

Accelerating Sustainable Impact

Indispensable Chemistry



14th
EDITION

Sustainability Report 2024
under the concept
“Accelerating
Sustainable Impact”

The concept underscores Indorama Ventures’ dedication to advancing transformative solutions across its global operations, fostering positive environmental, social, and economic impacts both within the organization and throughout its value chain. These efforts are deeply embedded in our core values of innovation, ESG-driven initiatives, collaboration, and sustainability leadership.

The cover powerfully reflects our commitment to sustainable growth, with a tree of interconnected lines symbolizing unity, progress, and resilience. Integrated visuals highlight our products, innovations, and ESG efforts, reinforcing our drive for lasting impact.



Key Sustainability
Recognitions and
Awards in 2024



Achieved the **99th percentile** with
a Platinum Medal for the 3rd time
among assessed basic chemical companies



Ranked 3rd in the chemicals sector,
placing in the 98th percentile
secured its listing in the Dow Jones Best-in-Class
World and Emerging Markets indices for
the 6th and 8th consecutive years, respectively



Achieved an **AA rating**
for the first time in 2024



**Ranked 1st in the FTSE4Good
Index Series** (ESG score 4.6 out of 5)
for the 6th time



Achieved an ESG rating in the **9th percentile**
among 580 companies in the chemical industry
(lower percentile indicates better performance)



Achieved a **“B” rating** in the
CDP’s Climate Change Assessment



Ranked 3rd with a B rating
in the 2024 ChemScore assessment
among 51 global chemical companies



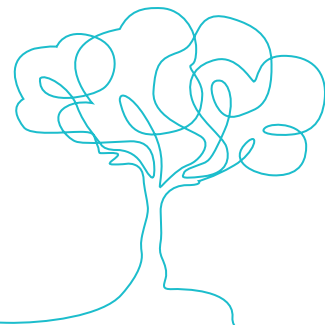
Achieved a total score of **91** with an **AAA rating**,
surpassing the average score of 87
for companies with a market capitalization
exceeding \$100 billion



Received the **“Honorable”**
Sustainability Disclosure Award 2024
for the **6th consecutive year**



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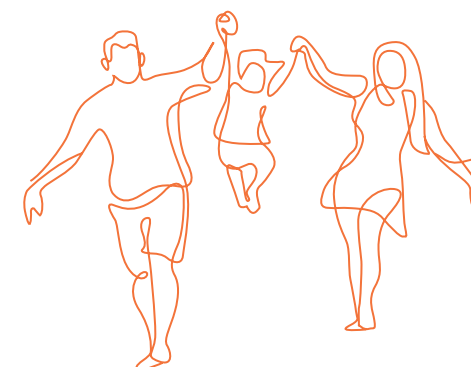
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Deputy Group CEO Message

DILIP KUMAR AGARWAL

- Deputy Group CEO
- Member of the Sustainability and Risk Management Committee



“As we step into 2025, we remain committed to driving sustainable growth, leveraging our resilience and focus on innovation to create long-term value. IVL 2.0 is not just a strategy—it is a blueprint for positioning us as a leader in the evolving global economy.”

Indorama Ventures delivered an improved financial performance in 2024, demonstrating resilience and a commitment to decisive management actions under our IVL 2.0 transformation strategy, despite the prolonged downturn in chemical markets, geopolitical disruptions, and rising energy costs.

Our disciplined execution led to an adjusted EBITDA of \$1.52 million, marking a 9.7% increase from the previous year, and a strong production volume of 14.04 million tons with a 79% operating rate. These results reflect our ability to adapt, innovate, and create long-term value for our stakeholders.

Shaping a Brighter Future

We continue to fortify our financial position by streamlining our portfolio and unlocking new opportunities. Guided by our IVL 2.0 strategy, we are securing our future as a company that generates sustainable and growing shareholder returns, with a focus on organic growth, financial discipline, developing future-ready leaders, and leading the transition to a low-carbon economy. The restructuring of CPET and Fibers segments, combined with our strategic initiatives, is strengthening our competitive edge, ensuring we remain agile, innovative, and prepared for the future.

The acquisitions of intellectual properties include pioneering solutions such as KEMELIX and FLOWSOLVE that accelerate our presence in energy extraction markets. These strategic moves expand our portfolio with resource-efficient technologies, biodegradable solutions, and renewable-based products, ensuring we continue to lead with innovation and sustainability.

ESG-focused Investments

Our commitment to ESG-focused investments and sustainable finance ensures that every step we take aligns with our broader environmental and social objectives. Securing a \$200 million, seven-year loan from the International Finance Corporation (IFC) will accelerate sustainability initiatives in India, Thailand, and Indonesia, as well as fuel our circular economy ambitions and reinforce our position as the global leader in PET recycling. Our investments in bio-PET and sustainable fibers continue to set new benchmarks in circularity and carbon reduction, with bio-PET production in 2024 totaling about 28,000 tons. In collaboration with Suntory, ENEOS Corporation, Mitsubishi Corporation, Iwatani, and Neste, we launched the world's first commercialized bio-PET bottle using ISCC+ certified bio-paraxylene, reducing fossil dependency and CO₂ emissions. We sold about 8,000 tons of bio-PET resin to Suntory in 2024, and we expect a similar offtake in 2025. We have joined a

consortium of seven companies across five countries to establish a supply chain for more sustainable polyester fiber, produced from renewable and bio-based raw materials, including paraxylene from carbon capture and utilization. Participants in the project include Indorama Ventures, Goldwin, Mitsubishi Corporation, Chiyoda Corporation, SK Geo Centric, India Glycols, and Neste.

Despite progress in our Environmental, Health & Safety targets, we recorded a number of accidents in 2024, including four that resulted in fatalities. Their absence is deeply felt across our organization, and we are taking all necessary steps to prevent such incidents in the future.

Pathway to Sustainable Growth

We remain optimistic about the future of our sustainable growth path, including enhancing operational efficiency, advancing circular economy initiatives, and accelerating low-carbon solutions. Under our visionary leadership, our talented employees are building a future that is not only profitable but also responsible and impactful. Together, we will continue to push boundaries, drive meaningful progress, and create lasting value for our stakeholders and the world.



Chairman of the ESG Council Message

YASH LOHIA

- Chairman of the ESG Council
- Member of the Sustainability and Risk Management Committee
- Executive President of Petchem



“By investing in decarbonization, circularity, and our passionate team, we are reimagining the very possibilities of how our business can create shared value for generations to come.”

Sustainability has been a driving force behind Indorama Ventures' growth and innovation for over 15 years. By investing in advanced recycling and low-carbon technologies, and expanding our global recycling facilities footprint, we continue to set new benchmarks in sustainability while reinforcing our commitment to a more sustainable future.

We are strengthening operational excellence, financial resilience, and sustainability-driven innovations while accelerating circularity, decarbonization, and operational eco-efficiency. Under IVL 2.0, we are optimizing assets, restructuring businesses, expanding sustainable product portfolio, and integrating AI-driven and digital solutions to enhance resource efficiency and climate resilience. This transformation is not just about strengthening our business—it is about shaping an ecosystem where sustainability and growth go hand in hand.

Innovating for a Low-Carbon Future

Climate change is one of the most pressing challenges of our time, and we remain committed to exploring technologies to support decarbonization strategies and to advance circularity. We are enhancing our supply chain engagement and rigorous ESG assessments. We are considering setting a target for Scope 3—the purchased goods and services category. We integrated climate adaptation into our sustainability strategy using a three-phase approach - Readiness & Capacity Building (2024-2025), Planning (2026), and Implementation (2027) - to maintain resilience against climate risks. We established in-house Life Cycle Management expertise and performed product Life Cycle Assessments to facilitate our customers' needs.

Despite our diligent efforts, external uncertainties such as the absence of advanced decarbonization technologies, business restructuring, and substantial capital investments present significant challenges to achieving our 2025 targets. Increased production at high-energy and carbon-intensive locations, coupled with higher energy consumption, has counterbalanced reductions, leading to the GHG intensity remaining nearly unchanged since 2020.

The overall GHG scope 1&2 intensity reduction at the end of 2024 is projected to be 1.09%, with an anticipated reduction of 1.14% by 2025, against a target of a 10% reduction from the 2020 baseline. The 2025 energy and water intensity targets may not be met. By the end of 2024, energy intensity increased by over 4% since the 2020 baseline instead of decreasing by 5%. Meanwhile, water intensity is projected to reduce by 6.8%, which is below the target of a 10% reduction by 2025.

Efforts are underway to identify climate investments via new technologies, scalable solutions, and partnerships while considering stakeholder economic impacts. We are committed to achieving the 2030 sustainability goals.

Sustainability Leadership in Action

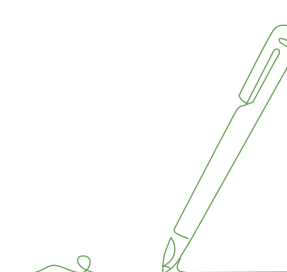
Since 2011, our commitment to recycling has resulted in establishing 852,000 tons of bale input capacity. The bale input capacity increase in 2024 was about 83,000 tons. In 2024 alone, over 396,000 tons of post-consumer PET bottles (equivalent to more than 26 billion bottles) were recycled, further solidifying our leadership in the PET circular economy and driving industry-wide transformation. From 2011-2024, we recycled more than 135 billion PET bottles, diverting 2.6 million tons of plastic waste from landfills and preventing 3.6 million tons of CO₂ emissions by 2024.

As sustainability regulations and standards—such as the EU

Corporate Sustainability Reporting Directive (CSRD), the EU Taxonomy, and IFRS Standards—reshape global markets, we are proactively aligning our business practices to enhance investor confidence, unlock sustainable financing opportunities, and future-proof our operations. Our focus on ESG transparency, resource efficiency, and regulatory compliance strengthens our financial resilience while delivering long-term value to all stakeholders. Today, our efforts and actions are recognized worldwide, consistently placing us among the top-tier rankings of DJSI, FTSE4Good, and EcoVadis. We continue to push boundaries—integrating sustainability, innovation, and operational excellence to drive long-term value and resilient growth.

Looking Ahead: A Future of Impact and Growth

As we move ahead, we remain guided by a clear purpose—to reimagine chemistry together to create a better world. Our global presence uniquely positions us to address critical challenges such as climate change and the mismanagement of plastic waste. With a strong foundation and a bold vision for the future, we are confident in our ability to drive meaningful progress and lead the way in delivering tangible and long-term sustainable solutions.





Chief Sustainability Officer Message

ANTHONY M. WATANABE, Ph.D.
Chief Sustainability Officer



“Value creation is about resilience—adapting to change, embracing new technologies, and aligning environmental, social, and governance goals to create a lasting impact.”

Driving Sustainability Forward: Our 2024 Progress and Future Commitment

At Indorama Ventures, sustainability is more than a commitment—it is a transformation. Over the past year, we have turned our ambitions into concrete actions, driving innovation, operational efficiency, and long-term resilience. Through strategic initiatives in decarbonization, materiality assessment, talent development, human rights, supply chain management, and stakeholder engagement, we are actively reducing our environmental impact while shaping a more responsible future for our industry. Investments in recycling, bio-based solutions, and circular economy initiatives continue to be at the core of our sustainability journey, ensuring that we drive meaningful impact across our value chain.

Despite our diligent efforts, external uncertainties such as the lack of decarbonization technologies, business restructuring, and capital investments pose significant challenges to achieving our 2025 targets. Increased production in high-energy and carbon-intensive sites, accompanied by higher energy usage, offset reductions, resulting in GHG intensity remaining nearly unchanged from 2020. Energy and water intensity targets are also at risk of not being met by 2025. Full data and details are provided in this 2024 report.

Extending Our Impact Beyond Operations

Ensuring our sustainability agenda goes beyond our own operations, we work closely with our stakeholders to anticipate expectations and exceed compliance requirements, all while safeguarding transparency and accountability at every step. ESG and sustainability principles are deeply embedded in our business through collaborative initiatives such as:

- GHG Scope 3 partnerships with suppliers to drive emissions reductions across our supply chain.
- Life Cycle Assessments (LCA) with customers to ensure sustainable product innovations.
- Enhanced reporting compliance with regulators, demonstrating our commitment to responsible business practices.
- Sustainable finance engagements with investors and bankers, reinforcing our long-term ESG strategy.
- Community engagement through recycling education, such as our Waste Hero program, which empowers consumers to take action.

Knowledge-building remains a key focus, and in 2024, we continued fostering a sustainability-driven culture through our Sustainability Academy. With 10 courses currently available and over 266 senior executives trained, we are equipping our leaders with the tools to drive impactful changes.

Global Recognition for Our Sustainability Leadership

Our dedication to sustainability has been recognized globally. We are honored to be ranked 3rd in the Dow Jones Sustainability World Index, marking our sixth consecutive year as Best-in-Class. Additionally, our AAA rating in the 2024 SET ESG rankings from the Stock Exchange of Thailand reflects our unwavering commitment to responsible and transparent business practices.

Driving Global Impact Through Collaboration

At COP29, we strengthened strategic partnerships with governments, customers, and leading international organizations, including the United Nations, World Bank, WBCSD, and UN Global Compact. We showcased our latest sustainable innovations, including:

- SIPA Sparkling Wine Bottle – The world’s first monolayer PET bottle for sparkling wine, setting new standards for sustainable packaging.
- OXISMOOTH® – A breakthrough product line made entirely from renewable resources.

These engagements are critical in fostering collaboration, unlocking new business opportunities, and driving shared value creation. As a result of our active participation in the Global Plastic Treaty discussions, we remain committed to working across the value chain to deliver real impact in the circular economy.

As Chair of the Circular Economy taskforce for the Sustainable Business Network, under the United Nations regional office in Asia Pacific, I was privy to how the “six secrets of circularity” are critical to any industry or sector’s market transformation from linear to circular, witnessing both the similarities and specificities of PET versus other impact areas. (The six secrets are Regulation, Education, Collaboration, Innovation, Infrastructure, and Finance.)

Empowering the Future: Sustainability Transformation

Looking ahead, we are empowering our teams to lead sustainability transformation within our organization. Our “Innovate to 28” strategy is designed to educate, inspire, and drive impactful action. By embedding sustainability across human capital, customer engagement, innovation, and supply chains, we are laying the foundation for responsible growth.

Through strategic partnerships, advanced recycling, biomass investments, circular feedstocks, and decarbonization, we are not just preparing for future challenges—we are shaping the transition toward a more sustainable petrochemical industry.



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Company Overview

Our Journey

Founded as Indorama Holdings, we began by developing numerous business segments, eventually becoming Thailand's first producer of worsted wool yarn. Since our inception in 1994, we have built a global presence with 150 operational sites, 24 recycling facilities, and 26 Research and Development (R&D) centers across 31 countries on five continents. Today, Indorama Ventures is a global leader in the chemical industry and the world's largest producer and recycler of PET.

Our three core business segments are Combined PET, Fibers, and Indovinya. Our products serve a wide range of industries, including food and beverages, automotive, hygiene, pharmaceuticals, textiles, home and personal care, and agrochemicals.

International expansion, particularly through acquisitions in the US and Europe, has positioned us as a global player in the PET and polyester value chain. We remain focused on innovation and advancing circularity to drive sustainable outcomes for business, communities, and the environment.

Our Purpose

Reimagining chemistry together
to create a better world.

Our Vision

To be a world-class sustainable chemical
company producing indispensable chemistry
that touches billions of lives every day.

Values

- **The customer is why we exist**
We measure ourselves by the success of our customers, striving to exceed their expectations through purposeful innovation and attention to quality.

- **Our people make the difference**
Our people are our greatest asset and competitive advantage. We respect every voice and grow stronger by supporting one another.

- **Diversity is our strength**
As a global company, we value the range of knowledge, perspectives, and experiences in our organization, drawing strength from this diversity to drive growth.

- **We embrace change as an opportunity**
In a constantly evolving business landscape, we take a lifecycle perspective that helps us anticipate change, adapt swiftly, and maintain a competitive edge.

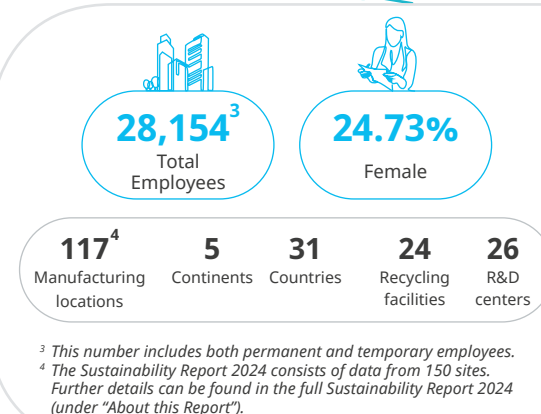
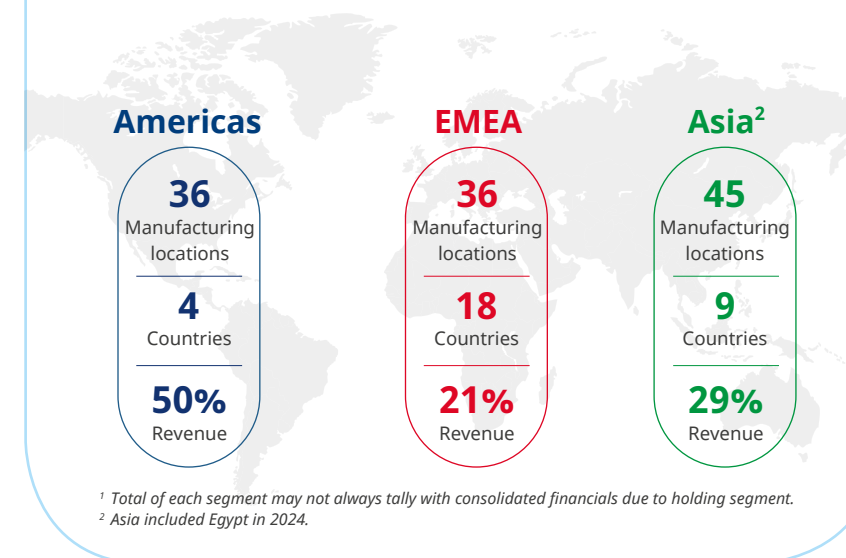
- **We are responsible**
We act with integrity, economically, socially, and environmentally, placing health and safety at the core of everything we do.



FOR MORE
INFORMATION

About Indorama Ventures

At a Glance



Our Differentiation

- 1 70% of our products serve daily necessities.
- 2 Leadership positions across all major markets and products we manufacture.
- 3 Best-in-class management.
- 4 A world-class digital and AI platform.

Market Positioning

Indorama Ventures has firmly established itself as a leader in the global chemical and materials industry, built on disciplined financial management, strategic expansion, and a relentless focus on delivering value to our customers and stakeholders through innovation, operational excellence, and sustainability. With consistent double-digit earnings growth, strong free cash flow, and a debt ratio below three times EBITDA, Indorama Ventures is well-positioned for sustained long-term success.

A Trusted Partner to Global Brands

We are a preferred partner to global brands across a wide range of applications. Our global reach, customer-driven innovation, and financial resilience set us apart in an evolving market. Our manufacturing sites around the world deliver high-quality, cost-effective solutions to customers worldwide. A robust supply chain and production capabilities ensure product quality consistency, reliability, and competitive pricing.

By anticipating industry shifts, leveraging technology, and championing sustainable innovation, we are able to meet evolving customer needs with high-performance products. We continue to strengthen our market leadership, set new industry standards, and deliver lasting value to our customers, investors, and the planet.

Sustainability is at the Core of Our Strategy

Through bold investments in recycling, decarbonization, and responsible sourcing, we are not only advancing our own operations but also helping shape the industry toward a more sustainable future.

As a global leader in PET recycling, we are scaling up our efforts through infrastructure investment and expansion. Having recycled over 135 billion PET bottles to date, we are now aiming to recycle 100 million bottles of post-consumed PET annually.

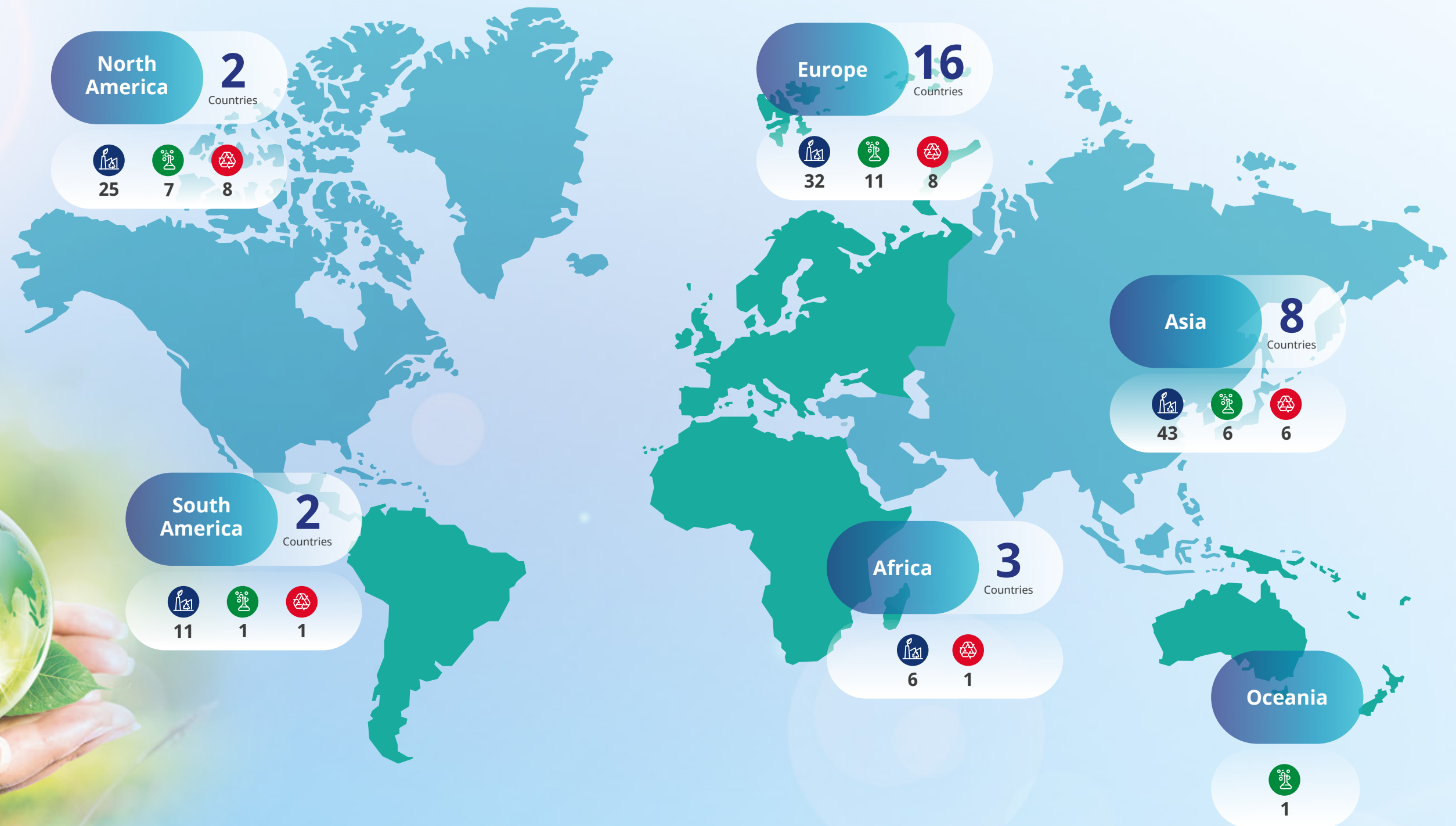
Circular feedstocks are increasingly important for achieving sustainability targets and meeting customer expectations. We proactively source more renewable feedstocks and are a long-standing member of the International Sustainability & Carbon Certification (ISCC) program, which helps ensure the sustainability of our supply chain. We currently hold 10 ISCC Plus certificates across sites in Europe, Asia, and Brazil.

We also incorporate responsible sourcing throughout our operations, embedding sustainability within our entire value chain. Additionally, we collaborate on decarbonization across the supply chain, with a particular focus on accounting for and reducing Scope 3 emissions.



Locations of Our Operations

[GRI 2-1, 2-2]



Operating
Sites



R&D
Centers



Recycling
Facilities

North America

- Mexico
- The United States

South America

- Brazil
- Uruguay

Africa

- Egypt
- Ghana
- Nigeria

Oceania

- Australia

Asia

- China
- India
- Indonesia
- Israel
- Myanmar
- The Philippines
- Thailand
- Vietnam

Europe

- | | | |
|----------------------|--------------|----------------------|
| • Belgium | • Ireland | • Slovakia |
| • Bulgaria | • Italy | • Spain |
| • The Czech Republic | • Lithuania | • The Netherlands |
| • Denmark | • Luxembourg | • Turkey |
| • France | • Poland | • The United Kingdom |
| • Germany | • Russia | |



Business Rationale

Our sustainability priorities are closely aligned with our mission to be a world-class sustainable chemical company. We are addressing regulatory, environmental, and market-related risks by optimizing our asset footprint, improving energy efficiency, and reducing reliance on fossil-based inputs. Investments in recycling infrastructure, bio-based and low-carbon technologies, and sustainable product innovation position us to meet rising demand for circular solutions and open pathways to new markets such as sustainable packaging, green chemistry, and bio-chemistry.

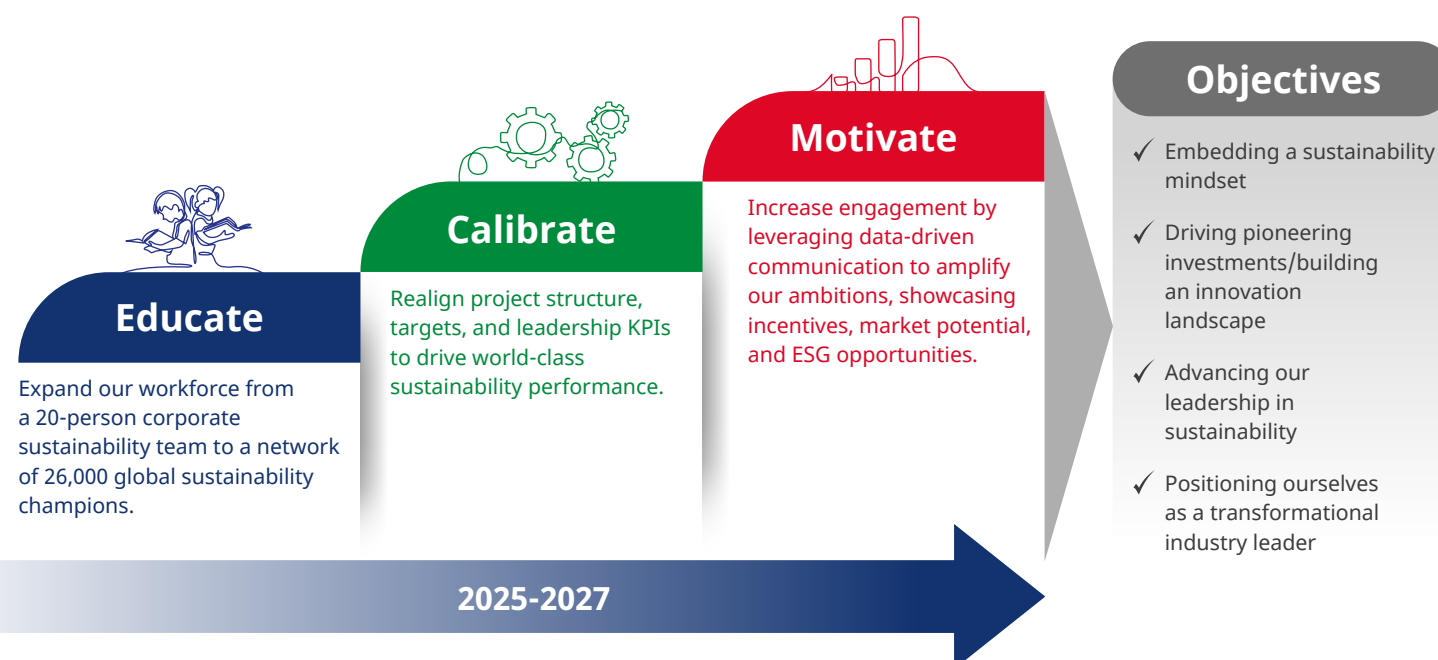
Sustainability is embedded across Indorama Ventures' value chain. Our "Innovate to 28" sustainability strategy aims to enable a company-wide sustainability mindset and promote ambitious ESG efforts in priority areas including decarbonization, advanced recycling, biomass, and circular feedstocks—reinforcing our leadership in sustainable innovation. Board and management oversight at both the corporate and segment levels, along with global collaboration from all business units, ensures accountability and measurable progress at every stage.

Consumer demand for sustainable products is increasing significantly. Our product portfolio, which includes Deja™ recycled PET products and other bio-based offerings, is well-positioned to support the sustainability goals of our customers. These trends present opportunities to increase our presence in high-margin, sustainable segments and strengthen long-term customer partnerships.

The EU and the US have introduced new ESG and sustainability reporting regulations to improve transparency, comparability, and decision-making by preventing misinformation and integrating ESG factors into investment and risk management processes. Indorama Ventures is preparing for compliance with the EU CSRD, EU Taxonomy, and IFRS sustainability disclosure standards. The company is also preparing for regulations such as the EU Carbon Border Adjustment Mechanism (CBAM), the EU Carbon Tax and Credits, and the EU Plastic Tax and Credits, while evaluating targets to reduce Scope 3 GHG emissions.

Sustainable Value Creation through "Innovate to 28"

Looking ahead, our "Innovate to 28" Sustainability Strategy outlines a three-year roadmap focused on strengthening existing sustainability initiatives and transforming others to unlock greater value. The strategy aims to embed a sustainability-first mindset across our operations, workforce, customer engagement, innovation processes, and supply chain. In parallel, we are advancing bold investments in decarbonization, cutting-edge recycling technologies, biomass, and circular feedstocks—underpinned by a startup-focused innovation ecosystem – to sustain our leadership in sustainability and shape the future of the industry.



Building Financial Resilience



Financial Capital

In 2024, Indorama Ventures remained focused on strengthening its financial foundation, reinforcing financial discipline, and pursuing a forward-looking investment strategy aligned with our transformation roadmap.



Financial Strategy and Governance

As part of our evolving financial strategy, we are integrating ESG-aligned performance indicators into executive accountability and capital allocation frameworks. This reflects our commitment to aligning environmental stewardship with responsible governance, helping safeguard long-term value creation for all stakeholders.



Remuneration

A key aspect of social sustainability is addressing disparities in pay, particularly the gap between CEO and employee remuneration, which directly impacts workforce morale and perceptions of fairness. To ensure transparency and equity, the Company rigorously monitors this gap, which stood at a ratio of 67.69 in 2024 between the GCEO and the average employee.



GHG Intensity per Unit Revenue

We continuously track and disclose greenhouse gas emissions intensity relative to revenue, offering a clearer picture of carbon productivity. This metric serves as a proxy for operational sustainability and helps guide our efforts to decouple economic growth from environmental impact.

- 0.037 million tons per \$ billion (Market-based GHG Intensity)
- 0.038 million tons per \$ billion (Location-based GHG Intensity)

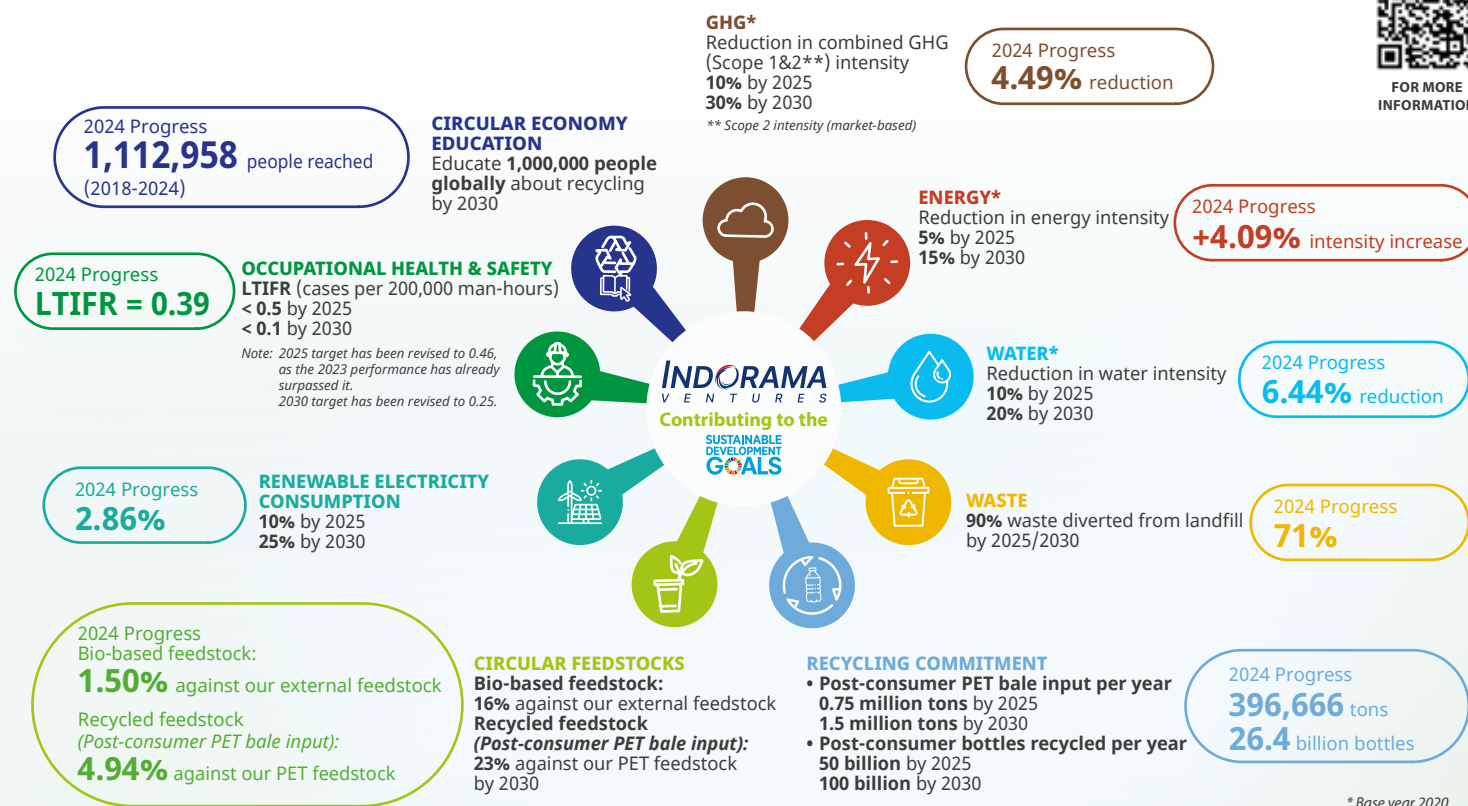


Internal Carbon Pricing

We have implemented an Internal Carbon Pricing (ICP) framework to assign a financial cost to carbon emissions across operations and investments. This tool drives capital toward lower-carbon alternatives, informs project feasibility assessments, and integrates climate considerations into enterprise risk management.



Performance in Our Sustainability Ambitions



Indorama Ventures continued to advance its sustainability agenda through targeted actions across environmental, social, and circular economy priorities. This highlights our progress toward key goals, including reducing emissions, increasing recycling, improving workplace safety, and promoting responsible resource use. Each indicator reflects our ongoing commitment to creating long-term value while contributing meaningfully to the United Nations Sustainable Development Goals (SDGs).

Indorama Ventures' Key ESG Highlights 2024

Environment



Total Energy Consumption
121.5 million GJ

Total Energy Intensity
7.43 GJ/ton of production

Total Renewable Energy Consumption
1.34 million GJ

Total Renewable Electricity Consumption
2.86%



Hazardous Waste Intensity
0.0079 tons/ton of production

Waste Diverted from Landfill*
71%

* Including waste incinerated with energy recovery.



Total Water Withdrawal Intensity
4.94 m³/ton of production

Total Recycled/Reused Water
7.16%



GHG Emissions (Scope 1) Intensity
0.4264 tCO₂e/ton of production

GHG Emissions (Scope 2) Intensity**
0.1591 tCO₂e/ton of production

GHG Emissions (Scope 1&2) Intensity**
0.5855 tCO₂e/ton of production

** Market-based



Economic & Governance

Financial Highlights

Total Production Volume
14.04 million tons

Consolidated Revenues
USD **15.36** billion

Adjusted EBITDA
USD **1,522** million

Adjusted Net Profit after Tax and NCI
USD **175** million

Operating Cash Flow
USD **996** million

Adjusted Earnings per Share
THB **0.88**

AA-
TRIS Rating

Customer Satisfaction Study*

84.55%
Customer Satisfaction Index (CSI)

86.68%
Customer Retention Rate (CRR)

46
Net Promoter Score (NPS)

*A formal customer satisfaction study is conducted every other year as part of our group sustainability strategy. The latest study was conducted in 2024.



Corporate Governance Policy Awareness Campaign (CGPAC) Implementation
80%
Employee Attendance



Human Rights Declaration
100%
Signed by Business Heads and Site Heads



Business Segments

Combined PET

As a key element of the polyester value chain, our Combined PET (CPET) business provides foundational materials for a wide range of applications, including bottles, sheets, films, fibers, filaments, and other specialty products. Its versatility supports the shift toward a circular economy, extending into specialty PET and packaging solutions.

For over three decades, our global network, spanning 63 PET manufacturing and recycling facilities in 26 countries, has enabled us to consistently deliver competitive, high-quality, and sustainable PET solutions worldwide.

Combined PET is integral to our globally integrated operations. It receives Ethylene Oxide (EO) from Indovinya to produce PET plastic. CPET supplies both virgin and recycled PET to our Fibers segment for the production of polyester yarns and fibers used across various industries.

Building on its leadership in PET packaging, the CPET segment delivered 5% growth in adjusted EBITDA, reaching \$1,012 million. Performance was supported by higher operating rates, stronger cost discipline, and a deliberate approach to rationalizing assets in Europe and Canada. These decisions were carefully managed to minimize disruption and improve long-term competitiveness.



Key ESG Highlights 2024

2024 Performance



Market Leadership

#1
PET producer globally

#1
rPET* producer globally
* Recycled PET

The only shale-integrated player in the West.

Packaging leadership in emerging markets.

Innovation

80
Patents
(Cumulative until 2024)

\$2.87 million
R&D Spending

18
R&D Employees

3
R&D Centers

Customer Satisfaction*

85.40%
Customer Satisfaction Index (CSI)

89.31%
Customer Retention Rate (CRR)

51
Net Promoter Score (NPS)

* A formal customer satisfaction study was conducted every other year as part of our group sustainability strategy. The latest study was conducted in 2024.

Health and Safety

Total Recordable Injury Rate: TRIR

0.52
cases per 200,000 man-hours

Lost Time Injury Frequency Rate: LTIFR

0.29
cases per 200,000 man-hours

Environment

GHG Emissions

0.3317 tCO₂e/ton of production
Scope 1 intensity

0.1286 tCO₂e/ton of production
Scope 2 intensity*

0.4603 tCO₂e/ton of production
Scope 1 & 2 intensity*
* Market-based

Energy

5.75 GJ/ton of production
Intensity

3.06%
Renewable electricity

Water

3.85 m³/ton of production
Intensity

Waste

58.62%
Waste diverted from landfill**

** Including waste incinerated with energy recovery



The Fibers segment benefits from its integration with the Combined PET business, enabling the efficient use of PET in producing yarns and fibers. This streamlined setup enhances our ability to meet the evolving needs of our customers. Our comprehensive portfolio offers safe, high-performance solutions across automotive, industrial, home textiles, apparel, hygiene, and medical applications.

We are a global supplier of tire reinforcements and automotive safety solutions, recognized for delivering superior safety, comfort, and performance. In the Lifestyle segment, our high-quality fibers and yarns cater to dynamic growth markets, seamlessly blending style with functionality.



Key ESG Highlights 2024

2024 Performance



Market Leadership

Lifestyle

#1
in PET staple fiber ASEAN

Hygiene

#2
in BiCO fiber

Mobility

#2
in airbag yarn

#2
in tire cord fabric

Innovation

44
Patents
(Cumulative until 2024)

\$8.50 million
R&D Spending

105
R&D Employees

16
R&D Centers

Customer Satisfaction*

84.02%
Customer Satisfaction Index (CSI)

86.28%
Customer Retention Rate (CRR)

42
Net Promoter Score (NPS)

* A formal customer satisfaction study was conducted every other year as part of our group sustainability strategy. The latest study was conducted in 2024.

Health and Safety

Total Recordable Injury Rate: TRIR

0.86
cases per 200,000 man-hours

Lost Time Injury Frequency Rate: LTIFR

0.62
cases per 200,000 man-hours

Environment

GHG Emissions

0.4673 tCO₂e/ton of production
Scope 1 intensity

0.5703 tCO₂e/ton of production
Scope 2 intensity*

1.0377 tCO₂e/ton of production
Scope 1 & 2 intensity*
* Market-based

Energy

10.24 GJ/ton of production
Intensity

3.41%
Renewable electricity

Water

7.62 m³/ton of production
Intensity

Waste

92.51%
Waste diverted from landfill**

** Including waste incinerated with energy recovery



Fibers

In parallel, in the Hygiene vertical, we provide reliable, safe, and comfortable fibers and yarns for personal care and medical applications.

The business recorded a 26% increase in adjusted EBITDA to \$159 million, supported by improved industry conditions in the Lifestyle sector and higher volumes across key markets. Cost efficiency and operational improvements were also advanced throughout the year. As customer preferences shift toward performance and sustainability, Fibers is collaborating with partners to develop innovative solutions that meet both functional and environmental expectations.



Indovinya

Indovinya plays a critical role in our chemical intermediates and surfactants value chain by developing specialized surfactants that reduce energy and water consumption, and agrochemical solutions that enhance crop yields while minimizing land use, supporting markets such as Home and Personal Care, Agrochemicals, Coatings, and Energy.

The Company is transitioning to bio-based, less harmful products to ensure that our chemistry aligns with evolving customer needs. Through collaboration, innovation, and a commitment to quality, we aim to create solutions that positively impact millions of lives every day.

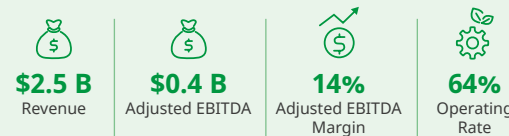
In 2024, the business delivered a strong performance, with adjusted EBITDA rising 29% to \$352 million. Sales volumes grew 4%, supported by stable demand in South America and improved pricing in North America. The portfolio was further strengthened through the acquisition of two established brands in the energy and resources sector, reinforcing its position in high-value applications.



Key ESG Highlights 2024

The previous name of the business division was Integrated Oxides and Derivatives (IOD).

2024 Performance



Market Leadership



Innovation

543
Patents
(Cumulative until 2024)

\$21.30 million
R&D Spending

207
R&D Employees

7
R&D Centers

Customer Satisfaction*

83.99%
Customer Satisfaction Index (CSI)

83.29%
Customer Retention Rate (CRR)

44
Net Promoter Score (NPS)

* A formal customer satisfaction study was conducted every other year as part of our group sustainability strategy. The latest study was conducted in 2024.

Health and Safety

Total Recordable Injury Rate: TRIR
0.16
cases per 200,000 man-hours

Lost Time Injury Frequency Rate: LTIFR
0.06
cases per 200,000 man-hours

Environment

GHG Emissions

0.6811 tCO₂e/ton of production
Scope 1 intensity

0.0491 tCO₂e/ton of production
Scope 2 intensity*

0.7302 tCO₂e/ton of production
Scope 1 & 2 intensity*

* Market-based

Energy

10.95 GJ/ton of production
Intensity

0.51%
Renewable electricity

Water

6.79 m³/ton of production
Intensity

Waste

72.67%
Waste diverted from landfill**

** Including waste incinerated with energy recovery

Thought Leadership in Action

[GRI 2-6, 3-3, ESR2 15]

Sustainable Partnerships and Engagement



United Nations
Global Compact

Since 2020, we have been a "Participant" member of the UN Global Compact (UNGC) and Local Network Thailand.

In support of

**WOMEN'S
EMPOWERMENT
PRINCIPLES**

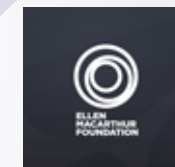
Established by UN Women and the
UN Global Compact Office

As a signatory to the UN Women's Empowerment Principles (WEP), we are dedicated to promoting gender equality and empowering women.



Alliance of
CEO Climate
Leaders

We are proud of our membership in the World Economic Forum Alliance of CEO Climate Leaders and are committed to achieving ambitious climate actions.



We take pride in our involvement with the Ellen MacArthur Foundation's New Plastic Economy Initiatives and have committed to advancing recycling efforts globally.



We are an active member of the American Chemistry Council (ACC), and our Group CEO serves on the ACC board.



Our US subsidiaries follow the 'Responsible Care' program established by the ACC and obtained certification in 2022.



We have been a signatory to the Task Force on Climate-Related Financial Disclosures since 2020.



We have implemented the recommendations of the TNFD since our first report in 2023.



The Federation of Thai Industries supports businesses developing sustainable growth in industrial operations.



Industry Collaborations/Partnerships



Indorama Ventures Showcases 'Indispensable Chemistry' and Sustainability at SX 2024

At Sustainability Expo (SX) 2024 in Bangkok, ASEAN's largest sustainability event, Indorama Ventures showcased its 'Indispensable Chemistry' booth, highlighting the essential role of its PET, polyester, and specialty chemicals in everyday products such as packaging, textiles, crop solutions, and personal care. Over nine days, thousands of visitors engaged with the company's sustainability strategy, responsible sourcing, and CSR efforts through interactive displays and guided tours. The booth also hosted distinguished guests, including Her Royal Highness Princess Maha Chakri Sirinthorn, to whom Yash Lohia, Chairman of the ESG Council, was honored to present gifts on behalf of Indorama Ventures.



Strengthening Strategic Partnerships and Championing Sustainability

Indorama Ventures' PET team in Vietnam participated in Coca-Cola Vietnam's 30th anniversary celebration in August 2024, and the launch of the second year of the "Our Bottles Can Live Many Lives" program. The event showcased recycled PET preforms produced by Indorama Ventures' Vietnam facilities, reinforcing the company's role in enabling Coca-Cola's sustainable packaging goals. As Vietnam's largest processor of recycled PET, the company ensures top-quality output through advanced facilities and stringent quality protocols. This partnership not only demonstrates a strong commitment to circular economy solutions but also enhances market presence, customer trust, and operational efficiency by aligning with global sustainability objectives.



Driving Circularity and Climate Action at COP29

Indorama Ventures Public Company Limited showcased its latest advancements in recycling and sustainability at the 29th United Nations Climate Change Conference (COP29), held from November 11 to 22 in Baku, Azerbaijan.

The company participated through its own booth and the Thailand Pavilion, in partnership with the Thai government. We highlighted the milestone of recycling over 130 billion post-consumer PET bottles (February 2011- October 2024) and innovations such as the SIPA Sparkling Wine Bottle—the world's first sustainable monolayer PET bottle for sparkling wine—and the world's first commercial-scale bio-PET bottle made with ISCC+ certified bio-paraxylene, in collaboration with Suntory and partners. We also featured OXISMOOTH®, a renewable multifunctional emollient range. Indorama Ventures contributed to thought leadership panel discussions at COP29, with Chief Sustainability Officer Anthony M. Watanabe presenting "The Six Secrets of Circularity," emphasizing the circular economy's potential to reduce global emissions by 40% by 2050 and the importance of global cooperation and a global plastic treaty.

Major Industry Associations, Memberships, and Collaborations

[GRI 2-28, 2-29]

As a prominent chemical company, Indorama Ventures exemplifies leadership through joint efforts with external alliances, partners, and industry experts to collectively address global sustainability challenges and accelerate sustainable development. In addition, we participate in various industry associations and promote partnerships at both the company-wide and segment levels.



Global

- United Nations Global Compact (UNGC)
- World Economic Forum (WEF)
- Global Plastic Action Partnership (GPAP)
- Task Force on Climate-Related Financial Disclosures (TCFD)
- Ellen MacArthur Foundation (EMF)
- Responsible Care
- Roundtable on Sustainable Palm Oil (RSPO)
- The Recycling Partnership (TRP)
- United Nations Environment Programme (UNEP)

EMEA

- PET Europe
- PETCORE Europe
- European Man-Made Fibers Association (CIRFS)
- Plastics Recyclers Europe (PRE)
- International Association of the Nonwoven Fabrics Industry (EDANA)
- The European Organization for Packaging and the Environment (EUROPEN)
- Asociación de Grandes Industrias (AGI), Spain
- Treuhandgemeinschaft Deutscher Chemiefasererzeuger GmbH, Germany
- Industrievereinigung Chemiefaser e.V. (IVC), Germany
- Le Syndicat des Régénérateurs de matières Plastiques (SRP), France
- Association of Ghana Industries (AGI), Ghana

Asia

- Indian Chamber of Commerce (ICC), India
- The Federation of Thai Industries (FTI), Thailand
- Thai Beverage Industry Association (TBA), Thailand
- Global Compact Network Thailand (GCNT), Thailand
- Thai Chamber of Commerce, Thailand
- Plastic Industry Club, The Federation of Thai Industries, Thailand

Americas

- National Association for PET Container Resources (NAPCOR), North America
- PET Resin Association (PETRA), North America
- Americas Fiber Manufacturing Association (AFMA), USA
- Association of Plastics Recyclers (APR), USA
- American Cleaning Institute (ACI)
- The National Association of the Chemical Industry
- American Fuel & Petrochemical Manufacturers (AFPM), USA
- American Chemistry Council (ACC), USA
- Association of the Non-woven Fabric Industry (INDA), USA
- Council for LAB/LAS Environmental Research (CLER), USA
- Associação Brasileira da Indústria do PET (ABIPET), Brazil
- Associação Brasileira da Indústria Químicas (ABIQUIM), Brazil
- PATRI Políticas Públicas & Public Affairs Ltd., Brazil
- Asociación de Combustibles Eficientes de Latinoamérica, Mexico
- Asociación Ambiental Sin Fines de Lucro (ECOCE), Mexico
- Asociación de Industrias Químicas del Uruguay, Uruguay



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Operating Environment and External Analysis



Macro-economic Trends

Market Analysis

The global petrochemical industry is shaped by shifting consumer preferences, tightening regulatory frameworks, and technological advances. There is a rising demand for sustainable and recyclable materials as environmental awareness grows. Indorama Ventures operates in a competitive landscape alongside major players such as BASF and Dow Chemical, making strategic differentiation vital to expanding our global footprint and capturing growth in emerging markets.

Regulatory Framework and Compliance Challenges

Tackling Regulatory Challenges

Regulatory changes may lead to delays, operational restrictions, or added compliance obligations. We remain committed to environmental protection and regulatory compliance across all our operations, actively monitoring evolving requirements, focusing on improving efficiency, aligning with GHG reduction targets, and participating in independent sustainability benchmarking to support long-term value creation, and our decarbonization strategy.

Competitive Dynamics within the Industry

We pursue a dual strategy of differentiation and cost leadership by leveraging product innovation and consistent quality to stand out, while operational efficiencies and research investments help manage costs. Strategic alliances and partnerships further support capability expansion, innovation, and broader market access, reinforcing our leadership in sustainable materials.

SDGs Alignment and Achievements

Indorama Ventures is committed to actively contributing to the achievement of the Sustainable Development Goals (SDGs). We have identified five key focus areas that are both relevant to our business and aligned with the SDGs, with our initiatives supporting 13 of the 17 goals and addressing 39 specific targets. In 2020, Indorama Ventures became the first company in Thailand to publish a standalone SDGs Report, presenting our performance and progress in advancing these goals.

To further align with the 2030 Sustainable Development Agenda, we enhanced our SDG-related practices and reporting in 2024 by integrating an Impact Measurement and Management (IMM) framework. This framework was jointly developed by the Securities and Exchange Commission (SEC) of Thailand and the United Nations Development Programme (UNDP) in Thailand, and published as part of an SDG Guidebook for Thai Listed Companies. It helps companies integrate SDG principles into their existing business practices. With this clarity, we are now better positioned to allocate resources strategically, respond more effectively to stakeholder needs, and build trust through increased transparency.

The IMM framework is aligned with global standards established by the Impact Management Project (IMP), which defines impact measurement across five dimensions: What, Who, How Much, Contribution, and Risk. This structured approach enables us to more clearly assess and communicate the value and reach of our sustainability efforts, reinforcing our commitment to responsible business practices and long-term growth. It also gives us a more systematic understanding of how our activities contribute to sustainable development. In 2024, we focused on Step 3: Prioritizing Impacts of the IMM framework. We also completed a Double Materiality Analysis (DMA), mapped and prioritized SDGs across our value chain, and set specific impact goals. A major development this year is our work to define the five dimensions of impact for each prioritized goal—a new and important step in deepening our impact strategy.

