The State of Global Sustainability Disclosures

From Fragmented Disclosures to Comparable Insights: A Comparative Analysis of Global Climate Reporting Using **200,000+ Reports** from **80,000+ Companies**.

- Powered by Sprih's SustainSense®.

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Executive Summary

Sustainability disclosures have moved from the margins to the mainstream of corporate reporting. Companies across industries and geographies now publish reports on emissions, resource use, and climate goals with a frequency that would have been unthinkable even a decade ago. The challenge is no longer whether data exists, but whether it can be compared, trusted, and understood at scale. This white paper draws on a dataset rarely assembled before: over 200,000 public disclosure documents from more than 80,000 companies worldwide*. These reports were analyzed using SustainSense, Sprih's Climate AI engine, designed to extract, standardize, and interpret public sustainability data. The purpose of this work is twofold:

- To highlight what patterns emerge when such a large body of disclosures is analyzed together.
- To illustrate how technology can transform scattered, inconsistent reporting into decision-ready insights.

The analysis provides a lens on how companies disclose information across four major dimensions:

- **Patterns of Disclosure:** How reporting on Scope 1, Scope 2, and Scope 3 emissions, as well as resource metrics like water and waste, differs across several parameters.
- **Geography and Regulation:** How disclosure practices differ across regions and how regulatory pressure shapes completeness.
- **Sector and Size:** How industries vary in what they report, and whether larger enterprises provide more complete data than smaller firms.

**Figures cited are as of September 1, 2025. The dataset continues to grow as SustainSense analyzes additional reports from publicly available sources, meaning coverage and insights expand over time.*

- **Targets and Initiatives:** The prevalence of climate commitments and the types of initiatives companies highlight.

What becomes clear through this exercise is not just the state of sustainability reporting today, but also the structural barriers that still prevent full transparency: missing metrics, varying definitions, and inconsistent levels of detail. These gaps limit comparability and create blind spots for decision-makers.

At the same time, the scale of analysis made possible by SustainSense points to a different future. When thousands of disclosures are brought into a common framework, patterns emerge that were previously hidden in the noise. Companies, regulators, and investors can see not only where progress is happening, but also where it is falling short, and, most importantly, why.

The relevance of this work cuts across multiple audiences. For executives such as CEOs, CFOs, and CSOs, it links sustainability performance directly to financial risk and long-term strategy. Investors view disclosure quality as a signal of governance strength, organizational resilience, and exposure to climate risk. Procurement and supply chain leaders gain simplified supplier engagement and clearer visibility into upstream impacts. Regulators and auditors can benchmark transparency, ensure auditability, and assess compliance readiness. For the technology community, it demonstrates the potential of applying AI and data engineering at scale to transform climate reporting.

This report is therefore both a snapshot and a demonstration. A snapshot of the current state of corporate sustainability disclosures, based on one of the largest analyses of its kind. And a demonstration of what becomes possible when AI is used to create the world's largest climate database: insight that is not anecdotal, but systemic, insight that matters as much to policymakers as to corporate leaders.

Chapter 1

The World's Largest Sustainability Dataset

1.1 SCOPE OF ANALYSIS

This white paper is based on one of the largest repositories of corporate sustainability disclosures assembled to date. The analysis draws on 200,000+ public disclosure documents, issued by 80,000+ companies worldwide. The reports considered were those published between 2022 and 2024, capturing three years of disclosure activity.

These reports include stand-alone sustainability reports, integrated annual reports, regulatory filings, and other public documents where companies disclose their environmental performance and climate commitments. The breadth of this dataset makes it possible to see patterns that are invisible in smaller samples. Companies from every major region and sector are represented, ranging from large multinationals with revenues above $100 billion to small and mid-sized enterprises that form the backbone of global supply chains.

Together, they provide a panoramic view of how corporate sustainability reporting is evolving across geographies, industries, and revenue tiers. It is one of the most ambitious efforts ever undertaken to capture, standardize, and analyze corporate climate disclosures at a truly global level.

1.2 SOURCES OF DATA

Every report was collected from the public domain: corporate websites, exchange filings, regulatory repositories, and sustainability databases. This ensures that the insights presented here are fully transparent, replicable, and accessible to any stakeholder, not locked behind private questionnaires or paywalled services.

1.3 COVERAGE ACROSS SECTORS, GEOGRAPHIES, AND SIZES

The scope of this dataset is unmatched in both scale and diversity. The analysis captures the full spectrum of corporate sustainability reporting, from the largest global enterprises to the smaller firms embedded deep within supply Chains.

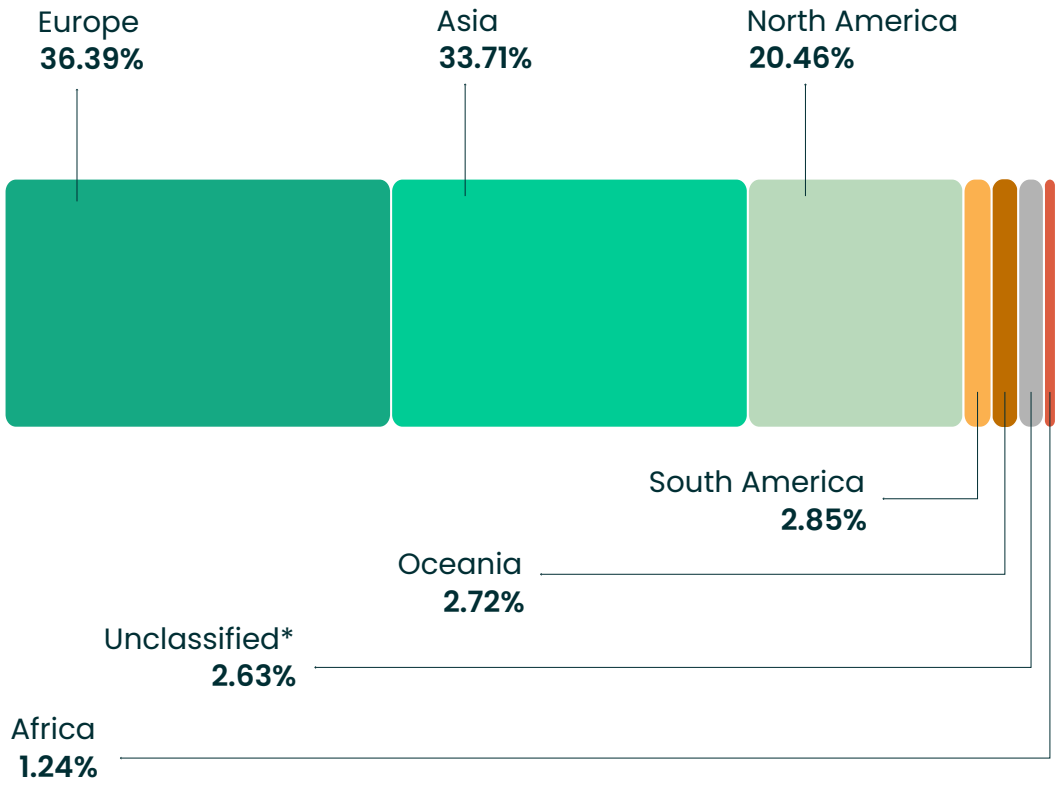
- **Global multinationals:** Companies with revenues exceeding $100 billion are represented across the dataset. These firms set the tone for international disclosure standards and play an outsized role in shaping supply chain practices worldwide.

