening Cybersecurity Infrastructure: Indorama Ventures has invested in enhancing its cybersecurity infrastructure to protect against evolving threats. This includes the implementation of advanced security technologies and regular system upgrades to safeguard sensitive data. • Employee Awareness and Training Programs: The company has rolled out comprehensive training programs aimed at increasing employee awareness of information security best practices. These programs are designed to foster a culture of security and ensure that employees are equipped to recognize and respond to potential cyber threats. • Regular Security Assessments and Audits: Indorama Ventures conducts regular security assessments and audits to identify vulnerabilities and ensure compliance with international security standards. These assessments help in proactively addressing potential risks and maintaining robust information security protocols.





Thank you