For more details on our SDGs practices and reports, please visit the Sustainability Development Goals section on our website.



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INFORMATION



Creating Value and Accelerating Impact Through SDGs Collaboration with Silpakorn University to Promote Pet Circularity

Since its launch in 2022, this collaboration has entered its second year, promoting PET circularity and the SDGs through hands-on education. Activities include collecting post-consumer PET bottles for recycling at our Nakhon Pathom facility, pitching circular economy project ideas, and promoting meaningful engagement. This initiative is part of the “Green ENTECH Green Campus” program by the Faculty of Engineering and Industrial Technology, which encourages environmental responsibility and empowers students to drive sustainability on campus.



In 2024, we conducted training sessions and knowledge-sharing activities focused on waste separation, PET recycling, and the circular economy, reaching a total of 400 students. During the event, students actively participated in sorting and collecting PET bottles, amounting to 1,300 kilograms, which were transported to our facility in Nakhon Pathom for recycling. This effort helped reduce carbon emissions by 1.5 tons of CO₂. Additionally, students and professors involved in the program were invited to visit our recycling factory to see firsthand where the bottles go and how the PET recycling process works.



Chapter 2

Value Creation

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Business Model and Integrated Strategy for Sustainable Value Creation

Our Three Business Segments

Combined PET

Indorama Ventures is a global leader in PET manufacturing and recycling. Our packaging, recycling, and specialty chemicals businesses support key global markets including food and beverages, pharmaceuticals, cosmetics, personal care, and technical polymers.

As an essential part of the polyester value chain, Combined PET provides core materials for bottles, packaging, fibers, and specialty products. It also integrates with Indovinya for Ethylene Oxide (EO) supply and provides both virgin and recycled PET to the Fibers segment.

Note: In this report, the Packaging segment is included as part of the Combined PET segment.

“



Our Combined PET business segment is built on a differentiated, customer-centric model, serving leading global brands with the agility of a competitive local player. By providing recycled PET products, we help customers advance their sustainability goals.

”



Fibers

Indorama Ventures is a global leader in the fibers industry, offering an extensive product portfolio across mobility, industrial, lifestyle, hygiene, and medical applications. Our integration with Combined PET ensures efficiency, quality, and alignment with evolving customer needs.

Growth in the Fibers business is underpinned by global trends such as lightweighting, the use of sustainable materials, and an increasing focus on hygiene and lifestyle shifts.

“



The Fibers segment leads in value-added, high-performance, recycled, and bio-based products across key applications, distinguishing us in a competitive market. We are introducing a new operating model to unlock the full potential of the business, grounded in innovation, reliability, functionality, and long-term value creation.

”



Indovinya

Indovinya is a key business within Indorama Ventures' global model, supplying Ethylene Oxide (EO) for PET production. It was established through the \$2 billion acquisition of Huntsman's surfactants business in 2020 and further strengthened by the 2022 acquisition of Brazil-based Oxitenio.

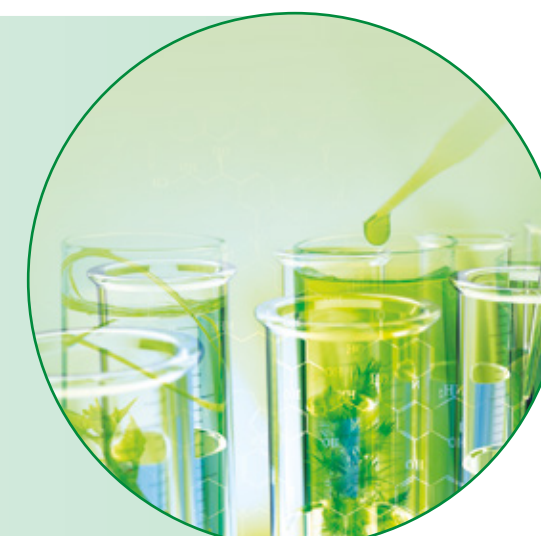
This amplifies downstream specialty chemicals' potential for growth, with a focus on innovation and sustainable solutions to support high-value markets such as Home and Personal Care, Agrochemicals, Coatings, and Energy.

“



Indovinya is building a strong equity story and unveiling a new brand identity. By harmonizing its operations and structure, it is positioning itself as a high-growth, high-margin leader in high value-added solutions, focusing on long-term value creation.

”





Creating Sustained Value through the Six Capitals

Creating long-term value goes beyond financial performance. It involves building trust, driving innovation, and operating responsibly. We have adopted the Integrated Reporting (<IR>) framework to present a clear and comprehensive picture of how we grow and sustain value for stakeholders connected to our business and communicate how we balance strong financial performance with our commitment to environmental and social responsibility while preparing for the future.



Financial Capital

Financial Capital is the foundation of our business, encompassing equity, debt financing, and retained earnings. These resources fund investments in advanced technologies, global operations, and sustainability initiatives. Through disciplined capital allocation, we maintain profitability and long-term value creation while meeting stakeholder expectations.

Key Initiatives

Indorama Ventures secured a \$255 million sustainability-linked loan from international financial institutions, marking an important step in aligning financial stewardship with our ESG priorities. The facility supported liquidity and balance sheet resilience while tying access to capital with clearly defined sustainability targets. The loan reflects growing confidence in the Company's ability to deliver on climate commitments and integrates environmental considerations into long-term financial planning.



Manufactured Capital

Our global manufacturing sites, process innovation, and technologies drive operational excellence, and enable us to deliver high-quality, sustainable products. Continued investments in operational efficiency, digitalization, automation, and responsible practices enhance our ability to meet market needs while reducing emissions and waste.

Key Initiatives

ESG is embedded in our manufacturing strategy through operational optimization, renewable energy adoption, and responsible sourcing. Key initiatives included investments in solar panel installations, transitioning from coal to natural gas at select facilities, and strategic closures of underperforming assets to streamline operations. Investments in energy-efficient technologies, such as waste heat and ethylene recovery, delivered significant emissions reductions. We also launched water conservation projects in high-stress regions and expanded our PET plastic recycling capabilities, with new facilities planned in India and Nigeria.



Intellectual Capital

Innovation underpins our competitiveness. Our intellectual capital includes technologies, R&D expertise, patents, and process improvements. We continue to advance technologies for recycling and develop bio-based materials, including CO₂-based feedstocks, Bio-PET, and sustainable polyester fibers to offer low-carbon products and support a circular economy.

Key Initiatives

With over \$33 million invested in R&D and 483 new product launches, we expanded our portfolio of low-carbon, recyclable, and bio-based solutions across PET, fibers, and specialty chemicals. Notable innovations include the world's first recycled PET bottles for sparkling wine, biodegradable chemicals and fibers, and advanced process technologies, all of which are focused on delivering practical, high-impact solutions. Our intellectual capital was further strengthened through global partnerships, youth-led sustainability programs, and structured knowledge management initiatives.



Human Capital

Our people are our greatest asset. We invest in their growth and productivity through targeted training and development programs, while ensuring a diverse, inclusive, and safe workplace focused on well-being. By promoting a healthy work environment, we empower our employees to perform at their best and contribute meaningfully to their career growth and long-term success.

Key Initiatives

Through our IVL 2.0 strategy, we streamlined global operations to build a resilient, inclusive, and future-ready workforce. Diversity, equity, and inclusion remained a priority, with increased gender representation at the Board level and structured DEI initiatives. We expanded upskilling, digital readiness, and leadership development programs, with global employee engagement achieving an 88% participation rate. Our safety culture was reinforced through expanded EHS training, site-level safety initiatives, and measurable improvements in injury rates.



Social and Relationship Capital

Strong relationships and partnerships with customers, suppliers, communities, and partners are built through transparency, responsible practices, and shared value creation. Our efforts in sustainability initiatives, community engagements, and collaborations with suppliers and customers form the foundation of trust, advancing our business, and long-term success.

Key Initiatives

We strengthened stakeholder engagement to drive inclusive growth and shared value through human rights governance, responsible sourcing, customer partnerships, and community programs. All sites underwent human rights assessments, achieving a 100% declaration rate by site and business heads, while supplier ESG due diligence was institutionalized through global platforms such as EcoVadis and Together for Sustainability. Our community initiatives reached over one million people through programs focused on education, health, and the circular economy, complemented by the Waste Hero Education program expanding to 150 countries to reinforce youth-led sustainability outreach.



Natural Capital

Our operations rely on natural resources for raw materials and utilities, including energy and water. We are committed to minimizing environmental and biodiversity impacts through circular economy initiatives, resource efficiency, and the use of renewable energy. By embedding sustainability into our operations, we aim to protect the planet while building a resilient and future-ready business.

Key Initiatives

Environmental stewardship is integrated across all operations to reduce environmental impacts, aligning with long-term sustainability goals, and comply with evolving global regulations. Key initiatives include water and biodiversity risk assessments, Scope 3 emissions tracking across nine categories, and the implementation of internal carbon pricing and site-level climate adaptation plans. These efforts are supported by lifecycle assessments and active supplier engagement. Additionally, circular feedstocks are increasingly being incorporated into product development to support low-impact innovations.



Indorama Ventures' Value Creation Model

Inputs	Business Processes and Outputs	Outcomes	SDGs	Material Topics
Financial Total Equity: USD 4,087.62 million Total Current Assets: USD 5,417.11 million Total Current Liabilities: USD 5,670.77 million Stakeholders: Bankers, Investors, Fund Providers, Government/Regulators		Financial Total Revenue: USD 15.4 billion Adjusted EBITDA: USD 1.5 billion Adjusted Earnings per Share: THB 0.88 Stakeholders: Bankers, Investors, Fund Providers, Employees		All the topics
Manufactured Operating Sites: 150* Countries with Operations: 33* Recycling Facilities: 24 Stakeholders: Customers, Bankers, Investors, Fund Providers, Suppliers and Vendors		Manufactured PET Bottles Recycled: 26.4 billion bottles PET Bale Inputs: 396,666 tons Renewable Electricity Consumption: 2.86% Stakeholders: Customers, Bankers, Investors, Fund Providers, Employees		- Climate Change and Energy - Water - Human Capital
Natural Total materials consumption 16.81 million tons Total Water Withdrawal: 80,672,980 m ³ Total Energy consumption: 121.5 million GJ Renewable Energy consumption: 1.34 million GJ Stakeholders: Government/Regulators, Communities		Natural Reduction in Energy Intensity: (+) 4.09% Reduction in GHG (Scope 1 and 2) intensity: 4.49% GHG reduce from Renewable Energy Consumption: 105,680 tCO ₂ e Water Withdrawal Intensity: 4.94 m ³ /ton of production Water Reused and Recycled: 7.16% Hazardous Waste Intensity: 0.0079 tons/ton of production Waste Diverted from Landfill: 71% Stakeholders: Communities, Government/Regulatory Bodies		- Climate Change and Energy - Water - Sustainable Products - Circular Economy - Biodiversity
Human Total Workforce: 28,154 headcount Total Training Expenditure: USD 2.2 million Average Training Hours: 23.11 hours Stakeholders: Employees, Bankers, Investors, Fund Providers, Customers		Human Employee Retention Rate: 86.10% Succession Planning: 1,339 Successors Leadership Training Program: 2,062 Leaders TRIR: 0.60 cases per 200,000 man-hours LTIFR: 0.39 cases per 200,000 man-hours Stakeholders: Employees, Communities		- Human Capital - Human Rights - Diversity Equity & Inclusion - Corporate Governance
Social & Relationships Total CSR Contributions: USD 2.2 million Total Number of CSR Activities: 527 Total Volunteer Hours: 8,843 hours Direct Tier 1 Suppliers assessed for ESG-related Risks: 57.5% Stakeholders: Employees, Customers, Bankers, Investors, Fund Providers, Suppliers and Vendors, Government/Regulators, Communities		Social & Relationships Customer Satisfaction Index (CSI): 84.55% Customer Retention Rate (CRR): 86.68% Net Promoter Score (NPS): 46 Total Circular Economy Education Beneficiaries: 1.1 million people reached (cumulative 2018-2024) Suppliers who completed EcoVadis Assessments (past 36 months): 103% Suppliers who completed Onsite Audits: 143% Stakeholders: All		- Consumer Safety - Health & Safety - Supply Chain Management - Stakeholder Engagement
Intellectual Total R&D Expenditures: USD 32.67 million • Indovina R&D Expenditures: USD 21.3 million • Combined PET R&D Expenditures: USD 2.87 million • Fibers R&D Expenditures: USD 8.5 million Total R&D Employees: 330 headcount Total R&D Centers: 26 Stakeholders: Customers, Investors, Bankers, Fund Providers, Suppliers and Vendors		Intellectual New Patents Granted: 23/667 (cumulative until 2024) New Products: 464 Collaboration with Customers, Suppliers, and Academia, etc.: 103 projects Stakeholders: Customers, Employees, Bankers, Investors, Fund Providers		- Cybersecurity - Sustainable Products

* The Sustainability Report 2024 consists of data from 150 manufacturing sites. Further details are provided in the full Sustainability Report 2024 (under the "About this Report" chapter).



Our Achievements and Unique Value Proposition



What Sets Us Apart?

Global Leadership in PET and Integrated Solutions

Indorama Ventures is among the world's largest producers of PET and holds leading positions across major markets and product segments. With a fully integrated portfolio – from feedstocks and intermediates to packaging – the Company ensures efficient, reliable supply chains and cost competitiveness for essential products.

Strategic Global Presence

Operating in 31 countries with 117 manufacturing locations we combine global reach with local service, reliably supporting customers across continents while actively engaging in regional industry memberships to help shape a more sustainable future for the sector.

Extensive Network and Advanced Recycling

With 24 PET recycling facilities worldwide, we are advancing the transition toward a closed-loop system. Alongside mechanical recycling, we are investing in advanced recycling technologies to reduce the environmental impact of plastic waste.

Sustainability as a Core Business Driver

We are committed to building a sustainable future by investing in circular economy initiatives, expanding recycling infrastructure, and reducing carbon intensity across our operations.

Customer-Centric Innovation

We continue to invest in R&D and technical collaborations to develop innovative materials that meet evolving customer needs in performance and sustainability. Through our 26 R&D centers, we focus on product development, process efficiency, and circular designs.

Diversified Product Portfolio

Our broad product portfolio includes PET resins and packaging, specialty fibers for hygiene, lifestyle and mobility applications, and high-value specialty chemicals that serve global markets across packaging, textiles, automotive, home care, and personal care industries.

Digitization

Our digital transformation is driven by a world-class digital and AI platform anchored by SAP S/4HANA, which enables real-time insights, agile operations, and data-driven decision-making, strengthening competitiveness, resilience, and customer responsiveness across our global network.

Strong ESG Governance and Transparency

ESG principles are embedded in our operations and supported by dedicated governance structures at the Board, management, and operational levels. Our strategy is guided by clear targets and transparent disclosures, which lead to long-term trust and consistent recognition.

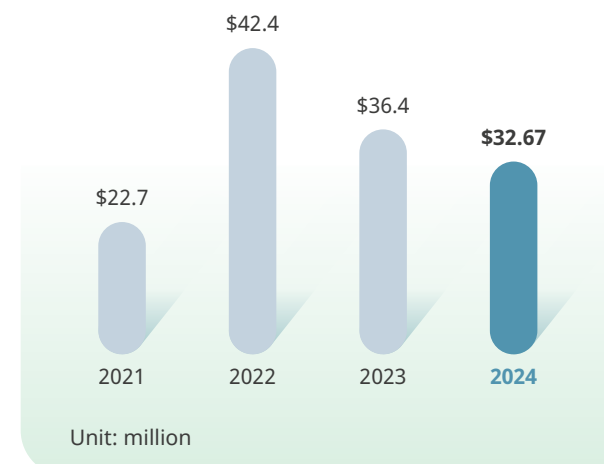
Strategic Trade-Offs, Risks, and Resilience

Trade-offs in Decision-Making

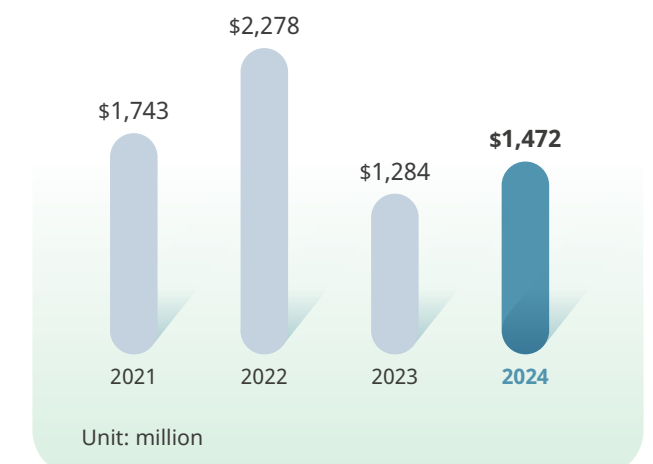
Indorama Ventures carefully evaluated opportunity costs when making strategic decisions, prioritizing investments that enhanced both operational efficiency and long-term sustainability. The Company made deliberate choices to allocate resources to projects that not only improved business performance but also support its commitment to environmental and social goals.

Relationship between Innovation Expenditure, Market Share, and Sales Volume

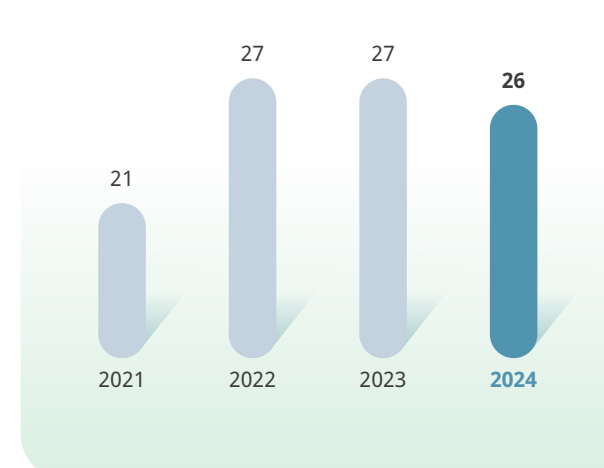
Financial Capital Input (R&D Expenditure)



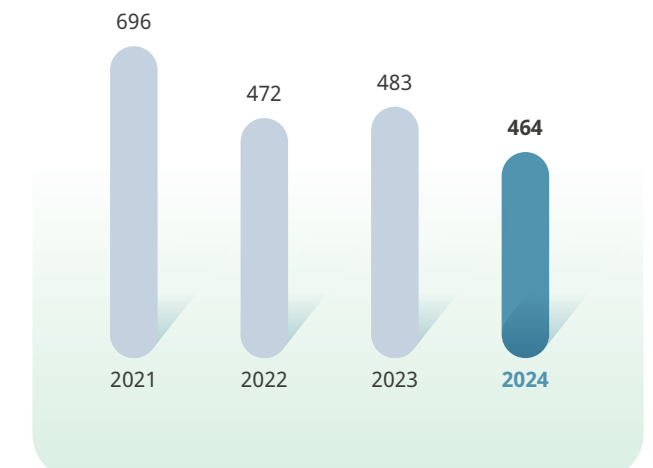
Financial Capital Output (Core EBITDA)



Intellectual Capital Input (Innovation Centers/Research Facilities)



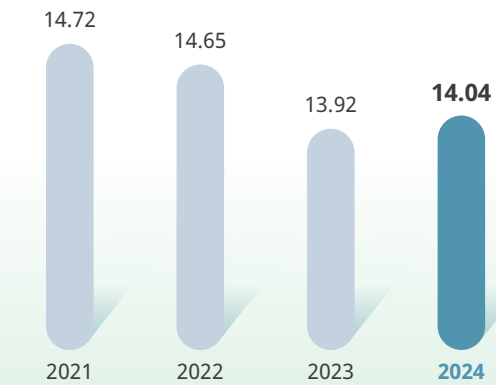
Intellectual Capital Output (New Products)





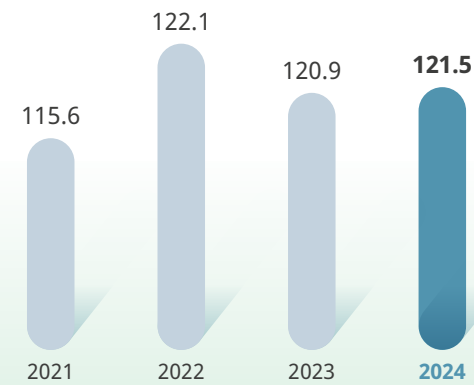
Relationship between Short-Term Financial Profitability VS. Long-Term Value Creation

Manufactured Capital Output (Production Volume)



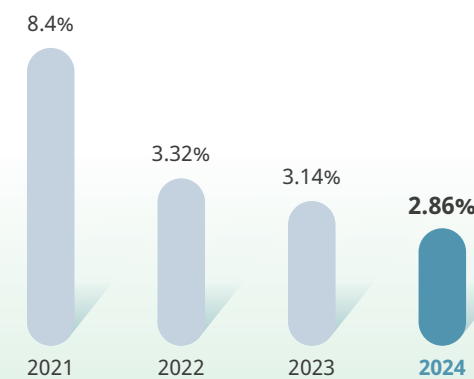
Unit: million tons

Natural Capital Input (Energy Consumption)



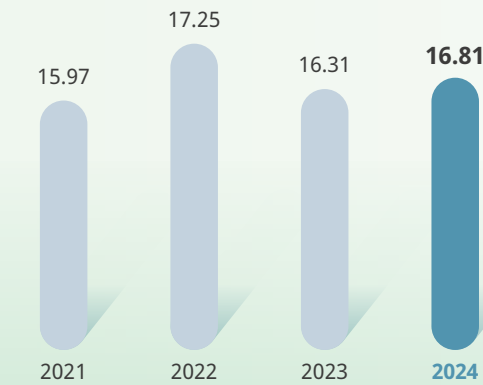
Unit: million GJ

Natural Capital Input (% of Renewable Electricity Consumption)



Relationship between Business Strategy and Environmental Impacts

Natural Capital Input (Material Consumption)



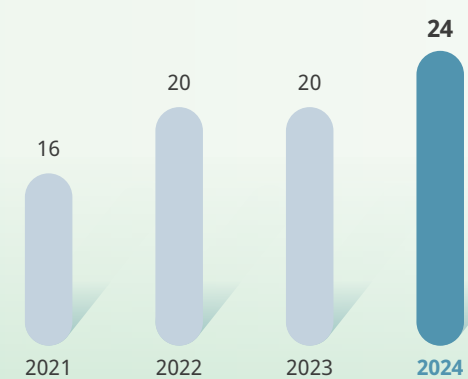
Unit: million tons

Manufactured Capital Output (Total Waste Generation)

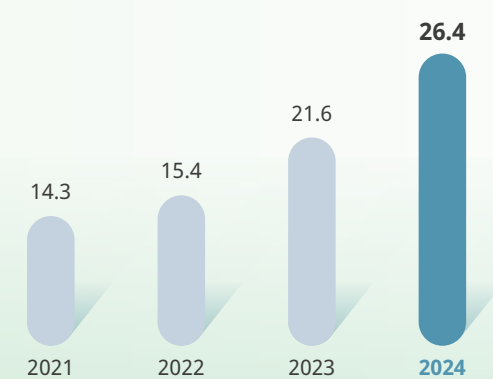


Unit: million tons

Manufactured Capital Input (PET Recycling Facilities)



Natural Capital Output (PET Bottles Recycled)



Unit: billion bottles





Sustainability-Related Risk Mitigation Plan

We take a proactive approach to managing sustainability-related risks by embedding risk considerations into our business operations. Early action helps strengthen performance and prevent regulatory non-compliance, business disruptions, or reputational harm.

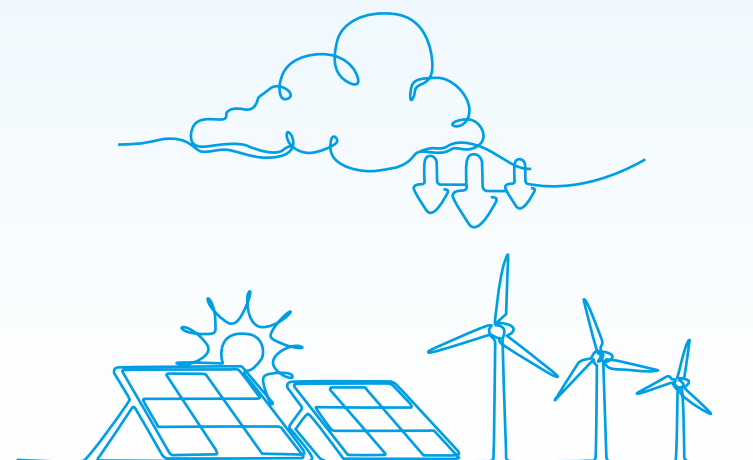
GHG and Energy Management

Challenges

- Ongoing volatility in energy markets due to the global energy transition and supply chain disruptions.
- High costs and slow progress in carbon mitigation technologies, which are still maturing.
- Evolving regulatory landscape and increasing stringency of decarbonization requirements.
- Technological constraints and scaling challenges for low-carbon solutions.

Mitigation Strategies

- Monitor energy market trends and apply cost hedging strategies to reduce financial exposure.
- Accelerate the shift to renewable energy, supported by Carbon Capture, Utilization, and Storage (CCUS) and Virtual Power Purchase Agreements (VPPAs).
- Prioritize rapid decision-making and execution of critical decarbonization projects, including coal phase-outs.
- Maintain contingency energy plans to ensure operational continuity during supply shortages.



Climate Change Adaptation

Challenges

- Growing exposure to shifting legal and regulatory changes, causing operational delays, restrictions, or higher compliance costs, plus increasing reporting obligations related to climate risks.
- Greater frequency and intensity of extreme weather events, including flooding and rising sea levels, driven by climate change.
- Potential operational disruptions due to acute and chronic climate impacts.

Mitigation Strategies

- Introduced a structured Climate Mitigation and Adaptation Plan (2024–2027) focused on:
 1. Readiness and Capacity Building (2024–2025)
 2. Planning (2026)
 3. Implementation (2027)
- Build long-term internal capabilities through initiatives like the Sustainability Academy.
- Train 60% of leaders through the Climate Adaptation Academy Course.
- Completed preliminary vulnerability assessments at 12 key sites, using industry risk tools and historical plant data.
- Developing localized adaptation plans with site heads; targeted completion by Q2 2026.
- Early resilience measures implemented at select locations in Brazil, Thailand, Egypt, and the US (Alabama).
- Collaborate with stakeholders to identify and manage water stress risks, particularly in high-risk geographies.
- Implement nature-based solutions and explore infrastructure resilience upgrades to mitigate physical risks.
- Continue environmental compliance roadmaps, regulatory readiness, and risk mapping to guide site-specific strategies.



Supply Chain Management

Challenges

- Disruptions due to global macroeconomic uncertainty and geopolitical instability.
- Increasing pressure to meet evolving customer expectations on ESG compliance, despite industry-wide material shortages.
- Limited real-time visibility into data, particularly in lower-tiers of the supply chain, creating challenges for risk assessment and regulatory reporting.
- Ensuring continuity and flexibility across markets in the face of supplier disruptions, logistics constraints, and volatile operating conditions.

Mitigation Strategies

- Strengthen ESG supplier assessments through platforms like EcoVadis and other third-party auditors as part of the Sustainable Supply Chain Program.
- Integrate digital supply chain solutions to enhance visibility, agility, and responsiveness.
- Strengthen talent acquisition to expand in-house supply chain expertise and bandwidth.
- Actively engage suppliers on Scope 3 emissions through the Sustainable Supply Chain Program, promoting shared sustainability objectives while advancing circularity.
- Deploy risk dashboards and agile response playbooks to manage disruptions.
- Promote collaborative forecasting and supplier alignment programs.
- Maintain cost competitiveness through strategic, proactive sourcing.





Driving Growth through Strategic Investments



Manufactured Capital

Our strategic investment approach focuses on enhancing operational capabilities and partnerships, strengthening market leadership, targeting high-margin segments, and advancing innovation-led solutions. These investments are critical to driving sustainably profitable growth and reinforcing our position as a global leader in sustainable chemicals and materials.



Investment in High-margin Packaging

A key milestone under our transformation agenda in 2024 was the acquisition of a 24.9% stake in EPL Limited, the world's largest laminated tube manufacturer. This investment represents a deliberate move to strengthen our presence in high-growth, high-margin packaging markets, particularly in India's expanding consumer sector. It supports our objective to diversify beyond traditional commodities, expand our innovation-anchored portfolio, and deliver premium quality, customer-centric solutions in downstream products.



Scaling Recycling Infrastructure

In 2024, we expanded our recycling footprint to 24 facilities across 13 countries. By 2027, three new greenfield facilities in India and one in Nigeria are planned for completion. These investments aim to significantly boost capacity and support our goal of recycling 1.5 million tons annually by 2030. Backed by a strategic investment of \$1.5 billion, this reinforces our commitment to making recycling a core pillar of our business. Since 2011, we have recycled over 135 billion PET bottles.



Investing in Avgol and Unveiling a New Production Line

Avgol, a subsidiary of Indorama Ventures, completed a \$100 million investment in its Mocksville, North Carolina facility. This includes a new 3-layer lamination line featuring precision temperature controls, high-speed bonding technology, and an integrated quality inspection system. These enhancements improve Avgol's nonwoven composite capabilities, enabling the production of lightweight, durable products with consistent high quality performance.

Manufacturing Resilience



Manufactured Capital

Through targeted risk mitigation measures, emergency response systems, and adaptive infrastructure, we continue to build resilience into our operations, protecting both our workforce and production capabilities while securing long-term value for stakeholders. Tailored initiatives have been implemented to address location-specific challenges and enhance operational resilience:

- At Indorama Ventures Xylenes and PTA in the US state of Alabama, tornado preparedness is a key focus. The site has established severe weather protocols, trained emergency response teams, and conducts regular tornado drills to ensure readiness for extreme weather events.
- In Brazil, Indorama Ventures Polímeros has strengthened wildfire risk management by introducing comprehensive emergency procedures and reinforcing fire suppression systems, safeguarding both personnel and infrastructure.
- In Thailand, Indorama Polyester Industries at Nakhon Pathom has adopted flood adaptation measures, including a dedicated flood emergency plan, the installation of protective barriers, and employee support systems to minimize disruption during heavy rainfall and flooding.
- In Egypt's Gulf of Suez, IVL Dhunseri Polyester Company S.A.E. has addressed water scarcity by installing a reverse osmosis (RO) system to optimize water usage and improve resource efficiency in a high-stress environment.

Future Outlook and Transformation Initiatives

This section presents our forward-looking strategy that prioritizes inclusive growth, nature-positive innovation, and value chain resilience. Through targeted initiatives, ranging from supply chain management and human rights due diligence to environmentally responsible product development, Indorama Ventures aims to support both people and the planet as we move toward a circular, climate-resilient economy. Our focus is not only to respond to global risks but to shape the path ahead by embedding sustainability, climate mitigation and adaptation, and circularity into our products, operations, and partnerships.

Building Resilience within Indorama Ventures

Analysis of Emerging Market Trends

The sustainability landscape for Indorama Ventures is evolving rapidly, shaped by changing market expectations, tightening regulations, and advancing technologies, particularly across the chemicals, packaging, and polyester value chains. With operations spanning over 31 countries and a presence in key sectors such as fast-moving consumer goods (FMCG), textiles, automotive, and pharmaceuticals, the company must continually anticipate and respond to global shifts of increasing scale and complexity.

For Indorama Ventures, whose operations include energy-intensive sites, this requires science-based, region-specific plans aligned with frameworks such as the Taskforce on Climate-related Financial Disclosures (TCFD), Taskforce on Nature-related Financial Disclosures (TNFD), and the United Nations Guiding Principles on Business and Human Rights (UNGPs). The plastics and packaging sector, where the company holds a global leadership position, faces growing pressure to adopt low-carbon, circular, and non-toxic materials.

Customers increasingly demand verified data on climate and water footprints, improved recyclability and biodegradability, and full traceability – embedding sustainability into procurement practices and supplier collaborations on decarbonization. Market demand is also shifting decisively toward low-carbon, recycled, and bio-based materials. Brands in packaging, fashion, and automotive are setting circularity and climate targets that require sustainable feedstocks. While Indorama Ventures is well-positioned with its global PET recycling infrastructure, continued competitiveness will rely on advancing design-for-recyclability, mono-material packaging, bio-based PET, and renewable energy.

Investor pressure is also rising. Access to sustainability-linked loans, ESG-index inclusion, and capital investment decisions are now contingent on transparent, auditable ESG metrics. Our existing ESG-linked financing mechanisms must expand to include biodiversity, just transition, and water stewardship, as these areas gain importance in green finance taxonomies.

Regulatory Shifts

Regulatory shifts are converging rapidly across geographies. In the European Union, policies such as the Corporate Sustainability Due Diligence Directive (CSDDD), the European Green Deal, and the Packaging and Packaging Waste Regulation (PPWR) are imposing strict mandates on product lifecycle sustainability, supply chain transparency, and extended producer responsibility (EPR). For Indorama Ventures and its European clients and operations, this requires systems that ensure ethical sourcing, eliminate forced labor, meet recycled content thresholds, and report Scope 3 emissions. Similar shifts are underway in India, Southeast Asia, and Latin America, key growth markets for the Company, where regulations on plastics, waste management, labor conditions, and ESG disclosures are aligning with global standards. The increasing focus on renewable energy and clean technologies is also influencing chemical manufacturers through incentives that promote bio-based materials, circularity, and green hydrogen – all of which align with our transformation priorities.

Indorama Ventures must also address rising expectations for human rights due diligence across global value chains. The Company's continued leadership in this space depends on strengthening supplier audits, grievance redress systems, and social impact assessments, particularly in high-risk geographies. Responsible sourcing and local community engagement are not only compliance requirements but also essential to long-term resilience and brand credibility.



Plastic Credits and Their Role in the Transition to Sustainable Plastics

Plastic credits are market-based tools that support the collection, recycling, and responsible management of plastic waste. They help hold companies accountable for the environmental impacts of plastic use by funding projects that improve waste collection, recycling infrastructure, and sustainable material recovery, particularly in regions most affected by plastic pollution. Indorama Ventures recognizes the beneficial role these instruments can play in accelerating the shift from fossil fuel-based and non-biodegradable plastics to more sustainable alternatives, including bio-based materials.

As the sustainability landscape continues to evolve, shaped by climate change, biodiversity loss, geopolitical shifts, and rising stakeholder expectations, scenario planning has become central to building resilient strategies. We have assessed sustainability risks and opportunities across short-, medium-, and long-term horizons, grounded in global megatrends, regulatory developments, and stakeholder demands.

Short-Term Outlook (2025-2028)



In the near-term, Indorama Ventures is focused on optimizing operations and enhancing regulatory readiness to meet global sustainability requirements. Priorities include improving operational efficiency, initiating energy transition projects (such as renewable electricity sourcing and coal phase-out), and scaling both mechanical and advanced recycling. This period also aligns with the rollout of major regulatory frameworks such as the EU Corporate Sustainability Reporting Directive (CSRD), the Corporate Sustainability Due Diligence Directive (CSDDD), and Extended Producer Responsibility (EPR) regulations across Europe, Southeast Asia, and India. These efforts support early progress toward our six-pillar decarbonization strategy.

Medium-Term Outlook (2029-2035)



By 2030, continued shifts in supply chains, consumer expectations, and climate policies will demand a more integrated and circular approach. For Indorama Ventures, the focus will be on expanding renewable feedstock usage (such as bio-based and recycled inputs), advancing technologies such as green hydrogen and carbon capture, and embedding ESG performance into core business decisions. Circularity, nature-positive practices, and human rights integration will be key to maintaining competitiveness amid increasing scrutiny from investors, insurers, and regulators. This phase will also involve wider adoption of energy-efficient technologies and greater transparency in our decarbonization progress.

Long-Term Outlook (After 2035)



Beyond 2035, sustainability will be seen not only as a compliance obligation but as a driver of enduring value. Our forward-looking strategy includes the full-scale deployment of carbon capture, utilization, and storage (CCUS); large-scale natural capital solutions, such as forest carbon projects; and the integration of sustainability metrics into financial valuation and customer trust models. Our long-term strategy will center on decarbonization, ecological restoration, and equitable value distribution across the value chain to ensure lasting business viability and stakeholder confidence.

Digital Transformation

At Indorama Ventures, digitalization and sustainability are interconnected pillars of our long-term strategy to build a resilient, efficient, and future-ready business. We are increasing investments in our digital transformation journey to support implementation and operations across regions.

The chemical and packaging industries are being reshaped by advances in digital and materials science. Tools such as AI-enabled predictive analytics, blockchain-based supply chain traceability, and IoT-based emissions monitoring are becoming standard. Indorama Ventures is investing in smart manufacturing systems and circular product design, with a focus on scaling these technologies to enhance decarbonization, resource efficiency, and transparency. For example, digital product passports, now being piloted in the EU, could soon become mandatory for PET bottles and fiber-based products.

Through the IVL 2.0 strategy, we are also modernizing business processes through the global rollout of enterprise digital systems. Platforms such as SAP S/4HANA are enabling more integrated operations and data-led decision-making. In 2024, all business segments made progress in adopting digital tools to streamline structures, optimize assets, and improve value delivery. AI-powered analytics are improving plant performance and reducing production variability, while our Manufacturing Excellence program is driving results through a connected worker platform that equips frontline teams with real-time tools to enhance safety, productivity, and operational control.

These upgrades are enhancing the Company's adaptability and resilience. By embedding digital innovation across our operations, Indorama Ventures is reinforcing its position in a more connected, circular, and digitally driven chemical industry.

Other complementary trends are also shaping the future: the rise of sustainability talent and green skills; the expanding role of corporate advocacy in climate and human rights policy; and the convergence of financial and sustainability accounting standards, such as the International Sustainability Standards Board (ISSB) and Corporate Sustainability Reporting Directive (CSRD), will influence how value is defined and measured across our businesses.



Chapter 3

Our Materiality

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Stakeholder Engagement and Materiality

Stakeholder Engagement

In 2024, we strengthened our approach to stakeholder engagement by developing the Stakeholder Management Guideline, aligned with the AA1000 Stakeholder Engagement Standard (AA1000SES). This framework standardizes engagement processes across departments, integrates stakeholder input into decision-making, and supports long-term value creation through stronger partnerships.

Stakeholder Engagement Process

Stakeholder engagement remains a core element of ethical and sustainable business practices at Indorama Ventures. A structured approach helps identify expectations, address concerns, and incorporate feedback into business operations. In 2024, the Stakeholder Management Guideline was applied to the Double Materiality Assessment, covering all group-wide activities and involving seven key stakeholder groups: employees, customers, communities, suppliers and vendors, bankers, investors, and fund providers; media; and government and regulators. The assessment considered factors such as dependency, responsibility, tension, influence, and diversity of perspectives.

Once identified, stakeholders are mapped and prioritized based on engagement needs, aligned with business and sustainability goals. Engagement methods may include direct consultations, surveys, forums, partnerships, and digital platforms. Regular monitoring, grievance mechanisms, and feedback loops support transparency, strengthen relationships, and drive continuous improvement.

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 was conducted in accordance with 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 us to identify and manage our most significant actual and potential positive or negative impacts on society 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 our understanding of our responsibilities and role in addressing sustainability challenges from both direct and indirect impacts across our value chain, on stakeholders and the environment, that are critical to long-term sustainability and value creation.

The Double Materiality Assessment (DMA) is integrated into our enterprise risk management framework, supporting the effective identification and management of sustainability-related risks. This 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.

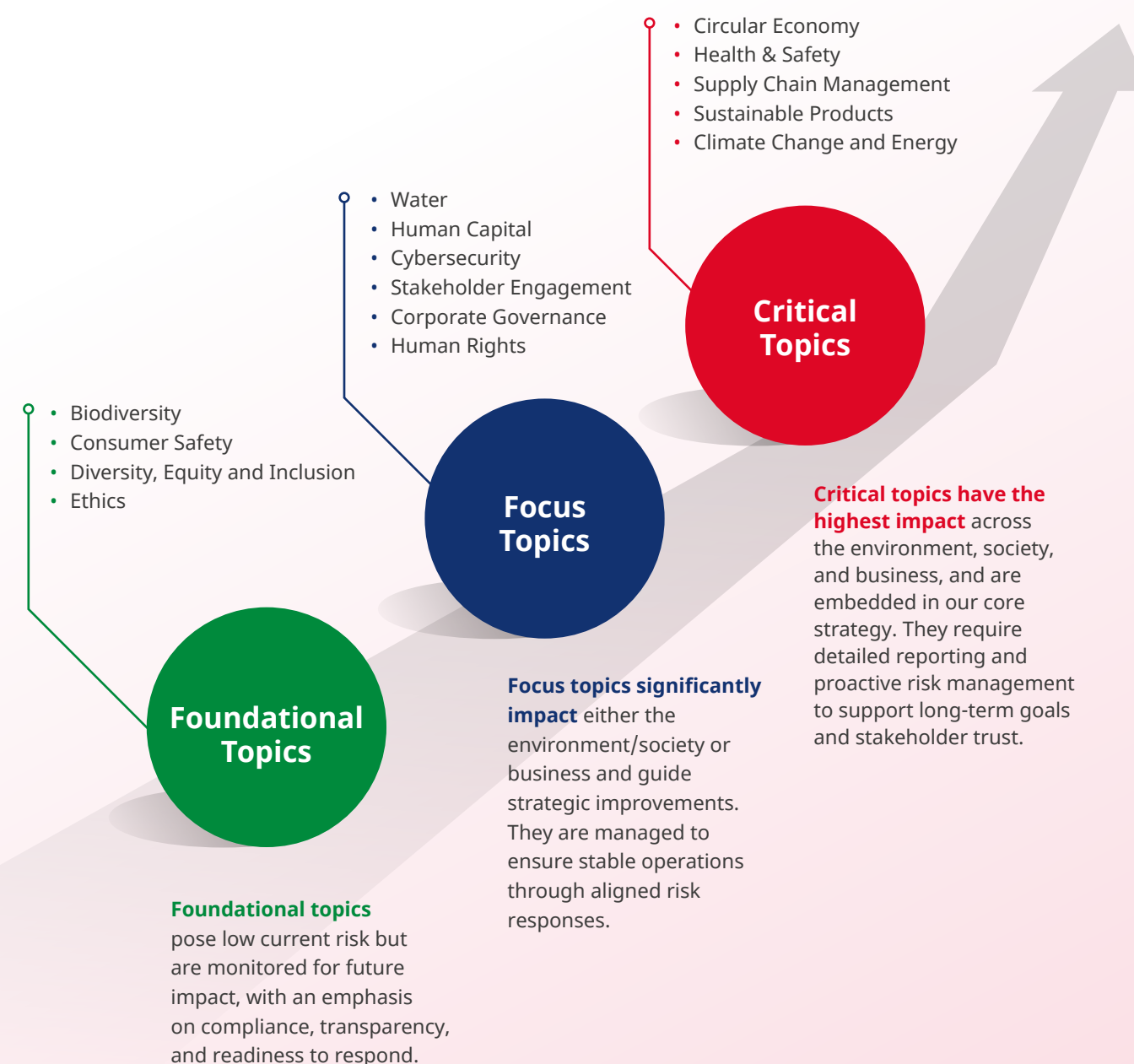
Further information regarding DMA and its outcome is accessible in the 2024 Double Materiality Assessment Summary.



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2024 Material Topics

The assessment identified and prioritized 15 material topics into critical, focused, and foundational groups. Indorama Ventures consulted external experts to review and validate the results. Following the assessment, the Company continues to prioritize the critical topics of the circular economy, health and safety, climate change, and energy, while also emphasizing the importance of supply chain management and sustainable products, aligning closely with stakeholder and market demands, as identified in the 2024 DMA. The final outcome of the DMA is reviewed and endorsed by the SRMC. In addition, the double materiality assessment process and its results are verified through third-party assurance.





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Advancing Operational Excellence

Manufacturing Capital

Operational excellence across our manufacturing sites, supported by continued investments in state-of-the-art technologies, supply chain integration, digitalization, and innovation, enhances production efficiency while minimizing environmental impacts. This approach ensures the delivery of innovative, sustainable, and high-quality products and solutions to customers worldwide.

Our strategically located production facilities in each region are designed for scalability, agility, and seamless integration. These sites support stable operations by leveraging local supply chains and mitigating supply and sourcing disruptions caused by geopolitical events. This also enables timely product delivery, effective management of supply and demand fluctuations, and a rapid response to evolving customer requirements.

During the year, we streamlined our business portfolio to enhance operational agility by successfully spinning off Indonova (recycling) and Indovida (packaging) as independent, high-growth businesses. This strategic move allowed both segments to operate with a more targeted focus and increased flexibility.

Complementing these efforts, we took decisive action to optimize our manufacturing footprint by closing facilities in Australia, Canada, Portugal, and the Netherlands as part of broader efforts to streamline operations, reduce structural costs, and align assets with future market demands.

“

Under the Olympus 2.0 transformation program, in 2024, we achieved an improved operating rate of 79%, increased total production to 14.04 MMT, and reduced fixed costs by \$48 million. These results reflect improved capacity utilization and process optimization across our manufacturing footprint.

To drive sustainable efficiency, we embedded lean manufacturing principles through our IVEX Program, which offers Lean Six Sigma training across all levels. The Green Belt Program equips employees in both manufacturing and non-manufacturing roles with practical improvement skills, while the Black Belt Program develops senior leaders in strategic project execution and operational excellence.

”

In 2024, we focused on asset utilization, process improvement, and the adoption of advanced technologies. Performance gains were also driven by rigorous cost optimization, the rationalization of high-cost facilities, and proactive operational strategies aimed at enhancing efficiency and resilience.

As part of our Transformation 2.0 journey, we strengthened our digital infrastructure through the global rollout of SAP S/4HANA. The deployment of field-connected worker technologies, predictive maintenance, and advanced analytics supported improvements in process reliability and asset performance.

We also introduced Integrated Business Planning (IBP) to enable end-to-end supply chain visibility, reduce inventory exposure, and optimize working capital. Complementary digital platforms, such as the Source-to-Contract (S2C) system, enhanced procurement efficiency through global aggregation and increased transparency. These initiatives are embedded within a robust governance framework to ensure accountability and measurable outcomes.

Manufacturing Sustainably

Manufacturing Capital

We incorporate sustainability into our manufacturing operations by adopting smart manufacturing technologies across our facilities to improve production efficiency, reduce resource consumption, and lower greenhouse gas emissions. These innovations support process optimization and data-driven decision-making, which are key enablers of long-term operational excellence.

To ensure effective end-of-life management of our PET products, we successfully recycled over 390,000 tons of post-consumer PET in 2024, equivalent to 26.4 billion bottles. Since 2011, this effort has contributed to a cumulative total of 135 billion bottles recycled, helping divert 2.6 million tons of waste from the environment and reducing carbon emissions by 3.6 million tons of CO₂ equivalent.

To decrease dependency on fossil fuels and increase the use of bio-based and renewable feedstocks, nine manufacturing sites have received ISCC+ certification, enabling the supply of traceable, low-carbon raw materials. We are also exploring innovative technologies through Indorama Ventures Investments & Holdings (IVIH), such as CO₂-based paraxylene and ethylene glycol, with the long-term objective of producing CO₂-based polyester.

These efforts reflect our commitment to transforming our manufacturing footprint through innovation, circularity, and decarbonization—core elements of our “Innovate to 28” strategy.



Coping with Climate Change

Natural Capital

At Indorama Ventures, climate change is recognized as both a material risk and strategic priority embedded across our operations, governance, and long-term value creation efforts. It presents physical and transition risks that impact our operations, supply chain continuity, access to primary feedstocks, regulatory compliance, stakeholder expectations, and ecosystem stability.

In May 2024, we experienced firsthand the devastating effects of extreme weather in the state of Rio Grande do Sul, in Brazil—one of the worst floods in the country’s history, which claimed 193 lives and left thousands homeless. In response, our Triunfo site led emergency relief efforts, organizing donation drives across all industrial locations to provide food, clothing, blankets, and other essential items to affected communities.

To mitigate climate-related impacts, we continuously assess global climate, water, and biodiversity risks, and conduct scenario analysis to understand their interconnections. These efforts support our strategies for reforestation, biodiversity preservation, and climate adaptation. In the Indovinya segment, a climate risk assessment was conducted across global operations to identify physical and transition risks. Physical risks evaluated in the study included flooding, landslides, heat waves, cold waves, severe storms, rising sea levels, meteorological droughts, and wildfires. These were analyzed using IPCC scenarios SSP1-2.6, SSP2 4.5, and SSP3-7.0 for the years 2030 and 2050.



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Based on these findings, we implemented site-specific adaptation and resilience measures, including:

- Indorama Ventures Xylenes and PTA: Established tornado preparedness protocols, including dedicated emergency teams and regular drills.
- Indorama Ventures Polímeros: Enhanced wildfire preparedness through updated emergency procedures and upgraded fire suppression systems.
- Indorama Ventures Dhunseri Polyester Company S.A.E.: Installed a reverse osmosis system to improve water efficiency and manage local water stress.
- Indorama Polyester Industries (Nakhon Pathom): Developed a flood response plan, including protective barriers and employee safety support mechanisms.

We also continue to integrate climate innovation into our operations by advancing decarbonization technologies, expanding renewable energy use, developing low-carbon products, and supporting biodiversity and ecosystem restoration.

In 2024, we strengthened our climate adaptation measures to build long-term resilience through a structured three-phase approach: Readiness and Capacity Building (2024–2025), Planning (2026), and Implementation (2027). During the first year, we focused on awareness and risk assessment. Through our Climate Adaptation Academy Course, we aim to equip 60% of our leaders by 2025 and complete preliminary vulnerability

assessments at 12 key locations, selected based on their history of extreme weather events. We used industry-leading risk assessment tools and historical plant data to establish a strong foundation for adaptation planning. With key risks identified, we will collaborate with site heads to develop comprehensive adaptation plans for high-risk sites, with full completion targeted by the second quarter of 2026.

Climate Adaptation and Mitigation

Readiness and Capacity Building (2024–2025)



Key Actions:

- Train 60% of leaders through the Climate Adaptation Academy Course
- Conduct preliminary vulnerability assessments for 12 key locations
- Utilize industry-leading risk tools and historical disaster records

Phase 1

Planning (2026)



Key Actions:

- Identify high-risk locations
- Collaborate with site heads to formulate adaptation plans
- Target full plan completion by Q2 2026

Phase 2

Implementation (2027)



Key Actions:

- Implement adaptation and resilience-building initiatives
- Monitor effectiveness and adjust measures based on findings

Phase 3

Climate Adaptation through Product Development

The Indovina segment has seized the opportunity to develop climate-adaptive products, including the following innovations:

ALKOPON® NB S 910 – Dry Surfactant Promoting Water Conservation

Developed to meet the growing demand for more sustainable and concentrated cleaning products, such as powders and concentrated detergents, this new dry surfactant offers multiple environmental and performance benefits. In addition to reducing packaging waste and improving transportation efficiency due to its dry format, the molecule delivers superior rapid dissolution, foam stability, and dirt removal performance. This advancement also supports water conservation efforts while enabling the creation of high-performing, eco-conscious cleaning products.

SURFOM® 9115 – Drought-Resilient Crop Solution

Launched in 2023, this biodegradable and biocompatible product helps farmers mitigate the effects of drought and reduces water usage in irrigated areas. It enhances water penetration in hydrophobic soils, improves lateral water distribution within the soil profile, and retains moisture near plant roots for extended periods, boosting crop resilience and supporting sustainable agricultural practices.

TCFD Reporting

Indorama Ventures ensures consistency, transparency, and accountability in our climate strategy, enabling us to lead responsibly in our transition toward decarbonization and a more sustainable future. As a signatory to the Task Force on Climate-related Financial Disclosures (TCFD) since 2020, we continue to integrate climate considerations into decision-making and enhance our risk assessments over the short, medium, and long term. The TCFD framework supports transparent climate reporting, stronger stakeholder engagement, and more effective risk management practices across our operations. This includes disclosures related to governance, strategy, risk management, and metrics and targets. TCFD reporting represents a crucial step in addressing financial and operational impacts while reassuring investors of our readiness to manage climate-related risks.

We are also pursuing green financing instruments, including sustainability-linked loans, green bonds, and climate transition finance, tied to defined key performance indicators related to emissions and resource efficiency. These tools ensure transparent and accountable capital allocation. Since 2018, we have secured \$2.7 million in sustainable finance to support our decarbonization activities. Additionally, Indovina secured a green loan with Bradesco Bank, reinforcing its commitment to sustainability.

For further insights into our climate-related risks, opportunities, scenario analysis, and governance approach, please refer to the QR code to learn more about our TCFD Analysis.