- **Regional champions:** Mid-sized leaders in manufacturing, finance, energy, technology, and consumer goods are equally present. Their disclosures provide a more grounded view of how sustainability is embedded in industries that drive regional economies.

- **Small and medium-sized enterprises (SMEs):** Often overlooked in global analyses, SMEs appear throughout this database. As the backbone of global supply chains, their disclosures, even when partial or inconsistent, add essential visibility into the emissions and resource use that flow through production networks.

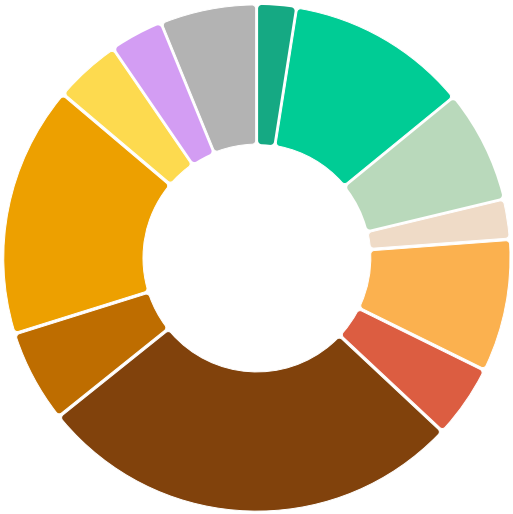
From a database of over 200,000 reports covering more than 80,000 companies worldwide, we selected a sample of **50,000+** companies for the analysis presented in **Chapter 2: Global Patterns of Disclosure – What the Data Reveals.**

Companies by Region



**Unclassified means that SustainSense was not able to extract the relevant information (such as region, sector, or revenue) from the publicly available sustainability reports, ESG reports, or annual reports of the company. This could be due to missing disclosures, or low confidence in the extracted data - for example, conflicting responses from different reports. In such cases, we preferred to classify the company under the "Unclassified" category to ensure the reliability of the presented data.*

Companies by Sector



- Communication Services **(2.49%)**
- Consumer Discretionary **(11.60%)**
- Consumer Staples **(7.16%)**
- Energy **(2.57%)**
- Financials **(8.47%)**
- Health Care **(4.68%)**
- Industrials **(27.28%)**
- Information Technology **(5.92%)**
- Materials **(16%)**
- Real Estate **(4.27%)**
- Utilities **(3.38%)**
- *Unclassified **(6.18%)**

Companies by Revenue Tier

- < 10 million USD **(7.56%)**
- 10–100 million USD **(18.01%)**
- 100 million – 1 billion USD **(25.82%)**
- 1–10 billion USD **(14.99%)**
- 10–100 billion USD **(13.40%)**
- > 100 billion USD **(1.55%)**
- *Unclassified **(18.67%)**

Chapter 2

Global Patterns of Disclosure: What the Data Reveals

This chapter presents the findings of our AI-powered analysis of corporate sustainability disclosures and practices, drawn from one of the most comprehensive datasets of its kind. Built on sustainability reports from **more than 80,000 companies** worldwide, the dataset provided the foundation for examining how organizations report, measure, and act on their environmental impacts.

The dataset was filtered to identify companies with the most relevant reports. This curation led to a **list of 50,000+ organizations** with sufficient reporting depth, thereby ensuring both the integrity and relevance of the information. The resulting dataset establishes a robust foundation for generating insights that are both accurate and meaningful.

Subsequently, six key sustainability reporting dimensions—**Emissions, Energy, Water, Waste, Targets, and Initiatives** were identified and extracted via SustainSense. Detailed breakdowns were produced across three critical perspectives:

1. **Regional:** Segmented by key geographic regions, such as Asia, Europe, North America, etc.
2. **Sectoral:** Categorized by industry sectors, including Energy, Industrials, Materials, etc.
3. **Revenue:** Divided into defined annual revenue tiers.

This multifaceted AI-driven analysis provides concentrated insights on sustainability disclosures and practices across the global corporate landscape, offering valuable inputs for various stakeholders.

2.1 EMISSIONS

This section examines corporate greenhouse gas (GHG) emission disclosures across diverse geographies and sectors.

Methodological note:

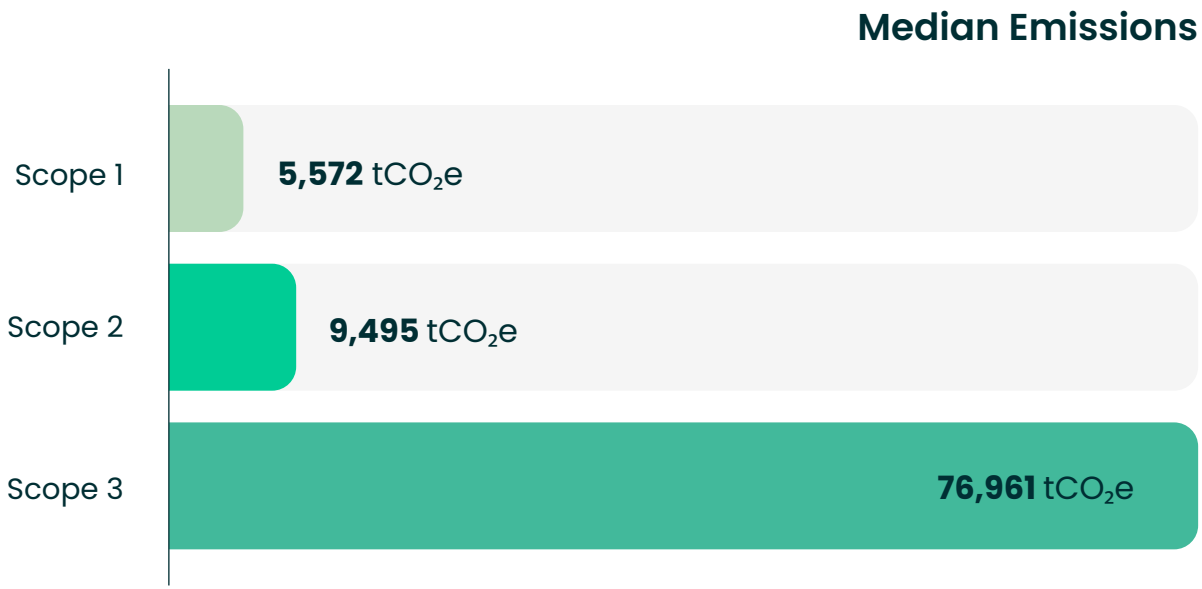
- For Scope 2 emissions, location-based figures were used as the primary reference whenever both location-based and market-based values were available.
- In the limited cases where only market-based data was disclosed, the market-based values were used.