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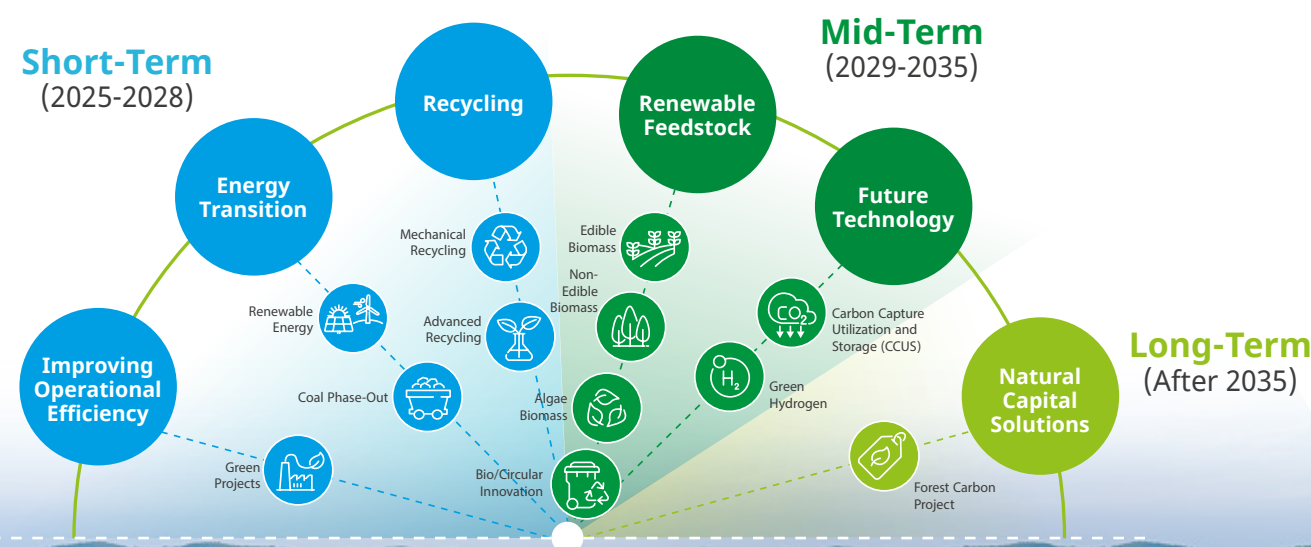
Advancing Decarbonization



Natural Capital

Our commitment prioritizes reducing greenhouse gas emissions, enhancing energy efficiency, and building climate resilience across our operations and value chain. Decarbonization is one of the most crucial strategies for addressing climate change. Indorama Ventures has laid out a six-pronged decarbonization approach across three horizons—short, mid, and long-term to achieve our climate ambitions.

In the short term, we are prioritizing operational efficiency improvements, energy transition initiatives, and the expansion of mechanical and advanced recycling. These efforts are complemented by the integration of bio-based and renewable feedstocks. In the mid-term, we are advancing future-ready technologies such as carbon capture, green hydrogen, and next-generation materials that support a circular economy. Beyond 2035, our vision includes nature-based climate solutions such as forest carbon projects, reinforcing our commitment to a sustainable and climate-resilient future.



Decarbonization Strategies - Driving Towards Sustainable Future

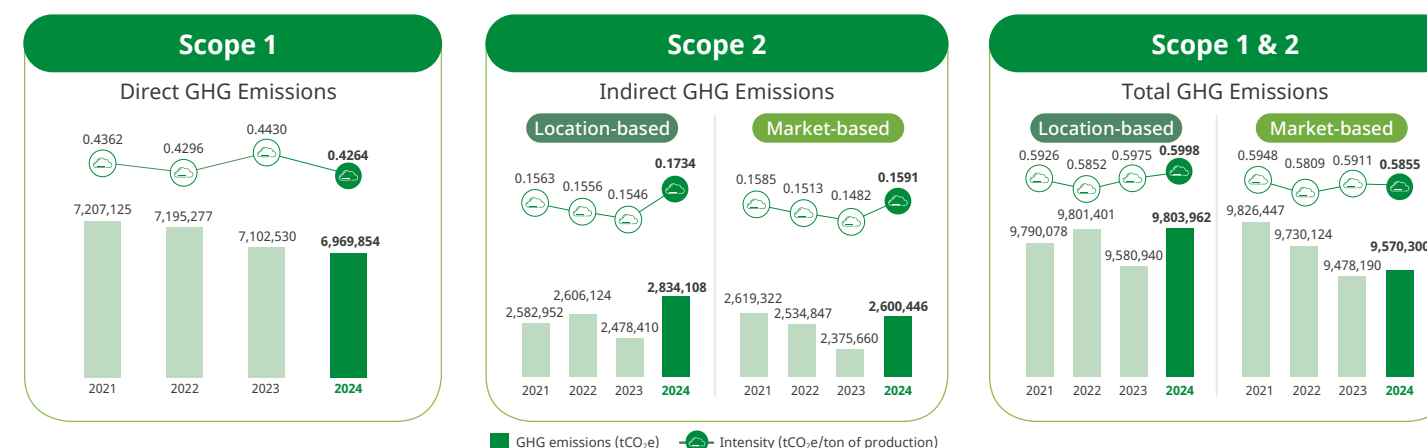
As global efforts to address climate change intensify, the implementation of carbon pricing mechanisms, such as carbon taxes or Emissions Trading Systems (ETS), is becoming increasingly likely. We also consider external carbon pricing mechanisms as part of our risk management approach. Our internal carbon pricing enhances investment decisions by incorporating climate-related risks and opportunities into financial assessments, helping to prioritize projects that deliver both environmental and long-term economic value.

GHG Emissions Management – Scope 1 and 2

Understanding and managing GHG emissions across Indorama Ventures' global operations is central to achieving our climate targets, meeting customer expectations, and reducing transition risks. We follow the GHG Protocol for calculating Scope 1, 2, and 3 emissions and adhere to the TCFD framework, while Intergovernmental Panel on Climate Change (IPCC) emission factors were applied to most of the fuels used in boilers and other combustion equipment.

When an emission factor was not available in the IPCC list, calculations were based on the fuel's carbon content and calorific value.

In 2024, our absolute Scope 1 and 2 GHG emissions totaled 9.57 million tCO₂e, with 73% attributed to Scope 1 and 27% to Scope 2. We remain focused on efficiency improvements and regulatory preparedness, including compliance with emerging requirements such as the EU Carbon Border Adjustment Mechanism (CBAM).



2024 HIGHLIGHTS

- **100%** verification of Scope 1, 2, and 3 (nine categories) GHG emissions by an external auditor
- **100%** GHG accounting, verification, and assurance in accordance with ISO 14064-1 and ISO 14064-3
- **\$1,893,986** in CAPEX allocated for GHG reduction projects
- **GHG emissions reduction projects:**
 - 36 projects completed in 2024
 - 5 projects ongoing as of year-end



GHG (Scope 1 & 2*) Intensity Reduction (2020 Baseline)

Targets

10% by 2025 and
30% by 2030

* Scope 2 intensity (market-based)

Performance

In 2024, we recorded an intensity of **0.5855** tCO₂e/ton, showing a **4.49%** reduction against the 2025 target.



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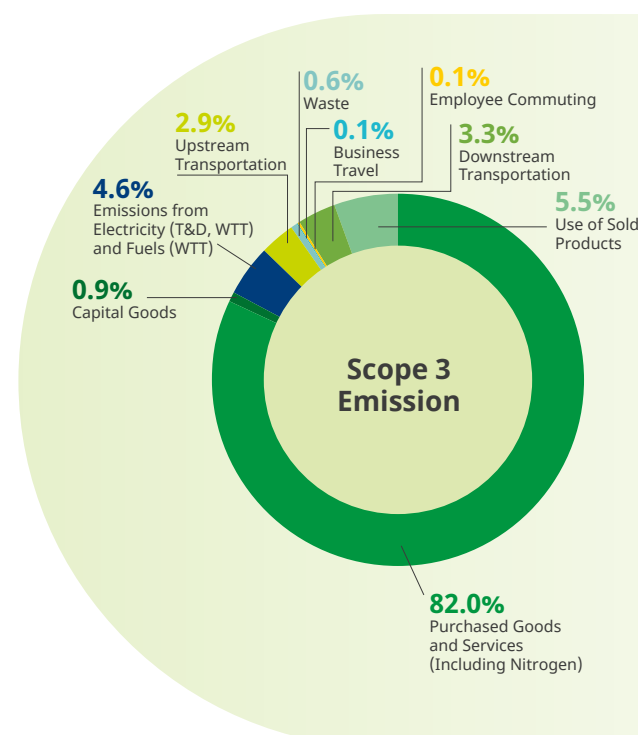
GHG Reduction and Efficiency Gains through Condensate System Upgrade

In 2024, Indorama Ventures Mobility Bohemia s.r.o. implemented a new condensate system in its spinning hall to reduce steam consumption and improve operational efficiency. The project involved the installation of heat recovery equipment and the optimization of the condensate return system. Key outcomes included a GHG reduction of 3,188 tCO₂e per year, steam savings of 31,875 GJ per year, and significant annual cost savings of \$632,440. This initiative contributes to our broader decarbonization efforts by delivering measurable climate and financial benefits.

Decarbonization in the Supply Chain (Scope 3)

Reducing Scope 3 emissions remains a key component of our Sustainability Strategy, helping to lower the carbon footprint of our products through improved sourcing practices and logistics. This includes using local feedstocks, optimizing upstream and downstream transportation routes, and minimizing operational waste. In 2024, we continued to engage suppliers, conduct ESG assessments, and strengthen internal capabilities. Since 2022, we have evaluated 371 raw material suppliers, with 60% of those reassessed showing improved sustainability scores. Internally, we continued to build awareness through the Sustainability Academy and e-learning platforms. Externally, we increased product-level life cycle assessments to support customers in reducing their own Scope 3 emissions.

Our Scope 3 GHG accounting and assurance currently cover nine categories, and we are evaluating the development of specific reduction targets for supply chain emissions. In particular, we are working toward setting specific targets for Scope 3 emissions related to “Purchased Goods and Services” and “Upstream Transportation and Distribution.” For Indovinya, there is a firm commitment to reduce absolute Scope 3 emissions in Category 1 by 15% by 2030 (baseline year 2022). To achieve this goal, we have outlined a roadmap and will launch targeted projects and build partnerships with suppliers to implement action plans focused on emissions reductions in this category.



Scope 3 Category	tCO ₂ e
Purchased Goods and Services (Including Nitrogen)	27,773,868
Capital Goods	298,706
Emissions from Electricity (T&D, WTT) and Fuels (WTT)	1,546,944
Upstream Transportation	983,042
Waste	217,730
Business Travel	24,224
Employee Commuting	33,724
Downstream Transportation	1,137,467
Use of Sold Products	1,857,357

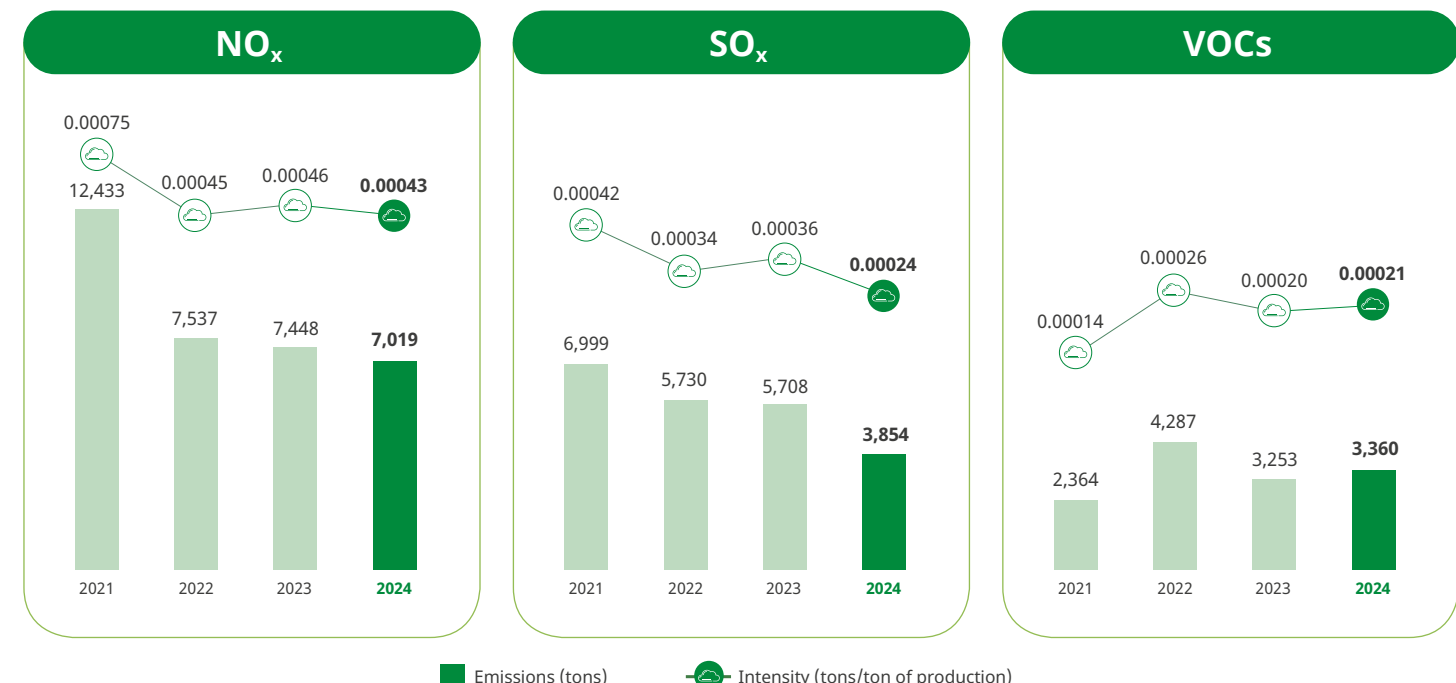
Air Emissions Beyond GHGs – NO_x, SO_x, and VOCs



We go beyond monitoring to actively manage air pollutants such as nitrogen oxides (NO_x), sulfur oxides (SO_x), and volatile organic compounds (VOCs) across our operations. We ensure compliance with applicable local and international air quality regulations in all countries where we operate, reinforcing our broader environmental and regulatory commitments.



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Improving Air Quality and Pollution with Bag Filter

To improve air quality and address multiple environmental non-conformities, Indorama Ventures Mobility Luxembourg S.A. installed a bag filter system as part of its air treatment strategy in 2024.

The system reduces emissions, noise, and odors, and includes a vertical air extraction unit positioned one meter above the site's tallest building to ensure optimal dispersion. As a result, the site achieved annual emission reductions of 0.014 tons/year NO_x, 2.316 tons/year dust, and 2.677 tons/year TOC. Noise levels were also lowered, with measurements ranging between 30 and 32 dB(A) (day and night), well below the 36 dB(A) threshold specified in the environmental permit. Regarding odor, the maximum perception frequency remained at just 1%, significantly below the authorized limit of 5%. This investment marks a significant step toward cleaner operations and demonstrates concrete action to safeguard both employees and the surrounding community.





Energy Management



Natural Capital

In response to growing climate and operational challenges, Indorama Ventures continues to prioritize energy efficiency and cleaner energy use as strategic levers to reduce emissions, manage costs, and enhance long-term business resilience. Our energy management approach supports the decarbonization roadmap while enabling operational improvements across our global footprint. We advanced the implementation of the ISO 50001:2018 Energy Management System to further institutionalize energy performance improvements through third-party audits. As a result, 56% of our operations (68 sites) received the certification in 2024.

We recorded total energy consumption of 121.5 million GJ, and our energy intensity was 7.43 GJ per ton of production, representing a 4.09% increase compared to our 2025 reduction target baseline. Indorama Ventures aims to reduce energy intensity by 5% by 2025 and 15% by 2030, using 2020 as the

baseline year. The increase in 2024 was primarily driven by product mix shifts and reduced production rates in certain regions. To improve efficiency, we conducted energy audits, including Energy Management or Resource and Efficiency Check (REC) assessments, at selected sites to identify and act on performance improvement opportunities. These audits led to targeted measures such as equipment upgrades, system optimizations, and the adoption of solar and bio-based energy sources.

We invested approximately \$1,893,986 in energy reduction projects, ranging from process innovations and equipment upgrades to cleaner fuel transitions. Our energy data is externally verified and audited annually to ensure accuracy, transparency, and accountability.

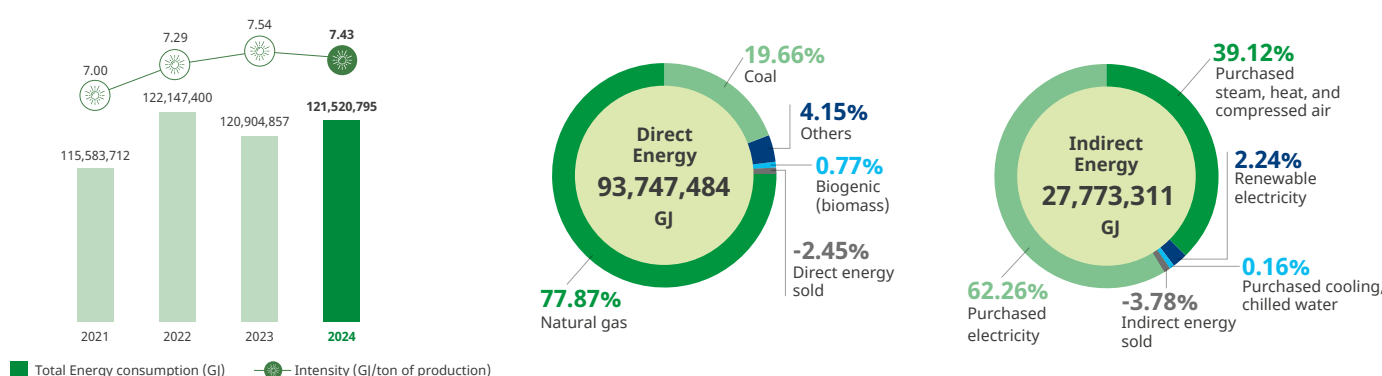
Energy Optimization through VFC Installation

In 2024, Avgol Russia improved energy efficiency by installing Vector Frequency Converters (VFCs) on electric motors in its ventilation system, replacing fixed-speed magnetic starters. This upgrade enabled dynamic motor speed control based on seasonal and operational needs. As a result, the project achieved annual energy savings of 1,020 MWh, reduced GHG emissions by 370.95 tCO₂, and generated cost savings of \$62,000 per year.

Moreover, the ability to adjust motor speeds lowered demand on the heating system, leading to a reduction in natural gas consumption. This initiative demonstrates scalable energy optimization and operational efficiency while also reducing the use of non-renewable energy sources.



Total Energy Consumption



Consumption of Renewable Energy and Electricity

Indorama Ventures has set a target to source 25% of total electricity consumption from renewable sources by 2030, with an interim target of 10% by 2025. In 2024, we achieved a renewable electricity consumption rate of 2.86%, which includes electricity procured from third-party renewable providers and onsite solar generation. To reduce GHG emissions, we are strategically increasing renewable energy use at sites with reliable supply and grid compatibility. This includes the expansion of onsite solar projects and the exploration of Virtual Power Purchase Agreements (VPPAs) in key markets such as the U.S. and Europe, initiatives that are central to achieving our long-term renewable energy targets.

In support of our broader decarbonization efforts, we also continued to enhance energy efficiency across multiple sites and advanced our coal phase-out strategy in prioritized operations.



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Energy Intensity (2020 Baseline)

Targets

5% by 2025 and
15% by 2030

Performance

In 2024, we recorded an energy intensity of **7.43** GJ/ton, reflecting a **4.09%** increase against the 2025 target.



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Renewable Electricity Consumption

Targets

10% by 2025 and
25% by 2030

Performance

In 2024, we consumed **2.86%** renewable electricity of total electricity consumption.

HIGHLIGHTS From 2012 to 2024

17 Onsite/Offsite solar installations

148,459 MWh of solar-based renewable electricity generated and used in plants.

105,680 tCO₂e of total cumulative GHG reduction from renewable electricity consumption.



Renewable Energy Across Our Operations

Americas

Brazil: 1

Brazil: 1

EMEA

Germany: 1

France: 1
Egypt: 1
Ghana: 1
Italy: 1
Lithuania: 1

Asia

Thailand: 7
India: 3
China: 1
Indonesia: 1

Thailand: 1
India: 1

2 Sites

Renewable Electricity Usage

Sites using 100%
renewable electricity in 2024

17 Sites

Onsite Solar Installations

(as of December 2024)

3 Sites

Biomass Consumption

Sites using
biomass in 2024

Onsite



Solar energy

2024 Highlights

- To date, we have installed onsite solar units across 17 sites in Germany, Ireland, Lithuania, Portugal, Slovakia, Egypt, Italy, Thailand, India, China, and Indonesia.
- Two projects were completed in 2024 in Ghana and France.

Offsite



Renewable electricity certificates (RECs)

2024 Highlights

We purchased renewable electricity with certificates through PPAs in the U.S. and Europe, providing a total of 39,058 MWh in 2024 and achieving 105,680 tCO₂e of cumulative GHG reduction from renewable electricity consumption from 2012 to 2024.

- We are further exploring the procurement of additional renewable electricity through VPPAs, especially in the U.S. and Europe, where the majority of our operational sites are located.
- The adoption of VPPAs not only facilitates scalability but also promotes the global expansion of renewable energy capacity, particularly in wind and solar power. Consequently, we are committed to exploring opportunities to enhance our renewable electricity procurement through VPPAs at other viable manufacturing locations.

CPET Ghana Rooftop Solar Sparks Change

Indorama Ventures' CPET Packaging team in Ghana has launched its first sustainability initiative by installing a 1,000 kW rooftop solar power generation unit. Expected to generate 1.3 million units of clean energy annually and reduce GHG emissions by 394.68 tCO₂e per year, the installation optimizes space and reinforces our commitment to sustainability goals. Commissioned in 2024, the rooftop solar unit marks the team's first sustainability-focused energy solution in the region and is projected to significantly advance the Company's green goals by reducing grid dependency and lowering energy costs by 12%.



CPET Egypt's Rooftop Solar Power Success

In 2024, IVL Dhunseri Polyester Company S.A.E. advanced its renewable energy strategy with a two-phase, 3.2 MW rooftop solar project. Phase I involved a 1 MW installation on the Raw Material Storage (RMS) warehouse, generating over 1.17 million kWh and avoiding 592.5 metric tons of CO₂e emissions. Phase II, a 2.3 MW system installed on the Finished Goods Storage (FGS) warehouse, was completed in October 2024 and is pending commissioning due to safety compliance reviews. Although shifts in local energy markets have reduced the financial savings of solar power, the project continues to support our decarbonization goals, increase renewable energy use, and build long-term operational resilience, delivering on our Sustainability Strategy.



Water Management



Natural Capital



By balancing environmental, social, and economic needs, integrated water resource management ensures sustainable water use in the face of changing climate conditions. Our Water Management Policy focuses on reducing consumption and improving reuse and recycling efficiency. The strategy is built on the principles of 3Rs (Reduce, Reuse, and Recycle), underpinned by circular economy thinking to enhance operational efficiency and meet reduction targets.

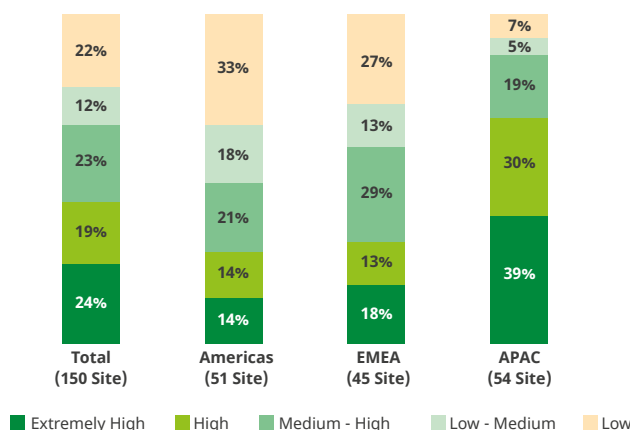
To assess and manage water risks, we continue to apply the AQUEDUCT Water Risk Atlas across our global operations. This tool supports the evaluation of physical and reputational risks, maps exposure in water-stressed regions, and informs mitigation strategies. In addition, risk management committees across our plants and business segments regularly monitor potential regulatory changes and evaluate water risks and opportunities through scenario analyses. We maintain ongoing communication with local authorities and monitor groundwater and reservoir levels to ensure adequate water supply and avoid potential conflicts with neighboring communities. For more information, please visit our Water Stress Analysis Summary Report 2024.



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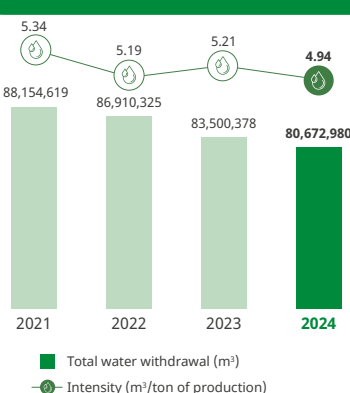
2024 Water Stress Assessment

(% of Indorama Ventures' operations identified in water stress areas using the AQUEDUCT Water Risk Tool)

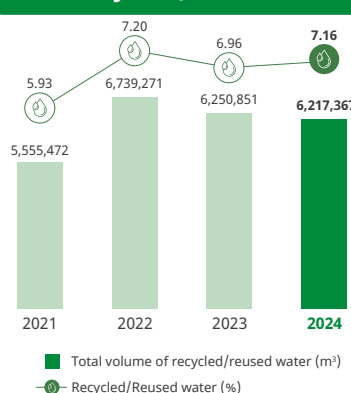


In 2024, our total water withdrawal was 80.67 million cubic meters. We recycled or reused 6.22 million cubic meters of water, representing 7.16% of our total water use. While this marks a slight decrease from 2023 in absolute volume, the percentage of recycled and reused water increased, reflecting improved water efficiency across our operations. In 2024, 3 water consumption reduction projects were initiated, supported by a capital investment of \$14,460. We recorded a water intensity of 4.94 m³ per ton of production, alongside a 6.44% water recycling and reuse rate, reflecting steady progress toward our water efficiency goals.

Total Water Withdrawal



Total Recycled/Reused Water



Water Intensity Reduction (2020 Baseline)

Targets

10% by 2025 and
20% by 2030

Performance

In 2024, we recorded a water intensity of **4.94** m³/ton of production, showing a **6.44%** reduction against the 2025 target.

We continue to implement water stewardship practices such as recycling in cooling systems, capturing rainwater, and reusing treated process water. These efforts support our broader water strategy focused on reducing freshwater withdrawals, especially in water-stressed regions, and advance our long-term water sustainability goals.

2024 HIGHLIGHTS

6 sites have achieved Zero Liquid Discharge

- Avgol Nonwovens India Private Limited (Halol site)
- Indorama Petrochem Limited (PET)
- PT. Indorama Ventures Indonesia (PET)
- PT. Indorama Ventures Indonesia (Fibers)
- Schoeller Kresice s.r.o
- IVL Dhunseri Petrochem Industries Private Limited (Karnal site)



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Cutting Wash Line Water Use at Wellman Neufchateau Recyclage S.A.

Wellman Neufchateau Recyclage S.A. launched the Wash Line Water Consumption Reduction project to address excessive water usage in LAC 2. The team improved water efficiency by implementing prewash water recycling and reintegrating it into the process, as well as optimizing the reuse of washing water. Additional actions included repairing leaks, minimizing autocleaning water use, and enhancing process monitoring.

These improvements resulted in a 30% reduction in wash line water consumption, saving 34,503 m³ of water and €600,000 annually. The initiative significantly enhanced operational efficiency, supported sustainability goals, and contributed to long-term water conservation without compromising production quality.

We ensure that 100% of our water discharge is treated to exceed regulatory quality thresholds before release into the environment. Site-level water assessments guide targeted reduction actions, while upgrades to wastewater treatment systems support improved discharge quality. Water recycling technologies are being scaled across priority sites to advance our goals in water circularity. In 2024, there were no water-related incidents affecting our operations, no plant closures, and no impacts on stakeholders.

Collaborating for Sustainable Industrial Water Solutions in Brazil

To mitigate the substantial risk posed by meteorological droughts, Indovina's Maua plant has proactively participated in the Aquapolo project, the largest water reuse initiative in the Southern Hemisphere. Developed through a partnership between GS Inima Industrial and Sabesp, Aquapolo supports sustainable water management.

Benefits and Actions

- Ensures continuous and stable water availability for operations
- Maintains high water quality in our processes
- Reduces pressure on local water supplies
- Prevents conflicts with local communities and the agricultural sector
- Demonstrates our proactive and innovative approach to climate challenges



Waste Management



Natural Capital



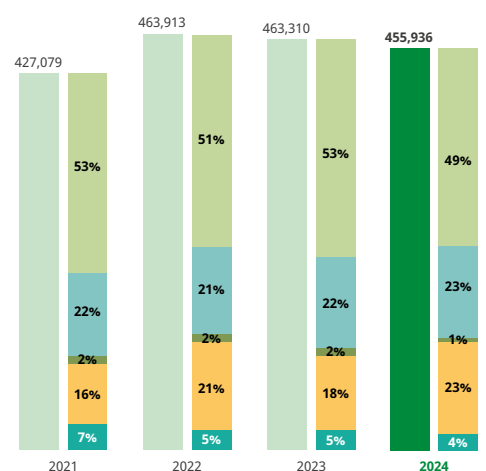
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Waste, both hazardous and non-hazardous, remains a key environmental focus across our operations. We manage waste in line with legal requirements and international standards, emphasizing circular economy principles. Our approach includes maintaining a legally compliant waste inventory, reducing hazardous waste, and ensuring proper disposal through approved vendors. Waste management follows structured processes such as segregation, collection, transport, reprocessing, recycling, and safe disposal, with a priority on health, safety, and operational efficiency.

In line with our commitment to continuous improvement, we regularly conduct waste audits to identify opportunities for enhancing waste performance and minimizing waste generation. In 2021, Indorama Ventures launched the Zero Waste to Landfill (ZWL) Audit, an initiative that remains ongoing. As a result, we received the ZWL certification from a globally recognized external assurance provider known for ensuring the quality and safety of products, processes, and systems across industries.

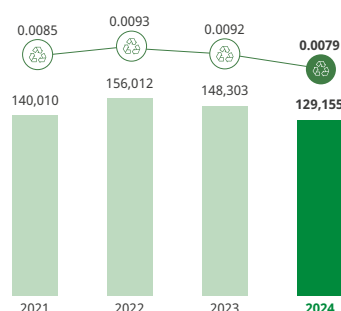
Total Waste

Generated, recycled & reused, incinerated (with and without energy recovery), landfilled, and others



■ Total generated waste (tons)
■ Recycled & reused (% of total generated waste)
■ Incinerated with energy recovery (% of total generated waste)
■ Incinerated without energy recovery (% of total generated waste)
■ Landfilled (% of total generated waste)
■ Others (% of total generated waste)

Total Hazardous Waste



■ Total hazardous waste (tons)
● Intensity (tons/ton of production)

Waste Diverted from Landfill*

Targets

90% Waste diverted from landfill by 2025 (This target applies to both types: hazardous waste and non-hazardous waste)

Performance

In 2024, **93%** of our hazardous waste was diverted from landfill, and **63%** of our non-hazardous waste was diverted from landfill.

* Including waste incinerated with energy recovery

2024 HIGHLIGHTS

0.0279 tons/ton of production of total waste intensity

49% of total waste was recycled and reused

23% of total waste went to incineration with energy recovery

Zero Waste to Landfill Certification by a Third Party

- Petform Lopburi
- Petform Korat
- Petform Pathum Thani
- Petform Rayong
- Indorama Polyester Industries (Nakhon Pathom)

Reducing Flake Losses in the rPET Line

In 2024, Indorama Ventures Sustainable Solutions Brazil implemented a waste reduction initiative in the rPET production line by minimizing “good flakes” in the metal reject stream, aiming to reduce losses from 6.5% to 0.5%. The team addressed this issue by adjusting detector sensitivity, enhancing cleaning routines, conducting loss audits, and installing magnetic grids. As a result, flake losses dropped to 0.98% within six months, leading to an average savings of 75 tons of flake per quarter and an estimated annual cost savings of \$135,000.

This initiative represents a process improvement effort aimed at minimizing production waste, which not only enhances resource efficiency but also maximizes material yield, reduces environmental impact, and supports a more circular production process.



Bio-Based Waste Collaboration in Mexico Boosts Biodiversity

Indorama Ventures Mobility Puebla (IVMP) partnered voluntarily with state-authorized recyclers to divert cardboard and wood waste from landfills. Launched in November 2023, this cross-functional initiative aligned waste management procedures with state requirements and supported certification for key buyers.

On 15 April 2024, we received our first certificate, recognizing the collection of 91,444 kg of cardboard and wood waste. This effort preserved 5,374 mature trees, as certified by the Sustainability Office of the State of Puebla’s Certificate of Collection, Transportation, and Final Disposal of Common Solid Waste. The preservation of these trees enables the annual absorption of 145,098 kg of CO₂, showcasing our steadfast commitment to environmental compliance, circularity, and the responsible stewardship of natural resources.





Biodiversity



Natural Capital

At Indorama Ventures, we recognize the critical importance of protecting nature and preserving biodiversity, and we are committed to ensuring that our operations avoid and mitigate any adverse impacts on ecosystems.

Commitment

Our commitment to biodiversity has received formal endorsement from the Sustainability and Risk Management Committee (SRMC), with active participation from board members and a formal sign-off by the Chairman of the ESG Council, who also serves as an executive director. This underscores the importance of biodiversity at the highest levels of governance.

The scope of our biodiversity commitment extends beyond our own operations to include suppliers, partners, and customers. We require our value chain partners to operate responsibly, particularly in or near areas of global or national biodiversity significance, and expect them to follow principles that align with our biodiversity goals. We also promote active engagement with local communities and stakeholders to ensure inclusive decision-making on natural resource use and biodiversity protection.

Risk Assessment and Action

Although biodiversity is not currently classified as one of our critical material topics, we acknowledge the dependencies and potential impacts our business activities may have on nature. A comprehensive biodiversity risk assessment has been conducted across our operations and activities. Globally recognized tools were used, including the ENCORE Tool, the Integrated Biodiversity Assessment Tool (IBAT), and the WWF Biodiversity Risk Filter. These tools enabled us to evaluate our operational footprint and collect site-specific data such as the number of species listed on the IUCN Red List, the presence of Protected Areas (PAs) and Key Biodiversity Areas (KBAs), and exposure to both physical and reputational risks related to biodiversity. The assessment identified ten high-priority sites in eight countries requiring improved biodiversity management. These insights shaped the first phase of our Biodiversity Action Plan (BAP), in alignment with the United Nations Sustainable Development Goals (SDGs), specifically SDG 14 (Life Below Water) and SDG 15 (Life on Land).

In 2024, we further integrated the five key drivers of biodiversity loss into our business considerations, which include land and sea use change, direct exploitation of organisms, climate change, pollution, and invasive alien species. Our biodiversity reporting is aligned with the recommendations of the Taskforce on Nature-related Financial Disclosures (TNFD), and we are applying the Locate, Evaluate, Assess, Prepare (LEAP) approach along with sector-specific guidance for the chemical industry, where relevant. For further information, refer to the detailed content in our TNFD Report 2024.



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Renova Mamona Project (Ongoing Initiative)

In its second year, the Renova Mamona Project continued to advance regenerative agriculture and community development in the Quilombola community of Cordoaria in Camaçari, Brazil. Key achievements in 2024 include:

- Implementation of 8 Agroforestry Systems (Sistema Agroflorestal), covering over 4,000 m²
- Production and planting of 1,000 seedlings
- 68.57% increase in organic matter content and 80% increase in plant species diversity
- Completion of the first sustainable harvest of castor beans
- Training provided in agroecology, entrepreneurship, and sustainable farming
- Emphasis on female participation in agriculture and integration of castor beans into Indovina's supply chain
- Community fairs organized to support sales of agroecological products

These efforts highlight our commitment to biodiversity, regenerative practices, and inclusive local economic growth.

Prototype of Rescue Products from Recycled Fibers to Protect Marine Life

Discarded items in oceans pose a serious threat to marine life. Larger debris such as fishing nets and packaging, entangle sea creatures, restricting their movement, feeding, and ability to evade predators. This disruption affects entire ecosystems, harming biodiversity and habitat health.



At Bangkok Design Week 2025, Indorama Ventures presented "Marine Rescue Product Prototypes" made from recycled fibers, supporting the Upcycling for Life project led by Her Royal Highness Princess Sirivannavari Nariratana Rajakanya. To date, 20 rescue devices have been tested across four locations to help free marine animals trapped offshore.

This initiative focuses on coastal habitat restoration and marine conservation, and has been supported since 2023 by the Thai Coral Reef and Marine Life Conservation Foundation, the Pollution Control Department, and Kasetsart University.



Ensuring Environmental Stewardship



Natural Capital

Environmental stewardship is integral to our sustainability strategy and is guided by a robust management system tailored to the scale and nature of our global business operations. Through our Environmental Policy, we emphasize resource efficiency, pollution prevention, operational excellence and continuous improvement. Furthermore, we raise awareness and educate internal and external stakeholders about environmental management and environmental impacts, as well as provide environmental information and advocacy by offering solutions to help customers meet their goals and mitigate environmental impacts from their consumption. This approach not only supports progress toward our 2030 sustainability targets but also helps minimize risks and environmental impacts across our supply chain, ensuring responsible operations, growth, and resilience.

Indorama Synthetics Ltd. (IRSL) honored as a Winner of the Prestigious Paryavaran Saathi Award 2025

From the visionary leadership and proactive approach towards environmental care with human safety that played a crucial role in embedding sustainability into the core of IRSL's business, this achievement is a testament to receiving, for the first time, the honorable IEI Paryavaran Saathi Award 2025 among 17 companies in the "Manufacturing—Large Scale" category. This prestigious recognition reflects our commitment towards to good governance, environmental sustainability, and responsible industrial practices.



At the heart of this achievement is our strong environmental policy, rooted in innovation, resource conservation, and minimal environmental impact. Also, through continuous awareness programs and sustainability initiatives, we strive to promote a culture of industrial sustainability across all levels of our operations.

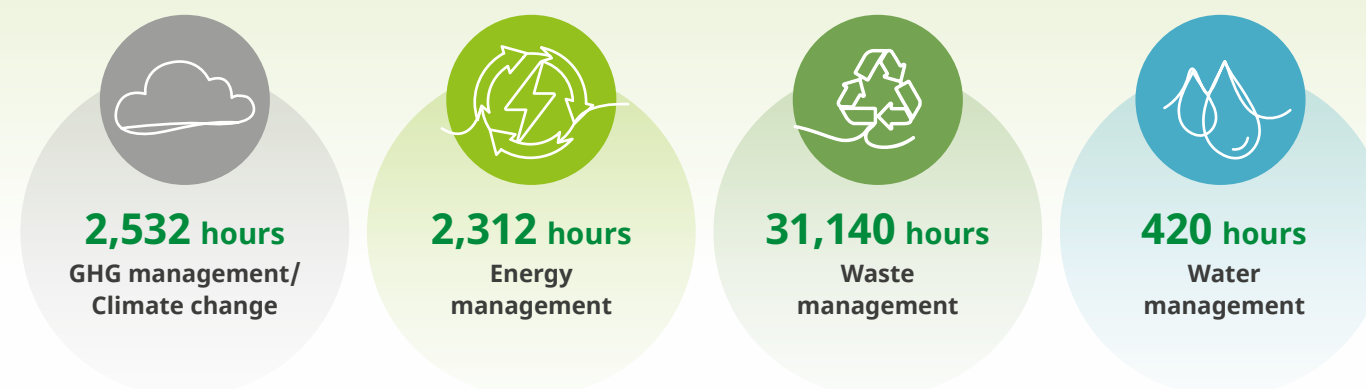
Environmental Management System (EMS)

We implement an Environmental Management System (EMS) aligned with ISO 14001 standards to manage environmental responsibilities across our operations. Furthermore, our Environmental, Health and Safety (EHS) team has a comprehensive compliance assurance auditing program, supported by third-party consultants with expertise in the regulatory requirements of the jurisdictions where we operate. The scope of these audits includes both EHS regulatory compliance and alignment with Corporate EHS standards. An audit schedule is maintained and reviewed annually. Each year, between 25 to 30 sites are audited by third-party consultants. Since the program's launch in 2022, 59 sites have been audited. In 2024, 80% of operations were certified, audited, and verified under ISO 14001. An additional 12% of operations, not yet certified, were audited by a third party, bringing total EMS verification and audit coverage to 92%.

Environmental Awareness and Capacity Building

Indorama Ventures continues to build environmental awareness and technical capability across its global operations. In 2024, we delivered targeted training programs for employees to understand and raise awareness about the impacts of their work activities to environment and support employee-led sustainability projects with measurable environmental and operational benefits. Onsite and online training sessions focused on greenhouse gas reduction, energy and water efficiency, and cost optimization. These were conducted by site professionals, external experts, and through the Indorama Ventures Excellence (IVEX) program, which supports operational improvement, strengthens environmental compliance, and reinforces the EMS.

Environmental Training in 2024



Environmental Non-Compliance

Our operations strictly comply with key environmental sustainability laws, regulations, and standards in the jurisdictions where we operate, guided by the governance of our EMS. All sites are required to report environmental incidents and non-compliance through an internal escalation process. Reported incidents are reviewed, and corrective actions are tracked to closure. In 2024, three significant environmental non-compliance incidents were reported, each involving fines of \$10,000 or more.

Significant fines and non-monetary sanctions for non-compliance with environmental laws and/or regulations in 2024

An unsecured closure on a tank car containing hazardous materials was discovered during an inspection. (\$10,000)

A tank car was found leaking hazardous materials from the protective housing area during transportation. (\$10,000)

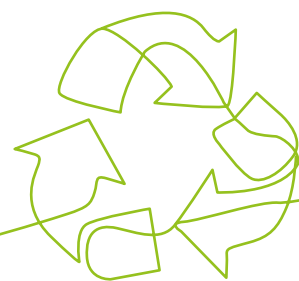
Improper hazardous waste labeling and container closures, failure to maintain required documentation and contingency plans, inadequate fire suppression equipment, and missing personnel training records. (\$332,157)



Advancing a Circular Economy throughout Our Value Chain



Natural Capital



The circular economy approach is integral to how Indorama Ventures establishes its management systems, spanning upstream to downstream activities, and encompasses responsible sourcing, sustainable design, innovative material use, and large-scale recycling. Our goal is to reduce waste and improve resource efficiency by prioritizing reduction, reuse, and recycling as part of our broader environmental and business resilience strategy.

Recycling plays a key role in advancing PET circularity by helping close the loop. This involves converting post-consumer PET bottles into feedstock for new products under the “Bottles to Bottles” and “Bottles to Fibers” concepts, while also supporting our decarbonization strategies. Over the past decade, we have invested more than \$1.5 billion in PET recycling. We are also exploring advanced technologies to address persistent challenges, such as colored bottles and multi-material packaging, reinforcing our position as a global leader in PET production and recycling and driving the circular economy forward.

Since 2011, we have recycled more than 135 billion PET bottles, diverting 2.6 million tons of plastic waste from the environment and reducing our carbon footprint by 3.6 million tons of CO₂. In 2024 alone, we recycled over 390,000 tons of post-consumer PET bottles, equivalent to approximately 26.4 billion bottles. We currently operate 20 recycling sites across 13 countries, and plan to expand to 24 sites by 2027, with new facilities in India, Nigeria, and Southeast Asia.

CELEBRATE WITH US

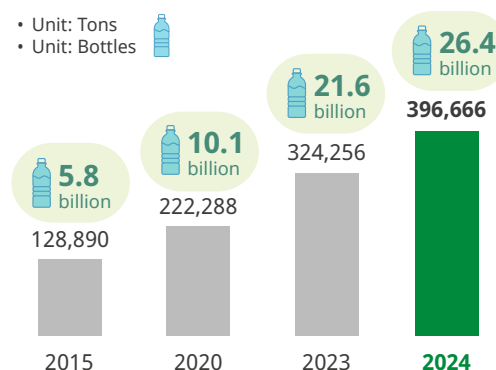
As of 31 December 2024, we have successfully recycled 135 billion post-consumer PET bottles (since 2011)—and the number is still growing.



Our real-time bottle recycling counter is available on our website.



Post-consumer PET Bale Input for Recycling



The PET bottles figure uses an average weight and an overall height of on-the-go PET water and soda bottles, equivalent to the volume recycled at Indorama Ventures' recycling sites between February 2011 and December 2024. Weighting will be referenced to the International Bottled Water Association.



Recycling Commitment

Targets

- Post-consumer PET bale input per year: **0.75 million tons** by 2025
- Post-consumer bottles recycled per year: **50 billion** by 2025

Performance

- Post-consumer PET bale input: **0.40 million tons** in 2024
- Post-consumer bottles recycled: **26.4 billion** PET bottles in 2024



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Indorama Ventures–Circular Economy

Highlights in 2024:

- Consumed bio-based feedstock accounted for 1.50% of our external feedstock
- Consumed post-consumer recycled PET bale input comprised 4.94% of our total PET feedstock

We continue to increase the use of circular feedstocks to reduce reliance on fossil-based materials, thereby lowering Scope 3 GHG emissions from purchased goods and services.

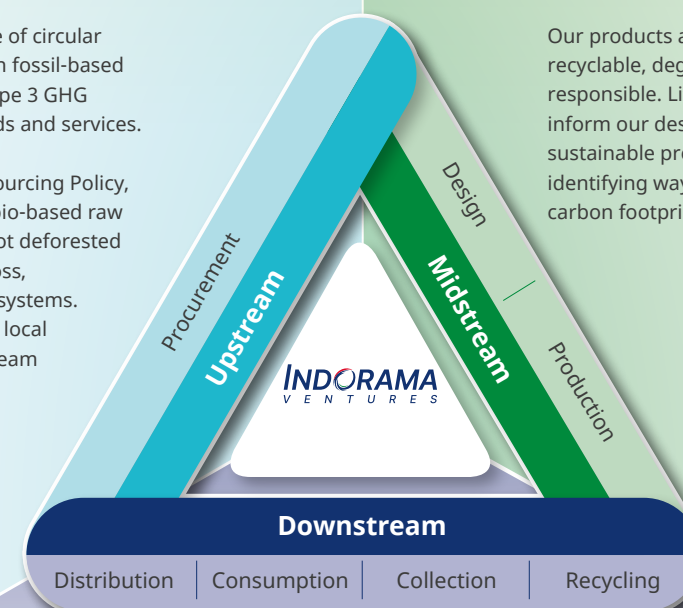
Aligned with our Responsible Sourcing Policy, we are committed to sourcing bio-based raw materials from areas that are not deforested or at high risk for biodiversity loss, helping to preserve natural ecosystems. Wherever feasible, we prioritize local procurement to minimize upstream transportation emissions.

Highlights in 2024:

- Used BHET monomer derived from the glycolysis of colored PET flakes to produce bottle-grade resin with 30% post-consumer recycled content at IVPG in Germany
- Launched the world's first commercialized PET bottles using bio-paraxylene for Suntory
- Established the world's first commercialized supply chain for more sustainable polyester fiber

Our products are designed to be lightweight, recyclable, degradable, and environmentally responsible. Life Cycle Assessments (LCAs) inform our design process and guide sustainable product development by identifying ways to improve the product carbon footprint (PCF).

We apply circular economy principles in production by maximizing resource efficiency, using renewable energy and circular raw materials, and exploring technologies to reduce emissions and waste.



Highlights in 2024:

- Driving the textile recycling revolution through the T-REX Project
- Partnered with the Bangkok Metropolitan Administration to implement the “Sustainable Plastic Waste Management Project Year 2”
- Sustainable fashion revolution with the RECO Collective

We are optimizing logistics and distribution by shifting from road to rail and increasing direct shipments to minimize transportation emissions and reduce Scope 3 greenhouse gas impacts. Furthermore, we prioritize green logistics modes and use fleets powered by low-carbon fuels.

We support regulatory and policy developments to advance a circular plastics economy by:

- Promoting recycled PET (rPET) as a safe, sustainable option for food and beverage packaging
- Addressing plastic waste through global and local initiatives
- Supporting the design and implementation of Extended Producer Responsibility (EPR) schemes
- Monitoring and preparing for emerging regulations, including plastic taxes and recycling content mandates

We collaborate with partners to drive recycling awareness and education through local Circular Economy Education initiatives and the Waste Hero Program. We also work with logistics providers and brand owners to expand bottle collection by establishing drop-off points.

To further strengthen PET recycling capabilities, we are expanding our global network of recycling facilities. Supported by Indorama Ventures Investments & Holdings (IVIH), we identify and partner with innovators in advanced recycling and circular feedstock technologies.



Collaborating with Industry Partners in Driving Circular Economy

We collaborate with internal and external stakeholders to drive co-creation, innovation, and technologies, and the development of technologies that enhance sustainability and circular economy practices. Our efforts also focus on raising awareness and

educating brand owners, consumers, and the public about responsible consumption, proper post-use waste management, and PET recycling. These partnerships facilitate the creation of a new ecosystem that supports responsible operations and low-carbon products, advancing the transition to a circular economy. Key activity achievements in 2024 are summarized below.



Trade Associations and Policy Engagement

Indorama Ventures participated in the fourth and fifth rounds of the Intergovernmental Negotiating Committee for a global treaty to end plastic waste, advocating for Extended Producer Responsibility (EPR), harmonized design for recycling guidelines, and regulatory alignment to minimize market fragmentation.

In Thailand, the Company played a key role in the government's Co-working Group on Plastic Waste Management.



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Driving Textile Recycling Revolution through the T-REX Project

In August 2024, Indorama Ventures joined the EU-funded T-REX (Textile Recycling Excellence) Project, which aims to establish a harmonized blueprint for closed-loop sorting and recycling of household textile waste in Europe. As the designated spinning partner, Indorama Ventures will process chemically recycled feedstock into polyester yarns and fibers through an extrusion process that eliminates impurities. This collaboration reflects the Company's commitment to advancing the circular economy and promoting circular fashion through PET recycling and the supply of recycled materials.



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World's First Commercialized PET Bottles Using Bio-Paraxylene Launched for Suntory Beverages

In October 2024, Indorama Ventures partnered with Suntory, ENEOS Corporation, Mitsubishi Corporation, Iwatani, and Neste to commercialize PET bottles made from bio-paraxylene derived from used cooking oil. Targeting 45 million units for Suntory's products in Japan, these bottles represent a milestone in sustainable packaging and demonstrate the scalability of circular feedstock solutions through multi-partner collaboration.



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Empowering Bangkok's Youth for a Greener Future with the Bangkok Metropolitan Administration (BMA)

This collaboration promoted proper waste separation and PET recycling practices among students, teachers, and local communities across Bangkok through joint activities, including educational roadshows, the development of teacher manuals, PET youth camps, and school competitions. Since 2023, the project has reached over 21,500 participants across 108 BMA schools. Indorama Ventures supported the installation of PET waste drop-off points and recognized model schools, teachers, and students for their leadership in waste management. This partnership reflects a successful public-private initiative to advance circular economy principles and promote sustainable behaviors at the grassroots level.



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World's First Supply Chain Established for More Sustainable Polyester Fiber

In July 2024, Indorama Ventures joined a global consortium of seven companies across five countries to establish the world's first supply chain for sustainable polyester fiber using CO₂-derived and renewable raw materials. This initiative aims to reduce reliance on fossil-based inputs by incorporating renewable and bio-based materials, along with Carbon Capture and Utilization (CCU) technologies, in polyester fiber production.

The consortium includes Indorama Ventures (Thailand), Goldwin (Japan), Mitsubishi Corporation (Japan), Chiyoda Corporation (Japan), SK Geo Centric (South Korea), India Glycols (India), and Neste (Finland). The sustainable polyester fiber produced through this collaboration was used in The North Face products in Japan, beginning with sports uniforms that launched in July 2024. The consortium applies a mass balance approach to ensure credible traceability of material streams throughout the supply chain, promoting the de-fossilization of materials and contributing to a more sustainable society.



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Sustainable Fashion Revolution with the RECO Collective

In December 2024, Indorama Ventures launched the RECO Collective 2025 initiative to support Small and Medium-sized Enterprises (SMEs) in adopting recycled PET (rPET) materials for product development. The program provides a knowledge-sharing platform offering expertise in sustainable branding, sourcing eco-friendly materials, and marketing strategies. Collaborations with retailers and industry experts, including Thai Taffeta, Jaspal Group, Ecotopia, and Dapper, guide SMEs in sustainable business practices and product distribution. Indorama Ventures is demonstrating its commitment to advancing a circular economy and promoting the use of recycled materials across industries through this initiative.



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Empowering Our People



Human Capital

At Indorama Ventures, our people are the foundation of sustainable growth. In 2024, the launch of our IVL 2.0 transformation strategy marked a key step in building an agile, resilient, and future-ready workforce. The strategy focused on strengthening leadership, advancing digital capabilities, and streamlining global operations to enhance long-term value. We continue to support our workforce through this transition and currently employ over 28,000 people (both permanent and temporary) across our global operations, business segments, and affiliates.

Talent development remained a priority in 2024, with targeted initiatives in inclusive recruitment, global internship programs, and academic partnerships to attract and grow future talents. Diversity, equity, and inclusion are central to these efforts, empowering teams to create meaningful impacts across the organization.

Diversity, Equity, and Inclusion (DEI)

DEI at Indorama Ventures drives innovation, resilience, and long-term growth. As a global enterprise operating in over 30 countries, we benefit from a broad range of perspectives, cultures, experiences, and nationalities across our workforce. Our Diversity Policy forms the foundation of our DEI strategy, which is fully integrated into our culture and business operations to support a respectful and inclusive workplace that ensures dignity and equal opportunity. The policy details our commitments related to leadership development, workplace accessibility, recruitment, training, and promotion, in alignment with our broader ESG priorities.

Indorama Ventures is a proud signatory of the Women's Empowerment Principles (WEPs), a United Nations Global Compact and UN Women initiative that promotes gender equality across the workplace, marketplace, and community. We also endorse the United Nations Human Rights Office (OHCHR) Standards of Conduct for Business, which aims to eliminate discrimination. Our Diversity Policy supports these principles by embedding inclusivity and fairness into every aspect of our workplace. For more details, please refer to the Diversity Report 2024.



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2024 HIGHLIGHTS

- Women in top leadership roles accounted for **21.50%**, progressing toward our 2030 goal of **25%**.
- Women in leadership roles across all management positions accounted for **36.99%**, progressing toward our 2030 goal of **40%**.

Celebrating International Women's Day 2025—reflect, empower, and take action



The Human Resources Head Office (HRHO) and the Indorama Ventures Foundation hosted an International Women's Day event at the Company's head office in Bangkok, embracing the 2025 global theme, "Accelerate Action" which promotes personal and professional growth within the organization.

A highlight of the event was an exclusive talk titled "Self-Reflection for Better Capabilities," led by executive coach Potjanart Seebungkerd, who shared her insights from more than 20 years of experience on how self-reflection can strengthen capabilities and goal achievement. Over 50 employees attended in person, with more than 200 participating online, gaining practical strategies and taking part in thought-provoking discussions.

This year's International Women's Day served as a platform for reflection and progress, reinforcing our efforts to promote an inclusive and empowered workplace.



24.73%
Female

(% of permanent employees)

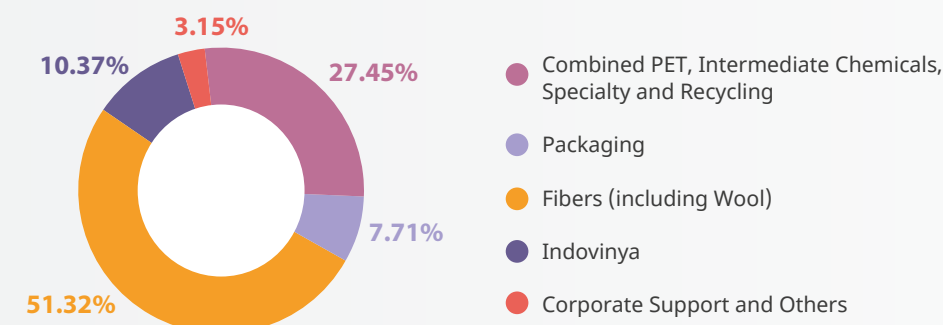


381
Employees
with disabilities

Workforce Composition

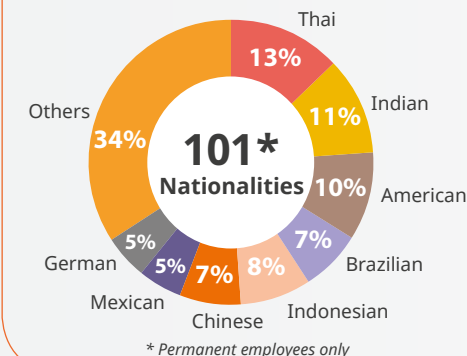
Employees by Segment

(% of total employees)



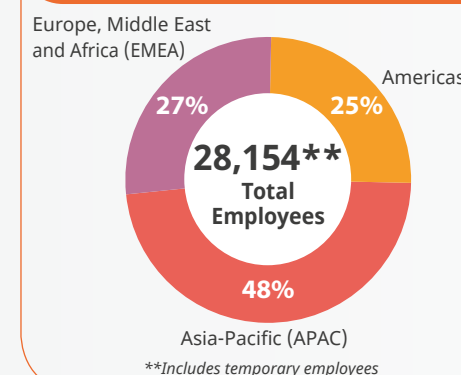
Nationalities

(% of total employees)



Employees by Region

(% of total employees)



Wages and Well-Being

At Indorama Ventures, we are committed to fair, competitive, and locally aligned compensation practices. Equitable pay is not only a regulatory requirement but also a key driver of employee well-being, retention, and long-term performance. We regularly benchmark compensation across our global operations against market standards and local living wage expectations. We uphold the principle of equal pay for equal work and actively address any gender-related pay gaps. Our performance-based remuneration framework ensures that employees are recognized and rewarded fairly. In 2024, all employees were paid at or above the minimum wage in their respective countries.



To support work-life balance, we promote an eight-hour workday, flexible working hours, and paid annual leave. Employee attendance is monitored through site-based systems. At our operational sites, employees who work beyond regular hours are eligible for overtime pay at a premium rate, in compliance with local laws.

The Global Human Resources team also oversees a standardized annual salary review process. This incorporates factors such as inflation, job evaluation benchmarks, attrition trends, and company performance to ensure fair and sustainable adjustments across operations. Through these measures, Indorama Ventures continues to promote a supportive and inclusive workplace, where fair compensation and employee well-being remain central to our people strategy.



Collective Bargaining and Social Dialogue

Indorama Ventures respects the right of employees to freedom of association and collective bargaining, in line with our Human Rights Policy and international labor standards. We consider open, constructive dialogue between management and employees as essential to maintaining a fair and equitable workplace.

In 2024, 47.94% of our global workforce (12,390 employees) were covered by collective bargaining agreements that addressed wages, working hours, health and safety, and other employment benefits. Throughout the year, we held 785 discussions or negotiations with trade unions on issues such as organizational changes, demonstrating our continued commitment to fair labor practices.

We also engage regularly with worker representatives on topics related to working conditions to ensure that employee voices are acknowledged and respected. In cases of organizational restructuring or workforce reductions, we strictly comply with local laws on notice periods such as providing at least 60 days of notice and a clear explanation of termination in accordance with Thai labor law.

Celebrating a Three-Year Streak – Best Employer Brand Award 2024

In 2024, Indorama Ventures received the Thailand Best Employer Brand Award for the third consecutive year, presented by the World HRD Congress. The recognition highlights our application of the 6Cs framework, which supports employees across multiple aspects of their journey, from career development to building a positive and inclusive workplace culture. This award reflects our ongoing efforts to create an environment where employees feel valued, supported, and empowered. It further underscores the strength of our workplace practices and the collective contributions of our teams in making Indorama Ventures a company where people can grow and succeed.



Human Resources Management



Human Capital

Indorama Ventures' approach to human resources is grounded in ethical practices, inclusive growth, and empowering employees throughout their career journey.

Attracting and Retaining Talent

As a global company, attracting and retaining skilled talent remains a key priority. Our approach is built on fairness, transparency, and alignment with both local markets and global objectives. Through Strategic Workforce Planning, we assess current capabilities, forecast future needs, and identify skill gaps to align talent with business goals. Recruitment is tailored by function while maintaining consistent standards across the Company. Evaluation methods include structured interviews, online assessments, and competency-based tools. Our Employee Referral Program continues to be a valuable hiring channel, engaging employees in talent sourcing and strengthening retention. The program offers incentives for successful referrals and helps reduce hiring costs, shorten recruitment timelines, enhance team alignment, and reinforce our reputation as an employer of choice.

Since 2021, the International Internship Program has offered young professionals with global exposure across business functions. In 2024, the program attracted 33 interns from multiple countries, representing eight nationalities (Thai, Singaporean, Indian, American, British, Cambodian, Laotian, and Filipino), with several joining the Company as full-time employees upon completion, including one who transitioned to a permanent role, strengthening our long-term talent development and supporting diversity and cost-effective hiring.

We invest in targeted retention programs such as structured career path planning, succession development, and training opportunities to help employees pursue long-term growth within the Company. Additionally, performance-linked compensation and benefits ensure that employees are recognized and rewarded for their contributions. We promote work-life balance through flexible working arrangements,

wellness initiatives, and paid leave policies. Regular employee engagement surveys, feedback sessions, and open communication with leadership further contribute to a supportive work environment. These initiatives collectively strengthen our commitment to building a positive, inclusive, and sustainable workplace culture.

“



In 2024, our global retention rate reached 86.10%, with overall attrition at 13.90% and voluntary attrition at 10.60%, reflecting the positive impact of our continued efforts to maintain a motivated and committed workforce.

”



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Employee Engagement

We recognize that engaged employees are essential to driving productivity, innovation, and long-term value. Our approach to employee engagement is holistic and data-driven, anchored by the biannual Global Employee Engagement (GEE) Survey, which provides actionable insights into employee motivation and well-being.

The GEE survey assesses engagement across multiple dimensions of well-being through questions aligned with core areas such as:

- Job Satisfaction (e.g., I am satisfied working here.)
- Purpose (e.g., I know what is expected of me in my job.)
- Fulfillment (e.g., Our company acts in a way to ensure my well-being and health.)
- Stress (e.g., It is possible for me to balance my personal and work life.)

2024 GEE Survey Highlights

- Participation Rate: 88.36%
- Actively Engaged Employees: 73.91%
- Employee Net Promoter Score (eNPS): 75.01%
- eNPS Target: Maintain a score $\geq$ 70%, starting from 2024

Key Engagement Drivers Identified

- Objectives and Aspirations: 74.69%
- Accountabilities and Collaboration: 79.46%
- People Manager Capabilities and Interactions: 74.03%
- Performance Management and Recognition: 62.88%
- Leadership: 73.35%

These insights continue to shape both our global and local HR programs. In 2024, we introduced several initiatives focused on driving performance management, job evaluation and salary benchmarking, rewarding communication, leadership development, and employee recognition through our Culture Awards. Following the survey, each site adopts a structured process that includes focus groups, data validation, and the identification of key improvement areas using both leading and lagging indicators.

Regular meetings such as HR Quarterly Connect, leadership updates, and open forums support ongoing dialogue and ensure that employee feedback drives meaningful action, reinforcing trust and sustained engagement.

Celebrating Through the Culture Awards

The Indorama Ventures Culture Awards program recognizes employees who embody our core values through their daily actions and contributions. Employees worldwide are invited to nominate peers in five categories: Change Enabler, Leadership, Responsibility, Customer Centricity, and Driving Diversity. This program celebrates individuals who go above and beyond in demonstrating behaviors that reflect our culture and contribute to a positive, purpose-driven workplace.

Enhancing Employee Well-Being and Work-Life Balance

At Indorama Ventures, employee well-being is a key driver of organizational resilience, performance, and long-term sustainability. Our approach integrates physical, emotional, mental, and social well-being through targeted programs and benefits. In 2024, we continued to advance our Corporate Well-being Reinvention Framework, emphasizing flexibility, inclusion, and personal fulfillment at work.

Building a holistic work environment through health and wellness activities

To promote a well-rounded work environment, our CPET Vietnam team launched a series of health and wellness initiatives across the Cu Chi, Tay Ninh, and Bac Ninh plants. Activities included health screenings for 425 employees, stroke prevention and first aid training for 72 participants, and a dedicated sports day to encourage physical fitness and teamwork. Mooncakes were also distributed in celebration of the Mid-Autumn Festival, reinforcing employee engagement and a sense of community. These efforts reflect our ongoing commitment to employee well-being, helping boost morale, productivity, and collaboration across all sites.



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Employee Benefits

A comprehensive benefits program is designed to support employee well-being, work-life balance, and family care.

Category	Particulars
Paid Parental Leave for the Primary Caregiver	Primary caregivers are entitled to extended leave benefits. In Thailand, for instance, this includes up to 45 days of paid leave (or approximately seven weeks).
Extended Care Leave*	Employees may take sick leave (up to 30 days with pay) or funeral leave (up to five days) in case of losing their parents, spouse, children, spouse's parents, brother, or sister in order to arrange the religious ceremony and related affairs.
Newborn Allowance*	A childbirth allowance is provided for every birth.
Childcare Contributions*	Scholarships are available for the children of employees, along with childbirth allowances for spouses and financial support for education.
Family Medical Support	Medical allowance reimbursement covers employees, spouses, children, and parents.
Group Health Insurance	Benefits are available to employees and extendable to spouses and children.
Workplace Well-Being and Health	Wellness initiatives and annual physical checkups support employee health.
Sports and Health Initiatives	Local sports events promote physical well-being and team spirit among staff.

* Examples of practices at the Head Office, Thailand.



Workplace Wellness Initiatives



• Hybrid Working Policy

We promote flexible work arrangements that support work-life balance, reduce commuting stress, and align with our sustainability goals.



• Internal Health and Mental Well-Being Activities

Webinars and awareness sessions are organized to encourage self-care, emotional resilience, and healthy lifestyle habits.



• Group Employee Assistance Program (EAP)

Offers confidential counselling and support services for employees and their families to help manage stress, emotional challenges, and mental well-being.



• Promoting breastfeeding and Childcare Facilities

Dedicated spaces at key sites provide privacy and support for nursing mothers and childcare needs.



• Ergonomics and a Safe Work Environment

Regular workstation assessments are conducted, ergonomic tools such as sit-stand desks are provided, and best-practice training is offered. Remote workers receive home office support, while employees and contractors are also empowered to stop work if safety is compromised.



• HIV/AIDS Education and Health Access

We uphold strict non-discrimination and confidentiality policies while providing education, voluntary testing, treatment access, and comprehensive healthcare support for affected employees.

Care begins with us—Indorama Ventures wins the Well-Being Organization Award



The HR Head Office and Thailand team at Indorama Ventures received the Well-Being Organization Award 2024, which recognized our holistic approach to employee well-being across seven dimensions: Physical, Mental, Spiritual, Social, Environmental, Career, and Financial. Jointly awarded by PMAT, TLCA, and Chulalongkorn University, the award underscores our strong commitment to a people-centric, sustainable workplace. The HR and EHS teams worked together to align well-being initiatives with safety and sustainability goals. This recognition strengthens our reputation as an employer of choice, reinforces our focus on workforce resilience, and highlights well-being as a key pillar of our long-term success.

Human Capital Development



Human Capital

In 2024, we continued to prioritize workforce development by creating opportunities for growth and enabling a culture of learning, innovation, and leadership. We invested approximately \$2,217,665 in employee development across our global operations.

This investment resulted in an average of 23.11 training hours per employee, totaling 597,519 hours for the year. On average, we spent \$85.80 per Full-Time Equivalent (FTE) on learning and development. These figures reflect our commitment to equipping employees with the skills and mindset needed to navigate a dynamic business environment.

Knowledge That Drives Us

Knowledge management at Indorama Ventures involves capturing, sharing, and applying organizational knowledge to enable continuous learning, collaboration, and responsive decision-making. It also supports a culture of agility and informed actions across global operations. To ensure these efforts remain aligned with evolving business needs, HR conducts Training Demand Surveys to identify development needs, evaluate existing skills, and address capability gaps through tailored course design.

We are committed to building workforce capabilities through continuous learning. Our training and development programs in 2024 reflect a strong focus on both hard and soft skills, designed to meet business demands and support employee growth. Based on insights from the Demand Surveys, the HR team curates and delivers suitable courses for employees across all functions. These sessions are conducted monthly through various formats, including onsite workshops, online webinars, hybrid sessions, and self-learning modules, to maximize accessibility and participation.

The curriculum spans a wide range of topics aimed at enhancing both functional excellence and personal development. This includes hard skills training in areas such as data analytics, automation tools, and business software; soft skills development in communication, leadership, and collaboration; as well as specialized topics such as sustainability, compliance, and cybersecurity awareness.

In 2024, Indorama Ventures strengthened its knowledge management efforts through targeted programs that support learning, innovation, and cross-functional collaboration. We also enhanced efficiency by collaborating with an external technology partner to introduce digital tools that improve data management and accelerate product development. A key initiative was the launch of the One IVL Academy, an internal platform where employees can explore training courses for upskilling. The platform offers academies and modules across multiple focus areas, including sustainability, supply chain, EHS, digital, data, communication, and leadership. With user-friendly content and practical training modules, the One IVL Academy builds awareness and enhances capabilities, helping teams apply sustainability principles and functional knowledge in their daily work and decision-making.

We also strengthened technical knowledge transfer through the Indorama Ventures Excellence (IVEX) Program and CSR knowledge-sharing initiatives, enabling the exchange of best practices between local sites and corporate teams, notably in community engagement.

Developing Talent

At Indorama Ventures, talent development is integral to employee engagement, organizational excellence, and business resilience. We promote a learning culture where employees are encouraged to take ownership of their development, supported by managers who facilitate and guide their growth. To build capabilities across the organization, we provide a range of learning methods, both internally and externally, including coaching and mentorship programs as well as participation in cross-functional teams and networks. Our employee development initiatives encompass leadership development, cultural education to promote inclusivity, and transition programs that support employees preparing for retirement or exploring new career paths. We also offer digital readiness programs to help our workforce adapt to technological change. Together, these efforts build an agile, future-ready workforce and reinforce our culture of continuous development and inclusive leadership.

Leadership Development and Succession Planning

Strong, future-ready leadership is critical to sustainable growth. In 2024, we continued to strengthen our leadership pipeline through a combination of structured training, digital learning, mentoring, and strategic role exposure. Since 2020:

- **2,062** leaders have undergone formal leadership training programs.
- **2,342** leaders have completed leadership e-learning modules.



These programs focus on developing leadership skills and core competencies aligned with our transformational goals, including agility, innovation, people development, collaboration, and change readiness.

Functional training was also delivered in key areas such as Sustainability, Digitalization, Health and Safety, and Lean Six Sigma through Indorama Ventures Excellence (IVEX). Learning methods include curated programs, coaching and mentoring, experiential learning, and peer-based collaboration.

Our succession planning framework, introduced in 2019, has expanded significantly, growing from 39 senior roles and 68 validated successors to 792 key positions and 1,339 validated successors as of 2024. The framework now spans senior, middle, and site-level leadership, and includes diversity and age profiling to ensure readiness and inclusivity. The Nomination, Compensation, and Corporate Governance (NCCG) Committee, along with the Board, oversees the succession planning process for the Group CEO and Executive Board roles. For all other positions, we follow a continuous development approach supported by real-time experience, targeted learning interventions, and regular performance reviews.



Future Leaders Program (FLP)

As part of our long-term leadership strategy, the Indorama Ventures Future Leaders Program (FLP) accelerates the development of high-potential talent across global operations. Structured as a 12-month blended learning journey, FLP includes contextualized assessments, tailored modules, coaching, mentoring, hands-on projects, and individual development plans. The program includes 360-degree feedback evaluations to provide participants with comprehensive insight into their leadership behaviors and development areas. The program also leverages team-based learning to encourage collaboration and cross-regional knowledge sharing.

The program aims to build a sustained pipeline of 200 future leaders by 2025, strengthening long-term organizational capability.

Following the successful completion of the inaugural cohort, the second edition was launched in May 2024 with 48 emerging leaders from various regions and business segments. In September 2024, participants convened in Bangkok for an immersive four-day development experience.

In recognition of its impact, the program received the Gold Award for Excellence in the Best Leadership Development Program at the prestigious 2024 Brandon Hall Group Human Capital Management (HCM) Excellence Awards, reflecting our commitment to developing future-ready leaders through structured, high-impact learning.

Transition Program

Indorama Ventures offers comprehensive programs to support employees nearing retirement or affected by termination. One key initiative is the "Transition Program," launched in Thailand, which assists employees in maintaining employability, financial stability, and overall well-being during their career transitions. This program is inclusively developed to support all employee groups. As part of the program, severance pay is administered in accordance with Thai Labor Law, taking into account the employee's age and years of service to ensure fair and lawful compensation. For operations in other countries, we comply with the applicable laws of each jurisdiction regarding this issue.

In preparation for life beyond employment, employees have access to corporate training programs focused on reskilling and upskilling. These cover essential areas such as digital literacy, communication, AI tools, problem-solving, and adaptability, equipping individuals with valuable skills for future opportunities.

To help employees plan for financial security, the program offers financial planning resources, including tax strategies, provident fund education, and investment advice through partnerships with financial institutions. Additionally, health-related forums and the Employee Assistance Program (EAP) are available to support emotional and physical well-being, offering guidance on stress management, relationships, and life changes. Employees also benefit from vocational workshops, often integrated into corporate events, and have the opportunity to participate in career coaching sessions through Individual Development Plans (IDP), tailored for personal and post-retirement planning. Furthermore, internal job placement support is available for affected employees, with HR teams coordinating internal and external job search assistance.

Performance Management and Recognition



Human Capital

We view performance as both a measure and a mindset. Our performance management approach emphasizes fairness, continuous feedback, and recognition that reflects both business outcomes and individual contributions. By aligning performance with purpose, we are building a culture of accountability, development, and motivation.

All employees are eligible for performance evaluations and compensation reviews. We are progressively expanding our structured performance management framework to ensure that all employees, regardless of level or function, receive transparent performance feedback and equitable reward opportunities.

A Structured Pay-for-Performance Philosophy

In 2024, we continued to apply our pay-for-performance compensation philosophy, ensuring that rewards are directly linked to employee performance, business outcomes, and organizational goals. Global compensation packages are reviewed regularly to remain aligned with market benchmarks and industry standards. A multi-level performance matrix, currently applied to top and middle management, assesses performance at the individual, business unit, and company levels, and is being progressively expanded to other professional levels. Our annual job evaluation process supports organizational change by aligning roles with evolving business needs.

To ensure transparency and competitiveness, we partner with a leading external firm to conduct annual pay gap studies across senior and middle management levels. These assessments help identify disparities and strengthen fairness in our reward systems.

Performance Appraisal and Career Development

Performance appraisals continue to play a central role in aligning individual contributions with business objectives and supporting professional growth. In 2024, 75.05% of permanent employees were evaluated using a range of models, including Key Performance Indicators (KPIs) based on goal-setting and management by objectives. At our production sites, performance appraisals are conducted annually, both formally and informally, ensuring that employees receive regular feedback on individual and team performance, as well as expectations. This dual approach enables meaningful conversations between employees and supervisors to clarify goals, recognize strengths, and plan development paths. We continued to use SAP SuccessFactors to support consistent goal setting, performance tracking, and transparent reviews across global teams. Based on appraisal outcomes, we apply performance-linked compensation strategies to ensure that remuneration reflects individual contributions, reinforcing our culture of accountability and continuous improvement.

Employees are also encouraged to use Individual Development Plans (IDPs) to define their career aspirations and identify the skills, training, and mentorship needed to achieve them. These plans provide a structured foundation for targeted development and long-term growth within the organization.





Indorama Ventures Excellence (IVEX) Program

In line with the Company's values, the Indorama Ventures Excellence (IVEX) function plays a critical role in driving enterprise-wide operational excellence. IVEX integrates cutting-edge methodologies by providing training programs and promotes a culture of continuous improvement through structured knowledge-sharing systems—Best-in-Peer and Best-in-Company—that enable the exchange of best practices across sites and promote team-based learning and cross-functional collaboration. This includes traditional Lean Six Sigma belt certifications for all proficiency levels, allowing employees to apply the methodologies within their specific areas, along with other world-class methodologies and training for non-manufacturing disciplines, such as Commercial, Supply Chain, Finance, and Innovation excellence, equipping employees with essential tools and techniques, with a primary focus on the DMAIC methodology to enhance day-to-day operational excellence.

IVEX programs are complemented by coaching and mentoring opportunities arising from hands-on project development following course completion, enabling employees to apply their learning beyond formal training.

Outcomes of these projects not only generate tangible benefits for the Company, such as increased output, enhanced sustainability in energy, air, water usage, efficient waste management, improved product and process quality, and stronger cost control, but also empower employees to deepen their knowledge and develop practical skills through hands-on project experience. Knowledge-sharing is driven by monthly sessions, cross-functional conferences, and annual project competitions, supporting sustainable progress. By leveraging data-driven analysis and applying structured problem-solving approaches, employees are equipped to make informed decisions, drive improvement initiatives, and strengthen their leadership capabilities. This dual impact supports both organizational and ESG performance as well as individual professional growth, contributing to a sustainable organization.

As of 2024, significant progress has been made. A total of 21,701 employees, representing 80% of the Company's workforce, have completed Lean Introductory and White Belt training. Additionally, 2,033 employees have been trained in IVEX Lean Six Sigma upper belts, accounting for 8% of the total workforce on a cumulative basis. These efforts reflect our ongoing commitment to employee development and the integration of continuous improvement practices across the organization.

2024 IVEX Performance Achievements

\$46.1 million in incremental saving benefits from 438 projects

57 Sustainability Projects across our company including utilities

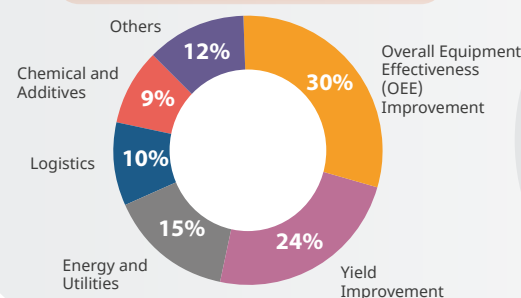
91 million kWh reduction in energy consumption from **47 projects**

Approximately **130 new projects** were submitted to the manufacturing competition, with roughly 700 participants attending the IVEX Competition—regional session.

36,400+ hours invested in IVEX training sessions

207 New Belt Practitioners in 2024

Types of IVEX Initiatives



Sustainability Benefits



GHG Reduction
35,773 tCO₂e



Energy Reduction
326,221 GJ



Water Reduction
37,289 m³

IVEX Competition

The IVEX Competition is one of the program's largest annual initiatives, engaging employees globally across multiple functions and business segments to demonstrate their problem-solving skills while learning best practices from other teams. With mid-to-senior-level leaders serving as judges, participants gain valuable exposure to executive insights, while enabling leadership development, mentoring opportunities, a mindset for change, and cross-functional collaboration.

To further expand its impact, IVEX introduced two new competitions for the first time in 2024:

IVEX Lean Finance Improvement Project Competition

This competition honors finance professionals worldwide who apply DMAIC tools from their training to enhance financial performance and operational efficiency. These improvements streamline workflows, reduce manual tasks and errors, and allow employees to focus on high-value activities, gain deeper insights, and make more informed decisions.

IVEX x Digital: AIA Adoption Competition

Designed to share best practices, recognize top-performing sites, and drive added value, this competition integrates analytics with IVEX methodologies. Participating sites demonstrated effective use of AIA technologies and the DMAIC approach to visualize processes, reduce costs, and optimize operations, achieving measurable results. The Indovina site in Camaçari, Brazil, was named the 2024 AIA x IVEX Adoption Competition Winner for reducing steam losses, lowering greenhouse gas emissions, and improving cost efficiency.

Advanced Industrial Analytics (AIA) Program Deployment

In 2024, the IVEX team, in collaboration with the Digital Manufacturing team, launched the Advanced Industrial Analytics (AIA) program to accelerate transformation at "digital speed," drive operational excellence, and equip employees to respond with in-house, best-in-class capabilities.

The AIA tools apply advanced data analytics and cutting-edge technologies to enhance decision-making and optimize variable costs. They help improve reliability and sustainability performance, contributing to organizational efficiency, by analyzing large datasets from industrial sensors and connected manufacturing data systems. The valuable insights delivered by AIA enable predictive sustainability metrics such as GHG reporting, support predictive maintenance to reduce downtime and waste, increase productivity, and deliver additional operational benefits.

2024 HIGHLIGHTS

In its first year, the AIA deployment included the following activities:

- Demonstrating Value through the Use Case Repository** with step-by-step documentation on the dedicated platform called "#Seeq Community" and embedded AI assistance to expedite success. Currently, there are 92 use cases in progress or completed for the Indovina, CPET, and Fibers segments.
- Cross-sharing Value** at the AIA x IVEX Competition nine months after deployment.
- Providing Continuous AIA Online Skills Training** to build foundational knowledge of advanced analytics.
- Running the Site Champion Development Program** with weekly consultations to accelerate value delivery and build onsite expertise.
- Developing Pilot Projects** at eight sites.
- Offering Program Support (through the system and weekly office hours)** hosted by IVL data scientists, digital team members, and AIA experts worldwide, providing open support to all participants.

Through real-time monitoring and advanced decision-making, 14 use cases were implemented, delivering \$1.1 million in cost savings. These results not only validate the program's scalability but also reinforce its potential to embed operational excellence and sustainable practices across other units.

As part of the broader AIA program, over 12,500 hours have been logged in Seeq during its first year, with 500 active users and 600 members trained in foundational concepts. These collective efforts have contributed to more than \$9 million in savings. **With this strong foundation**, Year 2 aims to further expand the program, with a total of 24 sites expected to be onboarded by the second quarter of 2025.



Health and Safety



Human Capital

In 2024, we deepened our commitment to a proactive, people-first safety culture, grounded in leadership, employee empowerment, and long-term behavioral change through building capability and creating a positive EHS culture in our value chain.

Our Environmental, Health, and Safety (EHS) Policy, endorsed by the Board of Directors, outlines our commitment to full compliance with all applicable environmental, health, and safety standards, regulations, and government statutes in every area where we operate. The policy applies to all employees, trainees, suppliers, contractors, and persons who are not employees but authorized to act on behalf of or represent the Company. We are committed to continually improving EHS performance across all aspects of our business. This includes setting quantitative targets to drive performance enhancements. Each business unit establishes prioritization and action plans to enhance EHS activities, ensuring a structured and effective approach to risk mitigation.

Our approach emphasizes proactive consultation and active participation from management and employee representatives to ensure safety and well-being. We respect and uphold collective bargaining agreements that address employees' health and safety, working conditions, and other workplace considerations. We are also committed to mitigating potential negative health and safety impacts of our products and services on customers and consumers by ensuring product safety. EHS practices are promoted among both employees and contractors through training and the consistent application of global best practices, aimed at raising awareness of EHS management.

To accelerate our safety agenda, the 2024 EHS strategy emphasized system realignment, digital visibility, improved risk controls, and site-specific wellness initiatives. We maintained alignment with ISO 45001 standards, with 71% of operations certified and an additional 18% audited under our Corporate EHS Audit Program, which includes internal and third-party reviews.

Our risk assessment model spans the full asset lifecycle, from due diligence to decommissioning, ensuring proactive identification and mitigation of potential health and safety hazards. Exposure Assessment and Control Standards support this by identifying and mitigating health risks through qualitative and quantitative evaluations, with appropriate controls implemented where necessary.



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Occupational Health and Safety Performance

In 2024, we continued to strengthen health and safety performance across the organization. Our Total Recordable Injury Rate (TRIR) improved to 0.60 cases per 200,000 man-hours—an 11.5% improvement over 2023 and a 59% decrease compared to 2019. Our Lost Time Injury Frequency Rate (LTIFR) fell to 0.39, marking a 20% year-on-year reduction and surpassing our revised 2025 target of 0.46 ahead of schedule.

We also saw a continued decline in process safety events across both the Tier 1 and Tier 2 categories. Compared to 2019, Tier 1 events were reduced by 60%, while Tier 2 events decreased by 78%, reflecting stronger controls and improved risk visibility in high-hazard operations.

Safety also extends to logistics. In 2024, 28 transportation-related incidents were recorded across all our sites. None resulted in recordable injuries beyond the level of first aid, litigation, or fines. Strict loading, unloading, and transportation protocols remain in place across all logistics operations. Transportation operation teams undergo mandatory training in the safe handling of hazardous materials in accordance with applicable regulations.

Despite these improvements, we deeply regret the loss of four lives in 2024 due to work-related incidents—three contractors and one employee—at sites in India, Vietnam, and Thailand. Each case was thoroughly investigated, with corrective and preventive measures implemented. Lessons learned were shared across the organization to strengthen preventive actions and reinforce shared accountability.

KPI Review: 2019 VS. 2024

Since 2019, we have made substantial progress in improving key EHS performance indicators.

-59%
TRIR

-54%
LTIFR

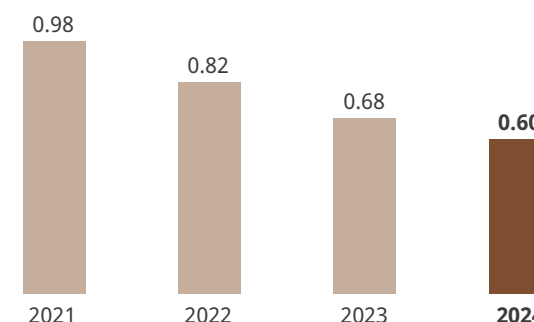
-60%
PS TIER1

-78%
PS TIER2



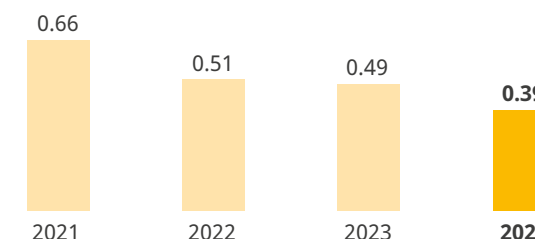
Total Recordable Injury Rate: TRIR

(cases per 200,000 man-hours)



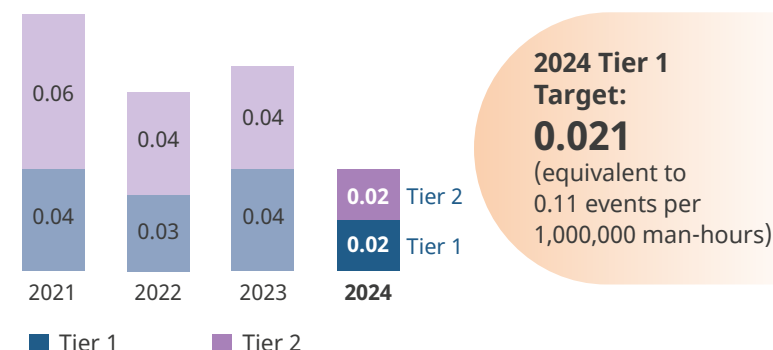
Lost Time Injury Frequency Rate: LTIFR

(cases per 200,000 man-hours)



Process Safety Event Rate

(events per 200,000 man-hours)



Target

LTIFR < 0.5* by 2025
(cases per 200,000 man-hours)

*2025 target has been revised to 0.46, as the 2023 performance has already surpassed it.

Performance

0.39 cases
per 200,000 man-hours

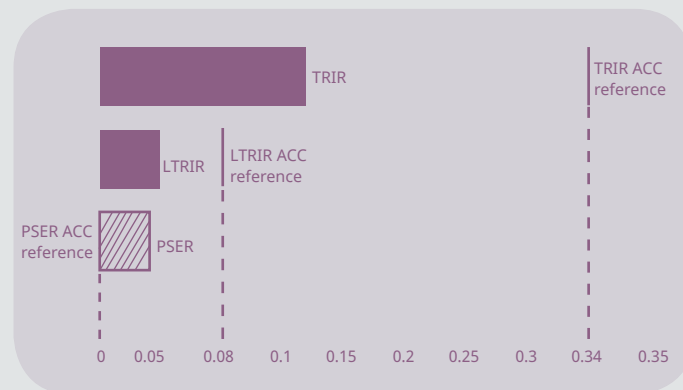
2024 HIGHLIGHTS

- **55%** of our sites (83 out of 150) achieved zero recordable injuries.
- **17%** decline in environmental permit exceedances.
- **66%** decrease in violation notices received.
- Almost 2 times increased in global and regional training hours compared to 2023, reaching over **1,260 employees** worldwide
- Indovinya, one of our business segments, recorded the lowest injury and illness rates, as well as the fewest environmental reportable events, since its formation in January 2020.
- **71%** of all operations have achieved ISO 45001:2018 certification.
- Expanded the Corporate Training Program on our software system, reaching **949 participants** with 77.5 hours of training.
- Introduced over **15 hours** of Process Hazard Analysis (PHA) software training for 14 process safety management specialists.
- Delivered **47 hours** of specialized training (e.g., ergonomics, first aid, industrial hygiene) to 156 EHS personnel and employees, enhancing safety and operational readiness.



Safety Performance Against Industry Peers

To assess our performance, Indovinya benchmarks its process safety events and recordable injury and illness rates against American Chemistry Council (ACC) standards. This comparison helps us maintain and continuously reduce our rates to industry-leading* levels. In 2024, Indovinya's Total Recordable Incident Rate (TRIR) and Lost Time Recordable Incident Rate (LTRIR) were both lower than the ACC benchmark.



*2024 ACC medium size peer companies

EHS Management and Compliance System

In 2024, as part of our continued commitment to improving the performance of our EHS management and compliance system, Indorama Ventures refined its approach to better align with enterprise-wide strategic priorities. A unified framework was introduced, built around four interconnected pillars: governance and standardization, assurance, capability building, and innovation. This model supports the integration of safety into operations, decision-making, and organizational culture.

Key Focus Areas



Governance and Standardization:

The focus shifted from standard development to consistent implementation across all sites, while the use of digital tools enhanced visibility, accountability, and operational efficiency.



Assurance:

Stronger data validation, systematic tracking, and comprehensive audits provided deeper insights, enabling informed decision-making and continuous improvement.



Capability Building:

Training investment grew by 197%. Key initiatives included leadership bootcamps, industrial hygiene programs, and expanded digital training. More than 50 senior leaders participated, with a total of 155 attendees contributing 56 hours of EHS-specific training across three global regions.



Innovation:

An increased emphasis was placed on leveraging technology to improve safety and operational efficiency. Key enhancements included upgraded incident tracking systems, streamlined audits, and enhanced compliance tools.



Culture as the Foundation:

A strong safety culture remained central to sustaining EHS excellence. Embedding EHS into daily operations and leadership behavior supported proactive risk management and made safety a shared value across the Company.

EHS Operational Practices and Workers Participation

Indorama Ventures ensures the consistent application of both mandatory and voluntary EHS standards, which include requirements related to work-related injuries, health issues, diseases, and incidents. Local EHS teams, comprising technicians, engineers, healthcare professionals, and safety specialists, work closely with site leadership to oversee implementation, conduct audits, and drive continuous improvement in line with evolving standards.

Work Permits are issued for non-routine tasks to ensure that site-specific risks are identified and mitigated before activities commence. These systems are reviewed periodically to maintain relevance and ensure safety.

Many of Indorama Ventures' sites maintain formal health and safety committees composed of employees and relevant workers, operating in compliance with local legal requirements. In addition, informal committees at several locations promote safety awareness and support program implementation at the operational level.

Our Occupational Health and Safety (OHS) approach includes conducting regular risk and hazard assessments to identify potential sources of harm in the workplace. Where relevant, action plans with clear priorities and measurable targets are developed to address identified risks. Emergency preparedness measures are integrated into site-level procedures to ensure effective responses in the event of an incident. Many of our sites have obtained, or are in the process of obtaining, ISO 45001:2018 or OHSAS 18001:2007 certification, reflecting our commitment to international standards.

All employees, contractors, and visitors are required to stop unsafe work, and no task proceeds without appropriate safeguards in place. We provide multiple channels for reporting risks, including structured feedback programs and welfare committees. Employees may report concerns directly or, if confidentiality is preferred, through the Whistleblower Channel.

EHS Audits and Site Performance Reviews

Now in its second full year, the Corporate EHS Audit Program continues to strengthen risk mitigation, provide assurance, and promote organizational learning. Operating on a five-year audit cycle, the program evaluates sites based on regulatory compliance, leadership accountability, performance indicators, and alignment with internal standards.

In 2024, 22 Corporate EHS audits were conducted according to a formal schedule, focusing on site compliance and maturity evaluations. Both internal and third-party assessments were coordinated by the corporate EHS team and monitored through the Action Tracking System. Closure targets were established to ensure accountability and drive progress in risk reduction and operational resilience. Since the program's launch in 2022, 45% of our operational sites have undergone audits, with 75% of identified corrective actions completed within the year.

Digital Enablement and Innovation

Digital transformation remained a cornerstone of our approach to standardization and compliance. The EHS software system, serving as a global repository for site-level data, enhanced visibility, incident tracking, and decision-making. In 2024, new modules of Industrial Hygiene (IH) and Management of Change (MOC) were introduced to further expand the platform and improve risk identification and control.

Additionally, new software was deployed to standardize and optimize Process Hazard Analyses (PHA). These digital tools provide customized dashboards and reports that convert raw data into actionable insights, strengthening real-time monitoring and regulatory compliance.

Together, these efforts reinforced our structured and scalable approach to health and safety, designed not only to meet expectations, but to anticipate risks and act with integrity.

Safety Culture

In 2024, Indorama Ventures elevated its safety culture by prioritizing employee participation and capability building across sites. Joint health and safety committees, comprising both management and employee representatives, continued to facilitate two-way dialogue between employees and management. This enabled feedback on workplace safety and the co-creation of site-specific standards. Employees also contributed to shaping a new contractor management framework, ensuring that safety expectations are both practical and locally relevant.

Training was a significant focus. EHS learning investments rose by 197% year-on-year. More than 155 senior leaders participated in EHS bootcamps across three regions, contributing 56 hours of specialized training. Additional regional sessions were held in Thailand, Poland, and Vietnam, covering topics such as industrial hygiene, chemical safety, and emergency preparedness.

These initiatives reflect our ongoing commitment to embedding safety into everyday behavior and empowering employees to identify risks, raise awareness, champion safety, and actively contribute to a resilient and accountable EHS culture, ultimately helping to reduce incidents.

Looking Ahead: EHS Priorities for 2025

Our 2025 priorities include strengthening governance, leveraging data for better insights, expanding training initiatives, and driving innovation in EHS practices. Key actions will focus on redesigning the risk management system, enhancing Golden Safety Rule implementation, strengthening contractor oversight, and accelerating the EHS transformation. Investing in EHS remains a strategic priority, central to protecting people, supporting communities, and ensuring long-term sustainable growth.



EHS Excellence Awards

The EHS Excellence Awards 2024 recognized individuals and teams who made outstanding contributions to improving health, safety, and environmental performance. The program featured five categories—Leadership, Environmental, Wellness, Innovation, and Process Safety—each with clear evaluation criteria aligned with our EHS strategic priorities. Open to all employees, the awards were designed to promote cross-functional engagement and reinforce a strong EHS culture. Winners were selected through a transparent and standardized review process conducted by internal EHS experts. All winning initiatives demonstrated measurable impact, innovation, and alignment with our overarching goals of enhancing EHS performance and strengthening our safety culture. Award recipients also shared their achievements in a company-wide forum, helping to inspire continuous improvement across the organization.

EHS Excellence in Practice



Integrating a Culture of Well-Being at the Site Level

In 2024, Ngoc Nghia Industry, our subsidiary, celebrated its Safety Week program, encouraging active participation through workshops and department-wide engagement. Highlights included 144 employee-submitted safety improvement ideas, a firefighting skills competition, and a Forklift Operator Skills Day, with over 100 prizes awarded to recognize participation and innovation. The program reinforced our commitment to operational safety and employee empowerment.



Industrial Hygiene Training for Asia-Pacific Teams

In 2024, the EHS team conducted a five-day training course on the Basic Principles of Industrial Hygiene at our head office in Bangkok. Based on an internationally recognized curriculum, the course was attended by 27 participants from across the Asia-Pacific region and included certification upon completion. The training aimed to strengthen internal capabilities in evaluating and managing workplace health risks such as chemical exposure, noise, ergonomics, and psychosocial factors. Participants reported improved risk communication skills and expressed a strong commitment to applying their knowledge in site-level assessments and future training.

Global Campaign on “Line of Fire” Risks

In 2024, the Indovinya segment launched a major global communications campaign focused on “Line of Fire” risks. Based on a critical analysis of past accidents, the campaign targeted the most common causes of accidents, such as exposure to hot water or steam, hazardous chemicals, or moving machinery parts, among others. The campaign featured targeted communication materials and an engaging online game to reinforce key safety concepts. Sites provided excellent feedback on the campaign’s quality, relevance, and user-friendly format, underscoring its effectiveness in raising awareness and promoting preventive actions.

Automation and Robotic Machine

Indorama Ventures Mobility Longlaville S.A.S., located in Longlaville, France, implemented an automation and robotic machine at the packaging line called MAP (Automatic Palletization Machine) in 2023. The primary objective was to improve health and well-being by replacing workers from carrying heavy bobbins from the process to the packaging section and storing them in stacks in the warehouse. Additionally, the system’s precise sensor checks enhance waste generation control. As a result, the injury rate and lost-time rate improved year on year due to reduced worker traffic. In 2024, the TRIR was 0.75 cases per 200,000 man-hours, better than 1.54 cases per 200,000 man-hours in 2022, the first year of implementation.

The fully automated and power-driven system also supports waste and substandard reduction by approximately 178 tons per year and cost savings of approximately \$1.4 million per year. Based on this success, there are plans to extend this system in spinning in order to completely eliminate all manual bobbin handling in the plant.





Human Rights

Respecting Human Rights Across our Value Chain

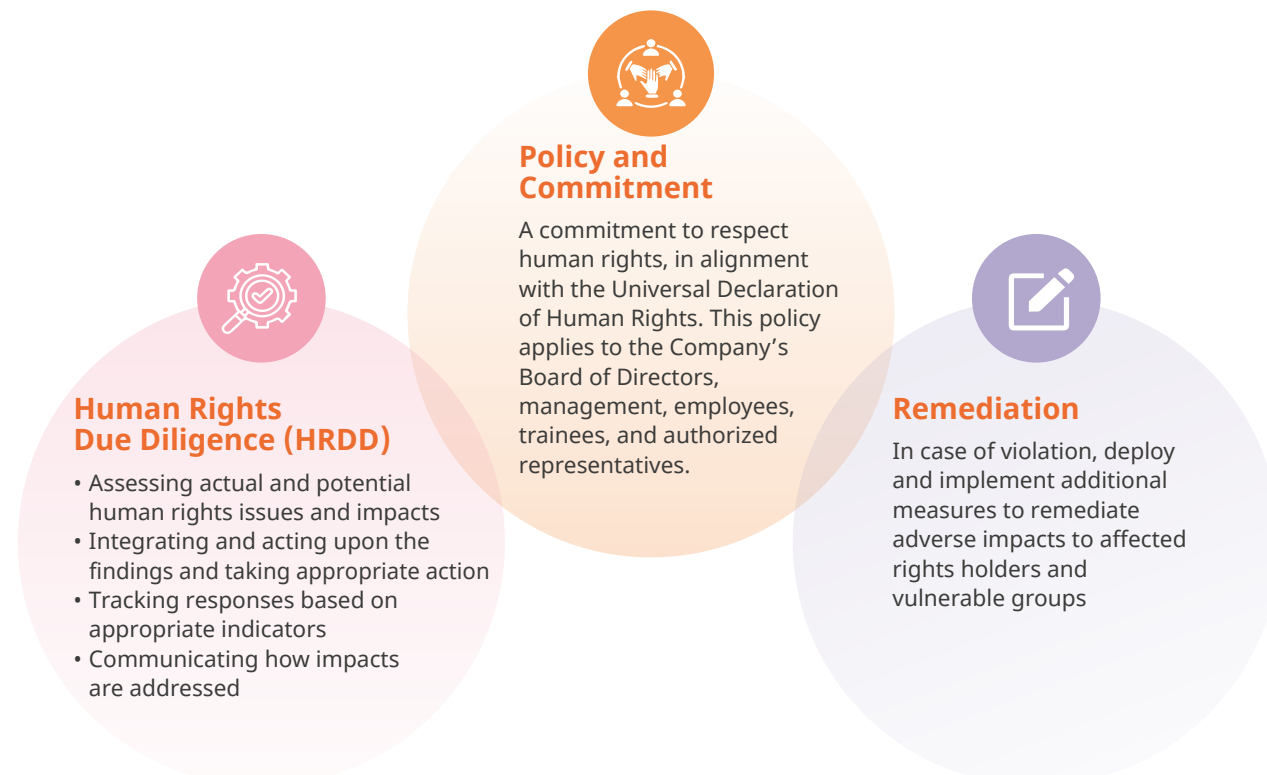
At Indorama Ventures, we uphold the rights and dignity of all individuals. Our commitment is rooted in internationally recognized human rights frameworks, including the Universal Declaration of Human Rights (UDHR), the United Nations Guiding Principles on Business and Human Rights (UNGPs), UN Convention on the Rights of the Child (1989) and the International Labour Organization (ILO)'s Declaration on Fundamental Principles and Rights at Work. As a member of the UN Global Compact and a signatory of the Women's Empowerment Principles (WEPs), we also support the UN OHCHR's Standards of Conduct for Business, which promote non-discrimination and equal treatment for LGBTQI+ individuals. We are committed to "Protect, Respect, and Remedy" framework and proactively identifying, addressing, and preventing human rights risks across our operations, while ensuring full compliance with applicable local and international laws. Our Human Rights Policy and Responsible Sourcing Policy extend these expectations to suppliers, subcontractors, and vendors. These principles are integrated into our governance, day-to-day operations, and supplier partnerships, underscoring our belief that ethical conduct is essential to sustainable growth.

Preventing Modern Slavery and Promoting Accountability

We are committed to maintaining transparency across our operations and throughout our supply chain in the fight against modern slavery. We expect the same high standards of ethical conduct from our contractors and suppliers and require that they pass these expectations on to their networks. Our due diligence and compliance processes are aligned with international frameworks to support this effort.

In 2023, it was expanded to explicitly address modern slavery and human trafficking. The policy also reinforces protections against retaliation through our Whistleblower Policy and encourages inclusive employment practices, including opportunities for people with disabilities. We maintain zero-tolerance for violations such as modern slavery, child labor, forced labor, harassment, and discrimination. As of 2024, no incidents related to modern slavery have been reported.

Our Human Rights Oversight and Accountability Process



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Indorama Ventures' Human Rights Due Diligence (HRDD) framework is embedded across our operations, supply chains, and the communities we touch. This includes employees, contractors, suppliers, and vulnerable groups who may be impacted by our business activities. Guided by our Human Rights Policy and aligned with the UNGPs, the framework helps us proactively identify, assess, and mitigate human rights risks.

To reinforce compliance, all site and business heads are required to submit an annual Human Rights Declaration. In 2024, we conducted risk assessments across all operational sites, focusing on health and safety, child labor, discrimination, and working conditions. We achieved a 100% declaration rate, with no significant violations reported.

Six human rights-related issues were identified in 2024, marking a reduction from the previous year. All cases were promptly investigated and resolved within the reporting period. Ongoing engagement with stakeholders and active use of whistleblower channels continue to strengthen our monitoring efforts and drive continuous improvements.

For more comprehensive insights, please refer to the 2024 Human Rights Due Diligence Report.



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Protecting Human Rights throughout the Supply Chain

We maintain a firm and unequivocal stance against all forms of discrimination, bullying, and harassment, as outlined in our Human Rights Policy and Responsible Sourcing Policy. We actively monitor and address any incidents of unfair treatment to promote a safe, respectful, and inclusive work environment. Our commitment also extends to safeguarding the rights of indigenous peoples, ensuring our operations respect their cultural integrity and fundamental rights.

Human rights principles are integrated into daily operations through site-level policies and comprehensive training programs. The Corporate Governance Policy Awareness Campaign (CGPAC) team conducted 30 onsite and online sessions focused on our Human Rights Policy, reaching approximately 900 employees across both local and international sites. These sessions highlighted the role of employees in preventing human rights violations and explained the reporting channels available for non-compliance.

Our Responsible Sourcing Policy clearly sets expectations for suppliers regarding ethical conduct, labor rights, health and safety, and environmental stewardship. It requires suppliers to uphold these standards throughout their own supply chains, ensuring that all employees and sub-tier subcontractors are treated with dignity and respect. This approach ensures alignment and accountability across the entire supply chain.

2024 HIGHLIGHTS

100% human rights risk assessments across all manufacturing locations

100% human rights declarations signed by business heads and site heads

No significant human rights issues or major violations recorded in our operations or supply chain

Approximately **900 employees** participated in **30 onsite and online** Human Rights Policy training sessions.

Strengthened employee data security and privacy protection in compliance with Thailand's PDPA (2012) and the EU GDPR

We also maintain strong safeguards and prioritize data privacy, complying fully with Thailand's Personal Data Protection Act (2019). Robust systems are in place to safeguard personal information and prevent unauthorized access or misuse, reinforcing our commitment to data security and confidentiality.