The analysis provides a comprehensive view of global emission patterns, highlighting variations in reporting transparency, regional dynamics, sectoral trends, and disclosure practices across companies of different revenue tiers.

Key Metrics

The chart below presents the median values that anchor this analysis. Medians provide a sense of the “typical” disclosure by reducing the influence of extreme outliers. The results indicate that the bulk of emissions are concentrated in Scope 3 activities across the value chain.

The median value of Scope 3 emissions is approximately 14 times higher than Scope 1 emissions and 8 times higher than Scope 2 emissions. This highlights the substantial impact of a company’s supply chain emissions compared to its direct operational footprint.



2.1.1 Regional Analysis of Emissions Data

The charts below summarize the percentage of companies reporting greenhouse gas emissions across various regions, categorized by Scope 1, Scope 2, and Scope 3 emissions.

Scope 1 emissions represent direct emissions from owned or controlled sources, Scope 2 emissions include indirect emissions from purchased energy, and Scope 3 emissions cover all other indirect emissions within a company's value chain.

Geographically, the dataset is heavily concentrated in Europe, Asia, and North America, which collectively dominate global emissions disclosures.

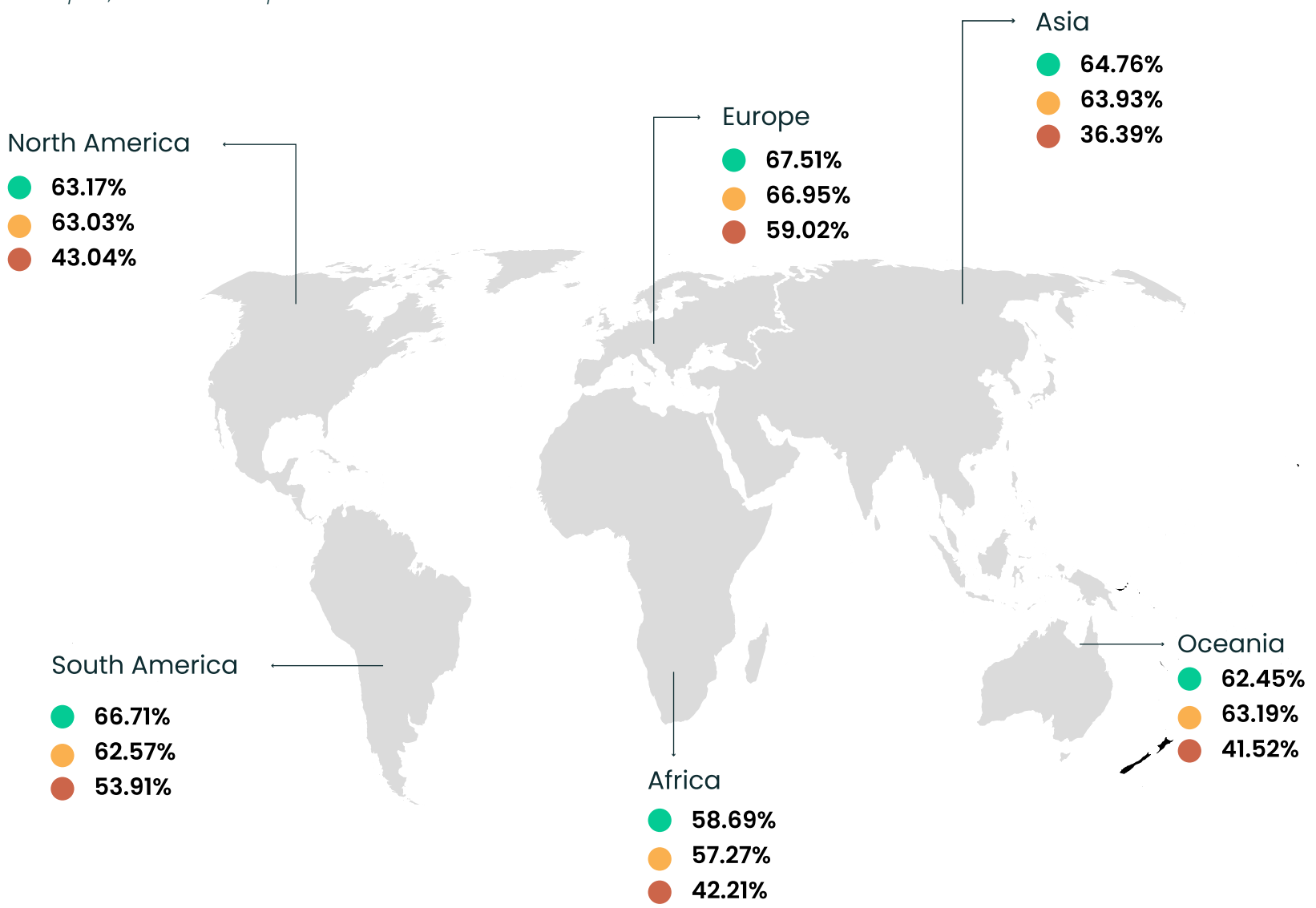
The data highlights clear regional differences in emissions reporting practices. Europe leads with the highest overall disclosure rates and demonstrates consistency across all scopes, particularly in Scope 3 reporting. South America shows strong performance in both Scope 1 and Scope 3 reporting. Asia records comparatively higher disclosure in Scope 1 and Scope 2, but lags in Scope 3 transparency. North America maintains moderate levels across all scopes, while Oceania shows stronger reporting in Scope 2 relative to Scope 1 and Scope 3. Africa has the lowest reporting levels overall, especially for Scope 3 disclosures.

Overall, the analysis highlights a clear divide: corporate reporting on direct and energy-related emissions has achieved a high degree of consistency, but value-chain emissions reporting remains fragmented. Addressing this gap is critical to achieving a more comprehensive understanding of corporate climate impacts and advancing global sustainability efforts.

The percentages for Scope 1, Scope 2, and Scope 3 emissions represent the share of companies within each region's total company base, not of the global total.