80%

of raw material suppliers were assessed based on human rights-related risks

No

suppliers were identified as being exposed to risks of incidents of child, forced, and compulsory labor

No

suppliers were identified as being susceptible to human rights-related risks

No

complaints concerning supply chain human rights were submitted through the grievance reporting system



Empowering Suppliers through Shared Values



Social & Relationship Capital

We continue to strengthen supplier relationships through capacity building, long-term engagement, and alignment with our sustainability values. These efforts contribute to inclusive growth, enhance supply chain transparency, and encourage collaborative impacts across the value chain, reinforcing our position as a responsible and forward-looking global partner.

Responsible and Resilient Supply Chain Management

Operating in over 30 countries, we manage a complex network of suppliers, service providers, and logistics partners that power our integrated operations. As part of our responsible supply chain management approach, we are committed to embedding ESG safeguards throughout our operations and broader business network. This commitment is outlined in our Sustainability Strategy and supported by key governance tools such as our Responsible Sourcing Policy, associated policies, the Supplier Self-Assessment Questionnaire, and strict adherence to national legal frameworks.

Our Responsible Sourcing Policy sets clear expectations on labor rights, environmental practices, and ethical conduct for all suppliers and subcontractors. It includes specific policies regarding the procurement of palm oil, palm kernel oil, and their derivatives, and addresses legal compliance, ethics, human rights, health and safety, anti-bribery and corruption, mutual trust and respect, as well as environmental performance monitoring.

We have strengthened our management processes by institutionalizing supplier assessments and audits. Using a risk-based approach, we classify our suppliers based on their ESG exposure and encourage regular assessments using platforms such as EcoVadis and the Together for Sustainability (TfS) audit framework. These platforms serve as partners in evaluating and benchmarking our suppliers' ESG performance within the chemical industry. We also request our suppliers to disclose their ESG data and policies through these platforms to enhance transparency and support performance monitoring. In line with this approach, we set 2024 targets for supplier assessments and audits: 366 suppliers to be assessed through EcoVadis, and 7 suppliers to undergo onsite third-party audits. By doing so, suppliers can access ESG benchmarks against industry peers and identify opportunities for improvement. We have also expanded our participation in TfS by contributing our own onsite supplier audits to its global library. Additionally, targeted training sessions were conducted to equip buyers with practical tools for sustainable procurement.

We prioritize ethically and sustainably sourced renewable and recycled raw materials, aiming to minimize reliance on virgin resources throughout our operations. Indovinya (our subsidiary that uses palm oil and its derivatives) requires that suppliers adhere to No Deforestation, No Peat, and No Exploitation (NDPE) practices, and also tracks the traceability of its supplier mills and updates ESG-related stakeholder complaints on its website every six months.

We emphasize local sourcing and procurement to enhance the reliability of production at plants, optimize cost management, reduce Scope 3 emissions, and support local economic development. In line with our broader decarbonization objectives, we are working toward setting specific targets for Scope 3 emissions related to "Purchased Goods and Services" and "Upstream Transportation and Distribution."

As part of our green procurement practices, we carefully assess the environmental impact, potential human implications, and full product life cycle of the products we source. In 2024, we sourced and utilized over 255,727 tons of bio-based raw materials, reflecting our commitment to reducing environmental impacts across our value chain.

Sustainable logistics is another key focus area where we have implemented a range of measures to reduce emissions across our value chain, leading to tangible progress toward our decarbonization targets. We collaborate with commercial teams to increase customer shipping volumes, enabling a modal shift from road to rail. Partnerships with rail operators help align our logistics with their sustainability priorities and initiatives. Additionally, we maintain close relationships with shipping providers to streamline booking processes and explore alternative shipping routes, such as transitioning shipments from the South to the West Coast of the United States to bypass the Panama Canal. We also partner with carriers that implement CO₂eq reduction strategies, including carbon offset programs such as tree planting, and the use of higher-capacity vehicles and fuel-efficient equipment.

Supplier ESG Assessment and Compliance Management

Indorama Ventures' comprehensive Sustainable Supply Chain Management program integrates key ESG initiatives that enable effective oversight, reduce carbon emissions, particularly Scope 3, and ensure regulatory compliance across our value chain. Our Corporate Sustainability and Procurement teams jointly lead these efforts, forming the core of our Sustainable Supply Chain Program. This program is overseen by the Sustainability and Risk Management Committee (SRMC) and the ESG Council, which provide strategic guidance and monitor progress on supplier-related ESG initiatives.

In 2024, the Company engaged with more than 360 direct raw material suppliers, representing at least 90% of our total spend, to ensure alignment with our Responsible Sourcing Policy and ESG expectations. This engagement also included verifying compliance through supplier self-assessments and audits, as well as managing and monitoring carbon footprints. We also support our suppliers through training and evaluation programs aimed at reinforcing adherence to our sustainable practices.

We are committed to fair treatment of our business partners and suppliers through transparent procurement practices and responsible payment terms. In particular, we strive to ensure that our suppliers, particularly small and medium-sized enterprises, receive payments on time, in line with our standard practice, which sets an average payment term of 60 days. In 2024, the average trade payment period for our business operations remained consistently at 60 days. This reflects our business ethics and respect for supplier rights, supports supplier cash flow, and reinforces long-term collaboration, all while continuing to build a resilient, inclusive, and sustainable supply chain.

Supplier Screening and Selection

Our supplier screening and evaluation process for onboarding new vendors is comprehensive and requires compliance with the Responsible Sourcing Policy. Suppliers are expected to meet all the business and ESG requirements, including our standards on human rights, labor practices, health and safety, environmental stewardship, business relevance, corporate ethics, and anti-corruption.

We require suppliers to disclose their ESG policies, performance data, and progress either through standardized tools or direct engagement under our Sustainable Supply Chain Program. As of 2024, 71.6% of our raw material suppliers acknowledged and aligned with our Responsible Sourcing Policy. Supplier selection is based on both ESG performance and business relevance, with regular reviews to ensure continued alignment with our evolving sustainability objectives.

A key objective is to incorporate ESG considerations and other specific requirements, such as carbon footprint data, into compliance management, including supplier contracting decisions. This approach will ensure that sustainability performance plays a meaningful role in vendor selection.



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Supplier Risk Assessment

We categorize our suppliers into high, medium, and low ESG risk levels based on a combination of geographic location, product category, and demonstrated ESG performance. For critical and Tier 1 suppliers, including raw material and critical non-raw material suppliers, and covering existing and new suppliers undergoing due diligence, we conduct detailed assessments that consider country-specific, sector-specific, and commodity-specific risks. This includes evaluating factors such as the type of raw material, country of origin, applicable regulatory requirements, relevant certifications, ethical track record, strategic spending, and the potential impact on business continuity in the event of supply chain disruptions.

Both current and new suppliers undergo ESG alignment reviews, with disclosures collected via EcoVadis and TFS. These reviews cover topics such as environmental performance, human rights, child and forced labor, legal compliance, and contributions to a sustainable supply chain. Suppliers identified as critical and high-risk are prioritized for enhanced due diligence, which includes in-depth evaluations, site-level audits, capacity building interventions, and ongoing performance monitoring. In 2024, we assessed 57.5% of direct Tier 1 suppliers for ESG-related risks and found no instances of child labor, forced labor, or compulsory labor.

Audit and Risk Monitoring

To strengthen supplier governance and environmental performance, we evaluate supplier assessments and audits using a range of methods aligned with globally recognized standards, including adherence to the UN Global Compact, International Labour Organization (ILO) guidelines, the Safety & Quality Assessment System (SQAS) by the European Chemical Industry Council (CEFIC), the Responsible Care Global Charter by the International Council of Chemical Associations (ICCA), relevant labor conventions, and following ISO and related standards:

- ISO 26000 (Social Responsibility)
- ISO 9001 (Quality Management Systems)
- ISO 14001 (Environmental Management Systems)
- ISO 19011 (Auditing Guidelines)
- OHSAS 18001 (Occupational Health and Safety)
- SA8000 (Social Accountability International)

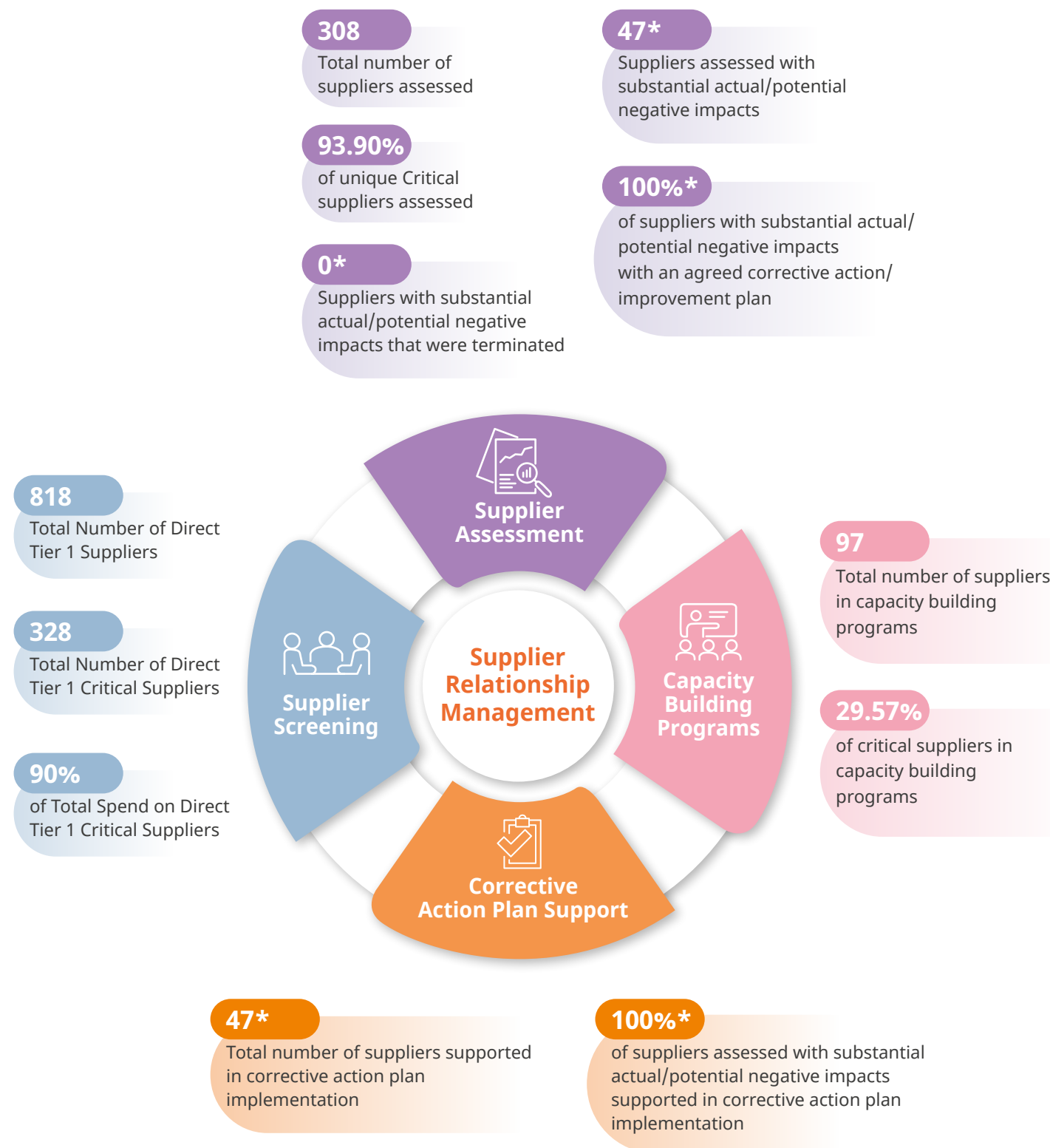
We also align our evaluations with the Universal Declaration of Human Rights, the UN Convention Against Corruption, and the OECD Guidelines for Multinational Enterprises.

To assess the ESG compliance and performance of our suppliers, we conduct audits utilizing both internal and external auditors. Our assessment methods include:

- Desk assessments with verification of evidence
- Onsite assessments conducted by our procurement team (second-party audits)
- Onsite assessments performed by external third-party auditors

These assessments ensure that our suppliers' practices align with our Responsible Sourcing Policy and ESG requirements, while also identifying potential risks, areas for improvement, and necessary corrective actions. We support suppliers in implementing corrective action plans and expect them to meet the minimum required ESG score and have no major findings. If a supplier fails to meet these criteria and cannot address the issues within the specified timeframe, the associated risks will be evaluated. This assessment directly influences whether the business relationship continues, with possible consequences including warnings, suspension, or contract termination.

In 2024, 66 suppliers underwent physical inspections and onsite audits. Findings and results are considered for corrective action/improvement plans.



Note: The data in the above chart was collected from all three sectors of our business: Indovinya, CPET, and Fibers. The numbers with * denote only the Indovinya segment. We plan to implement corrective action plans for all suppliers identified as having potential risks.



Capacity Building and Supplier Incentives

We aim to create a positive impact on our suppliers, customers, communities, and the environment, while strengthening our ESG leadership and reputation within the industry. As part of our Sustainable Supply Chain Program, we provide ESG-related training for both our procurement executives and suppliers. In 2024, 236 procurement executives received training to enhance their ability to incorporate ESG considerations into sourcing decisions, supplier engagement, and assessment processes.

Our procurement team also supports suppliers in improving their ESG performance by offering the necessary training, technical guidance, and best practices on ESG criteria such as energy efficiency, water stewardship, waste management, carbon footprint reduction, human rights, and anti-corruption to help them contribute effectively to our ESG objectives. In 2024, we set a goal to deliver ESG capacity-building programs to suppliers representing 40% of our total spending on raw materials.

We also recognize and reward suppliers who demonstrate exceptional ESG performance and improvements through formal recognition, preferential treatment, prioritization in our procurement strategies, and opportunities for long-term partnerships.



The 4th Edition of Supplier Relationship Program Awards

Indovina segment launched the Supplier Relationship Program Awards in 2020 to strengthen relationships with suppliers and recognize good suppliers, to differentiate the good from the best one in each of 7 categories. More than just recognizing suppliers, we celebrate strategic partners who have excelled in quality, innovation, and commitment to a more sustainable future.

2024 HIGHLIGHTS



Awarded a **Platinum Medal** for the 3rd times and placed in the **Top 1%** of the best performing companies in sustainability assessments.



TOGETHER FOR
SUSTAINABILITY

Active member of TfS, contributing to a range of workstreams aimed at enhancing the sustainability of chemical supply chains.

Supplier Assessments and Audits

- **Achieved 103% beyond the target** for suppliers who completed an **EcoVadis assessment** in the past 36 months.
- **Surpassed 143% of the target** for suppliers who successfully completed an **onsite audit**.



Petform (Thailand) Ltd. honored with ThaiBev's Gold Business Partner Award for the Second Consecutive Year

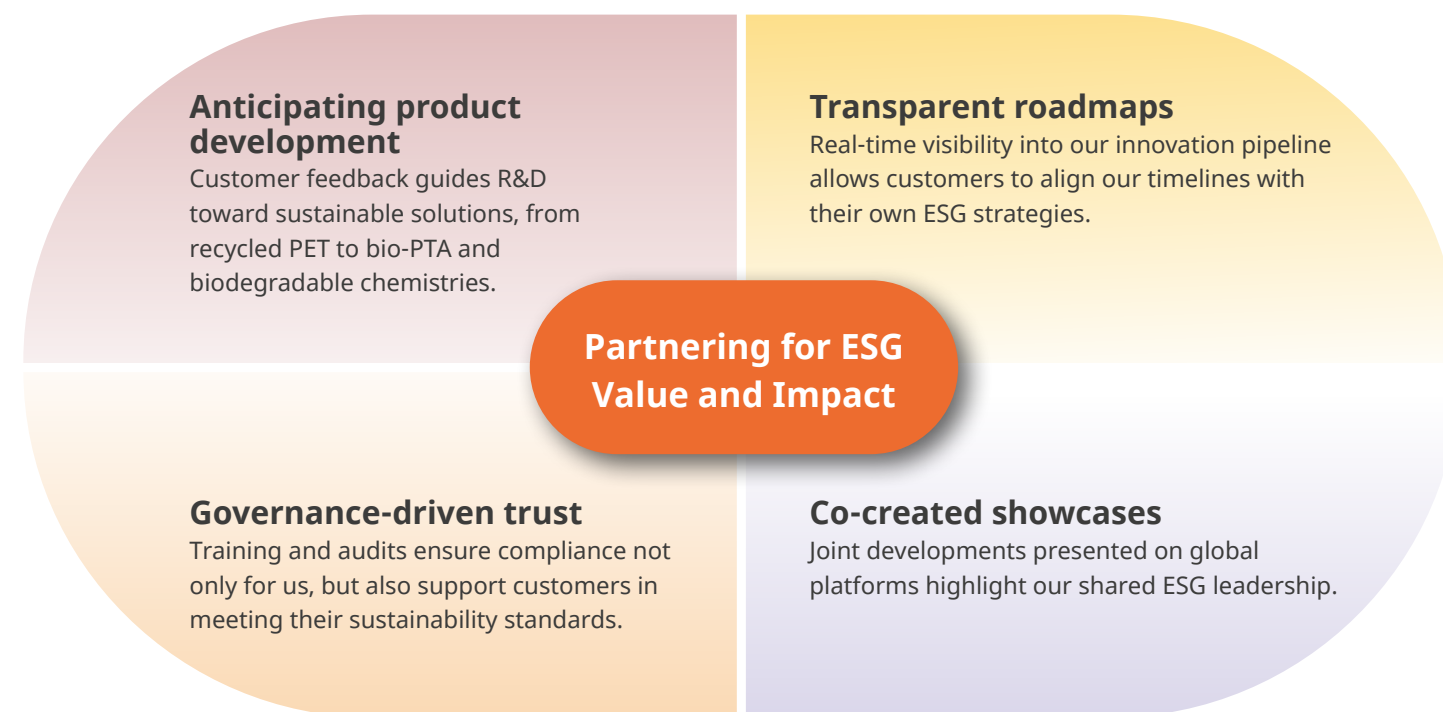
Petform (Thailand) Limited, a subsidiary of Indorama Ventures and a key supplier to the ThaiBev Group, was honored with the Gold Business Partner Award 2024. This award recognizes suppliers who score over 95% across five key criteria: Quality, Commercial, Delivery, Sustainability, and Project Development. Receiving this distinction for the second consecutive year highlights Petform's operational excellence, strong partnership with ThaiBev, and alignment with Indorama Ventures' commitment to delivering sustainable, high-quality solutions.

Customer Partnerships for Sustainable Growth



Social & Relationship Capital

For over 30 years, Indorama Ventures has strengthened its market position through strong, mutually beneficial relationships with customers, providing critical insights into market dynamics that have enhanced brand value and customer loyalty. Through consistent and proactive engagement with customers via regular interactions and formal satisfaction surveys, we ensure that our product development aligns with customer needs for sustainable solutions. This collaboration drives innovation in eco-friendly products and underscores our commitment to environmental stewardship.



Customer Satisfaction Study (CSS)

To ensure consistent value delivery and maintain customer confidence, Indorama Ventures actively monitors feedback and integrates it into ongoing process improvement efforts. High-performance benchmarks and Key Performance Indicators (KPIs) are regularly reviewed across customer service and product quality functions. The Customer Satisfaction Study (CSS) is conducted biennially to assess overall customer experience and gather actionable feedback. This survey evaluates customer perceptions across the following key areas:



Quality of products and services



Delivery and documentation services



Marketing representative/
account manager



Establishing Long-Term
Relationship



Technical and complaint
handling services



Innovation and product/
service development

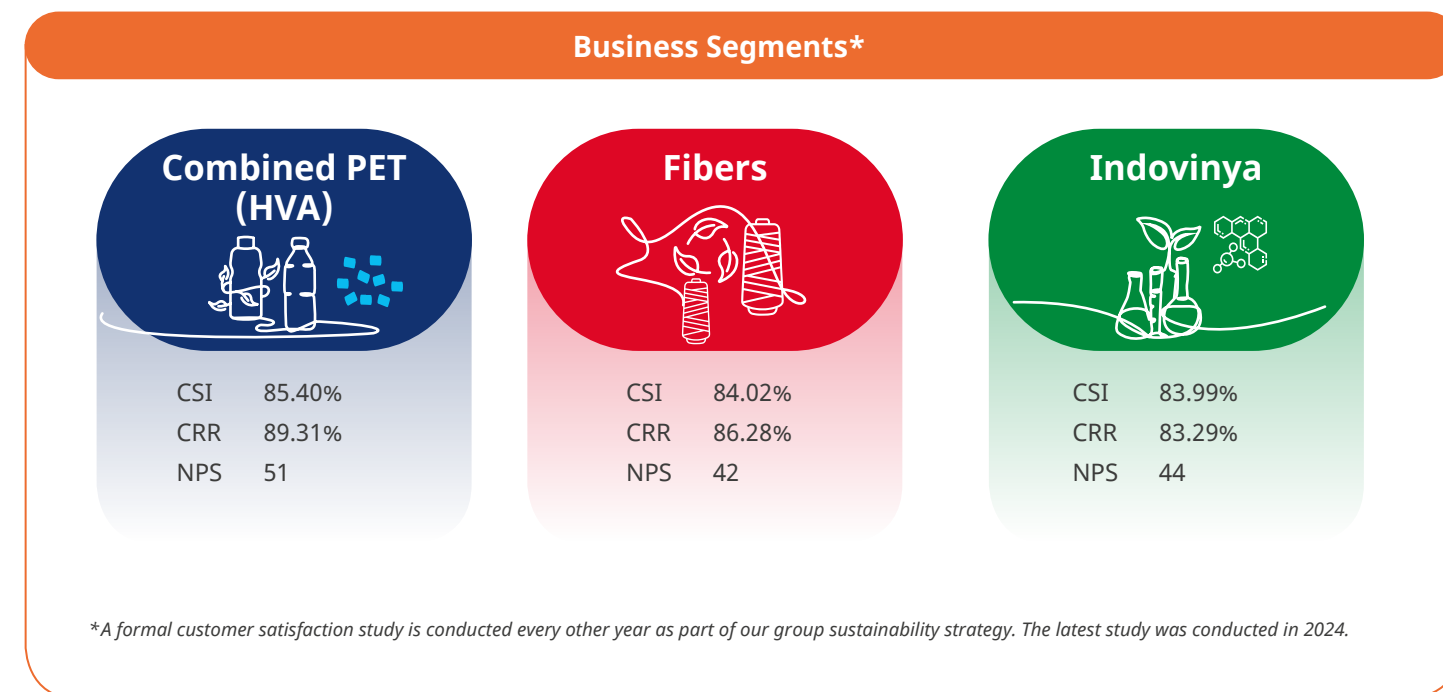


Sustainability



Results from the 2024 CSS Survey are presented in the tables below. These findings are shared with senior management and business heads to identify improvement opportunities and strengthen customer relationships. Targeted action plans are developed in coordination with each business segment to sustain long-term satisfaction and engagement.

Tools	Definition	2024 Performance	Impacts
Customer Satisfaction Index (CSI)	Evaluates customer expectations, needs, and the level of satisfaction with our products. Measures customer satisfaction relating to our products, services, etc.	84.55%	- Examine the root causes of any customer concerns. - Identify areas for improvement in support of our core values to become the preferred supplier to our customers. - Formulate strategic action plans to drive impactful product improvements. - Gain insights into the future needs and expectations of our customers. - Understand changing consumer behaviors. - Benchmark our business against competitors.
Customer Retention Rate (CRR)	Measures the number of customers we continue to do business with throughout the year.	86.68%	
Net Promoter Score (NPS)	Measures customer loyalty and the likelihood of recommending our products and services to others.	46%	- Develop process and product improvement plans based on identified issues. - Continuously monitor our business performance.
Customer Satisfaction Index (CSI) Target	The desired satisfaction score serves as a benchmark for performance and a driver of continuous improvement in the customer experience.	≥80% (2024-2025)	- Identify and address gaps in the customer experience. - Strengthen customer loyalty and retention.
Customer Satisfaction Survey (CSS)	Evaluates the expectations, needs, and level of satisfaction with our products on the part of our customers.	1,871 responses	- Enable the targeting of relevant customer groups. - Gain valuable insights to develop purposeful and meaningful products.



Collaboration and Co-Creation

As a result of our biennial Customer Satisfaction Study, we collaborate with customers to develop and innovate recycled PET, bio-feedstocks, biodegradable chemistries, and certified circular offerings. This approach ensures that our R&D pipeline directly supports the net-zero aspirations of our customers, and in turn, this co-innovation process strengthens relationships, enhances product-market fit, and helps customers achieve carbon reduction, circularity, and other sustainability targets.

We maintain high standards in customer relations through strict compliance frameworks. Our customer-facing teams undergo comprehensive training on regulations, product stewardship, and chemical safety, and participate in routine audits to ensure compliance support and effectively guide customers in meeting their sustainability obligations.



FOR MORE
INFORMATION

**Customer satisfaction
measurement covered
100%
of manufacturing
locations**





Consumer Safety and Trust

Consumer safety and satisfaction are foundational to building long-term trust and sustaining the Company's reputation as a global leader in chemicals and materials.

Through a strong commitment to product stewardship, Indorama Ventures ensures consumer safety and sustainability at every stage of the product life cycle—from raw material sourcing to end use. Cross-functional teams integrate regulatory compliance, toxicology, and environmental health into portfolio development, supported by tools such as the Portfolio Sustainability Assessment (PSA) and Life Cycle Assessment (LCA).

With regard to customer data safety, we prioritize data privacy through strict regulatory compliance and robust security measures. We implement technical and organizational safeguards to protect personal data against unauthorized access, alteration, or loss. Data sharing is conducted strictly on a need-to-know basis and under contractual agreements, ensuring compliance with applicable data protection laws.

In 2024, we recorded zero incidents of non-compliance pertaining to:



Marketing
communications

No
Incidents



Health and safety
impacts of products

No
Incidents



Product, service,
and information labeling

No
Incidents



Breaches of customer privacy
and losses of customer data

No
Incidents



Indorama Ventures was honored with an award from Akzo Nobel, recognizing us as one of the top five suppliers in the Brazil region

This achievement reflects the strong collaboration between our Química and Fibers Brazil teams and highlights our commitment to excellence in local deliveries, ensuring high-quality products and reliable services for coatings, UPR, and adhesives customers.

Community Engagement



Social & Relationship Capital

Creating Shared Value through Corporate Social Responsibility (CSR)

Corporate Social Responsibility is central to how Indorama Ventures defines success. We view sustainable business growth as closely tied to the well-being of our communities. Our CSR initiatives aim to deliver meaningful social impact while supporting long-term business value. Our strategy focuses on three core areas: Knowledge, Community Care, and Environment. These pillars, supported by multi-year programs, performance tracking, and strong local partnerships, guide our efforts to educate youth, support vulnerable groups, and safeguard the environment.

Overall Global CSR Performance

2024 Social Contributions

Total **\$2.2 million** investment

\$1,717,755
in cash
contributions

\$426,350
worth of
in-kind support

\$69,097
allocated to
overhead
management



527 CSR
activities conducted
across the globe

8,843 volunteer
hours contributed;
engaging **more than**
1,100 employees



We are reaching new heights with ambitious targets for 2025, further reinforcing our commitment to creating lasting social impacts.



Corporate Social Responsibility is at the heart of who we are. We strive to be indispensable in tackling social challenges and delivering real benefits to people's lives and our planet.

Mrs. Suchitra Lohia,
Deputy Group CEO and Chairperson of the CSR Committee

In 2024, our global programs addressed key challenges through waste education, youth empowerment, access to clean water, health services, and inclusive development. Each initiative is tracked using data-driven insights to ensure measurable outcomes. By creating shared value and aligning with global sustainability goals, we strive to build stronger, more resilient communities worldwide.



FOR MORE
INFORMATION

2030 Targets and Performance

Knowledge



Target:
Educate **1,000,000** people globally

Performance:
Educated **1,112,958** individuals on recycling and the principles of the circular economy (since 2018)

Community Care



Target:
Reach at least **100,000** people in the community

Performance:
Empowered **141,439** local residents through community-based development programs (since 2020)

Environment



Target:
Collect at least **100** tons of post-consumer PET bottles for recycling

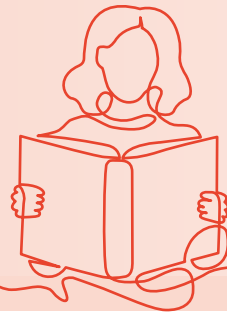
Performance:
Collected **120** tons of post-consumer PET bottles for recycling to help protect and conserve the environment (since 2020)



Global Impact Creation

CSR is more than just a responsibility—it is an opportunity to create lasting value for society. Guided by this vision, we focus on driving collective impact with a multiplier effect, maximizing positive change for society and the environment. Our key initiatives demonstrate how we are turning our vision into action.

Knowledge 117 initiatives



- Equipped over 400,000 students with knowledge and skills in recycling, the circular economy, education, and hands-on learning.
- Engaged recycling education resources to 13,840 educators in 150 countries, featuring internationally recognized content and experiential learning tools focused on recycling and the circular economy.
- Enabled 6,800 students across the United States, Canada, Brazil, Mexico, Poland, Spain, India, Indonesia, and Thailand to access quality sustainability education through challenges, competitions, innovation programs, together with essential professional and occupational skills through vocational training, including poultry farm management.
- Engaged 6,686 students from 21 schools in the United States, Brazil, Mexico, and Poland through STEM and innovation-focused programs.

Project Highlights

Empowering the next generation—A decade of sustainable fashion in Thailand

Marking a decade of impact, the RECO Collective's 10th anniversary celebrated our commitment to sustainability and recycling education in the fashion industry. In 2024, we partnered with industry stakeholders to mentor eight Thai designers, providing expertise in PET-recycled materials and sustainable business practices. Through our incubation lab and business network, they launched brands that contribute to the SDGs and highlight the power of recycling in fashion. By bringing the RECO Collective's products to market, we demonstrated the power of sustainable fashion at scale.

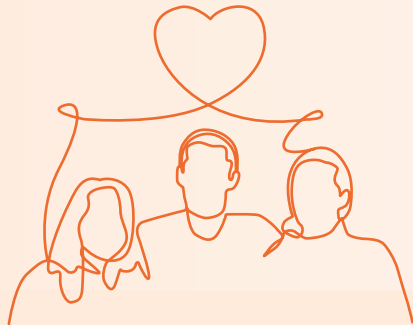
Supporting Scholarships and Young Talent in Poland

We promote academic excellence by awarding scholarships to outstanding students from two local secondary schools, including national Olympiad winners. To date, 55 students have benefited, reinforcing our commitment to local talent development and building long-term partnerships with the regional education sector.

Advancing STEM Education in the United States

In collaboration with the Beaumont Children's Museum, we promote STEM education through five interactive events that reached over 1,000 individuals through 100 schools. The initiative enhanced classroom learning in three schools and recognized five outstanding educators. This program strengthens STEM education in underserved areas and promotes community-wide engagement in K-12 learning.

Community Care 334 initiatives



- Supported 25 associations and foundations, improving the lives of 4,600 vulnerable individuals.
- Improved the well-being of 10,270 people through community health programs.
- Promoted entrepreneurship and income generation in 10 communities, benefiting more than 530 individuals.
- Promoted diversity and social inclusion through 68 events that supported vulnerable groups, people with disabilities, refugees, low-income youth, and celebrated local cultures and religious traditions.

Project Highlights

Supporting Vulnerable Communities in the Czech Republic

Through the "Let's Light Up the Czech Republic" campaign, we supported 14 nonprofits delivering critical aid to individuals with serious illnesses and socially isolated senior citizens, providing essential social care and comfort to some of the country's most vulnerable populations.

Improving Health, Nutrition, and Well-Being in Indonesia

In partnership with local organizations, we provided nutritional support to 34 toddlers experiencing stunted growth in the villages of Kembangkuning and Cibinong. These targeted health interventions addressed urgent developmental needs and contributed to better long-term community health outcomes.

Investing in Communities in India

We supported community development by enhancing local infrastructure, promoting sustainable livelihoods, and addressing key social needs. These integrated efforts helped uplift marginalized groups and strengthen long-term resilience in the communities where we operate.

Enhancing Local Recycling in the United States

Through our shared membership in The Recycling Partnership across seven entities, we collaborate with communities, companies, and policymakers to strengthen local recycling systems. This long-term investment improves access to recycling, promotes environmental responsibility, and delivers lasting economic and social value.

Environment 76 initiatives



- Recycled 1.35 million post-consumer PET bottles collected from communities and the environment, reducing approximately 30 tCO₂e.
- Enabled 10 communities to adopt improved waste management practices, driving lasting behavioral change in waste segregation.
- Promoted and co-developed 14 ecological restoration initiatives across 10 locations, enhancing biodiversity and supporting sustainable green environments.

Project Highlights

Promoting the Circular Economy and Waste Management

- Thailand: In partnership with over 10 organizations, we recovered 29 tons of PET bottles through grassroots recycling campaigns, reducing CO₂ emissions by an equivalent amount. On Koh Tao, we collected 13 tons of PET waste, contributing to sustainable tourism goals and creating income opportunities for local communities.
- Mexico: In collaboration with Comité Local de Ayuda Mutua (CLAM) and 22 civil associations, we removed 780 kilograms of waste from coastal areas. This large-scale cleanup helped protect marine ecosystems, raised environmental awareness, and reinforced community commitment to responsible waste management.

Environmental stewardship and biodiversity development in the United State

Since 2002, we have maintained a long-standing partnership with Decatur City Schools through the Wetlands Edge Environmental Center (WEEC), supporting environmental education and habitat conservation. In 2024, we deepened this commitment through a collaboration with the Wildlife Habitat Council under the "Wildlife at Work" program, which restored six local wildlife species, launched four habitat restoration projects, and engaged students in Grades 3-5 through hands-on environmental learning, reinforcing our dedication to biodiversity and environmental stewardship.



Waste Hero Circular Economy Education Impact and Global Progress

Waste Hero, our flagship free and globally-accessible educational program, was co-developed to promote sustainable waste management education with Yunus Thailand, in collaboration with various strategic partners such as National Education Association (NEA), American Federation of Teachers (AFT), and Southeast Asian Ministers of Education Organization Regional Centre for Sufficiency Economy Philosophy for Sustainability (SEAMEO SEPS).

As a part of this collaboration, Waste Hero resources have been actively integrated into recycling fundamentals, the circular economy, and environmental education programs through the on-the-ground efforts of Indorama Ventures' teams in Brazil, Spain, Poland, Mexico, and the United States.

Our ambition is to reach one million people globally by 2030 with free teaching materials on recycling and waste separation. These resources are designed for learners of all ages, available in 10 languages, with flexible scripts for diverse classrooms. In 2024, the program neared a significant milestone, expanding its global scale and deepening integration into education systems through inclusive learning materials.

To strengthen youth engagement and promote creative problem-solving, new initiatives were introduced, including the Waste Fiction Competition and the Waste Hero Schools Competition. These programs encouraged critical thinking, storytelling, and community-driven action among students across Southeast Asia, spotlighting local solutions to real-world environmental challenges.

Additionally, we engaged youth and informal waste workers in participatory processes to design policy prototypes for inclusive circular waste management and Waste Hero hubs in the Philippines, Bangladesh, Laos, and Thailand. This led to the development of a free toolkit to support an inclusive circular economy and strengthen communities.



FOR MORE
INFORMATION

200+

Extracurricular activities
created from core materials

380,000+

Students reached
globally

12,000+

Educators empowered through
training and access

100+

Classrooms actively using
the content

30+

Supporting organizations
helping extend reach

2024 HIGHLIGHTS

6,900+

Downloads of educational
materials worldwide

15+

Events and workshops
delivered

345+

Submissions from over 90 countries
in the Waste Fiction Challenge,
an inspiring youth essay competition
envisioning zero waste at school



We remain committed to providing fit-for-purpose educational resources and strengthening environmental stewardship among educators, students, and communities. Waste Hero continues to be a robust platform that bridges knowledge and action to help shape a better world for the next generation.

Empowering Communities through Bangkok's Sustainable Plastic Waste Management Project

In partnership with the Bangkok Metropolitan Administration (BMA), Indorama Ventures completed Year 2 of the Sustainable Plastic Waste Management Project in 2024, reaching 21,500 participants across 200 schools (2023-2024). The program advanced PET waste management and embedded its principles and practices into school systems through a six-part approach.

2024 HIGHLIGHTS

Bringing the vision of Sustainable Plastic Waste Management to Life



“

Waste management requires collaboration across all sectors, from local communities to national and global levels. Raising awareness about proper waste management is essential, and we are committed to equipping teachers, students, and parents with the knowledge to manage waste responsibly. Waste is a significant issue that demands large budgets for management. Proper waste separation from the source—whether in schools, households, or communities—can significantly ease this burden.

”

Mr. Pornphrom Vikitsreth,

Advisor to the Bangkok Governor and Chief Sustainability Officer, BMA



Awards and Recognitions



Corporate Level

AMCHAM Corporate Social Impact Award – Third consecutive year

In 2024, Indorama Ventures received Silver Level recognition at the 2024 AMCHAM Corporate Social Impact Awards, presented by the American Chamber of Commerce in Thailand. The award, presented by U.S. Ambassador Robert F. Godec, highlights the Company's strong integration of Corporate Social Responsibility (CSR) into its core business strategy and operations.

Strengthening Local Community Engagement for Positive Impacts

Indorama Ventures recognizes the importance of structured and proactive engagement with local stakeholders. In 2024, we strengthened our approach by developing a Stakeholder Management Guideline aligned with the AA1000 Stakeholder Engagement Standard (AA1000SES), reinforcing transparency and ensuring that stakeholder perspectives are incorporated into decision-making.

Our stakeholder engagement programs are designed to actively involve, communicate with, and address the concerns of local communities, ensuring we are aware of potential impacts and committed to promoting positive relationships.

We regularly engage with local stakeholders and communities to understand their perspectives, concerns, and expectations. Our community survey gathers input and feedback to shape initiatives and activities that align with social needs. We have

established multiple communication channels, including email, written submissions, and a whistleblower channel, to facilitate two-way communication and grievance tracking. In 2024, we received four societal grievances through our formal grievance process, all of which were resolved during the reporting period.

For large-scale projects or developments requiring extensive analysis of long-term implications, we conduct community impact assessments to evaluate how proposed projects at selected sites may influence the social, economic, and cultural fabric of a community. Public hearings provide a formal platform for direct dialogue and immediate input, allowing stakeholders to voice their opinions, concerns, and suggestions. This process meets the legal requirements for public participation in decision-making, with both community impact assessments and public hearings playing essential roles in ensuring that decisions are inclusive and well-informed.



Regional level

CSR-DIW Award - Tenth consecutive year

Indorama Ventures was recognized with the CSR-DIW Award, reinforcing its long-standing commitment to ethical, socially responsible, and sustainable industrial practices.

In 2024, seven sites in Thailand received the award: Indorama Polyester Industries Public Company Limited (Nakhon Pathom), Indorama Polyester Industries Public Company Limited (Rayong), Indorama Petrochem Limited – PTA (Rayong), Indorama Petrochem Limited – PET (Rayong), Indorama Polymers Public Company Limited & AsiaPet (Thailand) Limited (Lopburi), and Petform (Thailand) Limited.

Local Stakeholder Hearing Advances Solar Project

Indorama Polyester Industries Public Company Limited, as part of its 5.39 MW solar power project in Nakhon Pathom, conducted a public hearing with local stakeholders and community members on 12 March 2024. The session, attended by 49 participants including residents, community leaders, and government officials, provided a useful platform to raise concerns about land use, energy consumption, and solar panel safety.

To ensure ongoing dialogue, feedback channels via email, the LINE app, and written submissions were opened from 13 to 17 March 2024, enabling two-way communication and grievance tracking. This initiative reflects the Company's commitment to meaningful stakeholder engagement, early issue identification, and responsible project development, with participants expressing broad support and raising no major objections.

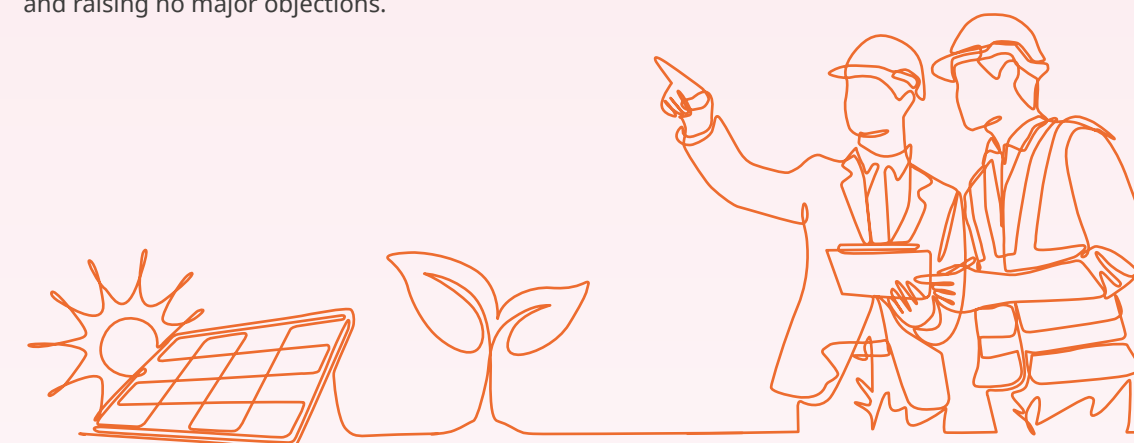


Global and International level

Waste Hero Wins the Green World Award - Gold winner

Indorama Ventures, through its Waste Hero global circular education initiative, won Gold in the Education & Training, Waste Management category at the Green World Award.

This international recognition highlights the Company's commitment to promoting sustainable waste management education and advancing the circular economy by empowering youth and communities with practical recycling knowledge and dedication to addressing societal challenges and making a meaningful contribution.





Advocacy at Indorama Ventures



Social & Relationship Capital



revitalizing manufacturing may present new opportunities for the recycling industry. Indorama Ventures actively collaborated with industry associations such as PETRA and NAPCOR, and NGOs including The Recycling Partnership and Ocean's Plastic Leadership Network, to educate legislators and government agencies and advocate for improvements to the U.S. collection and recycling system through comments and letters of support.

In Latin America, while many countries mandate minimum recycled content in plastic packaging, which incentivizes private sector investment in infrastructure to increase access to recyclable waste, there remains significant potential for broader progress on broader Circular Economy legislation in Brazil and Mexico. The goal of a national Circular Economy Law is to harmonize and streamline the collection infrastructure within each country. Strengthening these policies is key to reducing the mismanagement of waste, minimizing reliance on imports, and improving regional recycling systems. These advancements will support Latin American countries in achieving their environmental commitments.

In Europe, the European Commission, following a request from the PET industry association PET Europe, imposed definitive anti-dumping duties on virgin and recycled PET imports from China in April 2024. This measure reduced the volume of unfairly priced imports and helped ensure a level playing field for domestic PET producers. In December, the European Parliament and Council reached an agreement on revisions to the EU's Packaging and Packaging Waste Regulation (PPWR), introducing mandatory Deposit Return Systems (DRS) by 2029 under certain conditions, increasing recycled plastic content targets for beverage packaging to 65 percent by 2040, and setting refill quotas of 10 percent by 2030. Indorama Ventures played a key role in shaping the PPWR through active participation in European associations, including serving as a board member of the European packaging association EUROPEN, and by engaging in high-level meetings with co-legislators. The new European Commission, under Ursula von der Leyen's second term, took office on 1 December 2024, with a focus on regulatory simplification. Key updates published in the Official Journal of the European Union included the Waste Shipment Regulation, which bans plastic waste exports to non-OECD countries, as well as new regulations introducing eco-design requirements to improve product sustainability and support the development of Europe's net-zero emissions technology production ecosystem. As part of a strategic effort to deepen engagement on public policy, Indorama Ventures reinforced its commitment to advocacy within the fibers segment by appointing a dedicated Sustainable Textile Advocate. Based in Brussels, this advocate leads the company's outreach to public institutions at both the EU and national levels. The appointment comes at a pivotal moment, as the European Union advances a series of

sustainability-focused legislative initiatives that are set to shape the circular economy landscape. The advocate's work centers on navigating key regulatory frameworks, including the Ecodesign for Sustainable Products Regulation, the Waste Framework Directive, the proposed End-of-Life Vehicles Regulation, and the Single-Use Plastics Directive. These evolving policies are central to Europe's green transition and carry significant implications for the markets in which Indorama Ventures operates. By proactively engaging with policymakers and contributing to legislative discussions, the Company aims to ensure that future regulations support both environmental objectives and the operational realities of the textile and fiber industries.

All regional and global advocacy efforts are detailed in Indorama Ventures' Advocacy Transparency Report 2024, which outlines our policy positions and reaffirms our ongoing commitment to transparency and constructive engagement with policymakers, legislators, and industry associations. Our involvement with industry associations is guided by our business strategy, sustainability goals, and the ambition to achieve meaningful impacts. To support this, we introduced the Industry Association Selection and Sustainability Alignment Framework as part of this year's report. These tools help us



INC-5 BUSAN REPUBLIC OF KOREA

assess our memberships to ensure they align with our advocacy priorities. The report also highlights our efforts to promote circularity, increase global PET recycling, and support the transition to a low-carbon economy. These initiatives are fundamental to our long-term sustainability strategy and bring to life our vision: "To be a world-class sustainable chemical company producing indispensable chemistry that touches billions of lives every day."

On the international stage, we participated in the fourth and fifth rounds of the Intergovernmental Negotiating Committee to develop a treaty to end plastic waste. These sessions, held in Ottawa and Busan, were attended through our trade associations. Our focus remains on advancing PET circularity, advocating for the implementation of Extended Producer Responsibility (EPR) schemes, supporting globally harmonized design for recycling guidelines, and calling for strong action on chemicals of concern. In Thailand, we continued our active engagement with the Thai government's Co-Working Group on Plastic Waste Management under the Plastic Management Roadmap Phase 2 (2023-2027). Our advocacy centers on effective policy development and implementation, with key priorities including the promotion of environmentally friendly products, adoption of Design for Recycling (D4R) principles, enhanced public awareness and participation, improved waste management systems, expanded EPR implementation, and targeted action to address ocean plastic pollution.

In the United States, 15 states introduced legislation in 2024 addressing the collection and sorting of packaging waste. Minnesota successfully passed an EPR bill, joining Maine, Oregon, California, and Colorado in establishing the financial and regulatory frameworks needed to effectively manage packaging waste. This legislative momentum reflects growing stakeholder recognition that producer responsibility is the most effective approach to increasing PET collection rates nationwide. At the federal level, President Biden released his administration's National Strategy to Prevent Plastic Pollution, which recommends consideration of a federal EPR framework to boost recycling rates. While President Trump has taken a different stance on global climate initiatives, his emphasis on



INC-5 BUSAN REPUBLIC OF KOREA



INDORAMA
VENTURES

Capital Markets Day 2025

Chapter 6 Robust Governance

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Board and Executive Profiles

Board of Directors

The Board of Directors at Indorama Ventures plays a central role in corporate governance and strategic oversight, ensuring that sustainability principles are integrated into the Company's long-term growth strategy.

The Board comprises 12 members, including five Executive Directors, two Non-Executive Directors, and five Independent Directors, reflecting Indorama Ventures' commitment to governance, transparency, and ethical leadership. This composition balances executive insight with independent oversight to support accountability and effective decision-making.

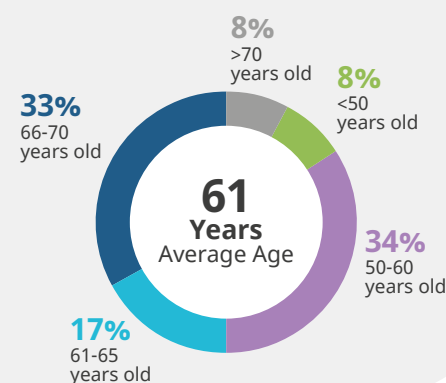
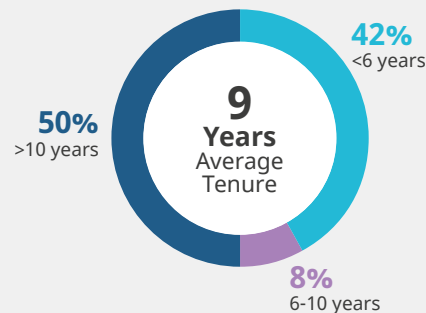
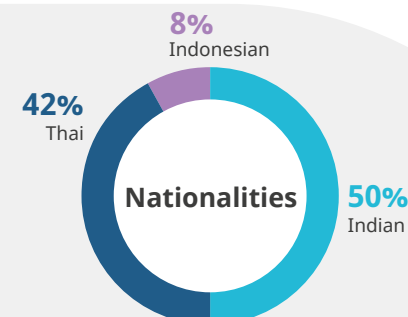
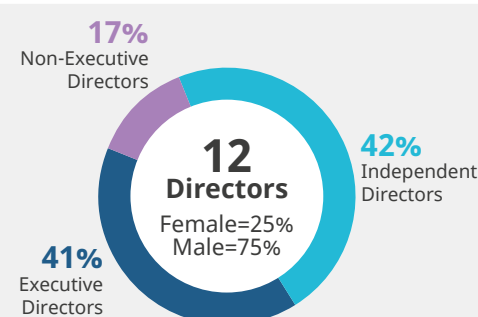
The Chairman, a Non-Executive Director, provides strategic direction and upholds leading governance practices. The Lead Independent Director (LID) role, introduced in 2018 and expanded in 2019, further strengthens independence and oversight.

In 2024, the appointment of Ms. Niramarn Kaisathit, a new Independent Director, increased female representation on the Board from 17% to 25%. The Board Diversity Policy, introduced in 2022, promotes diversity in experience, nationality, gender, age, and ethnicity, while maintaining a focus on leadership and industry expertise.

Details of individual directors, their mandates, and attendance are available on our website and in the Form 56-1 One Report 2024.



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The Board convened five meetings in 2024, achieving an average attendance rate of 96.92%. Attendance for the annual budget approval meeting was 100%.



Board Expertise and Industry Experience

Effective governance at Indorama Ventures is built on the expertise and leadership experience of its Board members, who provide strategic direction across key business areas as detailed in the Board Skill Matrix. Their global business acumen supports the Company's international growth, enables strategic expansions, and ensures adherence to international governance and ethical business practices.

To maintain a well-rounded and capable leadership team, the Company evaluates Board composition through its Board Competence and Diversity Matrix, which details collective expertise, independence, age, nationality, and gender. Approved by the Board and reviewed annually, this matrix helps align Board performance with evolving business priorities. For further details, please refer to the Board Competence and Diversity Matrix, the Board of Directors' Profiles, and the Shareholder Structure.

The Company ensures that its Board remains well-equipped to navigate an evolving global business landscape by investing in continuous learning. In 2024, all Directors participated in a specialized training seminar conducted by Dr. Ram Charan, a globally recognized business advisor. The session focused on emerging trends, sustainability-led strategies, and governance developments, enhancing the Board's ability to integrate ESG into decision-making.



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INFORMATION

Key Focus Areas

In addition to overseeing business, operational, and financial risks, Indorama Ventures, in 2024, prioritized five sustainability focus areas identified as critical topics through our Double Materiality Assessment (DMA) and comprehensive stakeholder engagement. The five areas are: the Circular Economy, Health & Safety, Supply Chain Management, Sustainable Products, and Climate Change and Energy. These areas represent key impacts and opportunities across the value chain and are central to advancing the Company's strategic goals.

We strengthened our leadership in PET circularity by expanding recycling capabilities, successfully recycling over 130 billion bottles, and enhancing collaboration across the value chain. Health and safety remained a top priority, supported by improved systems, leadership training, and proactive risk controls. Supplier engagement was deepened through ESG assessments, audits, and capacity-building initiatives.

In our Sustainable Products portfolio, we expanded the use of life cycle assessments to support customers in managing Scope 3 emissions while also broadening ISCC Plus certification coverage to improve traceability of bio-based, circular, and renewable materials.

In Climate and Energy, progress advanced through continued investments in renewable energy, energy efficiency, and process innovations, all contributing to the Company's 2030 GHG reduction targets.





Board Philosophy

Corporate Oversight and Governance Committees

The Company's governing structure is built on a structured framework, led by the Board of Directors and supported by the oversight of three key sub-committees: the Audit Committee; the Nomination, Compensation, and Corporate Governance (NCCG) Committee; and the Sustainability and Risk Management Committee (SRMC).



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Overview of Board Sub-Committees

Audit Committee

Composed of Independent Directors, oversees financial transparency, compliance, and risk management. Reviews financial statements, internal controls, and enterprise risk management practices to ensure strong governance and accountability.

Nomination, Compensation, and Corporate Governance Committee (NCCG)

Oversees executive appointments, compensation, and corporate governance policies to ensure alignment with long-term strategic goals, regulatory requirements, and best governance practices.

Sustainability and Risk Management Committee (SRMC)

Appointed by the Board, this group comprises six Board members (three Independent and three Executive Directors) and three business heads. Reviews operational issues and addresses global challenges across the value chain, including decarbonization, water scarcity, biodiversity, plastic waste, health and safety, and human rights.

ESG Governance Structure

Indorama Ventures has implemented a structured Sustainability Governance Framework to integrate Environmental, Social, and Governance (ESG) considerations into its corporate strategy and decision-making. This framework ensures accountability, oversight, and alignment across business units, advancing the Company's commitment to responsible and sustainable practices.

The Sustainability and Risk Management Committee (SRMC or the "Committee") is a Board-level committee responsible for overseeing the Company's sustainability and risk management activities. Operating under its charter, the Committee ensures that economic, social, and environmental interests are integrated into the Company's business strategy, while also monitoring the effectiveness of the risk management framework and reporting its findings to the Board. The Committee met four times in 2024 to oversee ESG global alignment.

Following the retirement of Committee member Mr. Russell Leighton Kekuewa at the Annual General Meeting on April 25, 2024, Mr. Alastair Mark Port, Mr. Diego Boeri, and Mr. Muthukumar Paramasivam were appointed as members effective May 15, 2024, increasing the SRMC Committee's size from seven to nine members.

Incentivizing Performance

Our Group CEO and Executive Directors undergo annual performance appraisals based on key performance indicators set by the NCCG Committee, ensuring a balanced evaluation of both business and ESG performance.

To reinforce accountability and impact, performance-based incentives are linked to decarbonization goals and sustainability ambitions, supporting alignment with Indorama Ventures' 2030 Vision and its targets for 2025 and 2030. For example, the Global EHS Head has health and safety KPIs, while the Recycling Business Head has KPIs for recycling operations and revenues from recycling products.

Executive compensation is disclosed in accordance with our governance commitments. For details on the Group CEO-to-average employee remuneration ratio and its alignment with equitable pay practices, please refer to the Form 56-1 One Report 2024.

Effective Governance, Compliance, and Ethics



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Corporate Governance and Responsible Business Practices

Our corporate governance principles align with leading international practices, including the Corporate Governance Code for Listed Companies 2017 issued by the SEC, the OECD Principles of Corporate Governance, and the ASEAN Corporate Governance Scorecard.

These principles are embedded across the organization through our Corporate Governance Manual (CG Manual). The Corporate Governance Policy Awareness Campaign (CGPAC) supports consistent implementation by providing essential resources and training to employees across our global operations. Each site head is responsible for applying the CG Manual and reporting outcomes to the CGPAC team, which then consolidates the findings for the NCCG Committee and the Board of Directors. New employees are introduced to the CG Manual during their induction and are required to confirm their understanding to ensure policy adherence.

Governance Recognitions for 2024



For the 12th consecutive year, we achieved an **"Excellent - 5 Star"** **Corporate Governance (CG)** score from the Thai Institute of Directors (IOD). We also earned a place among the **'Top Quartile Companies'** for the first time in the category of companies with a market capitalization exceeding ฿10,000 million.

100%
Independent
Directors on the
NCCG and Audit
Committees



Directors on the Nomination, Compensation, and Corporate Governance (NCCG) Committee and the Audit Committee are **fully independent**.

Awarded by the Thai Investor Association for achieving a **100% score** in the Annual General Meeting. This marks our **13th consecutive year** of receiving a full score.





Mechanisms for Ethical Business Conduct



Corporate Governance Manual and Principles

The Corporate Governance Manual serves as the foundation for ethical decision-making, providing clear guidelines on governance, risk management, and compliance. It ensures alignment with international best practices, including the OECD Principles and regulations of the Stock Exchange of Thailand (SET).



Whistleblower Policy and Reporting Mechanisms

A zero-tolerance approach to unethical conduct is enforced through confidential reporting channels. Submissions may be made by email or to the Whistleblower Center. The Whistleblower Committee investigates and reports outcomes to the Board of Directors.



Anti-Corruption and Compliance Framework

The Anti-Corruption Policy is aligned with the Thailand Collective Action Coalition Against Corruption. Employees receive both in-person and online training. Third-party due diligence is mandatory before entering partnerships, especially when engaging with government stakeholders.



Code of Conduct

The Code of Conduct governs ethical decision-making in areas such as conflicts of interest, fair business practices, the treatment of stakeholders, and the responsible use of company assets.



Data Privacy and Security Measures

The Company complies with global data protection laws, including Thailand's Personal Data Protection Act (PDPA) and the EU General Data Protection Regulation (GDPR). Policies are reviewed annually, and employees receive regular data privacy training.



Conflict of Interest Policy and Assistance Package

This policy outlines procedures for managing conflicts of interest. A localized support package ensures its application across subsidiaries.

Tax Strategy

Indorama Ventures, together with its subsidiaries and affiliates, takes a responsible and transparent approach to managing taxation matters. We ensure full compliance with all tax disclosure and filing obligations and are mindful of our responsibilities across the various jurisdictions in which we operate. Responsible tax practices are an integral part of our ethical and sustainable business conduct, and taxes paid are recognized as a meaningful contribution to the communities we serve. This approach is embedded within our broader Sustainability Strategy and reflects our commitment to transparency, trust, and compliance with best practice standards.

Our tax policy is governed by a robust framework overseen by the Chief Financial Officer, with additional oversight by the Audit Committee. The framework ensures full compliance with both the letter and spirit of applicable tax laws and disclosure

obligations. Tax filings and payments are made punctually and supported by qualified internal and external resources, while recordkeeping adheres to Generally Accepted Accounting Principles (GAAP) and local standards in every jurisdiction where we operate. To strengthen internal capabilities and reduce uncertainty, we conduct regular training and seek advance rulings or expert advice where appropriate.

We do not engage in artificial tax arrangements or the use of tax havens. Our investment structures are based on genuine commercial and economic substance and follow a principles-based approach to taxation.

A comprehensive overview of our tax policy, strategy, and related disclosures is available on our website under 2024 Tax Reporting.



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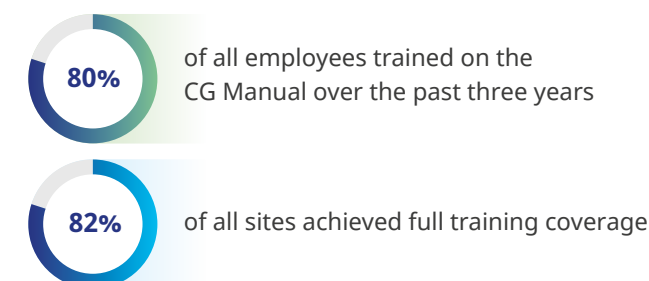
Promoting Compliance through Employee Training

The CGPAC reinforces our commitment to ethical business practices, ensuring employees across our global operations understand and adhere to governance policies. In 2024, the CGPAC Team piloted a Corporate Governance e-learning course, with full implementation planned for 2025.

To deepen engagement, the Company conducted 11 online training sessions across seven countries and over 20 onsite sessions, reaching approximately 900 employees. These sessions focused on key policies such as Whistleblower Protection, Anti-Corruption, and Human Rights. The team also launched the first episode of "CG on the Go," a new video series highlighting site-level implementation of the CG Manual. The video is hosted in the CG Database to facilitate cross-site learning.

Site heads oversaw implementation, while Human Resources ensured that all new employees formally acknowledged compliance. Governance policies are reviewed annually, and no revisions were made to the CG Manual in 2024.

CGPAC Implementation Highlights in 2024



Strengthening Policies to Ensure Governance

Our policies ensure ethical, transparent, and accountable business operations. They guide decision-making, risk management, and compliance, aligning business strategies with sustainability goals and regulatory requirements. By integrating governance into daily operations, the Company promotes a culture of integrity, enhances efficiency, mitigates risks, and supports long-term resilience.

Anti-Corruption and Bribery

Our Anti-Corruption Policy reinforces our zero-tolerance stance on bribery and unethical conduct. We are a certified member of Thailand's Collective Action Coalition Against Corruption (CAC) and renewed our certification in March 2024 for another three years. To strengthen implementation, we developed the Anti-Corruption Assistance Package – a structured resource featuring checklists, guidelines, and risk assessments, available via the CG Database.

Training programs were delivered in multiple languages, through both online and onsite formats, using interactive case studies and digital tools. In 2024, 107 senior officials from Thailand's National Anti-Corruption Institute visited our facilities in Thailand and Germany, recognizing our governance practices.

2024 HIGHLIGHTS

No material cases or incidents of corruption or bribery

No legal cases involving corruption or anti-competitive practices concerning the company or our employees

No material litigation against the company or our subsidiaries that negatively impacted our business

No penalties imposed for material non-compliance



In 2024, onsite Anti-Corruption Policy training was conducted at our Head Office, factories in Thailand, and four locations in China, in addition to online sessions for units in Vietnam and Myanmar. The training included real-life case discussions on preventive measures, protected disclosures, and compliance processes. Interactive digital tools boosted engagement and encouraged meaningful dialogue.





Whistleblower

Indorama Ventures maintains a secure and confidential Whistleblower Policy that enables employees and external stakeholders to report misconduct, ethical breaches, or legal violations. The policy aligns with the EU General Data Protection Regulation (GDPR) and was updated in February 2022 to reflect Thailand's Personal Data Protection Act (PDPA).

The policy is communicated globally and accessible through multiple channels, including email (ethics@indorama.net) and a secure web portal (https://whistleblower.indoramaventures.com). Reports are handled confidentially, and all whistleblowers are protected from retaliation. The Whistleblower Committee oversees the entire process.

In 2024, the Whistleblower Committee received 69 complaints, of which 55 qualified as whistleblower cases: 15 were substantiated, 28 unsubstantiated, five lacked sufficient information, and seven remain under investigation. All cases from 2023 were resolved. The outcomes were reported to the Audit Committee, NCCG Committee, and the Board of Directors.

In coordination with the Human Resources department, Internal Audit department, and relevant business units, the Committee took appropriate actions, including policy updates, procedural improvements, training sessions, warnings, and terminations.

Category	Reporting Cases (from Whistleblower Channels)	Non-Compliance Cases (after investigation)
Conflict of Interest	8	3
Corruption or Bribery*	10	2
Environment, Health, and Safety	2	1
Human Rights - Harassment	20	8
Human Rights - Unfair Termination	6	4
Miscellaneous	9	0
Money Laundering or Insider Trading	0	0
Not qualified as Whistleblower Cases	14	0
Total	69	18

* Corruption or bribery refers to bribery, extortion, fraud, deception, abuse of power, embezzlement, money-laundering, and other similar activities.

Enhancing the Whistleblower Mechanism

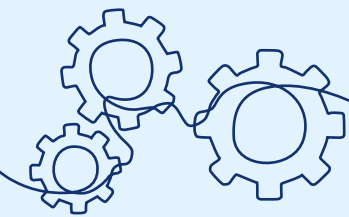
The Company strengthened its whistleblower system through monthly reviews and engagement involving senior executives, Human Resources, Internal Audit, and external experts to ensure thorough investigations. Whistleblowers received timely updates on their cases, reinforcing transparency and a commitment to due process. Notably, while total complaints declined in 2024, the number of legitimate whistleblower cases increased, indicating improved awareness, more effective training, and growing trust in the reporting system.



Political Engagement and Public Policy Advocacy

At Indorama Ventures, we prioritize transparency and accountability in all advocacy and public policy activities. In 2024, the company made no political contributions, in line with our longstanding policy of non-involvement in partisan activities. Through active participation in trade associations, policy dialogues, and support for tax-exempt organizations, we aim to strengthen industry knowledge, promote sustainability-aligned regulation, and foster greater public awareness on issues such as climate action and circularity. Our continued engagement with stakeholders and public authorities ensures timely and informed contributions to policy development across sectors.

Internal Control



Indorama Ventures maintains a robust internal control system aligned with the Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework. Oversight is led by the Board of Directors (BOD) and delegated to the Audit Committee (AC), which monitors financial reporting, compliance with corporate governance principles, internal control adequacy, and audit processes across the Company and its subsidiaries.

The Internal Audit Department (IAD) independently evaluates internal controls through assurance reviews and reports its findings to the Audit Committee and management. The control system covers key areas such as the control environment, control activities, information and communication, and monitoring. The Company has also established governance policies and procedures, including the Code of Conduct, Anti-Corruption Policy, Insider Information Policy, and Whistleblower Policy, to support ethical business practices and regulatory compliance.

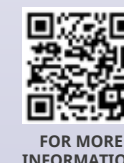


Risk Management

Risk Governance Structure and Committees

The Company's risk governance structure ensures clear accountability across all levels. Robust governance is led by the Sustainability and Risk Management Committee (SRMC), which oversees risk management at the Board level. The Chief Strategy and Transformation Officer supervises the establishment of robust management processes and systems, while the Corporate Risk Coordinator drives execution across segments and corporate functions. This structure effectively manages risks and facilitates long-term value creation.

The Audit Committee reinforces oversight through regular reviews of internal and external audit findings. This structure provides clear visibility from site-level risk management to executive leadership, ensuring effective identification and management of top corporate risks. The Risk Management section on our website contains additional details on risk governance structures and committees.



Enterprise Risk Management Structure

Risk management is vital to the long-term resilience, business continuity, and future investment at Indorama Ventures. Risk management is embedded across all levels of the organization and aligned with ESG considerations.

The Company adopts an Enterprise Risk Management (ERM) framework aligned with the COSO framework and ISO 31000 Risk Management Standard. This ensures a structured approach to identifying, assessing, and mitigating risks across all business segments. The framework comprehensively addresses business, operational, financial, regulatory, and sustainability challenges and is embedded in both strategic planning and operational execution, enabling proactive risk and opportunity management in pursuit of business resilience and regulatory compliance.

With strong governance led by the Chief Strategy and Transformation Officer and reinforced by robust oversight mechanisms, we effectively manage risks while facilitating long-term value creation.



Internal Risk Management Process

Indorama Ventures' risk management system follows a top-down and bottom-up approach across corporate, segment, and site levels. The risks include cybersecurity, environment, health & safety, human capital, regulatory compliance, operational (including supply chain), strategic, geopolitical, and sustainability risks, by assessing the potential impact and likelihood of each risk. These risks are regularly reviewed, monitored, and mitigated in alignment with the Company's risk appetite. Control mechanisms are continuously assessed for effectiveness and updated as needed.

To strengthen our sustainability risk management, we conduct a biannual review of critical risk areas based on defined performance indicators. This includes cause analysis, consequence mapping, and evaluation of risk control plans, followed by the development of supplementary actions to maintain risks at acceptable levels. External audits further strengthen oversight, covering the identified risks, and include certifications such as ISO 45001 (Health and Safety), ISO 27001 (Information Technology), and Energy Management or the Resource and Efficiency Check (REC). Audits are conducted annually by internal teams or third-party experts to ensure continuous improvement.

For risk appetite, the Enterprise Risk Management (ERM) process includes the Endorsement stage, which establishes formal support for existing risk management measures, identifies required resources, and determines any additional risk management activities needed to ensure continued operations. This stage helps define the amount of risk the organization is willing to pursue or retain over time to achieve its strategic business objectives. Monitoring risk appetite is carried out up to the Board level to ensure the organization does not exceed its financial capacity, which could put it at risk.

Embedding a Risk Culture

The Company promotes risk awareness, knowledge sharing, and proactive risk management through targeted initiatives, ensuring employees at all levels recognize and address potential risks. As part of our commitment to a strong risk management culture, regular education and training are also provided to non-executive directors and senior management to keep them well-informed and capable of overseeing risk-related issues in a dynamic operating environment.

The Risk Capability and Culture Leadership Program has equipped leaders with practical tools to assess and respond to emerging risks. In addition, programs such as employee suggestion schemes, incentive programs, and near-miss reporting help develop a positive risk culture by encouraging the right behaviors and recognizing proactive engagement.



Key Risks	Level of Inherent Risk (Before Controls)			Risk Management and Controls	Risk Assurance & Audit
	Severity	Likelihood	Risk Level		
1. Cybersecurity Inability to maintain cybersecurity for Information Technology (IT) & Operational Technology (OT) across Indorama Ventures' operations	High	High	High	- Information Technology Governance Control checks for mandatory & desirable IT checkpoints in place at all sites. - Operational Technology (OT) Cybersecurity Management System (CSMS) for minimum cybersecurity control requirements at all sites aligned with corporate OT CSMS. - Incident Response Plan & retainer service in case of major cyber-attack for incident assessment, forensic analysis, containment, eradication, and recovery of critical services - Secured 3-2-1 Backup strategy for critical servers & business applications, including recovery plans in case of major incidents. - Cyber security user awareness & training programmes	- Site-level periodic internal audit programme - Board-level oversight of frameworks & three lines of defense programmes - Operational Technology (OT) third-party assessment programme, e.g., ISO 27001 certification - Audit program to the board-level Audit Committee
2. Health and Safety Inability to maintain cybersecurity for Information Technology (IT) & Operational Technology (OT) across Indorama Ventures' operations	High	High	High	- Indorama Ventures' Environment Health & Safety Management System (EHS) & Corporate standards - Segment-level EHS programs deploy occupational safety, industrial hygiene (IH) & environmental management standards across all operations - Segment-level defines EHS & IH resources & expertise supporting continuous safe operations - Corporate & local training & competency development programmes, including employing qualified resources & third-party entities to provide capability & training activities for appropriate personnel.	- Segment-level assurance programmes - Board-level oversight of frameworks & three lines of defense programmes - Globally implemented and independent corporate EHS audit programme reporting to the board-level Sustainability & Risk Management Committee - ISO 45001 certification

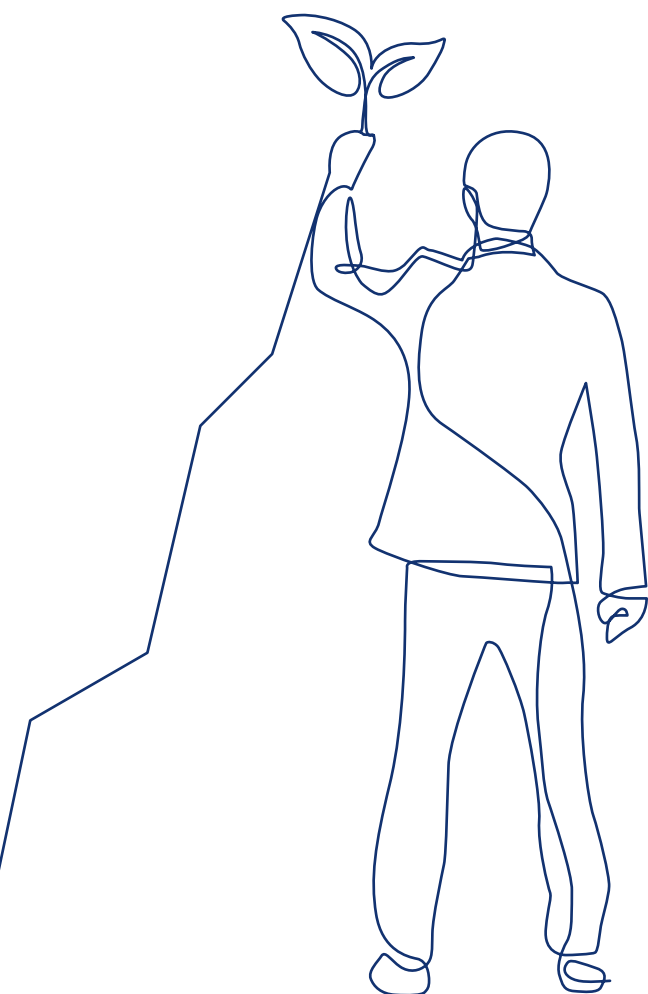


Emerging Risks

Our Materiality Indorama Ventures monitors emerging risks across short, medium, and long-term horizons to strengthen business resilience and safeguard stakeholder value. We assess both macroeconomic and sector-specific developments and address them through structured governance and risk management practices.



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Failure to Promptly Mitigate and Adapt to Climate Change

Description

Climate change represents a material and escalating risk across all regions where we operate. The delay in the Chemical Sectoral Decarbonization Approach (as of December 2024) may affect compliance timelines and increase mid to long-term exposure. Geopolitical competition further complicates the global energy transition. In parallel, the current lack of proven, cost-effective technologies further complicates mitigation and adaptation efforts. This risk aligns with the environmental threats posed by extreme weather events, as highlighted in the WEF Global Risks Report 2025.

Impacts

- Increased carbon taxes and fines for exceeding emission limits and non-compliance.
- Loss of economic opportunities and product premiums due to high carbon footprints in existing and new products.
- Weakened market positioning and reduced sustainability leadership from insufficient Net Zero alignment.
- Higher insurance premiums, reduced sustainable finance opportunities, and loan penalties.
- Regulatory non-compliance that may affect our license to operate.

Mitigation Plans

- Monitor climate-related laws and regulations in all operating regions and participate in industry associations to drive the sector's agenda.
- Conduct scenario analysis of climate and water-related risks, including natural disasters.
- Track decarbonization performance for effective management and identify further actions for improvement.
- Conduct business continuity planning (group, business, and site levels).
- Engage with stakeholders to decarbonize the supply chain.
- Develop targeted mitigation and adaptation plans (process and product) aligned with decarbonization strategies and Net Zero commitments.

Biodiversity Loss and Ecosystem Collapse

Description

With over 150 manufacturing sites in 33 countries, Indorama Ventures faces significant risks from biodiversity loss and ecosystem collapse—identified among the most critical global threats over the next decade. These challenges, compounded by pollution, resource depletion, climate change, and socioeconomic pressures, have the potential to disrupt supply chains, economic systems, and broader society. This risk aligns with the environmental threats posed by extreme weather events, as highlighted in the WEF Global Risks Report 2025.

Impacts

- Environmental degradation, including floods, sea-level rise, erosion, disease outbreaks, and water stress.
- Resource scarcity, violent conflict, supply chain disruptions, and increased raw material costs.
- Operational restrictions, project delays, compliance with new standards and regulations, and environmental remediation costs.
- Financial impact from biodiversity-related taxes and licensing requirements; production stoppages at sites with high biodiversity risk could result in an estimated annual EBITDA loss of over \$45 million.
- Reputational damage due to environmental and social consequences, potentially triggering unrest and jeopardizing our social license to operate.

Mitigation Plans

- Implement biodiversity risk assessments to proactively identify and manage site-level and regional risks.
- Enhance operational eco-efficiency through advanced technologies, promoting a circular value chain, reducing environmental impacts, and innovating sustainable products with lower carbon footprints.
- Integrate short, medium, and long-term biodiversity risk management into our corporate strategy, aligning with our decarbonization and sustainability goals.

Further details are available in Table 7 in our TNFD Report 2024.

Increasing Regulations Disrupt Supply Chains and Reduce Market Access

Description

Rising regulatory pressures, combined with geopolitical tensions, are increasing uncertainty in global supply chains and market access. This includes regulations such as the US (Trump's tariffs), EU ETS, EU Carbon Tax, and CBAM; stringent ESG regulations across different jurisdictions like the EU CSRD, the EU Taxonomy, EU Plastics Tax, and the German Supply Chain Act; as well as growing ESG backlash that further complicates operations. This risk aligns with the geopolitical risks associated with geoeconomic confrontation, as highlighted in the WEF Global Risks Report 2025.

Impacts

- Increased costs and limited access to raw materials, energy, and intermediate products.
- Reduced operational flexibility and potential plant interruptions or shutdowns.
- Disruptions to supply chains and declining demand for chemical products, impacting market share and revenues.
- Higher tariffs, trade barriers, and investment uncertainty due to escalating trade tensions and geopolitical conflict.
- Sanctions and embargoes limiting product movement, access to raw materials, technologies, and financial markets, as seen with EU sanctions on Russia.
- Stricter environmental regulations leading to increased tax and compliance burdens.
- Pressure to adapt products and operations to local regulatory frameworks.

Mitigation Plans

- Monitor relevant laws, regulations, and geopolitical risks, including interstate conflicts.
- Evaluate supply chain risks using scenario planning and localization strategies.
- Conduct business continuity planning at group, business, and site levels.
- Engage with stakeholders to develop supply chain resilience plans and participate in industry associations addressing ESG and supply chain issues.
- Integrate regulatory requirements into process operations and product stewardship.
- Upskill/reskill employees to ensure compliance management across jurisdictions.



Business Continuity Management

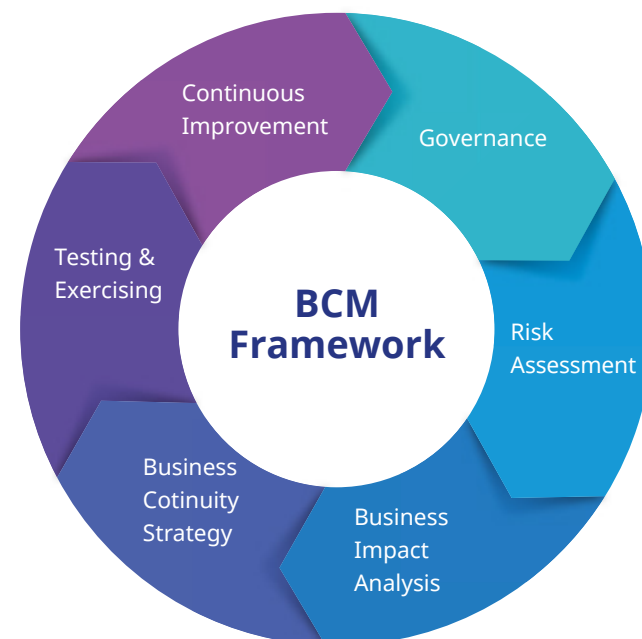
Indorama Ventures ensures operational resilience through Business Continuity Plans (BCPs) implemented across key regions. These documented procedures guide the response, recovery, and restoration of operations to predefined levels following a disruption, ensuring continuity of critical functions.

The Business Continuity Management (BCM) Framework establishes clear and consistent practices to ensure continuity of operations during prolonged disruptions. It outlines governance structures, processes, and continuous improvement measures, and serves as the company's official BCM policy. The framework applies across all operations and is overseen by the Group Risk Management and Business Continuity Management (GRMB) team, with regular updates to reflect changes in the business environment.

A Business Impact Analysis (BIA) identifies Critical Business Functions (CBFs), assesses the impact of potential disruptions, sets recovery time priorities, and defines Minimum Resource Requirements (MRRs).

Based on these findings, tailored BCPs are developed to ensure that essential operations resume within agreed timeframes. BCPs are then structured around likely disruption scenarios.

Climate-related risks are a key component of Indorama Ventures' Business Continuity Management Program (BCMP), which is aligned with ISO 22301:2019 Business Continuity Management Systems standard.



The program addresses the increasing frequency and severity of extreme weather events, which may:

- Disrupt the supply of raw materials and increase associated costs
- Interrupt transportation networks and infrastructure critical to operations
- Reduce manufacturing output or, in severe cases, lead to site shutdowns

To mitigate these risks, the BCM implements continuity strategies to manage disruptions caused by drought, extreme weather, flooding, and other climate-related events. These strategies include:

Strategy

Description

Product Standardization

Enables flexibility in sourcing and reduces customer qualification times

Seasonal Stock Buffering

Prevents shortages of key raw materials and finished goods during seasonal weather events

Alternate Suppliers and Flexibility

Ensures access to alternate sourcing options and flexible routing during disruptions

Diversify Transportation Modes and Expand Warehousing

Enhances logistics availability and capacity during supply chain disruptions

Production and Sales Transfer

Supports inter- and intra-regional transfer strategies leveraging Indorama Ventures' global network

Development and Exercising BCPs

Ensures familiarity with BCPs and guides continuous improvements through scenario-based responses

To further support implementation, a Natural Disaster Risk Assessment Guide has been introduced to align site-level assessments with global partner expectations. The BCMP also includes structured procedures for early warnings on climate impacts, enabling the timely activation of contingency plans.

Crisis Management

As part of our enterprise-wide resilience operation, we have implemented the Indorama Ventures Resiliency Model under our Enterprise Risk Management (ERM) Framework. This model provides a standardized yet adaptable approach for responding to a wide range of crisis scenarios, including environmental incidents, health and safety issues, labor disruptions, information security breaches, and natural disasters. Crises may also arise from non-operational reputational events such as misconduct, scandals, controversies, or public statements made by individuals.

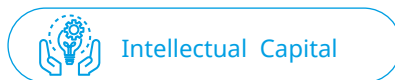
Our crisis management approach follows the Plan-Do-Check-Review (PDCR) methodology and is supported by detailed guidance, stakeholder communication protocols, and incident management templates to ensure timely and coordinated responses. Regular training and simulation exercises, including tabletop drills and full-scale exercises, are conducted to test preparedness and reinforce crisis management capabilities. Furthermore, many operational sites demonstrate their ability to maintain continuity during disruptions by holding internationally recognized certifications, such as ISO 14001, ISO 50001, and ISO 27001.

To facilitate continuous improvement and promote innovative solutions for effective business management, structured "lessons learned" reviews are conducted after each incident. These findings are carefully documented and used to update relevant protocols and enhance comprehensive training programs. Additionally, periodic audits are conducted to verify that all sites manage business continuity effectively and remain in compliance with established requirements.

A Global Crisis Management Playbook has been developed to ensure consistent communication and application of best practices across all sites, and its implementation is mandatory at all operational locations. This proactive and standardized approach strengthens our ability to safeguard personnel, assets, the environment, and operations, while aligning with international standards for risk preparedness and responsible business conduct.



Cybersecurity Management



Cybersecurity and Safeguarding Our Digital Future

Indorama Ventures is committed to protecting its digital assets and operational systems from a growing and evolving landscape of cyber threats. Cybersecurity is essential to maintaining trust, ensuring business continuity, and supporting long-term resilience. Key challenges include email-based threats, limited risk-based decision-making, gaps in vulnerability assessments, weaknesses in patch management, and the rapid pace of technological advancements.

Information Security Governance at Indorama Ventures

Cyber and information security are crucial enablers of operational resilience and digital trust. Governance is anchored at the highest level, with the Board of Directors providing oversight through the Sustainability and Risk Management Committee (SRMC) and the Audit Committee. These bodies oversee the cybersecurity framework and support the development of policies aligned with the Company's risk appetite.

Oversight is further strengthened by Mr. Sanjay Ahuja, Chief Strategy and Transformation Officer and Board member, who brings deep expertise in digital transformation and enterprise technology. He is responsible for guiding cybersecurity strategy and ensuring effective security performance across the organization.

The cybersecurity program is led by Mr. Shiv Shrivastava, Chief of Information Technology, in coordination with executive IT management and the Information Security Steering Committee. Together, they are responsible for building, implementing, and regularly reviewing the group's cybersecurity programs and operations. Quarterly updates on the cyber risk posture are provided to the Board and SRMC.

Cybersecurity is embedded within our Enterprise Risk Management framework and supported by regular risk assessments, policy development, incident response planning, and compliance monitoring. These activities are governed by our corporate IT and cybersecurity policies, which ensure consistent protection, accountability, and governance across all operations.

Reinforcing our cyber risk mitigation measures:

- ISO 27001 recertification – Validated our information security management systems (ISMS), ensuring continued compliance with international standards.
- Multi-Factor Authentication (MFA) – Implemented for Microsoft 365 email and Virtual Private Networks (VPNs) to strengthen login security.
- Multi-layered defense strategy – Upgraded our IT infrastructure by adopting AI and ML-based technologies such as Endpoint Detection and Response (EDR) and Next-Generation Firewalls (NGFW). Advanced threat protection tools were also deployed, including anti-virus, anti-malware systems, and up-to-date security patches.
- Information Technology Governance Controls (ITGC) – Enforced controls such as USB access blocking, remote connection restrictions, complex password policies, next-gen firewalls, routine operating system (OS) patching, and advanced antivirus solutions.
- Annual Vulnerability and Penetration Testing (VAPT) – Conducted regularly to assess system integrity and identify potential security gaps.
- Cisco Email Security – Deployed an email security gateway to detect and filter malicious or spam emails for further action.
- Sophos Endpoint Detection and Response (EDR) – Ensured effective antivirus protection and application control across servers and user endpoints.
- SIEM/SOC Implementation – Introduced Security Information and Event Management (SIEM) and Security Operation Center (SOC) monitoring to enable real-time alert detection and response.

Cybersecurity Awareness Training and Culture

We are committed to building a strong cybersecurity culture across the organization. All internal and external stakeholders along our value chain undergo mandatory training on data protection, cybersecurity, and the responsible handling of confidential information. Local IT teams regularly engage employees through updates on security policies and training, email communications, and interactive tools.

Since 2022, we have strengthened awareness through animated videos, quarterly training modules, and assessments. Campaigns such as Cybersecurity Awareness Month and phishing simulations further support our efforts to promote a culture of vigilance and prevention.

Quarterly training sessions for head office staff cover key cybersecurity topics, including malware threats, implementing secure password practices, safeguarding sensitive information, and compliance with the Company's IT security policies.

Ongoing training and assessments are delivered through a dedicated portal, while some sites also use email-based communications to reinforce key messages and encourage user awareness.

On 13 March 2024, we initiated the "Phishing Defense Best Practices" training session to improve user awareness and reduce the success of phishing attacks. The session focused on minimizing risk, accelerating threat reporting, and strengthening the organization's overall security culture. A total of 448 employees participated, with 356 successfully completing the training, resulting in a compliance rate of 79.02%.

On 18 June 2024, we held the "Defending Against Ransomware" training session, designed to educate employees on key risks, attack methods, preventive actions, and response procedures. Of the 444 employees targeted, 340 completed the training, yielding a compliance rate of 76.35%.

On 30 September 2024, we conducted a "Phishing Campaign Simulation" to assess and improve resilience to phishing attacks. The simulation monitored employee responses to mock phishing emails. Of the 471 employees targeted, 427 refrained from clicking on phishing links, achieving a compliance rate of 90.66%.

On 9 December 2024, we delivered the "QR Code Phishing" training session to address the growing threat of QR code-based phishing attacks, also known as "quishing." Of the 438 employees targeted, 312 completed the training, resulting in a compliance rate of 71%.



Ensuring Integrity and Protection of Data

Protecting confidentiality, integrity, and availability of data is fundamental to our cybersecurity strategy. We implement strict access controls, encryption protocols, and regular data backup and recovery procedures to safeguard sensitive information across all business units. Our Information Security Management System (ISMS), aligned with the ISO 27001 standard, undergoes internal reviews and external audits to ensure its effectiveness.

This commitment extends across our value chain through structured oversight of cybersecurity risks involving suppliers, vendors, and customers. Our Responsible Sourcing Policy requires all partners to uphold stringent information security standards, including the protection of confidential data, responsible handling of personal and corporate information, and proactive identification and mitigation of security vulnerabilities. Suppliers must treat proprietary information, such as product formulas and technical data, with strict confidentiality and are expected to comply with our security requirements.

We encourage collaboration and shared accountability to build a strong culture of security throughout our supply chain. Business continuity and disaster recovery plans are also maintained and regularly tested to ensure data integrity and operational resilience. In 2024, Indorama Ventures invested \$2.1 million in cybersecurity initiatives, including the deployment of advanced threat prevention tools and employee training programs aimed at strengthening internal capabilities and building organizational resilience.

Through these comprehensive measures, Indorama Ventures has established a robust system that not only safeguards digital assets but also protects stakeholders across the entire value chain.

2024 HIGHLIGHTS

Unlocking Business Value with Generative AI

In 2024, Indorama Ventures strengthened its cybersecurity resilience through a series of strategic IT infrastructure initiatives. We implemented SolarWinds, an integrated IT management suite that enhances network performance, server and application monitoring, and database management. The platform is fully integrated with ServiceNow to automate incident escalation and enable real-time monitoring and troubleshooting.

Our cybersecurity operations were further reinforced by Sophos MDR (Managed Detection and Response), providing 24/7 monitoring and rapid response to cyber threats. In 2024 alone, the system successfully managed 35 high alerts and 172 medium alerts, neutralizing threats such as phishing, spoofing, and domain impersonation.

Key results included:

44 phishing emails and
1,732 mass spam emails
detected and deleted

11 fake domains and four
domain spoofing attempts
identified and neutralized

Targeted attacks on critical
users and systems were
effectively contained

Additionally, proactive detection and quarantine of phishing and malicious emails at the gateway level helped protect users and prevent service disruptions. These measures reflect our strong commitment to securing digital infrastructure and delivering secure, uninterrupted services across global operations.

Project Quasar

Project Quasar was initiated to enhance cybersecurity and standardize tools and practices across Indorama Ventures. Cybersecurity involves protecting networks, systems, devices, and data from unauthorized access, malicious attacks, or damage. As part of this initiative, a range of cybersecurity controls has been implemented to strengthen the prevention, detection, and response to cyber threats. These include enhanced email security measures designed to safeguard communications against risks such as spam, phishing, malware, ransomware, and identity theft.

In 2024, Project Quasar was expanded to Mexico, reinforcing cybersecurity infrastructure across key business units.

External IT Audit

Indorama Ventures regularly undergoes external cybersecurity audits to ensure compliance with ISO 27001 and relevant data protection regulations. As of 2024, 50% of our operations are certified under the ISO 27001 standard. Two new sites achieved certification in 2024:

- Indorama Ventures Global Shared Services Pvt. Ltd.
- I.V.L. Dhunseri Polyester Company S.A.E.

Vulnerability Analysis and Penetration Testing (VAPT)

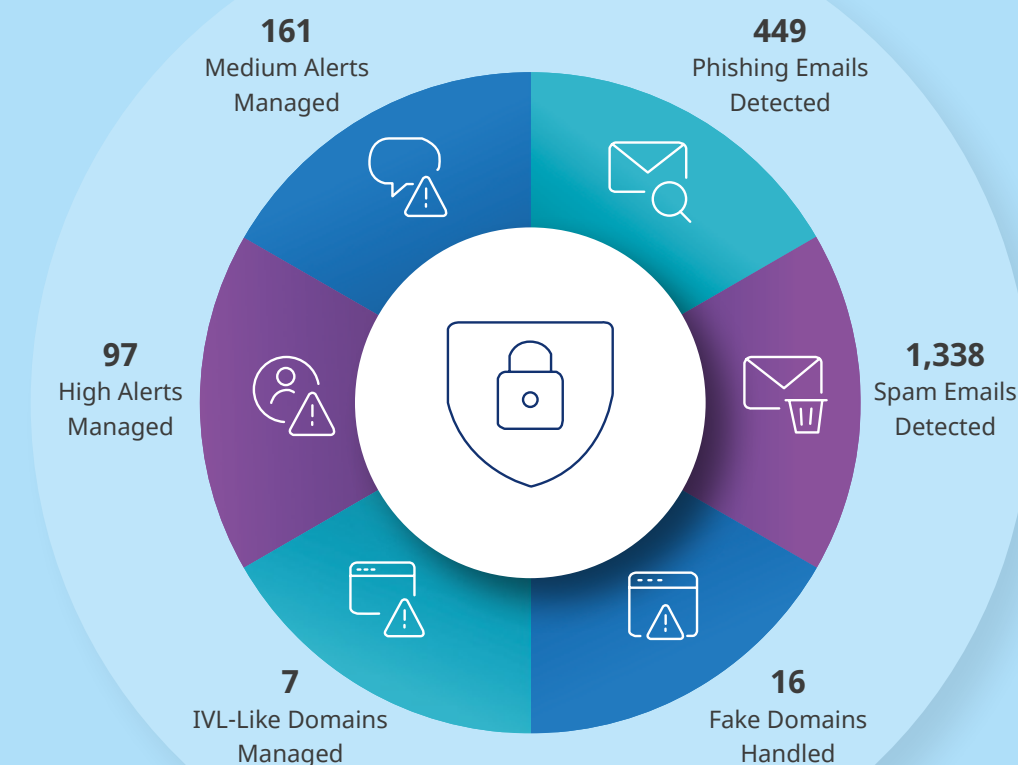
Since 2022, we have partnered with an external vendor to conduct VAPT, including comprehensive system assessments and simulated cyberattacks. These third-party evaluations help us identify internal and external vulnerabilities, supporting the timely development and implementation of mitigation plans, enabling us to promptly remediate issues and maintain the integrity of our IT infrastructure.

Incident Response

- Strengthened incident response protocols with predefined escalation procedures for cyber threats.
- Continuous monitoring and logging of security events through SIEM-SOC systems.
- Regular penetration testing and cyber resilience assessments to proactively identify and resolve threats.

Verified Complaints on Customer Privacy Breaches and Data Loss

In 2024, zero data breaches were reported across Indorama Ventures. This outcome reflects the effectiveness of our cybersecurity measures and our ongoing commitment to protecting sensitive customer, client, and employee information across our operations.





Financial Discipline in Action



Financial Capital

In 2024, we reinforced our financial foundation while maintaining flexibility to invest in long-term opportunities that align with our growth and sustainability ambitions. This was achieved through prudent capital management, liquidity protection, and efficient debt handling.

We successfully refinanced \$1.8 billion in debt at lower spreads, extending the average maturity to 4.5 years. This proactive step improved our capital structure and liquidity while demonstrating the confidence of financial institutions.

By year-end, liquidity stood at \$2.1 billion, positioning Indorama Ventures to navigate uncertainty and seize emerging opportunities. Operating cash flow reached \$1,335 million, reflecting the underlying resilience and stability of our operations. Of this, \$257 million in free cash flow was directed toward debt reduction, lowering our net debt from \$6.84 billion to \$6.58 billion.

To support future refinancing and maintain a healthy balance sheet, we secured:

- A \$255 million sustainability-linked Ninja loan from international financial institutions, with repayments spread over five years through March 2029. This financing reflects stakeholder trust in both our credit strength and sustainability-linked goals.
- A \$500 million syndicated term loan facility, designed to refinance upcoming maturities, ensure ample liquidity, and diversify our funding base.

Indorama Ventures has redefined its approach—moving away from asset-led expansion toward a disciplined, value-driven capital allocation strategy. Our focus is now on maximizing returns from existing assets, deploying capital selectively for strategic growth, and reinforcing financial resilience through prudent balance sheet management.



\$739 million allocated toward maintenance capital expenditure and financing costs

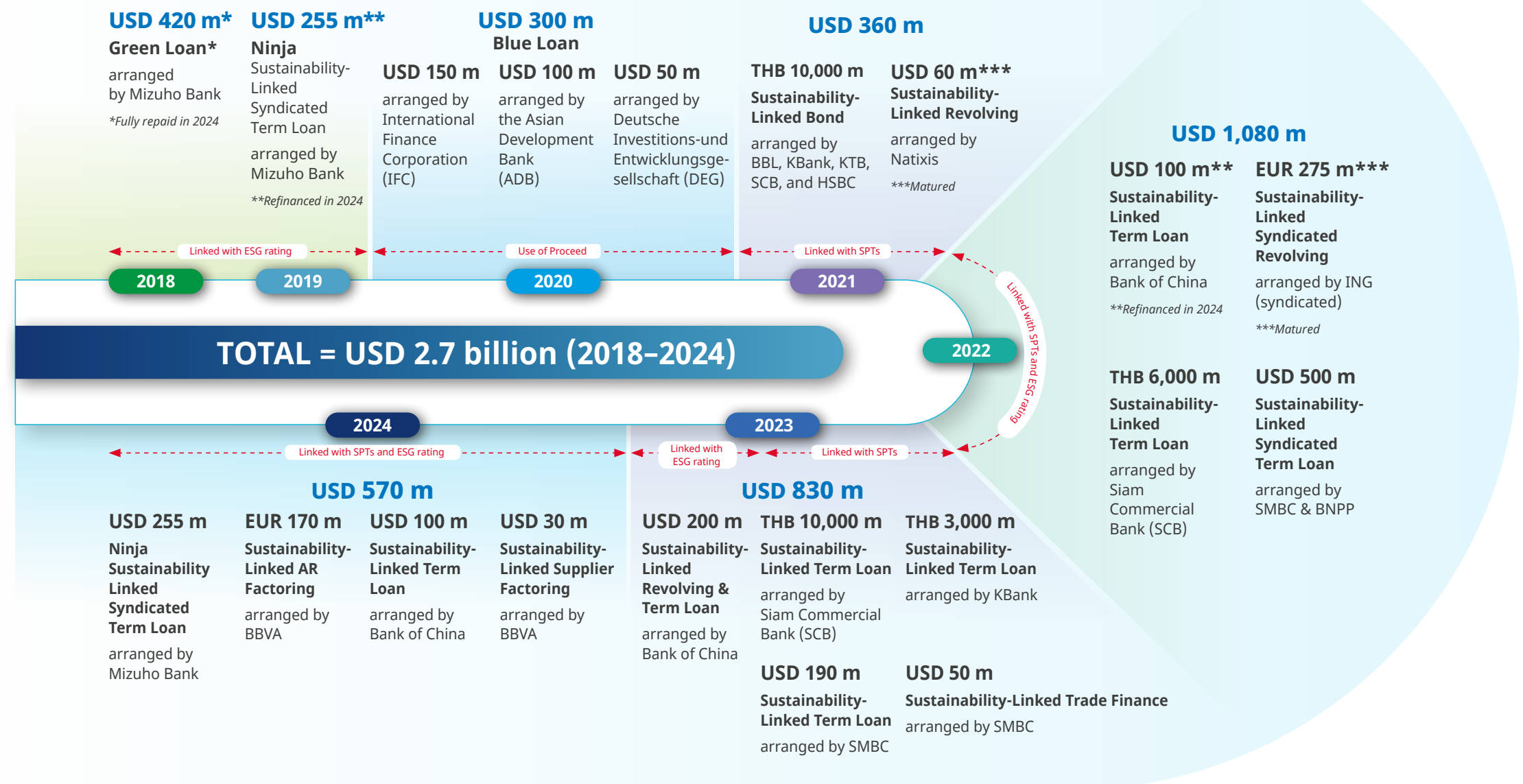


Coated and laminated fibers facility in Mexico, catering to the high-growth mobility segment



Introduced a structured Climate Adaptation Strategy, embedding resilience into our investment planning and risk-informed capital deployment

Sustainable Finance



As part of our transformation, we sharpened our capital allocation strategy through proactive refinancing, disciplined cash flow management, and selective asset optimization, advancing toward our goal of reducing net debt-to-EBITDA below three times by 2026. An additional \$1.9 billion refinancing is planned in 2025, supporting our ambition to regain an international investment-grade credit rating. We also addressed short-term working capital needs, including a temporary outflow of \$229 million to stabilize our PTA and PX supply chains. This investment is expected to normalize in 2025.

We also invested in a new coated and laminated fibers facility in Mexico, catering to the high-growth mobility segment. This project is expected to deliver double-digit internal rates of return starting in 2025. Such investments reflect our shift towards smart growth, where every project is measured for both financial and strategic return.

We have integrated decarbonization activities into our annual financial planning and capital allocation to ensure a consistent commitment across our operations. In 2024, we launched a structured climate adaptation plan based on a three-phase model:

Phase 1

Readiness and capacity building

Phase 2

Risk-informed planning

Phase 3

Long-term implementation

This strategy guides resilient investment planning and ensures risk-informed capital deployment. In parallel, we are expanding Scope 3 emissions accounting and assurance to cover over nine categories while also evaluating targets for Scope 3 reductions within our supply chain, aligning our financial strategy more closely with our sustainability objectives.

By maintaining a balance between performance and resilience, as well as efficiency and agility, we are building the financial strength needed to deliver sustained value to our stakeholders.



FOR MORE INFORMATION



Strategic Investments in 2024



Financial Capital

PET Recycling Facilities in India

Indorama Ventures, through its subsidiary IVL Dhunseri Petrochem Industries Limited, has formed a joint venture with Dhunseri Ventures Limited and Varun Beverages Limited to establish multiple PET recycling facilities in Kathua (Jammu and Kashmir) and Khurdha (Odisha). These facilities, currently under construction, will have a combined annual capacity of 100 kilotons of recycled PET (rPET) and involve a capital investment of approximately \$150 million. This initiative supports India's regulatory goals for recycled content and contributes to our ambition to recycle 750,000 tons of PET annually by 2025.

T-REX Textile Recycling Project

Indorama Ventures has joined the EU-funded T-REX (Textile Recycling Excellence) Project, which aims to create a unified blueprint for closed-loop textile recycling across Europe. As the designated spinning partner, we will convert chemically recycled feedstock into high-quality polyester yarns and fibers, helping eliminate impurities through advanced extrusion processes.

Acquisition of the KEMELIX and FLOWSOLVE Brands

Through Indovinya, Indorama Ventures acquired the KEMELIX and FLOWSOLVE brands from Cargill Bioindustrial UK Limited. The acquisition includes trademarks, customer relationships, 25 patents, tolling rights, and an R&D facility in Houston, Texas, enhancing Indovinya's specialty surfactants portfolio in the energy extraction sector.

Digitalization and Operational Agility

In 2024, we accelerated the rollout of SAP S/4HANA, Source-to-Contract platforms, and Integrated Business Planning (IBP) systems. These digital initiatives are streamlining procurement, improving inventory management, and reducing working capital exposure, laying the foundation for scalable operational agility.

Risks and Controls



Financial Capital

In 2024, Indorama Ventures navigated a challenging global economic landscape marked by inflationary pressures, volatile raw material prices, and fluctuating demand across key markets. To address these conditions and safeguard financial capital, we implemented a series of strategic measures under the IVL 2.0 transformation strategy. For more information on identified risks and control measures, please refer to the Risk Factors and Risk Management section of our 2024 Annual Report.



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INFORMATION

Paving The Way Forward



Financial Capital

Our financial objective is clear: to reduce the net debt-to-EBITDA ratio to below three times by 2026. This will be achieved through free cash flow generation, strategic asset monetization, and proceeds from IPOs. In parallel, we are reviewing our financial strategy to better manage currency risks, particularly in emerging markets where volatility can affect cost structures and investor returns.

With a stronger financial profile, disciplined cost management, and alignment with ESG-linked financing, Indorama Ventures is well-positioned to deliver long-term value for stakeholders and investors.

Driving Innovation and Product Stewardship for Business Resilience



Intellectual Capital

Under our IVL 2.0 strategy, we are creating long-term value through innovation that enhances competitiveness, adaptability in a dynamic global environment, and supports the transition to resource-efficient and circular economy models. At the same time, innovation management encourages us to rethink traditional approaches and adopt new strategies. For instance, reimagining supply chain processes through the integration of IoT (Internet of Things) devices can significantly improve monitoring and reduce disruptions.

Our R&D strategy is guided by a clear purpose: to deliver smart, sustainable, high-performance products that align with customer expectations, regulatory requirements, and our sustainability objectives. Our innovation approach focuses on practical, scalable solutions to reduce Scope 1 emissions and improve our product carbon footprint (PCF), supporting customers in addressing their Scope 3 targets.

Through a dedicated R&D and innovation team, internal cross-functional collaboration, and external engagement with customers and industry experts, we ensure that diverse perspectives contribute to the development of distinctive products and services, promoting well-rounded solutions tailored to evolving customer needs.

We also employ a dynamic management system to drive improvements in energy and water efficiency, aligned with our decarbonization goals, while continuing to integrate process innovation for circularity across operations. Technological integration enables rapid deployment, scalability, and real-time decision-making, all of which contribute to improved profitability, resilience, and sustainability performance.

Product Innovation

Our product innovation is guided by a structured framework that defines each stage—from ideation and prototyping to testing and market introduction. This includes advanced recycling and biochemistry technologies, increasing the use of recycled PET (rPET) and bio-based feedstocks, and developing low-carbon products aligned with our sustainability goals. We track progress through the Vitality Index, which measures the percentage of revenue generated from products developed within the past five years. Strong performance in this index reflects the strength of our innovation pipeline and its contribution to both business growth and sustainability targets, ensuring a significant share of our portfolio is driven by advanced, efficient, and sustainable products. Faster time-to-market further signals process efficiency, alignment with market demand, and responsiveness to competition.

Process Innovation

We are developing customized solutions that improve our environmental performance across diverse industries while enhancing product quality and maintaining cost competitiveness. Integrating technologies further strengthens this advantage by enabling efficient workflows, seamless operations, and enhanced customer experiences. The adoption of advanced tools such as artificial intelligence, machine learning, and data analytics allows us to anticipate market trends, personalize offerings, and proactively respond to customer needs. These innovations improve product and quality yields, reduce operating costs from raw materials and utilities, increase run-rate consistency, minimize emissions, waste, and effluents, and lower waste treatment costs, while ensuring regulatory compliance and supporting better working conditions.

Open Innovation

We apply a structured approach to open innovation tailored to both internal and external ecosystems. Internally, this involves cross-functional collaboration, employee training, and the use of digital tools across our 26 R&D facilities. Externally, we engage in partnerships with suppliers, customers, academics, industry experts, startups, and tech developers to access cutting-edge research, prototypes, and specialized knowledge. Data security, intellectual property protection, and confidentiality are upheld at all stages. Transparent communication and active feedback loops help us to continuously build trust with both internal and external stakeholders while refining processes and solutions. A notable example is Indovinya's initiation of open innovation challenges in 2024, which focused on sustainable surfactants, polypeptide-based surfactants for personal care, and CO₂ conversion into chemicals.