Region-wise Reporting

Unclassified companies (2.63%) are excluded from the map; 55.20% reported Scope 1, 56.90% Scope 2, and 42.50% Scope 3 emissions.



2.1.2 Sectoral Analysis of Emissions Data

The dataset spans nearly every sector of the global economy, from resource-intensive industries like materials and energy to service-driven domains such as financials and real estate.

Industrials, materials, and consumer-focused sectors together account for over half of the sample, underscoring the prominence of manufacturing and supply chain–heavy industries in sustainability reporting.

Sector-wise reporting shows relatively consistent disclosure levels for Scope 1 and Scope 2 emissions, with most sectors clustered around similar reporting rates. By contrast, Scope 3 reporting is lower and more dispersed as compared to Scope 1 and 2, reflecting challenges in tracking value chain emissions. Among sectors, Financials and Utilities demonstrate comparatively higher Scope 3 disclosure, while Energy and Materials lag behind, underlining sector-specific differences in addressing indirect emissions.

Taken together, these findings reveal two clear dynamics: emission-intensive sectors have reached a level of maturity in Scope 1 and Scope 2 disclosures, but face considerable challenges in addressing Scope 3 reporting. Other sectors disclose consistently, while sharing similar concerns over Scope 3 disclosures, particularly those with extensive value chains such as Consumer Discretionary. This underscores why sector-specific approaches are essential for both regulation and corporate strategy.

The reporting percentages for Scope 1, Scope 2, and Scope 3 show the share of companies within each sector's base, not across the global total.

Sector-wise Reporting

2.1.3 Analysis of Emissions Data by Revenue

The revenue distribution of companies offers critical context for understanding disclosure maturity:

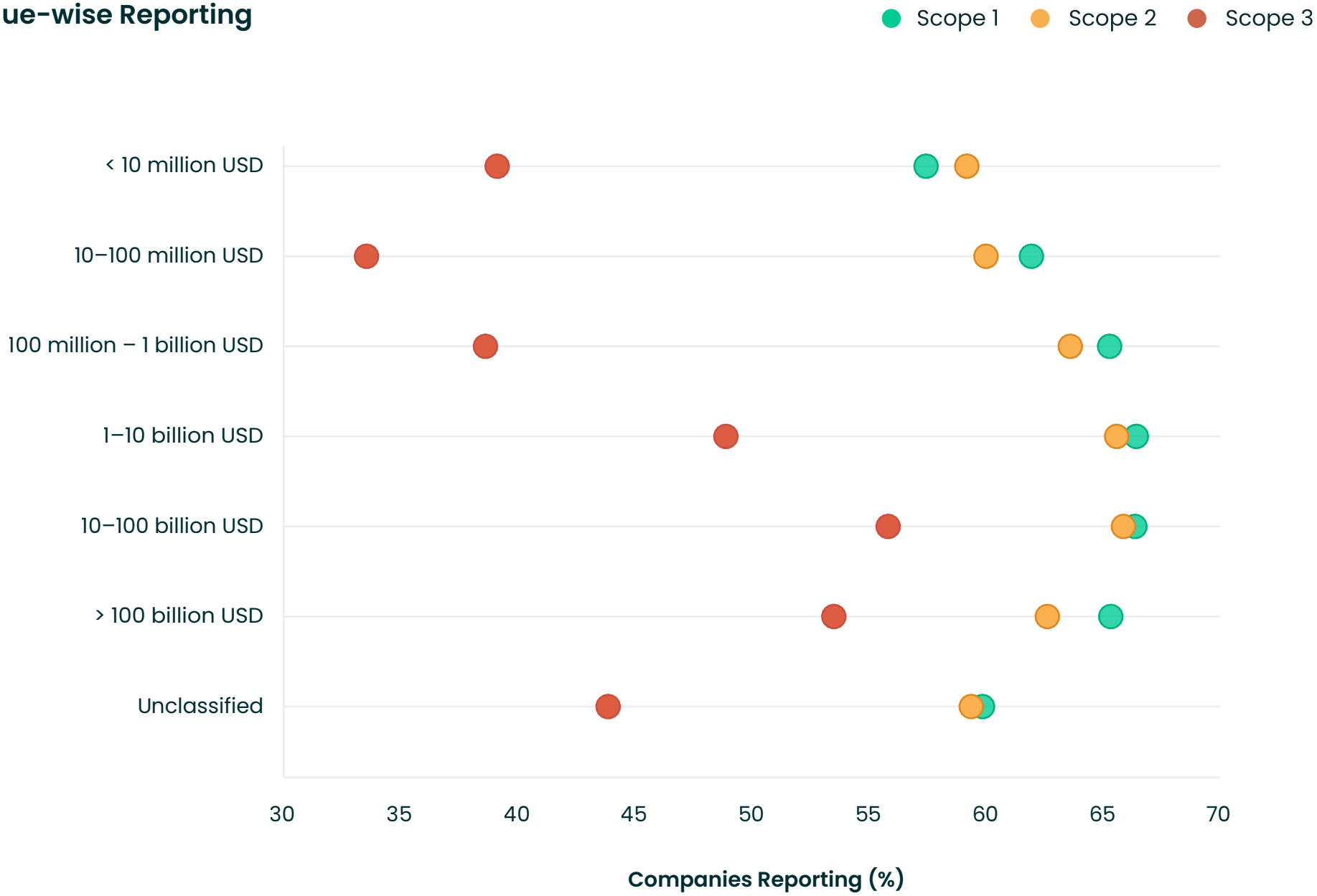
- **Stronger disclosure among larger firms:** Companies with revenues exceeding USD 1 billion demonstrate higher consistency in reporting Scope 1 and Scope 2 emissions. These firms also show higher rates of Scope 3 coverage compared to smaller peers, reflecting greater regulatory pressure and stakeholder scrutiny.

- **Weaker reporting among smaller firms:** Companies in the 10-100 million USD range disclose at lower rates, especially for Scope 3, where fewer than 35% provide data. This underscores resource constraints and the absence of mandatory requirements for many SMEs.

The data reveals a clear relationship between company size and disclosure maturity: the bigger the firm, the more complete the reporting, particularly when it comes to the most complex category, Scope 3.

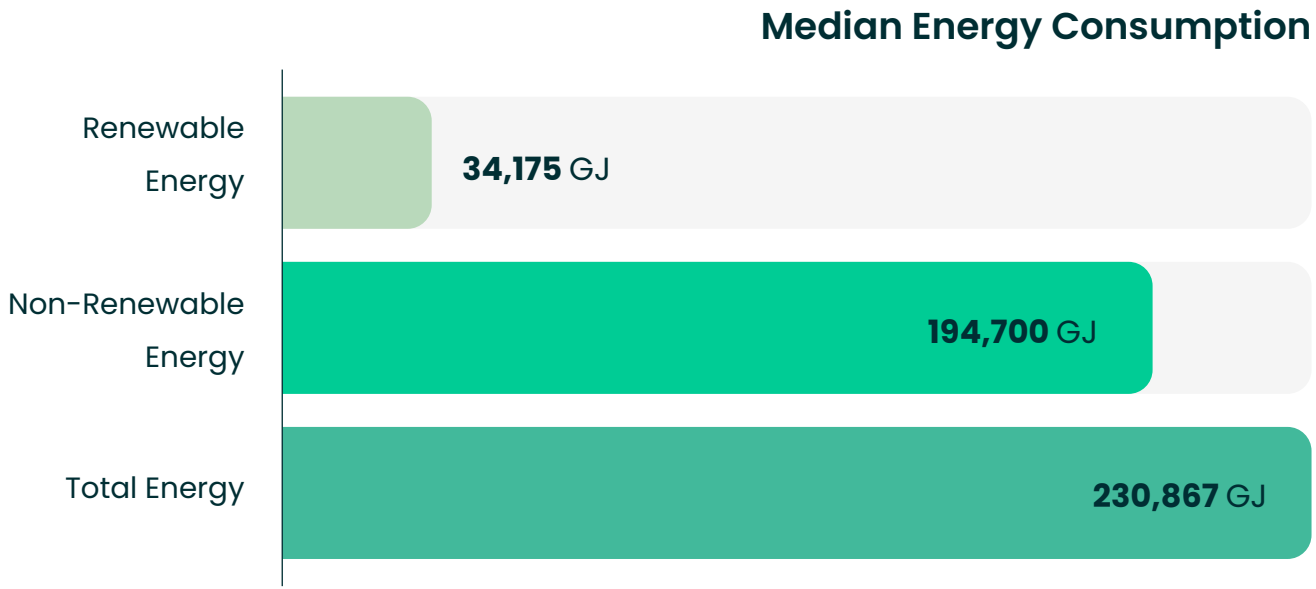
The percentages for Scope 1, Scope 2, and Scope 3 reflect reporting rates within each revenue category, not across the full dataset.

Revenue-wise Reporting



2.2 ENERGY

Energy disclosures serve as a practical bridge between sustainability commitments and actual business operations. They reveal how companies power their activities and provide critical insights into the transition from non-renewable to renewable energy sources. This section analyzes energy-related reporting metrics from thousands of companies, focusing on renewable energy, non-renewable energy, and total energy consumption. The analysis highlights global patterns in energy reporting, showing how disclosure practices vary across regions, sectors, and company sizes, and sheds light on where companies are making progress versus where gaps remain.



2.2.1 Regional Analysis of Energy Data

This analysis highlights the global data reporting patterns of companies related to energy, showing how disclosure practices vary across regions. It provides insights into which geographies are more transparent in reporting energy consumption and associated metrics, reflecting the impact of regulatory frameworks, stakeholder expectations, and industry practices.

Europe stands out with a notably high level of energy reporting, suggesting robust data collection practices. Asia shows a balanced approach with strong overall energy reporting.

North America and South America exhibit moderate total energy reporting, with renewable energy showing a significant presence, particularly in South America.

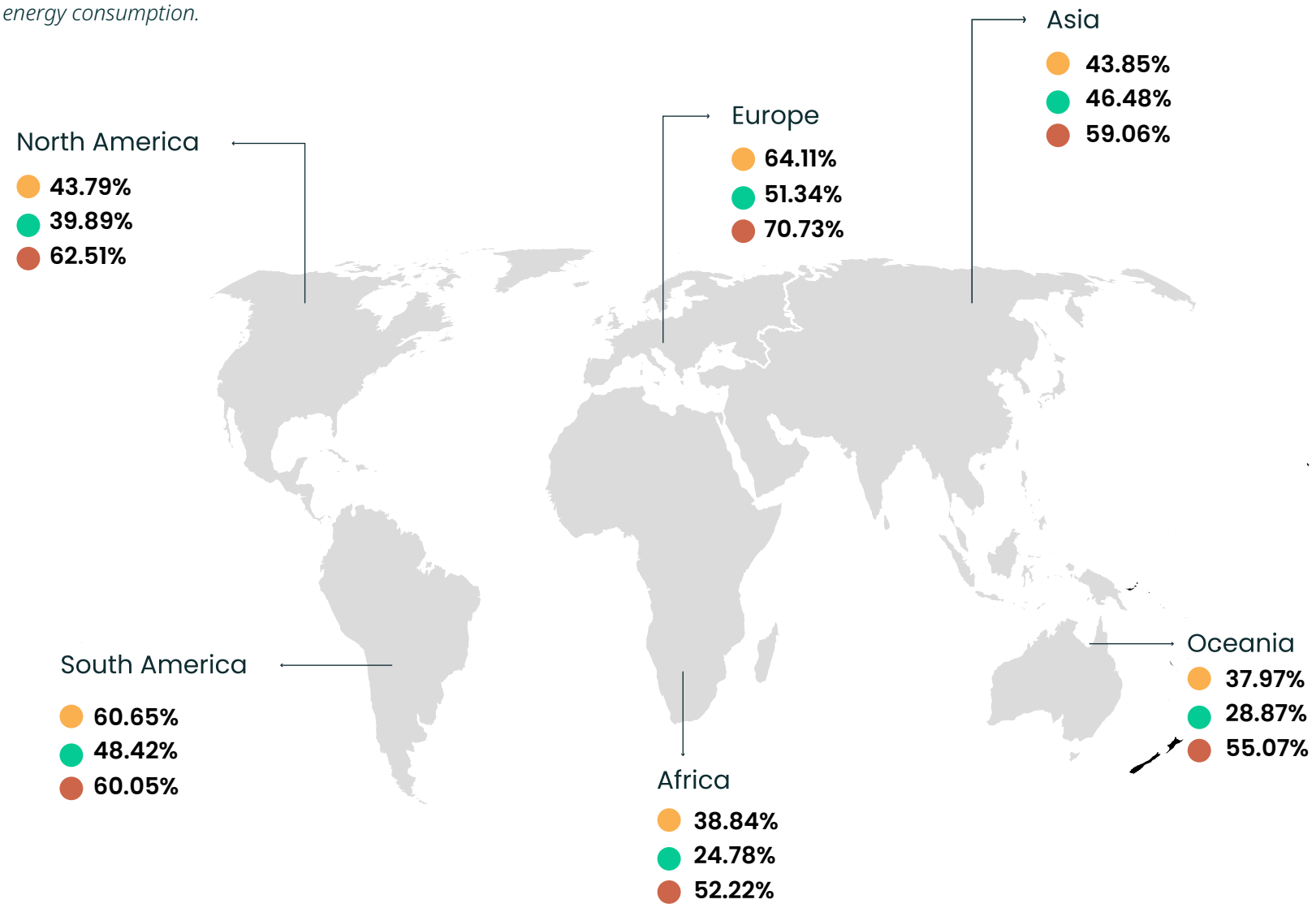
Africa and Oceania lag in overall energy disclosure, indicating potential gaps in data availability or regulatory focus.