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Strengthening Innovation through Strategic R&D Investments



Investment in research and development (R&D) is a powerful driver of innovation, growth, and sustained competitive advantage across industries. Indorama Ventures operates dedicated R&D centers that serve as hubs for developing advanced materials, enhancing manufacturing processes, and promoting circular solutions across all business segments. To ensure effective resource allocation and desired outcomes, we apply robust evaluation metrics aligned with organizational objectives, encompassing financial, strategic, and innovation-related performance. In addition to traditional financial indicators, our assessments also consider environmental and social impacts, reflecting the broader value delivered by R&D.

By evaluating financial returns, innovation output, market influence, and strategic contributions, we continuously optimize our R&D efforts for sustained growth and a long-term competitive advantage. While intangible outcomes such as reputational benefits and strategic positioning can be harder to quantify, they remain crucial indicators of meaningful innovation and long-term value creation.

Business Segment	R&D Investment	R&D Centers	R&D Employees	Patents (Cumulative Until 2024)
CPET	\$2.87 million	3	18	80
Fibers	\$8.50 million	16	105	44
Indovinya	\$21.30 million	7	207	543
TOTAL	\$32.67 million	26	330	667

Beyond immediate financial metrics, the strategic contributions of R&D investments, such as strengthening industry positioning or laying the groundwork for future growth, are vital indicators of success. We emphasize change management and human capital development as central to business resilience. Our People Strategy includes upskilling programs, leadership development, and cross-functional collaboration to build agility in a low-carbon, rapidly evolving chemical and materials landscape.



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2024 R&D and Innovation Impacts

Impacted Area: Business

Indovinya



Vitality Index*	12.6%
New Products	112
Revenue from New Products	\$215.1 million
Patents	15

Combined PET (HVA)



Vitality Index*	25.7%
New Products	2
Revenue from New Products	\$83.03 million
Patents	2

Fibers



Vitality Index*	18.0%
New Products	350
Revenue from New Products	\$637 million
Patents	6

Impacted Area: Environment



GHG emissions
reduced through
recycling

3.6
million tons tCO₂e



Bio-based feedstock
consumed

255,728
tons



Recycled PET feedstock
consumed/Plastic waste
diverted from landfills

2.6
million tons

Impacted Area: Society



Customer
Satisfaction
Index**

84.55%



Net Promoter
Score**

46



Collaborative Projects
with customers,
suppliers, academia, etc.

103

* The Vitality Index was measured based on revenue generated from the sales of products developed during the last five years.

** The Customer Satisfaction Index (CSI) and Net Promoter Score (NPS) are conducted every two years, with the latest study in 2024.



Examples of Embedding Innovation across Business Segments



Intellectual Capital

Combined PET (CPET)



Under the Indonova innovation platform, CPET integrates advanced mechanical and chemical recycling technologies to develop next-generation packaging solutions. These innovations meet customer demand for sustainable, food-grade, and fully recyclable PET products while improving energy and resource efficiency.

Sustainable Recycling Technology Innovation

The Specialty Polymers team in Germany (IVPG), in collaboration with Indorama Ventures Investments & Holdings (IVIH), has developed a bottle-grade polymer containing 30% Post-Consumer Recycled (PCR) content using a BHET monomer derived from glycolysis. This marks the first time such a resin has been produced on a continuous CP line within the Company. The BHET was sourced from colored bottle flakes processed at recycling plants in France and Poland, with 40% of the monomer input coming from enhanced recycling.

The polymer retains optical and physical properties comparable to virgin PET, making it suitable for refillable bottles, cosmetics, mobility, and construction applications. BHET suppliers are currently working to improve flowability and obtain certifications for food safety and GHG reduction through LCAs. Once this process is complete, the Gersthofen site will begin full-scale production.



Enhancing Sustainability with An Optimized PET Polymer for Melt-blown Nonwovens

Melt-blown nonwovens are commonly used to enhance filtration efficiency and improve barrier performance. Traditionally made from polypropylene, these materials lack thermal stability at higher temperatures.

By combining our PET polymerization capabilities with our expertise in spun melt nonwovens, we have engineered a patent-pending PET polymer suitable for producing melt-blown nonwovens. This advancement enables the production of PET-based spunbond melt-blown nonwovens that are compatible with conventional PET recycling schemes, supporting greater recyclability and sustainability in nonwoven applications.

Fibers



The Fibers segment focuses on high-value applications such as hygiene, automotive, home textiles, and industrial uses. Innovative efforts are directed toward developing biodegradable, recyclable, and low-carbon footprint materials. Through a combination of strategic partnerships and in-house R&D, the segment continues to advance fiber technologies that deliver durability, safety, and improved environmental performance.

Scaling Low-Carbon rPET Tire Cord Yarn and Fabric for Industrial Use

In Europe, Extended Producer Responsibility (EPR) regulations mandate that tire manufacturers take responsibility for the entire lifecycle of their products, with non-compliance leading to fines or legal liabilities. Eco-friendly design practices, including the use of sustainable materials and designing products for recycling, can help reduce fees and improve environmental outcomes.

We have industrialized the production of rPET tire cord yarn and fabric to support our customers in meeting their sustainability targets and regulatory requirements for Low-Carbon, sustainable products. This innovation enables the use of recycled PET in tire cord applications, reducing environmental impacts and advancing circularity in the tire industry. The rPET yarn and fabric have been tested and meet the required performance standards for tire reinforcement.

Avgol's Next Generation Odor-trapping Technology Solutions

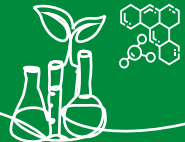
As a leading player in the hygiene industry under Indorama Ventures Group, we prioritize innovations that enhance both product performance and user experience. Our initiatives include the development of water-based additives that support pH balance and incorporate skin-friendly ingredients such as aloe vera, vitamins, and natural oils.

We are also actively researching and developing innovative odor-trapping technologies to further improve product effectiveness and deliver a more comfortable and hygienic experience for end-users.





Indovinya



Indovinya drives innovation by offering customized chemical solutions across industries such as coatings, crop protection, home and personal care, and energy. The segment emphasizes green chemistry, focusing on the development of bio-based solvents, low-VOC products, and high-performance additives. In 2024, our Process & Technology Development team optimized the production cycle of an adjuvant for the Crop Solutions market, reducing cycle time by approximately 35%, leading to significant savings in time, utilities, and overall production costs.

Bioefficac.AI – AI-driven formulation development for herbicide innovation

Indovinya's R&D scientists have developed Bioefficac.AI, an advanced tool that integrates artificial intelligence with photosynthesis-based bioefficacy analysis. This innovation accelerates herbicide formulation development by streamlining screening processes and reducing resource consumption.

Traditional bioefficacy assessments often rely on visual analysis, introducing subjectivity, delays, and higher costs. Bioefficac.AI overcomes these limitations by leveraging data from well-established photosynthesis mechanisms, a fundamental process for plant survival, to predict weed control effectiveness within days of herbicide application, significantly improving formulation screening accuracy. Utilizing infrared gas analyzer (IRGA) measurements combined with artificial neural networks, the tool enables precise, consistent, and rapid evaluations for advanced data analysis. This method minimizes variability while enabling faster, data-driven decision-making throughout herbicide development.

Indovinya wins Brazil's top innovation award

We are proud to announce that Indovinya has been awarded first place in the Chemicals category of the Valor Inovação Brasil 2024 Award and ranked 12th overall among Brazil's 150 most innovative companies.

This prestigious recognition was accorded by Valor Econômico, one of Brazil's most respected business publications. The award is based on five pillars: intention to innovate, transformation of innovation into value, measurable results, market perception, and knowledge generation.

This achievement reflects Indovinya's strong commitment to innovation, aligned with our identity as a surfactants-led company focused on delivering high-value, sustainable solutions. It further recognizes our advancements in product development, open innovation, digital transformation, and governance. We received this award for the sixth consecutive year and continue to climb the national ranking, demonstrating our long-term commitment to shaping the future through chemistry and innovation.



Indorama Ventures Investments & Holding (IVIH)

A wholly-owned subsidiary of Indorama Ventures, established in 2022, Indorama Ventures Investments & Holding (IVIH) acts as a sustainable business incubator, focusing on investments in startups that advance recycling, bio-based chemicals and polymers, renewable feedstocks, and biodegradable polymers. IVIH plays a key role in Indorama Ventures' Vision 2030 goals related to advanced recycling, renewable feedstocks, decarbonization, and the circular economy.

2024 HIGHLIGHTS

40+
Circularity
opportunities

including those we have identified to deliver drop-in recycled feedstocks derived from hard-to-recycle polyester-based waste (i.e., waste that would otherwise be landfilled or incinerated) or other plastic waste.

30+
Low-carbon
opportunities

including those we have identified to deliver drop-in bio-based or CO₂-based feedstocks (such as bio-based or CO₂-based polyester precursors).

ISCC Plus

We became a member of the International Sustainability & Carbon Certification (ISCC) and hold 10 ISCC Plus certificates at 10 sites in Europe, Asia, and Brazil.

The ISCC is a certification system that offers solutions for the implementation and certification of sustainable, deforestation-free, and traceable supply chains for agricultural, forestry, waste and residue raw materials, non-bio renewables, and recycled carbon materials and fuels.



Sustainable Product Portfolio



Intellectual Capital

A sustainable portfolio prioritizes products designed with environmental stewardship, social responsibility, and economic viability in mind, ensuring that businesses meet consumer demands while addressing global challenges. We continue to advance product excellence with purpose and innovation, enabling us to differentiate in competitive markets, promote brand loyalty, and contribute meaningfully to the global movement toward a greener future.

Our approach goes beyond compliance with regulatory and industry requirements. Sustainability is embedded in our product development through responsible sourcing materials, increased use of circular feedstocks (recycled and/or bio-based), energy-efficient manufacturing, and design for end-of-life management, all while ensuring product quality and safety. Renewable raw materials consumption in 2024 accounted for 1.16% of our total raw materials consumption, sourced from bio-based materials such as palm kernel oil and PKO fatty alcohols, Bio MEG, cellulose, and PLA. We assess the sustainability performance of both our existing product portfolio and new developments while simultaneously striving to exceed customer expectations in functionality, design, performance, and overall user experience.

Our sustainable products include those made from renewable sources, bio-based feedstocks, and recycled raw materials from our PET recycling, as well as recyclable PET products. Additionally, products classified according to the Life Cycle Assessment (LCA) and the WBCSD's Product Sustainability Assessment (PSA) were counted. In 2024, we generated more than \$1,500 million, accounting for almost 10% of our total sales revenues.

The Product Sustainability Assessment (PSA) methodology, developed by the WBCSD, guides our evaluation of new product development. We also assess and communicate the health and environmental hazards of our products in alignment with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), and, when applicable, classifications from the International Agency for Research on Cancer (IARC). All of our products are documented with Safety Data Sheets (SDS), which provide information on product composition, risk classification, and physicochemical properties in accordance with GHS guidelines.



Sustainable Product Innovation at Indovinya

Indovinya continues to embed innovation at the core of its portfolio strategy. Building on our Group-wide Sustainable Product Portfolio, Indovinya has set clear targets to advance product sustainability and long-term value creation. As part of our 2025 ambitions, Indovinya aims to:

- Achieve 15% of revenue from sustainable products by 2025.
- Ensure that 50% of new products launched from 2025 onward are classified as sustainable.*

In 2024, 15.3% of Indovinya's revenue came from sustainable products, and 68% of product launches met the sustainability classification criteria. This marks a major milestone, reflecting strong progress toward our 2025 goals by meeting the revenue target and significantly surpassing the product classification benchmark.

**Based on P&G and LCA methodologies used to measure product sustainability performance.*



OXISMOOTH® LINE Multifunctional emollients made from 100% renewable resources

Composed of **multifunctional green emollients**, this line delivers unique benefits with **superior sensory experiences** for personal care solutions.

The line includes esters produced by the reaction of a responsibly sourced palm oil derivative with Isoamyl Alcohol, which is obtained from the **upcycling of fuel oil**, a by-product of the **bioethanol process derived from sugarcane**.

The general benefits include:

- Moisturizing
- Conditioning properties
- High spreadability and fast absorption
- Pleasant sensory feel and non-greasy
- Preservative-free
- Easy handling and incorporation
- Suitable for all cosmetic formulations

SURFONIC® BIO – Redefining the Standard for Green Biosurfactants

Indovinya introduced SURFONIC® BIO, a new biosurfactant line that offers low toxicity, high biodegradability, and strong performance in home and personal care applications. This innovation represents a significant step toward replacing conventional surfactants with nature-derived, circular alternatives.

Key benefits of SURFONIC® BIO in final products include:

- Mild yet effective cleansing, making it ideal for makeup removal.
- A sustainable alternative to Behentrimonium Chloride in hair conditioners.
- Microbiome-friendly formulation.
- Creamy foam suitable for cosmetic and household applications.
- Effective dishwashing performance while remaining gentle on hands.



Advancing Binder Fiber Innovation for Natural Fiber Composites

Natural fibers, such as wood, flax, hemp, jute, and sisal, are increasingly used in composite applications due to their renewability, biodegradability, and have a lower carbon footprint compared to synthetic fibers like glass or carbon. They also offer a favorable combination of strength, stiffness, and lightweight properties, making them ideal for use in automotive interior panels and components, construction insulation and structural materials, and consumer goods such as sporting equipment and furniture.

To bind these fibers and provide structural integrity, composites traditionally relied on thermoset resins like epoxy, polyester, and vinyl ester. However, these are now being replaced with thermoplastics to improve environmental performance and reduce VOC emissions.

We have developed polyolefin-based binder fibers that bond effectively at lower temperatures and require minimal use rates, supporting more efficient, sustainable, and eco-friendly composite manufacturing.

Product Lifecycle Assessment (LCA)



Intellectual Capital

In an increasingly eco-conscious marketplace, offering products along with clear information about their reduced environmental impact appeals to informed consumers. Our assessment is based on two key approaches that help identify leading products, measure our performance against targets, and lead to detailed action plans when improvements are needed.

Methods	Portfolio Sustainability Assessment (PSA) Classification	Life Cycle Assessments (LCA) Calculations
Description	Sustainability performance assessment of our existing portfolio and new solutions through a comprehensive qualitative analysis. This evaluation considers environmental, social, and economic factors, and is verified by a third party.	Measurement of the environmental impact of our products across the entire value chain, from raw materials and supply sources to our processes and product applications. This method is verified by a third party. Understanding the life cycle impact helps steer our efforts to reduce our environmental footprint.
Coverage (by production volume)	8%	53%
Global Coverage (by production volume)		61%

OXIMULSION® B 1000 – High Performance with A Reduced Carbon Footprint

OXIMULSION® B 1000, a two-in-one surfactant developed for emulsion polymerization, is partially derived from renewable raw materials and uniquely combines the properties of both nonionic and anionic surfactants in a single, innovative solution—eliminating the need for separate surfactants.

Throughout its life cycle, OXIMULSION® B 1000 achieves a 31% carbon footprint reduction compared to APE-based (alkylphenol ethoxylate) surfactants. This improvement results from superior formulation efficiency, requiring a lower amount of active ingredients for comparable performance. Additionally, its plant-based raw materials contribute to a lower environmental impact at the product's end-of-life.



Minimizing Hazardous Chemicals and Substances



Intellectual Capital

We ensure product safety through a comprehensive Product Compliance Risk Characterization (PCRC) process for all raw materials and products to assess potential environmental and human health impacts. This procedure is designed to identify and manage compliance risks and is applied to all our raw materials and products. Additionally, we incorporate toxicology assessments, environmental health criteria, sustainability metrics, and life cycle analysis to ensure product integrity and minimize environmental impacts. When hazardous substances are detected, we implement mid to long-term plans to phase them out and replace them with safer, greener alternatives. These efforts are driven by close collaboration among our R&D, product stewardship, procurement, and quality control teams.

Ensuring Product Safety



100%

of European entities
are **compliant with**
REACH regulations



100%

compliance with the
ECHA SVHC list



Our finished products
contain less than
0.1%
by weight
of any Substance
of Very High Concern
(SVHC)*



Zero violations
of domestic
and international
regulations

* Listed in the SVHC Candidate List in accordance with Article 33 of the REACH Regulations (EC) 1907/2006. None of our products contains substances on the Candidate List of Substances of Very High Concern (SVHC) above 0.1% by weight are sold.



Honored with Second Place in the 2024 ChemScore Recognition – Global Sustainability Leadership

In 2024, Indorama Ventures was ranked third out of 51 global chemical companies in the ChemScore assessment, receiving a B rating for our performance in chemical safety, transparency, and sustainable innovation. This recognition reflects our continued commitment to responsible chemical management and product stewardship.

We remain the only Asia-based chemical company to have published a formal strategy to phase out hazardous chemicals from our portfolio. Our approach goes beyond compliance, aligning with the best international practices to reduce environmental and health risks while supporting the development of safer, more sustainable products across our portfolio.

ALKONT® SSL - Our Latest Innovation in Surfactants

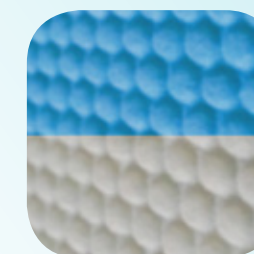
A mild anionic surfactant that is 100% biodegradable, derived from renewable, natural sources. It is formulated without sulfates, Ethylene Oxide (EO), or preservatives, making it an ideal choice for eco-conscious consumers. ALKONT® SSL excels as an effective emulsifier and surfactant, enhancing the texture and stability of various personal care products. Its primary function is to deliver superior performance while ensuring mildness and safety, making it perfect for sensitive applications.



Safer Fibers through Geometry Modification

Another important innovation initiative focuses on modifying fiber geometry to enhance performance and reduce or eliminate the need for certain chemicals (such as TiO₂), resulting in environmental benefits.

The development of our latest generation of fibers with a custom-designed shape exemplifies this approach, maintaining core material properties while enhancing opacity.



SURFONIC® H-1040 – A Next-generation Liquid Green Hydrotrope

Developed with 87% renewable raw materials, SURFONIC® H-1040 delivers a high-performance, sustainable alternative to traditional hydrotropes such as Sodium Xylene Sulfonate (SXS), which is derived from fossil and aromatic sources.

It can be cold processed, reducing energy use during manufacturing, and is free from phosphates and other phosphorus derivatives, which helps prevent eutrophication and protect aquatic ecosystems.





Chapter 7

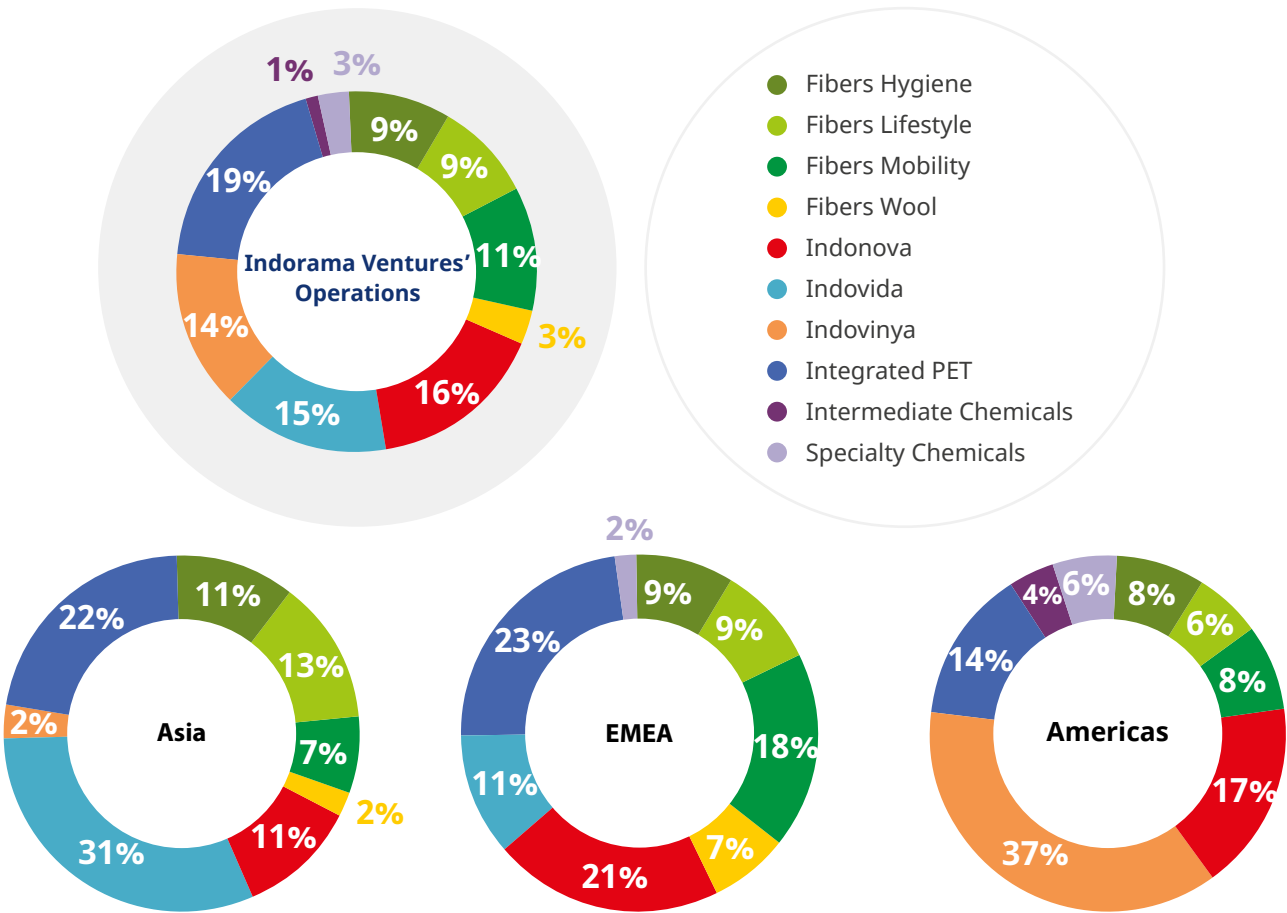
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Global ESG Performance Data

Our 2024 Sustainability Report covers all Indorama Ventures’ sites across the globe in all business units including Integrated PET, Specialty Chemicals, Intermediate Chemicals, Indonova, Indovida, Fibers – Hygiene, Fibers – Lifestyle, Fibers – Mobility, Fibers – Wool and Indovinya, as listed below.



Coverage of Data Collection (% of Total Global Production)

Material Indicators	2021	2022	2023	2024
Total energy consumption	100	100	100	100
Direct GHG emissions Scope 1	100	100	100	100
Indirect GHG emissions Scope 2	100	100	100	100
Total NO _x emissions	100	100	100	100
Total SO _x emissions	100	100	100	100
Total VOC emissions	100	100	100	100
Total waste (excluding reused and recycled)	100	100	100	100
BOD and COD in treated wastewater discharged	100	100	100	100
Total water consumption (with and without water stress areas)	100	100	100	100
Total water withdrawn by sources	100	100	100	100
Wastewater discharge	100	100	100	100
Health & safety	100	100	100	100
Process safety events	100	100	100	100
Spills	100	100	100	100
CSR	91	78	78	79
HR	100	100	100	100

Operations Information Included in 2024 Sustainability Report

Region Operation	Country	Business
Americas		
AlphaPet, Inc.	USA	●
Auriga Polymers Inc.	USA	● ●
Avgol America Inc.	USA	●
Empresa Carioca de Produtos Químicos S.A.	Brazil	●
Indorama Ventures (Oxide & Glycols) LLC	USA	●
Indorama Ventures EcoMex S. de R.L. de C.V.	Mexico	●
Indorama Ventures Fibras Brasil Ltda.	Brazil	●
Indorama Ventures Hygiene Athens Inc.	USA	●
Indorama Ventures Hygiene Covington Inc.	USA	●
Indorama Ventures Lifestyle Brazil Ltda.	Brazil	●
Indorama Ventures Mobility Puebla, S.A. de C.V.	Mexico	●
Indorama Ventures Mobility Scottsboro Inc.	USA	●
Indorama Ventures Mobility Winnsboro LLC	USA	●
Indorama Ventures Olefins LLC	USA	●
Indorama Ventures Oxides International LLC	USA	● ● ●
Indorama Ventures Oxides LLC	USA	● ● ●
Indorama Ventures Polymers Mexico, S. de R.L. de C.V.	Mexico	● ●
Indorama Ventures Polymeros S.A.	Brazil	●
Indorama Ventures Propylene Oxides LLC	USA	●
Indorama Ventures PTA Montreal LP	Canada	●
Indorama Ventures Solucoes Sustentaveis Brasil Ltda.	Brazil	● ●
Indorama Ventures Sustainable Recycling LLC	USA	● ●
Indorama Ventures Sustainable Solutions LLC	USA	● ●
Indorama Ventures Sustainable Solutions Fontana Inc.	USA	● ●
Indorama Ventures Xylenes & PTA LLC	USA	● ● ● ● NDC, PX, PNDA
Oleoquímica Indústria e Comércio de Produtos Químicos Ltda.	Brazil	●
Oxiten S.A. Indústria e Comércio	Brazil	● ● ● ● ● ● ● ●
Oxiten México, S.A. de C.V.	Mexico	● ● ●
Oxiten Uruguay S.A.	USA	●
Oxiten USA LLC	USA	●
Performance Fibers Operations Mexico, S. de R.L. de C.V.	Mexico	●
StarPet Inc.	USA	●

Asia		
Asia Pet (Thailand) Limited	Thailand	●
Avgol India Private Limited	India	●
Avgol Limited (Dimona)	Israel	●
Avgol Nonwovens India Private Limited	India	●
FiberVisions (China) Textiles Products Limited	China	●
Guangdong IVL PET Polymer Company Limited	China	●
Hubei Gold Dragon Nonwoven Fabrics Co., Ltd.*	China	●
Indorama Holdings Limited	Thailand	●
Indorama Petrochem Limited	Thailand	●
Indorama Petrochem Limited (2 nd Branch)	Thailand	●
Indorama Polyester Industries Public Company Limited, Nakhon Pathom	Thailand	● ● ●
Indorama Polyester Industries Public Company Limited, Rayong	Thailand	● ● ●
Indo Rama Synthetics (India) Limited	India	●
Indorama Yarns Private Limited	India	●
Indorama Ventures Mobility (Kaiping) Co., Ltd.	China	●
Indorama Ventures Mobility (Kaiping) No.2 Co., Ltd.	China	●
Indorama Ventures Mobility (Kaiping) No.3 Co., Ltd.	China	●
Indorama Ventures Mobility (Qingdao) Co., Ltd.	China	●
Indorama Ventures Oxides Ankleshwar Private Limited	India	●
Indorama Ventures Oxides Australia Pty Limited	Australia	●
Indorama Ventures Packaging (Myanmar) Limited	Myanmar	●
Indorama Ventures Packaging (Philippines) Corporation, Bacolod	The Philippines	●
Indorama Ventures Packaging (Philippines) Corporation, Batino	The Philippines	●
Indorama Ventures Packaging (Philippines) Corporation, Davao	The Philippines	●
Indorama Ventures Packaging (Philippines) Corporation, Meycauayan	The Philippines	●
Indorama Ventures Packaging (Philippines) Corporation, MOP	The Philippines	●
Indorama Ventures Yarns Private Limited	India	●
IVL Dhunseri Petrochem Industries Private Limited (Haldia)	India	●
IVL Dhunseri Petrochem Industries Private Limited (Panipat)	India	●
Petform (Thailand) Limited, Korat	Thailand	●
Petform (Thailand) Limited, Lopburi	Thailand	● ●
Petform (Thailand) Limited, Nakhon Pathom	Thailand	● ●
Petform (Thailand) Limited, Pathumthani	Thailand	●

* One of the six Avgol sites, the other five are Avgol America Inc., Avgol India Private Limited, Avgol Nonwovens India Private Limited, Avgol Limited Liability Company and Avgol Limited (Dimona).



Asia

Petform (Thailand) Limited, Rayong	Thailand	
PetValue Philippines Corporation	The Philippines	
PT Indorama Petrochemicals	Indonesia	
PT Indorama Polychem Indonesia	Indonesia	
PT Indorama Polypet Indonesia	Indonesia	
PT Indorama Ventures Indonesia	Indonesia	
PT Indorama Ventures Sustainable Solutions Indonesia	Indonesia	
Ngoc Nghia Industry	Vietnam	
Sinterama Yarns (Dongguan) Co., Ltd.	China	
TPT Petrochemicals Public Company Limited	Thailand	

EMEA

Avgol Limited Liability Company	Russia	
Beverage Plastics Limited	Northern Ireland	
Bevpak (Nigeria) Limited (Ibadan)	Nigeria	
Bevpak (Nigeria) Limited (Port Harcourt)	Nigeria	
Egyptian Indian Polyester Company S.A.E.	Egypt	
Filatura Tollegno 1900 S.r.l.	Italy	
Indorama PET (Nigeria) Limited	Nigeria	
Indorama Ventures Corlu PET Sanayi Anonim Sirketi	Turkey	
Indorama Ventures Europe B.V.	The Netherlands	
Indorama Ventures Fibers Germany GmbH	Germany	
Indorama Ventures Hygiene Denmark A/S	Denmark	
Indorama Ventures Lifestyle Bulgaria EOOD	Bulgaria	
Indorama Ventures Lifestyle Italy S.p.A.	Italy	
Indorama Ventures Mobility Bohemia s.r.o.	The Czech Republic	
Indorama Ventures Mobility Cremona S.p.A.	Italy	
Indorama Ventures Mobility Krumbach GmbH & Co. KG	Germany	
Indorama Ventures Mobility Longlaville S.A.S.	France	
Indorama Ventures Mobility Luxembourg S.A.	Luxembourg	
Indorama Ventures Mobility Moravia a.s.	The Czech Republic	
Indorama Ventures Mobility Moravia a.s.	Slovakia	
Indorama Ventures Mobility Obernburg GmbH	Germany	
Indorama Ventures Packaging (Ghana) Limited	Ghana	
Indorama Ventures Poland Sp. z o.o.	Poland	
Indorama Ventures Polymers Germany GmbH	Germany	
Indorama Ventures Quimica S.L.U.	Spain	
Indorama Ventures Recycling Poland Sp. z o.o. (Bielsko-Biala)	Poland	
Indorama Ventures Recycling Poland Sp. z o.o. (Łęczyca)	Poland	
Indorama Ventures Recycling Verdun S.A.S.	France	
Medco Plast Co. for Packing & Packaging Systems (S.A.E.)	Egypt	
Schoeller Kresice s.r.o.	The Czech Republic	
Tollegno 1900 Poland Sp. z o.o.	Poland	
UAB Orion Global Pet	Lithuania	
UCY Polymers CZ s.r.o.	The Czech Republic	
Wellman France Recyclage S.A.S	France	
Wellman International Limited, Ireland	Ireland	
Wellman International Limited, the Netherlands	The Netherlands	
Wellman Neufchâteau Recyclage S.A.	France	

Remarks:

- Fibers Hygiene
- Fibers Lifestyle
- Fibers Mobility
- Fibers Wool
- Indonova
- Indovida
- Indovinya
- Integrated PET
- Intermediate Chemicals
- Specialty Chemicals

NDC

PIA

PNDA

PX

Naphthalene Dicarboxylate

Purified Isophthalic Acid

Purified 2, 6 - Naphthalene Dicarboxylic Acid

Paraxylene

Global Performance Data

Standard Requirements		Unit	2021	2022	2023	2024
Production						
General	Total production (including captive consumption)	Ton of production	16,521,350	16,748,664	16,034,161	16,345,398
	Combined PET	Ton	11,757,074	11,522,447	10,810,578	10,814,833
	Fibers	Ton	2,004,005	1,773,107	1,727,871	1,799,288
	Fibers (Hygeine, Lifestyle, Mobility)	Ton	1,997,837	1,765,967	1,717,055	1,792,016
	Wool	Ton	6,168	7,140	10,816	7,272
	Indovinya	Ton	2,760,270	3,453,110	3,495,712	3,731,277
Revenue						
General	Total revenues (including inter-company sales)	\$ (million)	17,533	23,864	19,047	18,616
	Total revenues (excluding inter-company sales) – Financial Statement reporting scope	\$ (million)	14,629	18,715	15,555	15,358
	Green revenues from sustainable products	\$ (million)	300	200	200	1,500
Materials						
GRI 301-1	Materials used by weight or volume	Ton	15,990,880	17,356,455	16,308,928	16,812,298
	Non-renewable raw materials	Ton	15,616,149	16,595,070	15,761,590	15,737,460
	- PTA	Ton	5,567,369	5,450,517	5,339,496	5,413,231
	- MEG	Ton	2,184,696	2,115,053	2,104,844	2,130,672
	- Paraxylene	Ton	2,996,541	2,720,688	2,365,482	2,188,199
	- Indovinya's raw materials	Ton	1,783,223	3,903,983	3,713,852	4,234,132
	- Acetic Acid	Ton	163,937	159,336	135,726	125,549
	- Purified isophthalic acid	Ton	93,539	97,875	95,364	93,117
	- PET	Ton	426,209	380,635	432,703	465,244
	- PP	Ton	270,314	221,539	207,663	214,311
	- PE	Ton	58,436	48,350	40,918	37,798
	- HDPE	Ton	10,639	19,751	22,937	26,104
	- Others	Ton	2,061,244	1,477,343	1,302,605	809,103
	Bio-based raw materials	Ton	28,833	209,212	223,082	255,728
	- Palm kernel oil and PKO fatty alcohols	Ton	-	136,204	150,302	166,952
	- Bio-MEG	Ton	9,615	9,875	9,175	9,506
	- Cellulose	Ton	10,298	7,745	6,289	7,905
	- PLA	Ton	4,065	4,233	4,543	4,745
	- Wool	Ton	4,855	8,070	7,633	7,044
	- Others	Ton	-	43,085	45,139	59,577
GRI 301-2	Recycled input materials used	Ton	317,064	342,961	324,256	396,666
	Percentage recycled materials used	%	1.98	1.98	1.99	2.36
GRI 301-3	Total packaging materials	Ton	10,993	105,103	105,448	113,130
Energy						
GRI 302-1	Total energy consumption within the organization	GJ	115,583,712	122,147,400	120,904,857	121,520,795
DJSI 2.2.2	Total non-renewable (direct) energy consumption	MWh	32,106,587	33,929,833	33,584,683	25,840,972
	- Natural gas	GJ	72,030,245	79,098,642	79,115,199	72,998,104
	- Coal	GJ	20,816,598	17,477,273	17,806,805	18,428,157
	- Fuel oil	GJ	1,895,027	653,786	392,006	215,394
	- Diesel	GJ	190,526	435,183	529,711	312,219
	- LPG	GJ	98,096	98,078	249,331	140,869
	- Gasoline	GJ	35,004	41,810	50,028	49,974
	- Fuel gas	GJ	-	-	-	-
	- Tail gas	GJ	-	466,210	569,877	555,287
	- Other	GJ	476,118	465,377	427,277	2,613,799
	Total renewable (direct) energy consumption	GJ	485,511	579,224	728,630	719,985
	- Palm shell	GJ	416,226	425,094	497,758	656,515
	- Biomass	GJ	69,285	150,961	228,619	61,946
	- Bio LPG	GJ	-	3,141	2,185	1,373
	- Bioethanol	GJ	-	28	68	151
	Direct energy sold	GJ	(3,411,550)	(2,915,134)	(2,340,503)	(2,286,304)



Standard Requirements		Unit	2021	2022	2023	2024
DJSI 2.2.2	Total Indirect energy consumption (electricity, cooling, steam purchased from outside of Indorama Ventures group)	GJ	22,968,136	25,746,952	23,376,496	27,773,311
		MWh	6,380,038	7,151,931	6,493,471	7,714,809
	Renewable (Indirect - electricity) generated and consumed	GJ	24,933	37,269	59,530	76,145
		MWh	6,926	10,352	16,536	21,151
	Renewable (Indirect - electricity) purchased through certificate and market mechanisms	GJ	1,883,403	716,325	620,907	544,817
		MWh	523,168	198,979	172,474	151,338
	Total direct electricity sold	GJ	354,050	659,971	472,446	459,674
		MWh	98,347	183,325	131,235	127,687
	Total steam sold	GJ	519,650	586,479	650,230	579,208
		MWh	144,347	162,911	180,619	160,891
	Total indirect electricity sold	GJ	16,449	16,127	12,069	11,200
		MWh	4,569	4,480	3,353	3,111
	Total non-renewable energy consumption	GJ	113,194,408	120,814,902	119,495,940	120,179,848
		MWh	31,442,891	33,559,695	33,193,317	33,383,291
	Total renewable energy consumption	GJ	2,389,306	1,332,497	1,408,918	1,340,947
		MWh	663,696	370,138	391,366	372,485
GRI 302-3	Energy intensity	GJ/Ton of production	7.00	7.29	7.54	7.43
GRI 302-4	Energy saved due to conservation and efficiency improvement	GJ	1,575,159	413,476	2,267,194	1,081,579

Reused/Recycled Water

	Total volume of recycled/reused water	m³	5,555,472	6,739,271	6,250,851	6,217,367
	Percentage of recycled/reused water	%	5.93	7.20	6.96	7.16

Water Withdrawal

GRI 303-3	Total water withdrawal by source					
	Total water withdrawal by source (with and without water stress)	m³	88,154,618	86,910,036	83,500,378	80,672,980
	Freshwater (≤1,000 mg/L total dissolved solids)	m³	84,704,174	85,376,163	82,412,722	79,357,079
	Other water (>1,000 mg/L total dissolved solids)	m³	3,450,444	1,533,873	1,087,656	1,315,901
	Surface water/rain water	m³	61,522,902	48,332,122	47,660,402	45,235,195
	Freshwater (≤1,000 mg/L total dissolved solids)	m³	58,361,273	48,239,270	47,415,500	44,996,204
	Other water (>1,000 mg/L total dissolved solids)	m³	3,161,629	92,852	244,902	238,991
	Ground water	m³	7,459,005	11,722,585	11,418,275	11,515,288
	Freshwater (≤1,000 mg/L total dissolved solids)	m³	7,458,027	11,293,294	10,988,468	11,053,235
	Other water (>1,000 mg/L total dissolved solids)	m³	979	429,290	429,807	462,052
	Seawater	m³	-	-	-	-
	Freshwater (≤1,000 mg/L total dissolved solids)	m³	-	-	-	-
	Other water (>1,000 mg/L total dissolved solids)	m³	-	-	-	-
	Produced water	m³	193,615	129,085	170,647	242,982
	Freshwater (≤1,000 mg/L total dissolved solids)	m³	64,141	490	507	453
	Other water (>1,000 mg/L total dissolved solids)	m³	129,474	128,595	170,141	242,529
	Third-party water	m³	18,979,096	26,726,244	24,251,053	23,679,515
	Freshwater (≤1,000 mg/L total dissolved solids)	m³	18,820,734	25,843,108	24,008,248	23,307,186
	Other water (>1,000 mg/L total dissolved solids)	m³	158,362	883,135	242,805	372,329
	Total water withdrawal by source (with water stress)	m³	39,501,965	37,566,089	34,203,988	32,537,401
	Freshwater (≤1,000 mg/L total dissolved solids)	m³	39,224,933	37,294,453	34,022,998	32,254,644
	Other water (>1,000 mg/L total dissolved solids)	m³	277,032	271,636	180,990	282,757
	Surface water/rain water	m³	23,446,101	25,372,029	25,599,863	24,487,484
	Freshwater (≤1,000 mg/L total dissolved solids)	m³	23,446,101	25,372,029	25,599,863	24,487,484
	Other water (>1,000 mg/L total dissolved solids)	m³	-	-	-	-
	Ground water	m³	3,961,213	3,600,532	3,567,032	3,450,145
	Freshwater (≤1,000 mg/L total dissolved solids)	m³	3,961,213	3,600,532	3,567,016	3,450,145
	Other water (>1,000 mg/L total dissolved solids)	m³	-	-	16	-
	Seawater	m³	-	-	-	-
	Freshwater (≤1,000 mg/L total dissolved solids)	m³	-	-	-	-
	Other water (>1,000 mg/L total dissolved solids)	m³	-	-	-	-
	Produced water	m³	153,254	106,889	108,850	217,476
	Freshwater (≤1,000 mg/L total dissolved solids)	m³	34,585	-	-	-
	Other water (>1,000 mg/L total dissolved solids)	m³	118,669	106,889	108,850	217,476
	Third-party water	m³	11,941,396	8,486,639	4,928,243	4,382,296
	Freshwater (≤1,000 mg/L total dissolved solids)	m³	11,783,034	8,321,892	4,856,119	4,317,015
	Other water (>1,000 mg/L total dissolved solids)	m³	158,362	164,747	72,124	65,281
	Total water withdrawal by source (without water stress)	m³	48,652,654	49,343,947	49,296,389	48,135,579

Standard Requirements		Unit	2021	2022	2023	2024
	Freshwater (≤1,000 mg/L total dissolved solids)	m³	45,479,242	48,081,710	48,389,724	47,102,435
	Other water (>1,000 mg/L total dissolved solids)	m³	3,173,412	1,262,237	906,666	1,033,144
	Surface water	m³	38,076,801	22,960,093	22,060,539	20,747,711
	Freshwater (≤1,000 mg/L total dissolved solids)	m³	34,915,172	22,867,241	21,815,637	20,508,720
	Other water (>1,000 mg/L total dissolved solids)	m³	3,161,629	92,852	244,902	238,991
	Ground water	m³	3,497,792	8,122,053	7,851,243	8,065,142
	Freshwater (≤1,000 mg/L total dissolved solids)	m³	3,496,813	7,692,762	7,421,452	7,603,090
	Other water (>1,000 mg/L total dissolved solids)	m³	979	429,290	429,791	462,052
	Seawater	m³	-	-	-	-
	Freshwater (≤1,000 mg/L total dissolved solids)	m³	-	-	-	-
	Other water (>1,000 mg/L total dissolved solids)	m³	-	-	-	-
	Produced water	m³	40,361	22,196	61,797	25,506
	Freshwater (≤1,000 mg/L total dissolved solids)	m³	29,556	490	507	453
	Other water (>1,000 mg/L total dissolved solids)	m³	10,805	21,706	61,291	25,053
	Third-party water	m³	7,037,700	18,239,605	19,322,810	19,297,219
	Freshwater (≤1,000 mg/L total dissolved solids)	m³	7,037,700	17,521,216	19,152,129	18,990,171
	Other water (>1,000 mg/L total dissolved solids)	m³	-	718,388	170,681	307,048

Wastewater Discharge

GRI 303-4	Total wastewater discharge by source					
	Total water discharge (with and without water stress)					
	Total water discharge	m³	49,662,741	46,990,764	45,576,757	47,736,660
	Freshwater (≤ 1,000 mg/L total dissolved solids)	m³	40,515,778	38,767,716	36,213,752	34,952,908
	Other water (> 1,000 mg/L total dissolved solids)	m³	9,146,963	8,223,048	9,363,005	12,783,752
	Total Surface water/rain water discharge	m³	26,147,436	24,645,275	24,566,153	25,480,466
	Freshwater (≤ 1,000 mg/L total dissolved solids)	m³	-	22,543,112	22,120,077	22,705,314
	Other water (> 1,000 mg/L total dissolved solids)	m³	-	2,102,163	2,446,077	2,775,152
	Total Ground water discharge	m³	92,209	416,408	203,729	180,904
	Freshwater (≤ 1,000 mg/L total dissolved solids)	m³	-	334,820	140,651	107,330
	Other water (> 1,000 mg/L total dissolved solids)	m³	-	81,587	63,078	73,574
	Sea water discharge	m³	3,132,273	2,034,927	1,745,450	1,865,834
	Freshwater (≤ 1,000 mg/L total dissolved solids)	m³	-	2,034,927	1,745,450	1,865,834
	Other water (> 1,000 mg/L total dissolved solids)	m³	-	-	-	-
	Third-party/municipality/common WWTP water discharge	m³	20,184,379	16,937,671	15,610,476	16,288,611
	Freshwater (≤ 1,000 mg/L total dissolved solids)	m³	-	10,980,924	8,847,394	6,444,363
	Other water (> 1,000 mg/L total dissolved solids)	m³	-	5,956,748	6,763,082	9,844,248
	Third-party for other organization water discharge	m³	106,001	2,956,483	3,450,949	3,920,846
	Freshwater (≤ 1,000 mg/L total dissolved solids)	m³	-	2,873,934	3,360,181	3,830,068
	Other water (> 1,000 mg/L total dissolved solids)	m³	-	82,549	90,769	90,778
	With water stress					
	Total water discharge (with water stress)	m³	25,674,905	22,681,126	19,763,325	22,446,520
	Freshwater (≤ 1,000 mg/L total dissolved solids)	m³	25,416,890	19,280,294	16,177,768	15,874,495
	Other water (> 1,000 mg/L total dissolved solids)	m³	560,322	3,400,833	3,585,557	6,572,024
	Surface water/rain water discharge	m³	14,164,176	14,089,106	13,323,342	13,483,906
	Freshwater (≤ 1,000 mg/L total dissolved solids)	m³	-	13,842,562	13,010,518	13,086,887
	Other water (> 1,000 mg/L total dissolved solids)	m³	-	246,543	312,824	397,019
	Ground water discharge	m³	52,544	287,723	186,445	163,695
	Freshwater (≤ 1,000 mg/L total dissolved solids)	m³	-	220,385	139,285	106,090
	Other water (> 1,000 mg/L total dissolved solids)	m³	-	67,337	47,160	57,605
	Seawater discharge	m³	1,771,417	1,460,691	1,422,689	1,665,137
	Freshwater (≤ 1,000 mg/L total dissolved solids)	m³	-	1,460,691	1,422,689	1,665,137
	Other water (> 1,000 mg/L total dissolved solids)	m³	-	-	-	-
	Third-party/municipality/common WWTP water discharge	m³	9,676,833	6,711,487	4,694,671	6,991,974
	Freshwater (≤ 1,000 mg/L total dissolved solids)	m³	-	3,698,315	1,553,004	957,654
	Other water (> 1,000 mg/L total dissolved solids)	m³	-	3,013,172	3,141,667	6,034,320
	Third-party for other organization water discharge	m³	9,935	132,120	136,178	141,808
	Freshwater (≤ 1,000 mg/L total dissolved solids)	m³	-	58,340	52,272	58,727
	Other water (> 1,000 mg/L total dissolved solids)	m³	-	73,780	83,907	83,081
	Without water stress					
	Total water discharge (without water stress)	m³	23,987,836	24,309,638	25,813,432	25,290,141
	Freshwater (≤ 1,000 mg/L total dissolved solids)	m³	15,724,020	19,487,423	20,035,984	19,078,413



Standard Requirements		Unit	2021	2022	2023	2024
	Other water (> 1,000 mg/L total dissolved solids)	m ³	8,817,375	4,822,215	5,777,448	6,211,728
	Surface water/rain water discharge	m ³	11,983,260	10,556,169	11,242,811	11,996,560
	Freshwater (≤ 1,000 mg/L total dissolved solids)	m ³	-	8,700,549	9,109,558	9,618,427
	Other water (> 1,000 mg/L total dissolved solids)	m ³	-	1,855,620	2,133,252	2,378,133
	Ground water discharge	m ³	39,665	128,685	17,285	17,209
	Freshwater (≤ 1,000 mg/L total dissolved solids)	m ³	-	114,435	1,366	1,240
	Other water (> 1,000 mg/L total dissolved solids)	m ³	-	14,250	15,919	15,969
	Seawater discharge	m ³	1,360,856	574,236	322,760	200,697
	Freshwater (≤ 1,000 mg/L total dissolved solids)	m ³	-	574,236	322,760	200,697
	Other water (> 1,000 mg/L total dissolved solids)	m ³	-	-	-	-
	Third-party/municipality/common WWTP water discharge	m ³	10,507,990	10,226,185	10,915,806	9,296,637
	Freshwater (≤ 1,000 mg/L total dissolved solids)	m ³	-	7,282,608	7,294,390	5,486,709
	Other water (> 1,000 mg/L total dissolved solids)	m ³	-	2,943,576	3,621,415	3,809,928
	Third-party for other organization water discharge	m ³	96,066	2,824,363	3,314,771	3,779,038
	Freshwater (≤ 1,000 mg/L total dissolved solids)	m ³	-	2,815,594	3,307,909	3,771,340
	Other water (> 1,000 mg/L total dissolved solids)	m ³	-	8,769	6,862	7,697
	Waste generation and significant waste-related impacts					
	Total water discharge volume	m ³	49,520,229	46,907,077	44,941,189	45,086,132

Water Consumption

GRI 303-3, DJSI 2.4.2	Total water withdrawal (by sources)	m ³	88,154,618	86,910,036	83,500,378	80,672,980
	- Surface water	m ³	61,522,902	48,332,122	47,660,402	45,235,195
	- Once through cooling water	m ³	-	-	-	-
	- Municipal water and water utilities	m ³	19,172,711	26,855,329	24,421,701	23,922,497
	- Groundwater	m ³	7,459,005	11,722,585	11,418,275	11,515,288
	- Rain water	m ³	-	-	-	-
	Water intensity	m ³ /Ton of production	5.34	5.19	5.21	4.94
GRI 303-4, DJSI 2.4.2	Water discharge (excluding salt water)	m ³	46,530,468	44,955,837	43,831,308	45,870,826
GRI 303-5, DJSI 2.4.2	Total net freshwater consumption from all areas (Water withdrawal (excluding saltwater) - Water discharge (excluding saltwater))	m ³	41,624,150	41,954,199	39,669,070	34,802,153
DJSI 2.4.3	Total net freshwater consumption in water-stressed areas (Total water withdrawals – Total water discharges)	m ³	13,827,060	14,884,963	14,440,663	10,090,881

Business Impacts of Water Related Incidents

DJSI 2.4.5	Total number of production plants in water stressed areas (extremely high + high)	Number	34	46	64	65
	Total number of production plants	Number	112	141	149	150
	% of production plants in last FY in water-stressed areas	%	30%	33%	43%	43%

Emissions

GRI 305-1, DJSI 2.5.1	Direct (Scope 1) GHG emissions	tCO ₂ e	7,207,125	7,195,277	7,102,530	6,969,854
	Biogenic CO ₂ emissions in metric tons of CO ₂ equivalent under Scope 1	tCO ₂ e	-	-	76,521	73,994
GRI 305-2, DJSI 2.5.2	Energy indirect (Scope 2) GHG emissions	tCO ₂ e	2,582,952	2,606,124	2,478,410	2,834,108
	Total GHG emissions (Scope 1 & 2)	tCO ₂ e	9,790,077	9,801,401	9,580,940	9,803,962
GRI 305-4	GHG emissions intensity					
	Scope 1 GHG intensity	tCO ₂ e/Ton of production	0.436	0.430	0.443	0.426
	Scope 2 GHG intensity	tCO ₂ e/Ton of production	0.156	0.157	0.155	0.173
	Scope 1 & 2 GHG intensity	tCO ₂ e/Ton of production	0.593	0.585	0.598	0.600
	GHG intensity (Scope 1 & Scope 2) per total revenue	tCO ₂ e/\$ (million)	558.38	410.72	503.01	638
	GHG intensity in tons of CO ₂ e per full time equivalent (FTE) employees	tCO ₂ e/FTE	324.16	324.54	317.24	348
GRI 305-5	GHG emissions reduced as a direct result of reduction initiatives	tCO ₂ e	28,702	148,102	263,379	129,190
GRI 305-6	Emissions of ozone-depleting substances (ODS) from production	tCO ₂ e	15,211.60	32,029.89	39,584.76	27,955.33
GRI 305-7	Nitrogen oxides (NO _x), sulfur oxides (SO _x) and other significant air emissions					
DJSI 2.3.5	Total NO _x emissions	Ton	12,433	7,536	7,448	7,019
DJSI 2.3.6	Total SO _x emissions	Ton	6,999	5,730	5,708	3,854
DJSI 2.3.7	Total VOC emissions	Ton	2,364	4,287	3,253	3,360
	Total PM emissions	Ton	915	1,137	1,217	1,283

Waste Water Quality

GRI 306-1	Waste generation and significant waste-related impacts					
	Total water discharge volume	m ³	49,520,229	46,907,077	44,941,189	45,086,132
DJSI 2.3.4	COD in treated wastewater discharged	Ton	24,765	8,272	3,125	2,793
	BOD in treated wastewater discharged	Ton	2,735	3,005	973	853

Standard Requirements		Unit	2021	2022	2023	2024
GRI 306-1	TSS in treated wastewater discharged	Ton	1,860	651	636	760
	Oil and grease in treated wastewater discharged	Ton	243	995	84	69

Solid Waste

GRI 306-3	Total weight of waste generated	Ton	427,079	463,913	463,310	455,936
	- Waste generated (total hazardous waste)	Ton	140,010	156,012	148,303	129,155
	- Waste generated (total non-hazardous waste)	Ton	287,069	307,901	315,007	326,780
GRI 306-4	Total waste (hazardous + non-hazardous) diverted from disposal	Ton	225,344	117,629	113,901	221,192
	Total waste (hazardous + non-hazardous) diverted from disposal onsite	Ton	-	-	-	2,100
	Total waste (hazardous + non-hazardous) diverted from disposal offsite	Ton	-	-	-	219,092
	Total hazardous waste diverted from disposal by recovery option					
	- Reuse	Ton	47,897	0	0	0
	- Recycling	Ton	2,931	53,083	46,477	38,568
DJSI 2.3.3	Total hazardous waste recycled/reused	Ton	50,828	53,083	46,477	38,568
	Total non-hazardous waste diverted from disposal by recovery option					
	- Reuse	Ton	82,289	1,560	1,378	1,649
	- Recycling	Ton	92,227	62,986	66,046	80,127
DJSI 2.3.2	Total non-hazardous waste recycled/reused	Ton	174,516	64,546	67,424	81,776
GRI 306-5	Waste directed to disposal					
DJSI 2.3.3	Total hazardous waste disposed	Ton	89,183	102,929	101,826	90,587
	- Incineration (with energy recovery)	Ton	71,709	84,128	85,726	74,839
	- Incineration (without energy recovery)	Ton	7,435	6,872	6,083	4,073
	- Landfilled	Ton	6,557	5,440	3,804	4,864
	- Others	Ton	0	0	0	0
	▪ Composting	Ton	0	0	0	0
	▪ Deepwell injection	Ton	0	0	0	0
	- Unknown disposal methods	Ton	3,482	6,489	6,213	6,811
	Total non-hazardous waste disposed	Ton	112,553	243,355	247,583	244,529
	- Incineration (with energy recovery)	Ton	6,341	10,945	18,607	29,319
	- Incineration (without energy recovery)	Ton	1,135	583	1,260	1,726
DJSI 2.3.2	- Landfilled	Ton	61,155	96,403	79,761	98,657
	- Others	Ton	0	0	0	0
	▪ Composting	Ton	0	0	0	0
	▪ Deepwell injection	Ton	0	0	0	0
	- Unknown disposal method	Ton	43,922	135,424	147,955	114,827
	Total waste reused, recycled and incinerated with energy recovery	Ton	303,394	212,702	218,235	224,502
	Total waste reused, recycled and incinerated without energy recovery	Ton	123,685	251,212	245,075	230,301

Return on Environmental Investments

DJSI 2.1.3	Total expenses	\$	46,700,000	11,509,500	13,333,440	1,931,866
	Capital investments	\$	44,700,000	11,275,000	13,072,000	1,893,986
	Operating expenses	\$	2,000,000	234,500	261,440	37,880
	Savings, cost avoidance, income, tax incentives, etc.	\$	14,000,000	4,634,000	3,194,000	2,421,649
	% of operations covered	%	100	100	100	100

Significant Spills

GRI 306-3	Waste generated					
	Total significant spills	Case	52	13	8	9
		Ton	348	23	2.8	0.6
	- Hydrocarbon spills	Case	7	10	5	2
		Ton	35	1	1.3	0.002
	- Chemical spills	Case	29	3	1	5
		Ton	293	21	0.1	0.374
	- Other spills (e.g. wastewater, dewatering)	Case	16	0	2	2
	- Non-hydrocarbon spills	Ton	20	0	1.4	0.270

Environmental Compliance

GRI 2-27	Total number of environmental violations of legal obligations/regulations	Case	33	20	23	16
DJSI 2.1.4	Number of significant violations of legal obligations/regulations (The fine/penalty individually costs more than \$10,000 or equivalent when converted from local currency)	Case	7	4	5	3
	Total number of pending environmental violations	Case	0	0	4	7
	Amount of fines/penalties from significant cases	\$	196,896	121,946	417,000 ¹	585,605
	Environmental liability accrued at year end from significant cases ²	\$	0	19,800	330,500	573,605



Standard Requirements		Unit	2021	2022	2023	2024
Occupational Health & Safety						
GRI 403-9	Work-related injuries					
	Total Recordable Injury Rate (TRIR)	No/Million man-hours	4.90	4.10	3.41	2.99
	Employees	No/Million man-hours	5.97	5.20	4.23	3.38
	Contractors	No/Million man-hours	9.31	1.45	1.53	2.10
	Total Recordable Injuries (not including first aid incidents)	Case	299	301	272	227
	Employees	Case	267	268	235	178
	Contractors	Case	32	33	37	49
DJSI 3.4.4, 3.4.5	Lost Time Injury Frequency Rate (LTIFR)	No/Million man-hours	3.30	2.55	2.44	1.96
	Employees	No/Million man-hours	4.05	3.30	3.02	2.15
	Contractors	No/Million man-hours	1.22	0.80	1.12	1.55
DJSI 3.4.3	Fatalities (all employees and contractors)	Person	2	1	3	4
	Employees	Person	1	0	0	1
	- Male	Person	1	0	0	1
	- Female	Person	0	0	0	0
	Contractors	Person	1	1	3	3
	- Male	Person	1	1	3	3
	- Female	Person	0	0	0	0
	Total Lost Time Injuries	Case	202	188	195	149
	Employees	Case	181	170	168	113
	Contractors	Case	21	18	27	36
GRI 403-10	Work-related ill health					
	Occupational Illness Frequency Rate (OIFR)	No/Million man-hours	0.06	0	0.01	0
	Employees	No/Million man-hours	0.09	0	0.02	0
	- Male	No/Million man-hours	0.03	0	0.02	0
	- Female	No/Million man-hours	0.35	0	0	0
	Contractors	No/Million man-hours	0	0	0	0
	- Male	No/Million man-hours	0	0	0	0
	- Female	No/Million man-hours	0	0	0	0
	Total number of occupational disease cases	Case	4	0	1	0
	Employees	Case	4	0	1	0
	- Male	Case	1	0	1	0
	- Female	Case	3	0	0	0
	Contractors	Case	0	0	0	0
	- Male	Case	0	0	0	0
	- Female	Case	0	0	0	0
	Fatalities (all employees and contractors)	Person	0	0	0	0
	Employees	Person	0	0	0	0
	- Male	Person	0	0	0	0
	- Female	Person	0	0	0	0
	Contractors	Person	0	0	0	0
	- Male	Person	0	0	0	0
	- Female	Person	0	0	0	0
	Near Miss	Case	2,558	2,794	2,478	2,559
	Numbers of operations achieved zero-recordable injuries	Number	49	87	79	83
ESRS	Numbers of days lost to work-related injuries and fatalities from work-related accidents	Day	8,192	5,173	3,501	2,801
Process Safety Events						
DJSI 3.4.6	Process Safety Events					
	Tier 1					
	- No. of events	Case	15	10	15	7
	- Rate	Case/Million man-hours	0.24	0.14	0.19	0.09
	Tier 2					
	- No. of events	Case	21	14	17	6
	- Rate	Case/Million man-hours	0.33	0.19	0.21	0.08

¹ Revised figure to reflect actual amount.