These differences likely reflect varying regional priorities, infrastructure development, and policy frameworks influencing energy reporting practices.

The percentages for renewable, non-renewable, and total energy consumption indicate reporting rates within each region's share of companies, not across the full dataset.

Region-wise Reporting

Unclassified companies (2.63%) are excluded from the map; 46.33% reported non-renewable, 23.35% renewable, and 63.62% total energy consumption.



2.2.2 Sectoral Analysis of Energy Data

The dataset spans eleven sectors, with industrials, materials, and consumer-facing industries making up more than half of the sample. These sectors, being resource-intensive, naturally shape much of the energy reporting landscape.

Coverage varies depending on the type of energy disclosed. Utilities show the highest rates of renewable reporting, reflecting regulatory focus on clean power. Consumer sectors and health care also report renewables strongly, while energy companies themselves lag, an indication of fossil-fuel dependence and selective disclosure.

Reporting on non-renewables is strongest in resource-heavy sectors such as Materials and Industrials, while Finance and Real Estate show much lower coverage, given their indirect energy footprints.

Total Energy figures are the most widely reported across all sectors, with asset-heavy industries like energy and real estate showing the most consistent disclosure.

This suggests that companies are more comfortable reporting aggregate consumption than breaking it down into renewable versus non-renewable categories, leaving gaps in transparency where it matters most for transition planning.

The percentages for renewable energy, non-renewable energy, and total energy represent reporting rates within each sector's share of companies, and not the entire dataset.

Sector-wise Reporting

2.2.3 Analysis of Energy Data by Revenue

This section analyzes energy reporting metrics of companies across different revenue ranges, focusing on the disclosure of renewable energy, non-renewable energy, and total energy consumption.

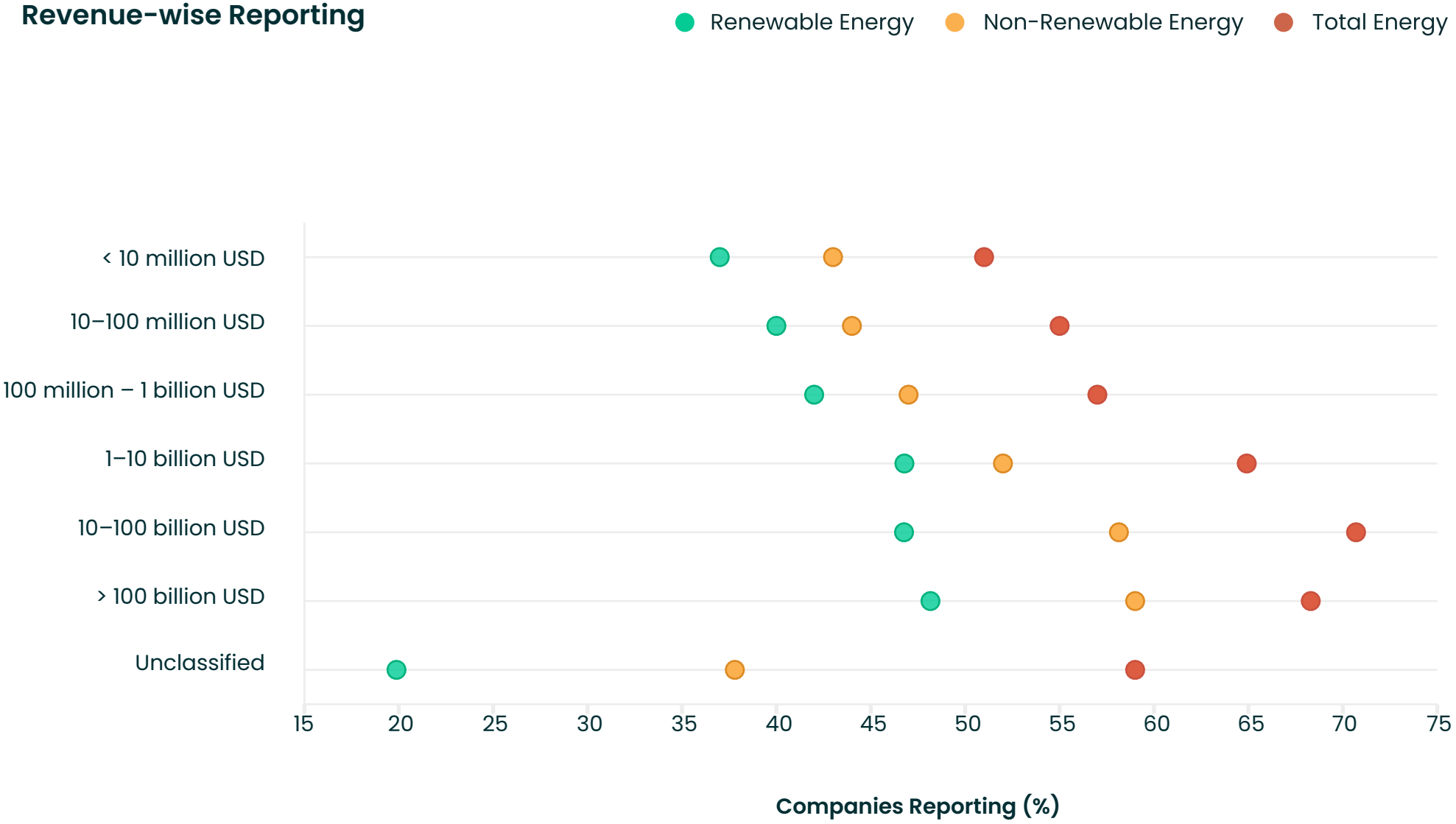
The data reveals how reporting transparency varies with company size, providing valuable insights to inform sustainability strategies and regulatory focus.

Larger companies tend to demonstrate stronger and more consistent reporting practices, while smaller companies and those in the "Unclassified" category show significant gaps in energy reporting.

The analysis shows that reporting rates generally increase with higher revenue, indicating that larger companies are more likely to disclose comprehensive energy data.

The percentages for renewable energy, non-renewable energy, and total energy indicate reporting coverage within each revenue group's share of companies, not across the overall dataset.