² Fines or penalties not paid yet, including expected fines for cases that are not yet closed. In other words, it can be viewed as ongoing "tally" of outstanding expected fines or penalties, and includes violations that occurred in other years.

Global Human Resources Data

Standard Requirements		Unit	2021	2022	2023	2024
Employees						
GRI 2-7, CSRD	Employees					
	Total employees by gender	Person	25,760	30,201	29,056	28,154
	- Male	Person	20,261	23,102	22,466	21,561
	- Female	Person	5,499	7,099	6,590	6,593
	Total employees by region	Person	-	-	-	28,154
	- North America	Person	-	-	-	5,195
	- South America	Person	-	-	-	1,889
	- Europe	Person	-	-	-	6,463
	- Africa	Person	-	-	-	1,006
	- Asia	Person	-	-	-	13,575
	- Oceania	Person	-	-	-	26
	Total permanent employees by gender	Person	23,666	25,740	26,093	25,847
	- Male	Person	18,425	19,397	19,763	19,454
	- Female	Person	5,241	6,343	6,330	6,393
	Total permanent employees by region	Person	-	-	-	25,847
	- North America	Person	-	-	-	5,092
	- South America	Person	-	-	-	1,886
	- Europe	Person	-	-	-	6,252
	- Africa	Person	-	-	-	1,005
	- Asia	Person	-	-	-	11,586
	- Oceania	Person	-	-	-	26
	Total temporary employees by gender	Person	2,094	4,461	2,963	2,307
	- Male	Person	1,836	3,705	2,703	2,107
	- Female	Person	258	756	260	200
	Total temporary employees by region	Person	-	-	-	2,307
	- North America	Person	-	-	-	103
	- South America	Person	-	-	-	3
	- Europe	Person	-	-	-	211
	- Africa	Person	-	-	-	1
	- Asia	Person	-	-	-	1,989
	- Oceania	Person	-	-	-	-
Human Rights Grievances						
GRI 2-25	Processes to remediate negative impacts					
	Total number of grievances about human rights through formal grievance process	Case	22	33	35	57
	Number of grievances about human rights (related to employees) through formal grievance process	Case	12	29	33	56
	Number of grievance about human rights (not related to employees) through formal grievance process	Case	0	1	2	1
	Total number of human rights grievances addressed in this reporting period	Case	7	21	4	60
	Number of human rights grievances (related to employees) addressed during the reporting period	Case	7	15	4	58
	Number of human rights grievances (not related to employees) addressed during the reporting period	Case	1	0	0	2
	Total number of human rights grievances filed in previous reporting period resolved during the reporting period	Case	1	3	3	3
	Number of human rights grievances (related to employees) filed in previous reporting period resolved during the reporting period	Case	1	4	3	3
	Number of human rights grievances (not related to employees) filed in previous reporting period resolved during the reporting period	Case	0	0	0	0
Collective Bargaining						
GRI 2-30	Collective bargaining agreements					
	Total employees covered by collective bargaining agreements	Person	9,914	10,900	10,580	12,390
DJSI 3.1.7	Percentage of employees represented by an independent trade union or covered by collective bargaining agreements	%	41.89	42.35	40.55	47.94
	Number of consultations/negotiations with trade unions over organizational changes	Number	903	791	704	785
Labor Practice Grievance						
GRI 103-2	The management approach and its components					
	Total number of grievances about for labor practices filed through formal grievance mechanism	Case	65	364	58	150



Standard Requirements		Unit	2021	2022	2023	2024
	Total number of grievances about labor practices addressed during the reporting period	Case	58	73	34	116
	Total number of grievances about labor practices resolved during the reporting period	Case	60	37	9	68
	Total number of grievances about labor practices filed prior to reporting period that were resolved during the reporting period	Case	7	91	9	14
Employment						
GRI 401-1	New employee hires and employee turnover					
DJSI 3.3.4	Total new employee hires	Person	3,295	3,999	2,863	2,418
	- Male	Person	2,334	2,446	1,911	1,733
	- Female	Person	961	1,553	952	685
	Total new employee hires rate	New hire rate (%)	12.79	13.24	9.85	8.59
	- Male	New hire rate (%)	11.52	10.59	8.51	8.04
	- Female	New hire rate (%)	17.48	21.88	14.45	10.39
	Total new employee hires rate by age	Person	-	-	2,863	2,418
	Over 50 years old	Person	-	-	210	248
	- Male	Person	-	-	144	186
	- Female	Person	-	-	66	62
	30-50 years old	Person	-	-	1,371	1,244
	- Male	Person	-	-	918	864
	- Female	Person	-	-	453	380
	Below 30 years old	Person	-	-	1,282	926
	- Male	Person	-	-	849	683
	- Female	Person	-	-	433	243
	Total new employee hires rate by age	New hire rate (%)	-	-	9.85	8.59
	Over 50 years old	New hire rate (%)	-	-	2.95	3.33
	- Male	New hire rate (%)	-	-	2.54	3.14
	- Female	New hire rate (%)	-	-	4.59	4.05
	30-50 years old	New hire rate (%)	-	-	8.96	8.30
	- Male	New hire rate (%)	-	-	8.09	7.85
	- Female	New hire rate (%)	-	-	11.48	9.53
	Below 30 years old	New hire rate (%)	-	-	34.84	27.25
	- Male	New hire rate (%)	-	-	31.04	27.08
	- Female	New hire rate (%)	-	-	45.82	27.74
	Percentage of open positions filled by internal candiadtes	%	-	-	4.50	4.34
	Average hiring cost/FTE	\$	-	-	752.83	554.90
GRI 401-1, DJSI 3.3.5	Employee turnover					
	Total employee turnover	Person	2,703	3,529	3,540	3,593
	- Male	Person	1,951	2,392	2,396	2,512
	- Female	Person	752	1,137	1,144	1,081
	Total employee turnover rate	Turnover rate (%)	11.42	13.71	13.57	13.90
	Total employee turnover rate by gender					
	- Male	Turnover rate (%)	-	-	12.12	12.91
	- Female	Turnover rate (%)	-	-	18.07	16.91
	Total employee turnover by age	Person	-	-	3,540	3,593
	Over 50 years old	Person	-	-	807	856
	- Male	Person	-	-	587	650
	- Female	Person	-	-	220	206
	30-50 years old	Person	-	-	1,691	1,897
	- Male	Person	-	-	1,131	1,227
	- Female	Person	-	-	560	670
	Below 30 years old	Person	-	-	1,042	840
	- Male	Person	-	-	678	635
	- Female	Person	-	-	364	205
	Total employee turnover rate by age	%	-	-	13.57	13.90
	Over 50 years old	%	-	-	11.34	11.48
	- Male	%	-	-	10.34	10.97
	- Female	%	-	-	15.29	13.46
	30-50 years old	%	-	-	11.06	12.65
	- Male	%	-	-	9.96	11.15
	- Female	%	-	-	14.19	16.81

Standard Requirements		Unit	2021	2022	2023	2024
DJSI 3.3.5	Below 30 years old	%	-	-	28.32	24.72
	- Male	%	-	-	24.79	25.18
	- Female	%	-	-	38.52	23.40
	Voluntary employees turnover	Person	2,149	2,916	1,723	2,740
	Voluntary employees turnover rate	%	9.08	11.33	6.60	10.60
	Number of employees laid off	Person	148	243	299	1,122
	Number of negotiations	Person	37	50	28	176
GRI 401-3	Parental leave					
	Number of employees taken parental leave	Person	899	781	602	674
	- Male	Person	584	266	408	454
	- Female	Person	315	515	194	220
	Number of employees return to work after parental leave	Person	821	715	557	582
	- Male	Person	534	261	408	450
	- Female	Person	287	454	149	132
	Return to work rate (after parental leave)	%	91.32	91.55	92.50	86.35
	- Male	%	91.44	98.12	100	99.12
	- Female	%	91.11	88.16	76.80	60.00
	Retention to work (after parental leave and still employed for the next 12 months)	Person	720	669	500	640
	- Male	Person	497	232	363	497
	- Female	Person	223	437	137	143
Employees Training ³						
GRI 404-1	Average hours of training per year per employee					-
	Total training hours provided to employee	Hour	708,106	789,313	831,855	597,519
	- Male	Hour	552,323	591,984	632,210	448,139
	- Female	Hour	155,783	197,328	199,645	149,379
DJSI 3.3.1	Total average training	Hours/Employee	29.92	30.66	31.88	23.11
	- Male	Hours/Employee	29.98	30.52	31.99	75.00
	- Female	Hours/Employee	29.72	31.11	31.54	25.00
DJSI 3.3.1	Average amount spent per FTE on training and development	\$	101.44	139.47	117.83	85.80
	Mandatory course	Hour	301,340	398,704	498,503	283,940
	Non-mandatory course	Hour	406,766	390,609	333,352	313,579
	Total amount spent	\$	2,400,752	3,590,000	3,074,554	2,217,665
	- Mandatory course	\$	708,545	1,110,162	1,108,115	1,049,484
	- Non-mandatory course	\$	1,692,207	2,479,838	1,966,439	1,168,180
	- Region - Asia	\$	1,024,422	1,073,187	847,622	385,347
	- Region - EMEA	\$	611,035	1,105,987	1,279,529	594,438
	- Region - Americas	\$	765,295	1,410,825	947,403	1,237,878
Performance Appraisal						
GRI 404-3	The percentage of employees receiving regular performance/ performance appraisals and career development reviews					
	Total employees receiving performance appraisal reviews	Person	15,959	16,549	17,694	19,450
	Percentage of employee receiving regular performance reviews	%	67.43	64.29	67.81	75.05
	Total employees receiving career development reviews	Person	7,641	7,803	9,333	7,894
Percentage of Employees - Race/Ethnicity						
GRI 405-1, DJSI 3.1.5	Diversity of governance bodies and employees					
	Asian					
	- Percentage of total workforce	%	18.04	4.65	3.05	3.06
	- Percentage of total management workforce	%	15.00	8.77	11.68	11.14
	Black or African American					
	- Percentage of total workforce	%	12.15	14.75	19.37	16.46
	- Percentage of total management workforce	%	14.13	9.77	10.54	10.00
	Hispanic or Latino					
	- Percentage of total workforce	%	9.57	12.50	14.47	17.64
	- Percentage of total management workforce	%	7.36	7.78	9.97	11.43
	White					
	- Percentage of total workforce	%	30.04	62.40	59.68	61.59
	- Percentage of total management workforce	%	38.72	68.71	64.68	66.00
	Indigenous of Native					
	- Percentage of total workforce	%	10.70	1.39	0.83	1.25
	- Percentage of total management workforce	%	9.97	0.83	0.28	1.43



Standard Requirements		Unit	2021	2022	2023	2024
DJSI 3.1.4	Others					
	- Percentage of total workforce	%	19.49	4.31	2.60	0.00
	- Percentage of total management workforce	%	14.81	4.10	2.85	0.00
	Percentage women in management positions in revenue-generating functions (e.g. sales) as % of all such managers	%	25.30	25.40	16.73	18.78
	Total STEM position	Person	-	-	1,909 ⁴	1,825
	Percentage women in STEM position	%	-	-	17.86 ⁵	17.97

Employees by Level ³						
GRI 405-1	Total employee by level	Person	23,666	25,740	26,093	25,847
	Executive management	Person	117	127	129	128
	- Male	Person	102	111	113	112
	- Female	Person	15	16	16	16
	Senior management	Person	620	674	684	678
	- Male	Person	503	547	555	550
	- Female	Person	117	127	129	128
	Middle management	Person	2,515	2,735	2,732	2,706
	- Male	Person	1,955	2,126	2,115	2,095
	- Female	Person	560	609	617	611
	Junior management	Person	9,127	9,927	9,971	9,877
	- Male	Person	5,476	5,956	5,734	5,680
	- Female	Person	3,651	3,971	4,237	4,197
	Non - management ³	Person	11,287	12,277	12,577	12,458
	- Male	Person	10,470	11,388	11,246	11,140
	- Female	Person	817	888	1,331	1,318

Employees by Age ³						
GRI 405-1	Diversity of governance bodies and employees					
	Total employees by age	Person	23,666	25,740	26,093	25,847
	Over 50 years old	Person	6,118	6,430	7,117	7,454
	- Male	Person	4,927	5,077	5,678	5,923
	- Female	Person	1,191	1,353	1,439	1,531
	30-50 years old	Person	13,962	15,416	15,296	14,995
	- Male	Person	10,683	11,472	11,350	11,009
	- Female	Person	3,279	3,944	3,946	3,986
	Below 30 years old	Person	3,586	3,894	3,680	3,398
	- Male	Person	2,815	2,848	2,735	2,522
	- Female	Person	771	1,046	945	876

Remuneration Ratio of Women to Men						
GRI 405-2	Ratio of basic salary and remuneration of women to men					
	Strategic (base salary only)	Ratio	0.965	0.966	0.967	0.968
	Strategic (base salary + other cash incentives)	Ratio	0.958	0.959	0.960	0.961
	Managerial (base salary only)	Ratio	0.951	0.953	0.955	0.957
	Managerial (base salary + other cash incentives)	Ratio	0.955	0.957	0.959	0.961
	Supervisory and operational	Ratio	0.937	0.940	0.942	0.945

Employee Engagement						
DJSI 3.3.9	Employee participation rate	%	82.87	84.06	84.06	88.36
	Employee satisfaction score	%	73.89	73.31	73.31	73.91
	- Male	%	74.54	74.04	74.04	74.32
	- Female	%	77.40	77.28	77.28	75.48
	Data coverage of employee satisfaction survey	%	82.87	84.06	84.06	88.36
	Employee Net promoter score (NPS)	%	76.20	75.85	75.85	75.01

Non-discrimination						
GRI 406-1	Incidents of discrimination and corrective actions taken					
	Total number of incidents of discrimination and corrective actions taken	Case	12	17	2	36
	Number of incidents of discrimination and corrective actions taken regarding employees	Case	10	16	2	32
	Number of incidents of discrimination and corrective actions taken to all excluding employee	Case	2	1	0	4

Standard Requirements		Unit	2021	2022	2023	2024
Human Capital Return on Investment (HC ROI)						
DJSI 3.3.3	Total revenue	\$	14,629,000,000	18,713,000,000	15,555,000,000	15,358,000,000
		THB	472,857,207,000	665,577,927,000	546,549,164,000	545,896,127,000
	Total operating expenses	\$	13,543,614,607	17,314,417,736	15,363,230,256	14,986,617,353
		THB	437,773,995,198	615,833,605,725	539,811,035,214	532,695,427,145
	Total employee-related expenses	\$	1,161,570,769	1,285,033,076	1,365,400,437	1,418,682,864
		THB	37,545,772,750	45,705,640,509	47,975,472,026	50,426,714,485
Human Capital Return on Investment (HC ROI)		-	1.93	2.09	1.14	1.26

Rights of Indigenous People					
GRI 411-1	Incidents of violations involving rights of indigenous people	Case	0	0	0

Human Rights Assessment					
GRI 412-1	Operations that have been subject to human rights reviews or impact assessments				
	Total number of operations	Number	124	147	148
	Total number of operations that have been subject to human rights reviews or impact assessments	Number	124	147	148
	Percentage of operations that have been subject to human rights reviews or impact assessments	%	100	100	100

Human Rights Integration					
GRI 412-2	Employee training on human rights policies or procedures				
	Total number of hours of employees training on human rights policies or procedures concerning aspects of human rights that are relevant to operations	Hour	22,622	28,173	15,676
	Total number of employees trained in human rights policies or procedures concerning aspects of human rights that are relevant to operations	Person	16,673	10,786	11,185
	Percentage of employees trained in human rights policies or procedures concerning aspects of human rights that are relevant to operations	% of total employees	64.70	35.70	38.50

³ Does not include temporary employees. Appropriate compliance training on Human Rights, Health & Safety has always been given to temporary employees.

⁴ In 2023, we collected STEM-related positions categorized by department: R&D, IT, and Engineering. However, since the structure in SF differs, these positions may not fully align with last year's departmental classifications.

⁵ To ensure consistency, we rechecked the 2024 data using the same departmental breakdown as 2023 and conducted a review of position keywords related to R&D, IT, and Engineering. We also expanded the scope to include EHS and Digital roles, so the total number of STEM positions was 1,909. And following the changes, the percentage of women in STEM positions should be adjusted to 17.86% in 2023.

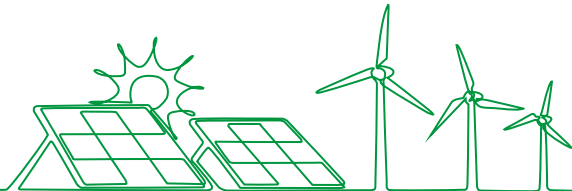
⁶ Manufacturing locations





Global CSR Data

Standard Requirements		Unit	2021	2022	2023	2024
Local Community Engagement						
GRI 413-1	Operations with local community engagement, impact assessments and development programs					
	Percentage of operations with implemented local community engagement, impact assessments, and development programs	%	91	78	78	79
	Total number of operations with any of the below local community engagement, impact assessments and developed programs (e.g. if site A has SIA and EIA, and site B has EIA the total number of sites with programs is 2)	Number	47	43	41	45
	Number of operation with implemented social impact assessment including gender assessment	Number	12	11	27	30
	Number of operation with implemented environmental impact assessment	Number	38	33	41	45
	Number of operation with implemented public disclosure of results of environmental and social impact assessment	Number	24	24	23	37
	Number of operation with implemented local community development programs	Number	23	19	32	33
	Number of operation with implemented stakeholder engagement plans	Number	24	22	26	33
	Number of operation with implemented broad base local community consultation committees and processes	Number	22	19	26	27
	Number of operation with implemented work councils, occupational health and safety committees and other employee representation bodies to deal with impacts	Number	39	35	37	46
	Number of operation with implemented formal local community grievance process	Number	25	22	29	42
Social Grievances						
GRI 413-1	Operations with local community engagement, impact assessment and development programs					
	Number of grievances regarding society received through formal grievance process	Number	0	2	4	4
	Total number of societal grievances addressed during this reporting period	Number	0	2	4	4
	Total number of societal grievances resolved during this reporting period	Number	0	2	4	4
	Total number of societal grievances resolved in the previous reporting period	Number	1	2	2	4
Total Philanthropic Activities						
GRI 413-1	Total philanthropic activities	Number	450	590	529	527
	Charitable donations	Number	249	205	220	161
	Community investments	Number	161	304	284	295
	Commercial initiatives in the community	Number	40	81	25	71
Philanthropic Contributions						
GRI 413-1	Total cash contributions	\$	1,405,621	1,708,752	2,773,633	2,213,203
	Charitable donations	\$	743,123	377,456	461,106	252,684
	Community investments	\$	751,889	1,654,785	2,437,869	1,768,456
	Commercial initiatives in the community	\$	157,982	304,832	327,947	192,063
	Total time contribution					
	Time: Estimate employee costs	\$	210,969	560,385	390,181	223,510
	Time: Employee volunteering during paid working hours	Hours	9,493	22,864	15,126	8,843
	Total in-kind giving	\$	200,981	472,446	327,693	426,350
	Total management overheads	\$	46,392	155,874	125,597	69,097



Indorama Ventures is honored to be listed on

THE DOW JONES SUSTAINABILITY
WORLD INDEX

for the 6th consecutive year and

THE DOW JONES SUSTAINABILITY
EMERGING
MARKETS INDEX

for the 8th consecutive year





About this Report

Management Responsibility Statement

The 2024 Sustainability Report reflects the ongoing dedication of Indorama Ventures to adhering to Environmental, Social, and Governance (ESG) standards while outlining our comprehensive strategy for generating value that considers both tangible and intangible, as well as financial and non-financial aspects of the business. This includes identifying stakeholders, recognizing critical issues, and adhering to the International Integrated Reporting (IR) Framework.

In alignment with the 2021 Global Reporting Initiative (GRI) Standards, International Financial Reporting Standards (IFRS) S1 and S2, and the Corporate Sustainability Reporting Directive (CSRD), we detail our sustainability initiatives and their links to our financial performance, assessing our position as a sustainable chemical company within the reporting scope. The Chief Sustainability Officer (CSO) is responsible for preparing our annual Sustainability Report, following these reporting standards to determine its topics, content, and quality. We have implemented robust internal controls and verification processes to uphold data accuracy and reliability while reaffirming our unwavering commitment to ethical business conduct, responsible decision-making, and long-term value creation for all of our stakeholders.

Additional information is available through links in the relevant sections. Throughout this report, terms such as “us,” “our,” and “the Company” refer to Indorama Ventures.

Our Approach and Objective

We are pleased to present our 14th Sustainability Report for 2024, continuing over a decade of sharing our sustainability initiatives, milestones, roadmap and future commitments to ensure both transparency, and stakeholder engagement.

We are expanding the scope of our reporting to further improve transparency and align with global best practices by integrating double materiality, capturing both financial and impact-driven material concerns. Our approach adopts an integrated reporting framework in line with GRI, IFRS S1 and S2, and CSRD, providing a holistic view of our sustainability performance.

Additionally, our reporting incorporates insights from the UN Global Compact (UNGC), the 56-1 One Report, and the AA1000 Assurance Standard to enhance regional and global relevance. To ensure broader accountability, we are aligning our disclosures with leading sustainability benchmarks including the Carbon Disclosure Project (CDP), Dow Jones Sustainability Indices (DJSI), Morgan Stanley Capital International (MSCI), and Sustainalytics. This comprehensive reporting reflects our commitment to responsible business practices and long-term value creation.

Companies and Subsidiaries Covered

This report presents consolidated data from entities where Indorama Ventures holds a majority stake (over 50%) and from joint ventures under our management control. Entities in which we hold a minority stake or lack management control are excluded. The data covers 150 operational sites (all manufacturing sites which reported production or consumption in 2024) spanning our global operations, subsidiaries, and manufacturing facilities across 33 countries. Exceptions and exclusions are outlined separately.

Data Methodology

Data Coverage

In 2024, we expanded our data verification coverage from 149 to 150 operational sites. Our data reporting for operations is based on 100% of the data, unless otherwise specified (for example, in an 80%-owned operation, we report the full data set). The information presented in this report is specific to the Company, with the metric system and US dollars used as the standard units for reporting unless stated otherwise.

It is important to acknowledge the inherent limitations in measuring and reporting non-financial information, which introduces a degree of uncertainty. Variations in measurement techniques and data selection criteria may exist across Indorama Ventures and its subsidiaries. However, we remain committed to presenting the most comprehensive and accurate metrics within the scope of our reporting capabilities.

Changes in Size, Structure, Ownership, and Developments

A list of newly acquired or incorporated entities and other relevant developments can be found in the 2024 Annual Report on pages 22-23 and on our website under “Investor Relations > Newsroom.”

In 2024, we made the strategic decision to close sites in Australia, Canada, Portugal, and the Netherlands as part of efforts to optimize our global asset footprint and adapt our manufacturing lines to evolving market conditions.

Exceptions

The content of the 2024 Sustainability Report was compiled by incorporating data on environmental, safety, governance, and human resources from all entities, including joint ventures where we hold a minimum 50% share and exercise management control.

However, there are exceptions where environmental and safety information are excluded:

1. Joint ventures with a 50% or lower shareholding and no management control:
 - ES Indorama Ventures Rayong Company Limited, Thailand
 - ES Indorama Ventures (Suzhou) Co., Ltd., China
 - Shenma-PHP (Pingdingshan) Air Bag Yarn Manufacturing Co., Ltd., China
 - Corpus Christi Polymers LLC, United States
 - Huvis Global Corporation, United States
 - Toyobo Indorama Advanced Fibers Company Limited, Thailand
2. Sales and corporate offices
3. Human resources information, excluding human rights and employee engagement, also excludes joint ventures with a 50% or lower shareholding and no management control.
4. Environmental and safety data do not include any entities acquired, or operations commenced on or after 1 July 2024.

Reporting Period

This report covers activities that took place from 1 January 2024 to 31 December 2024. In some cases, it also includes significant global events that occurred after 31 December 2024.

Reporting Guidelines

We are adopting the IIRC Integrated Reporting (<IR>) framework and aligning our disclosures with the GRI Standards, IFRS S1 and S2, and the CSRD, to provide a comprehensive view of our sustainability performance. Additionally, we incorporate insights from the UNGC and 56-1 One Report. Our reporting is aligned with leading sustainability benchmarks, including CDP, DJSI, MSCI, and Sustainalytics. Quantitative environmental data is collected through meter readings, production system outputs, detailed accounting models, and, where necessary, estimations based on clearly defined methodologies. Details of GRI Index, IFRS, and CSRD are available on our website.



FOR MORE
INFORMATION

Double Materiality Assessment

Indorama Ventures conducts biennial materiality assessments, complemented by annual reviews, to identify and prioritize the ESG topics most relevant to our business and stakeholders. In 2024, the assessment was conducted in alignment with the EU CSRD and the European Sustainability Reporting Standards (ESRS), and further aligned with key frameworks such as the GRI Standards 2021, IFRS Sustainability Disclosure Standards, and DJSI. This process incorporates input from external stakeholders, internal engagement across business units, and analysis of forward-looking trends. It is based on the principle of double materiality, addressing both:

- Impact Materiality – the Company’s actual and potential impacts on people and the environment; and
- Financial Materiality – sustainability-related risks and opportunities that may influence our business performance and enterprise value.

The results of the assessment are integrated into our enterprise risk management framework, helping guide strategic decision-making and contributing to long-term value creation.

Sustainability Report Assurance and GHG Verification

External verification is a critical component in enhancing the credibility and transparency of our disclosures. To ensure compliance with the GRI Standards 2021, IIRC Integrated Reporting (<IR>), and the AA1000 Assurance Standard v3, we engaged TÜV India Private Limited as our independent external auditor. The Independent Assurance Statement issued by TÜV India Private Limited can be found on pages 172-177 of this report, confirming that the information presented in our 2024 Sustainability Report has undergone rigorous verification.

TÜV NORD CERT GmbH conducted third-party verification of our Scope 1, 2, and 3 greenhouse gas (GHG) emissions across nine categories, in accordance with the GHG Protocol, ISO 14064-1, and ISO 14064-3. Prior to publication, the final report undergoes a thorough review by our senior leadership, including the Chairman of the ESG Council, Chief Sustainability Officer, and business executives.

Greenhouse Gas (GHG) Accounting

We follow the Greenhouse Gas Protocol on Corporate Accounting and Reporting, developed by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD). Our systematic approach to GHG accounting is consistently applied across all our global operations ensuring strict compliance with internationally recognized standards.

Forward-Looking Statements

This 2024 Sustainability Report includes forward-looking statements that reflect projections for the future performance of Indorama Ventures. These statements reflect our long-term vision and use terms such as “aim,” “expect,” “goal,” and “plan,” and are subject to various risks, including regulatory changes, market shifts, and economic uncertainties. We do not commit to updating these statements as new information becomes available. Readers are advised to interpret them with caution and investors should not rely solely on them for decision-making.

Feedback

We value your feedback and encourage you to share your comments or questions related to this report at: sustainability@indorama.net



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INDEPENDENT ASSURANCE STATEMENT

To
The Directors and Management
Indorama Ventures Public Company Limited,
Bangkok, Thailand

Indorama Ventures Public Company Limited (hereafter 'Indorama Ventures') commissioned TUV India Private Limited (TUVI) to conduct independent external assurance of non-financial ESG indicators disclosed in Indorama Ventures' Sustainability Report 2024 (hereinafter 'the Report') for the period January 01, 2024, to December 31, 2024. This engagement comprises a "limited assurance" of Indorama Ventures' sustainability information for the applied reporting period. The Report is developed based on GRI Standards 2021, IIRC Integrated Reporting (<IR>), and AA1000 Assurance Standard V.3 (Type 1, Moderate Level).

Management's Responsibility

Indorama Ventures has developed the Report content and is responsible for the identification of materiality through the double materiality assessment, corresponding ESG issues, identifying, establishing, and reporting performance management, data management, and quality. The management team at Indorama Ventures is accountable for the accuracy of the information provided in the Report and the process of collecting, analysing, and reporting that information in both web-based and printed Report. This includes the maintenance and integrity of the company's website. Furthermore, Indorama Ventures' management team takes responsibility for the accurate preparation of the Report in reference to the applied criteria of GRI Standards 2021 and IIRC Integrated Reporting (<IR>) framework. They ensure that the Report is free of any intended or unintended material misstatements, so stakeholders can trust the information provided. Indorama Ventures will be responsible for archiving and reproducing the disclosed data for the stakeholders upon request.

Scope and Boundary

The assurance engagement encompasses a review of the evidence (on a sample basis) for identified ESG indicators. Additionally, the verification team performed

- Verification of the application of the Report content according to material topics identified based on the double materiality, and principles as mentioned in the GRI Standards 2021, IIRC Integrated Reporting (<IR>), and the quality of information presented in the Report over the reporting period;
- Review of the policies, initiatives, practices, and performance described in the Report;
- Review of the ESG disclosures made in the Report against the requirements of the GRI Standards 2021, IIRC Integrated Reporting (<IR>);
- Verification of the reliability of the GRI Standards disclosure on environmental and social topics;
- The specified information was selected based on the materiality determination and needs to be meaningful to the intended users.

TUVI has verified the below-mentioned disclosures given in the report.

Topic	Indicator	GRI Disclosure
Energy	Energy consumption within the organization covering - Total renewable and non-renewable energy consumption	302-1
	Energy intensity	302-3
	Reduction of energy consumption	302-4
Water and effluents ¹ (with and without water stress)	Water withdrawal (from municipal supplies, lakes, river, sea , ground water, third-party water, etc.)	303-3
	Water discharge (surface water, ground water, seawater, third-party water, etc., TDS, BOD, COD, TSS, and oil & grease as applicable)	303-4
	Total water consumption from all areas (Water withdrawal-Water discharge) and water consumption from all areas with water stress (Total water withdrawals – Total water discharges)	303-5
Emissions	Direct (Scope 1) GHG emissions	305-1
	Energy indirect (Scope 2) GHG emissions	305-2
	GHG emissions intensity	305-4
	Emissions of ozone-depleting substances (ODS)	305-6
	Nitrogen oxides (NOx)/Sulphur oxides (SOx) and other significant air emissions (Volatile Organic Compounds (VOCs), particulate matters (PM) and other emissions as applicable)	305-7

¹ “Out of total 150 reported sites, 98 sent waste water to external treatment facilities, and 52 treated it on-site. No liquid discharge for 6 sites.

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Waste	Waste generated	306-3
	Waste diverted from disposal	306-4
	Waste directed to disposal	306-5
Occupational health and safety	Work-related injuries -covering LTIFR (employees and contractors), number of days lost to injuries, accidents, fatalities (for employees and contractor), near-misses	403-9
	Work-related ill health- covering OIFR (employees and contractors), total of occupational disease cases, fatalities (employees and contractors)	403-10
Training and education	Average hours of training per year per employee	404-1
Process Safety Events (Tier 1 and 2): As per the American Petroleum Industry's recommended Practice API RP 754		

The reporting boundary for the above topics cover 150 operating sites across 33 countries in 2024. An onsite visits and remote verification (via web-based video conference calls) was conducted as per below schedule. The assurance encompassed

- IPI – Rayong (PET & Fibers) – Thailand, onsite site visit- 02 – 03 Dec. 2024, remote assessment - 10 –11 Feb. 2025,
- IRPL – PTA – Thailand, onsite site visit- 04 Dec 2024, remote assessment - 12 –13 Feb 2025,
- AsiaPET – PET – Thailand, remote assessment - 25 –26 Nov. 2024 and 6 –7 Feb. 2025,
- PTIVI – Indonesia, remote assessment - 14 –15 Nov 2024 and 24 25 Feb. 2025,
- IDPI Egypt, remote assessment – 23 –24 Dec. 2024 and 26 27 Feb. 2025.

The assurance activities were done together with a desk review for all other Indorama Ventures sites within the reporting boundary.

Our Responsibility

TUVI's responsibility as per the assurance engagement is to perform independent assurance and to express a conclusion based on the work performed. We conducted our engagement in reference to the AA1000 Assurance Standard V.3 for identified non-financial ESG indicators. Our engagement did not include an assessment of the adequacy or effectiveness of Indorama Ventures' strategy or management of sustainability-related issues or the sufficiency of the Report against the principles of GRI Standards 2021, IIRC Integrated Reporting (<IR>), and AA1000 Assurance Standard V.3, other than those mentioned in the scope of the assurance. The data is verified on a sample basis, the responsibility for the authenticity of data lies with the reporting organisation. The reporting organisation is responsible for archiving the related data for a reasonable period of time. TUVI does not take any liability or co-responsibility 1) for any damages in the case of erroneous data reported. 2) for any decision a person or entity would make based on this assurance statement. This assurance engagement is based on the assumption that the data and information provided to TUVI by Indorama Ventures are complete and true.

Verification Methodology

TUVI adopted a risk-based approach, focusing on verification efforts on issues of high material relevance to Indorama Ventures business and its stakeholders. TUVI has verified the statements and claims made in the Report and assessed the robustness of the underlying data management system, information flows, and controls. In doing so,

- TUVI reviewed the approach adopted by Indorama Ventures for the stakeholder engagement and materiality determination process (based on the principle of double materiality and the requirements of the GRI Standards).
- TUVI verified the disclosures and claims made in the Report and assessed the robustness of the data management system, information flow, and controls;
- TUVI examined and reviewed the documents, data, and other information made available by Indorama Ventures for the reported disclosures, including the disclosure on management approach and performance disclosures;
- TUVI conducted interviews with key representatives, including data owners and decision-makers from different functions of the Indorama Ventures, during the remote assessments;
- TUVI performed sample-based reviews of the mechanisms for implementing the ESG related policies, as described in the Indorama Ventures Report;
- TUVI verified sample-based checks of the processes for generating, gathering, and managing the quantitative data and qualitative information included in the Report for the reporting period.

The Report was evaluated against the following criteria: adherence to the principles of stakeholder inclusiveness, materiality, responsiveness, completeness, neutrality, relevance, sustainability context, accuracy, reliability, comparability, clarity, and timeliness, as prescribed in the GRI Standards 2021, IIRC Integrated Reporting (<IR>), and AA1000 Assurance Standard V.3 along with AA1000 AccountAbility Principles (2018).

Opportunities for Improvement

The following are the opportunities for improvement reported to Indorama Ventures. However, they are generally consistent with company's management objectives and programs. Indorama Ventures already identified below topics and Assurance team endorse the same to achieve the Sustainable Goals of organization.

- The training hours per year per employee can be increased by setting appropriate target,
- The safety checklist and vendor evaluation attributes 10 % weightage for safety parameters, revisiting the same is requested,
- Indorama Ventures can evaluate the impact of the introduction of green hydrogen to reduce its scope-1 emissions,
- Where possible, Indorama Ventures can make provision for the dedicated monitoring of CoD, rather than modelling CoD values



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from BoD values,

- v. Rain water harvesting can be calculated from the subsequent verifications.

Our Conclusion

In our opinion, based on the scope of this assurance engagement, the ESG disclosures and reference information provide a fair representation of the material topics and meet the general content and quality requirements of the applied standards.

Indorama Ventures appropriately discloses the KPIs and actions that focus on the creation of value over the short, medium, and long term. The selected KPIs disclosed by Indorama Ventures are fairly represented. TUVI did not perform any assurance procedures on the prospective information, such as targets, expectations, and ambitions, disclosed in the Report. Consequently, TUVI draws no conclusion from the prospective information. This assurance statement has been prepared in reference to the terms of our engagement.

Disclosures: TUVI is of the opinion that the reported disclosures generally meet the GRI Standards 2021 reporting requirements. Indorama Ventures refers to universal disclosure to Report contextual information about Indorama Ventures, while the 'Management Approach' is discussed to Report the management approach for each material topic.

Universal Standard: Indorama Ventures followed GRI 1 Foundation 2021: Requirements and Principles for using the GRI Standards; GRI 2: General Disclosures 2021: Disclosures about the reporting organization. General Disclosures were followed when reporting information about an organisation's profile, strategy, ethics and integrity, governance, stakeholder engagement practices, and reporting process, and GRI 3: Material Topics 2021: Disclosures and guidance about the organization's material topics. GRI 3 was selected for management's approach to reporting information about how an organisation manages a material topic.

TUVI is of the opinion that this report has been prepared in reference to the GRI Standards 2021, IIRC Integrated Reporting (<IR>).

Topic-Specific Standards: 300 series (environmental topics), and 400 series (social topics); these topic-specific standards were used to Report information on the organisation's impacts related to environmental and social topics. TUVI is of the opinion that the reported material topics and topic-specific standards that Indorama Ventures used to prepare its Report are appropriately identified and addressed.

Assurance Conclusion: Based on the procedures we have performed; nothing has come to our attention that causes us to believe that the information subject to the limited assurance engagement was not prepared in all material respects. TUVI found the ESG information to be reliable in all respects, with regards to the reporting criteria of the GRI Standards 2021, IIRC Integrated Reporting (<IR>). TUV Nord Cert GmbH has verified the information on GHG Scope 1 and 2 emissions in reference to the GHG Protocol, ISO 14064-1, and ISO 14064-3 to ascertain the GHG reporting process in line with standards.

TUVI confirms that Indorama Ventures has transparently reported major material information pertaining to all its six capitals in line with the <IR> framework, as below

Financial Capital: net worth, capex, investment spent, the economic value generated, gross revenue, etc.

Manufactured Capital: Manufacturing facilities, R & D centers, number of new products launched, new plants, buildings, infrastructure, etc.

Intellectual Capital: Knowledge-based intangibles, including intellectual property, R & D activities, patents, designs registered new product development, etc.

Human Capital: Indorama Ventures' Engineers, technicians, skilling and re-skilling of employees to enhance their competencies, safety performance, capabilities, experience, motivations to innovate, etc.

Social and Relationship Capital: Indorama Ventures' relationship with stakeholders such as customers, business partners, regulators, suppliers, business partners, communities, legislators, policy-makers, and benefits associated with brand and reputation, along with Indorama Ventures' ability to share information to enhance wellbeing.

Natural Capital: Sourcing responsibilities for the majority of renewable and non-renewable environmental resources and processes that provide goods or services. Reporting of circular economy, emissions, water consumption, waste disposal, etc.

Evaluation of the adherence to AA1000 AccountAbility Principles along with other contemporary Principles

Stakeholder Inclusiveness: Stakeholder identification and engagement is carried out by Indorama Ventures on a periodic basis to bring out key stakeholder concerns as material topics of significant stakeholders. In our view, the Report meets the requirements.

Sustainability Context: Indorama Ventures established the relationship between ESG and organizational strategy within the Report, as well as the context in which disclosures are made. In our view, the Report meets the requirements with regards to the sustainability Context.

Materiality: The materiality determination process has been conducted and reviewed based on the principle of double materiality and the requirements of the GRI Standards, considering involvement of internal and external stakeholders in upstream and downstream value chain in identifying the material issues to the Indorama Ventures range of businesses. The Report fairly brings out the aspects, topics, and their respective boundaries of the diverse operations of Indorama Ventures. In our view, the Report meets the requirements.

Responsiveness: TUVI believes that the responses to the material aspects (identified through the Double Materiality study) are fairly articulated in the report, i.e., disclosures on Indorama Ventures policies and management systems, including governance. In our view, the Report meets the requirements.

Impact: Indorama Ventures communicates its sustainability performance through regular, transparent internal and external reporting

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throughout the year, aligned with GRI Standards 2021, IIRC Integrated Reporting (<IR>), TCFD and CDP as part of its policy framework encompassing environmental, social, ethical, and other policies. Indorama Ventures reports on sustainability performance to the Board of Directors, who oversees and monitors the implementation and performance of objectives, as well as progress against goals and targets for addressing sustainability-related issues.

Completeness: The Report has fairly disclosed the selected non-financial KPIs, as per GRI Standards 2021. In our view, the Report meets the requirements.

Reporting Principles for defining report quality: The majority of the data and information were verified by TUVI's assurance team during the remote assessment and found to be fairly accurate. The disclosures related to ESG issues and performances are reported in a balanced manner and are clear in terms of content and presentation. In our view, the Report meets the requirements.

Reliability: The majority of the data and information were verified by TUVI's assurance team and found to be fairly accurate. Some inaccuracies in the data identified during the verification process were found to be attributable to transcription, interpretation, and aggregation errors, and these errors have been corrected. Therefore, in reference to the GRI Standards 2021, IIRC Integrated Reporting (<IR>), TUVI concludes that the ESG data and information presented in the Report are fairly reliable and acceptable. In our view, the Report meets the requirements.

Neutrality: The disclosures related to ESG issues and performance are reported in a neutral tone, in terms of content and presentation. In our view, the Report meets the requirements.

This assurance statement does not endorse any environmental and social claims (related to the product, manufacturing process, packaging, disposal of product etc.) as well as advertisements by the reporting organization. TUVI does not permit use of this statement for Greenwashing or misleading claims.

Our Assurance Team and Independence

TUVI is an independent, neutral third-party providing sustainability services with qualified environmental and social specialists. TUVI states its independence and impartiality and confirms that there is "no conflict of interest" with regard to this assurance engagement. In the reporting year, TUVI did not work with Indorama Ventures on any engagement that could compromise the independence or impartiality of our findings, conclusions, and recommendations. TUVI was not involved in the preparation of any content or data included in the report, with the exception of this assurance statement. TUVI maintains complete impartiality towards any individuals interviewed during the assurance engagement.

For and on behalf of TUV India Private Limited

Manojkumar Borekar

Product Head – Sustainability Assurance Service
TUV India Private Limited



Date: 25-03-2025
Place: Mumbai, India
Project Reference No: 8123012979

Revision:02



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CERTIFICATE

Carbon Footprint 2024

according to GHG Protocol - A Corporate Accounting and Reporting Standard (<https://ghgprotocol.org/>)

The respective Carbon Footprint was verified by TÜV NORD CERT GmbH in accordance with DIN EN ISO 14064-3: 2020 regarding its correctness and completeness for

Indorama Ventures Public Company Ltd.
75/102, Ocean Tower 2
28th Floor, Sukhumvit Soi 19
Bangkok 10110
Thailand



Acting as an independent Certification Body TÜV NORD CERT GmbH has verified the carbon footprint of the organization for the reporting period **01.01.2024 - 31.12.2024**

to be **43,677,023 t Co₂e** (details s. annex).

The level of assurance is reasonable. The carbon footprint includes Scopes 1 and 2 (location-based approach). The calculation of the carbon footprint takes into account emissions from:

Scope 1: Stationary and Mobile Combustion, Fugitive Emissions, process off gas (Feedstock, PET, PTA, Fibers, Olefins), wastewater treatment (anaerobic and aerobic), fire suppression equipment, SF6 in electrical equipment, compressed air, chilled water, cooling water.

Scope 2: Electricity purchased (location and market based), third party electricity and heat, steam purchased, cooling and chilling.

Scope 3: Purchased goods and services (including Nitrogen), Upstream and Downstream transportation, Waste, Business travel, Employee commuting, WTT and T&D related to electricity and fuels, Capital goods and use of sold products.

Biogenic emissions: Biomass, palm shell and bio LPG.

On the basis of the verification, the greenhouse gas statement is materially correct and a fair representation of greenhouse data and information. Furthermore, it can be confirmed that the greenhouse gas statement has been prepared in accordance with the ISO 14064-1 2019 standard.

Certificate Registration No. 44 776 180191-001
Audit Report No. 3539 7103

Dawroth
Certification Body
at TÜV NORD CERT GmbH

Essen, 2025-06-06

TÜV NORD CERT GmbH

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ANNEX

to Certificate Registration No. 44 776 180191-001

for the **Carbon Footprint 2024**

according to GHG Protocol - A Corporate Accounting and Reporting Standard (<https://ghgprotocol.org/>)

Indorama Ventures Public Company Ltd.
75/102, Ocean Tower 2
28th Floor, Sukhumvit Soi 19
Bangkok 10110
Thailand



Summary	t CO ₂ e
A – Greenhouse Gas Inventory	
Scope 1	6,969,854
Scope 2 (Location based)	2,834,108
Scope 1 and 2 (Location based)	9,803,962
Scope 2 (Market based)	2,600,446
Scope 1 and 2 (Market based)	9,570,300
Biogenic emissions	73,994
Scope 3 Purchased Goods and Services (including Nitrogen)	27,773,868
Scope 3 Upstream Transportation	983,042
Scope 3 Waste	217,730
Scope 3 Business Travel	24,224
Scope 3 Employee Commuting	33,724
Scope 3 Downstream Transportation	1,137,467
Scope 3 Emissions from electricity (T&D, WTT)	736,161
Scope 3 Emissions from Fuels (WTT)	810,783
Scope 3 Capital goods emissions	298,706
Scope 3 Use of sold products	1,857,357
Scope 1, Scope 2 (location based), Scope 3	43,677,023
Scope 1, Scope 2 (market based), Scope 3	43,443,361

Dawroth
Certification Body
at TÜV NORD CERT GmbH

Essen, 2025-06-06

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Data Reporting, Verification, and Report Assurance

This report was prepared in adherence with the **Global Reporting Initiative (GRI) standards** core option and the **International Integrated Reporting Council (IIRC)**'s International Integrated Reporting Framework 2021.

100% Reporting Certification and Assurance in accordance with the GRI Standards, <IR> Framework and AA1000AS by an independent auditor.

100% GHG Accounting, Verification and Assurance in accordance with **ISO 14064-1** and **ISO 14064-3** by an independent auditor.

CONTACTS AND FEEDBACK

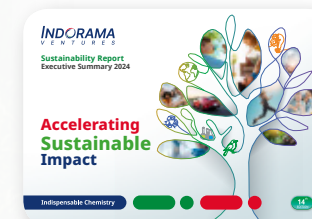


sustainability@indorama.net



FOR MORE
INFORMATION

Indorama Ventures - ESG Profile



Sustainability Report
Executive Summary 2024



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INFORMATION



Annual Report 2024
(Form 56-1 One Report)



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INFORMATION

Celebrate with us!

Since 2011 until now*, we have ACHIEVED

135
billi♻n
PET bottles

(*As of 31 December 2024)

With a total reduced
GHG emission of
3.6 million tons

INDORAMA VENTURES PUBLIC COMPANY LIMITED

75/102 Ocean Tower 2, 37th Floor, Soi Sukhumvit 19 (Wattana),
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for the real-time bottle
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