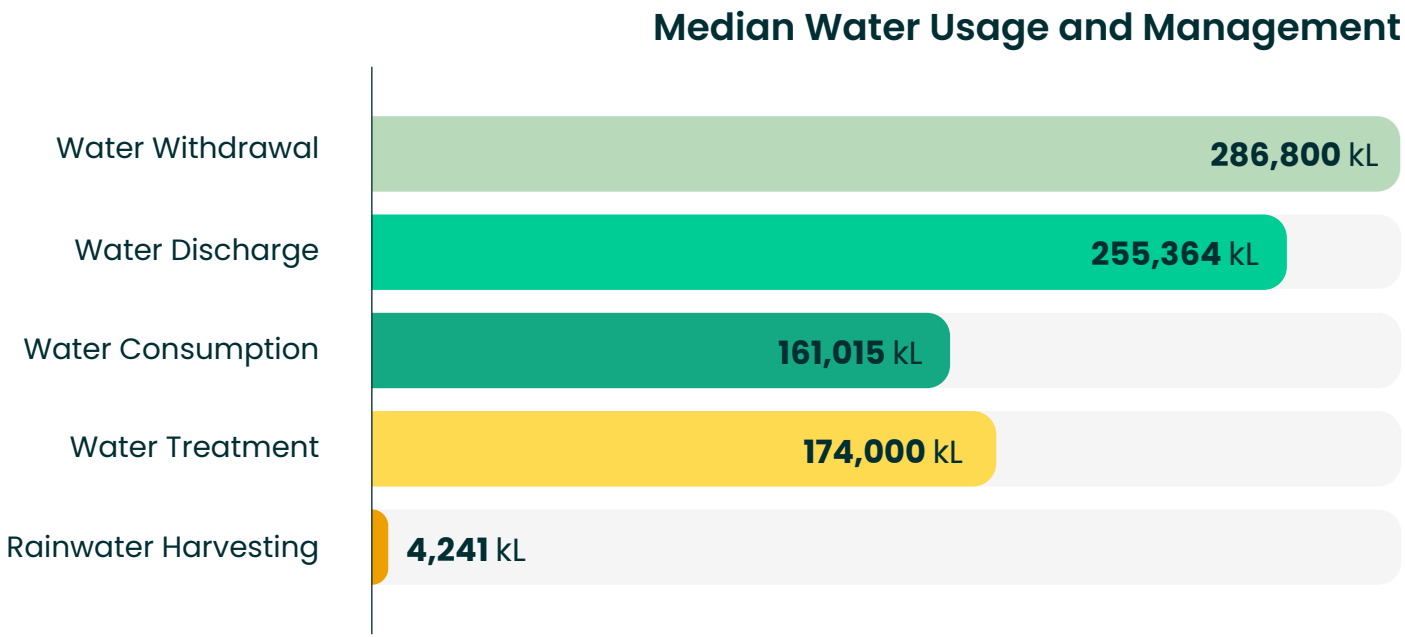
Revenue-wise Reporting



2.3 WATER

Water is a critical resource for businesses across industries, impacting both environmental sustainability and operational efficiency. This section analyzes water-related reporting metrics, focusing on key aspects such as water withdrawal, discharge, consumption, treatment, and rainwater harvesting.

The analysis highlights global patterns in water data disclosure, showing how transparency varies across regions, sectors, and company sizes. Understanding these patterns helps identify gaps in water-related sustainability reporting and provides insights for improving corporate water management practices.



2.3.1 Regional Analysis of Water Data

Water is emerging as one of the most critical sustainability challenges, yet disclosure practices vary widely across regions and metrics. The dataset analyzed here shows that while a majority of companies report at least one water-related metric, the depth and consistency of coverage remain uneven.

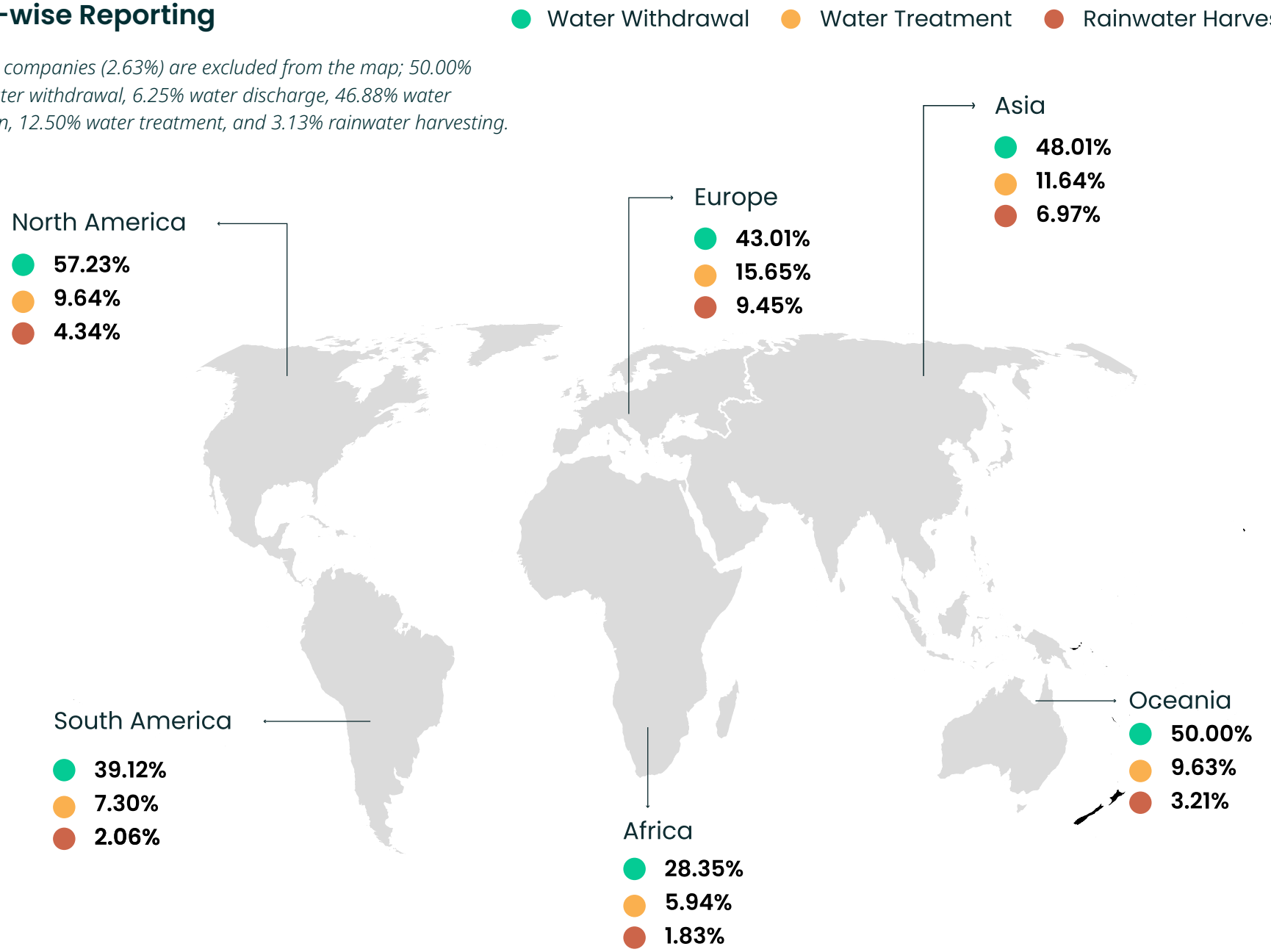
- **Regional concentration of data:** Most disclosures come from Asia and Europe, together making up nearly three-quarters of all reporting companies. While Africa, Oceania, and South America are underrepresented.

- **Withdrawal vs. reuse:** Water withdrawn is the most frequently disclosed metric, reported by almost half of companies overall. In contrast, water treated and rainwater harvested are rarely reported, suggesting limited emphasis on reuse, recycling, and circular water strategies.

The percentages for water withdrawal, treatment, and rainwater harvesting are calculated within each region's share of companies, not across the entire dataset.

Region-wise Reporting

Unclassified companies (2.63%) are excluded from the map; 50.00% reported water withdrawal, 6.25% water discharge, 46.88% water consumption, 12.50% water treatment, and 3.13% rainwater harvesting.



2.3.2 Sectoral Analysis of Water Data

Water disclosure patterns differ significantly across industries, shaped by operational dependencies, regulatory requirements, and stakeholder expectations.

The dataset covers all major sectors, with industrials and materials contributing the largest share, followed by consumer-facing and financial industries. This distribution reflects the predominance of resource-intensive sectors in global sustainability reporting.

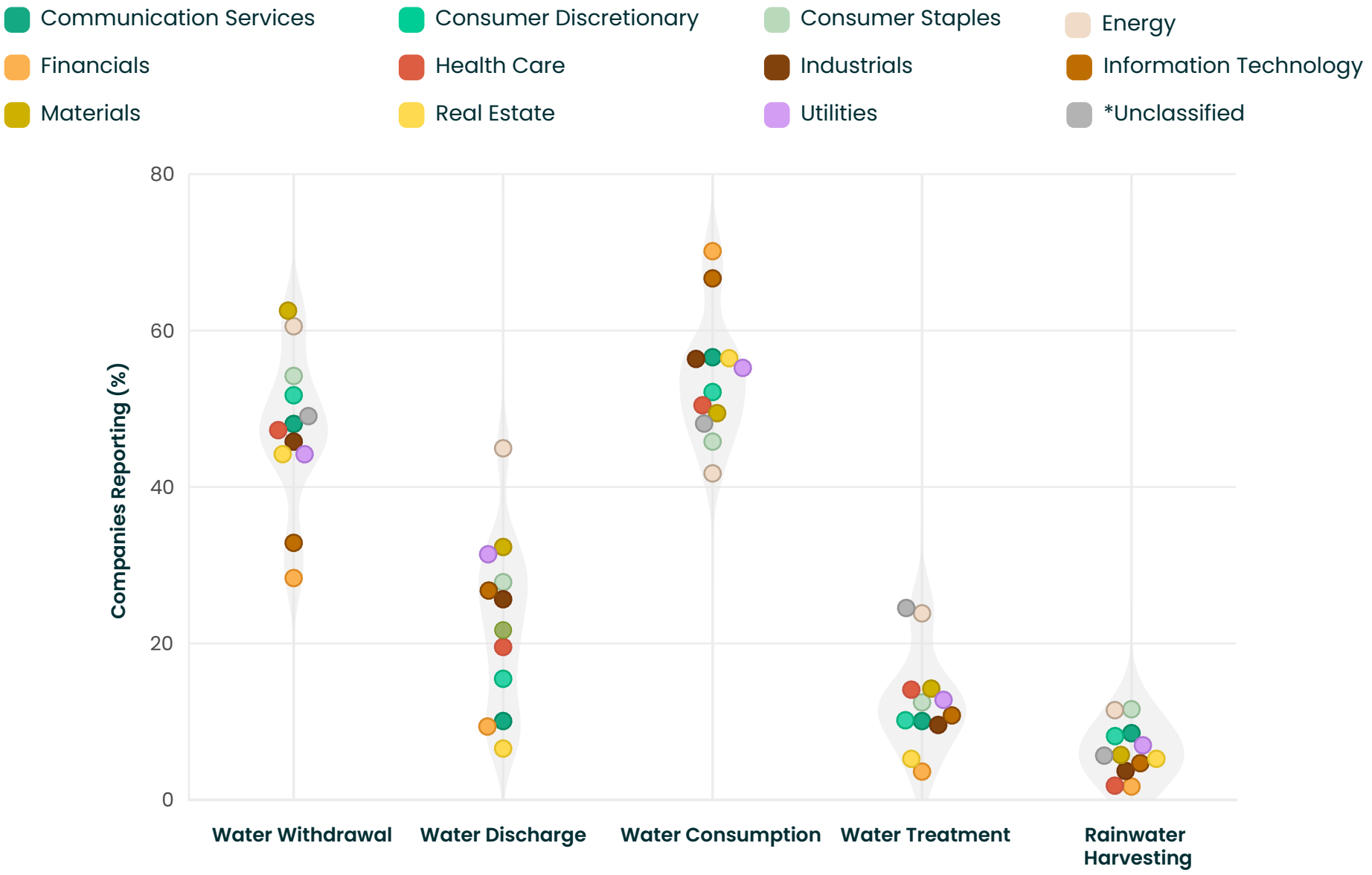
The analysis highlights uneven levels of reporting maturity. Resource-heavy industries tend to disclose more consistently on water use and discharge, while sectors with indirect dependencies are only beginning to embed water metrics into their sustainability strategies.

This may be attributed to the fact that, in some sectors, water is not regarded as a material issue for monitoring or reporting purposes.

However, the very low rates of disclosure on water reuse and harvesting across sectors underscore a systemic gap in global water resilience planning.

The percentages for water withdrawal, discharge, consumption, treatment, and rainwater harvesting are expressed within each sector's share of companies, not relative to the global total.

Sector-wise Reporting



2.3.3 Analysis of Water Data by Revenue

Water disclosure practices vary significantly by company size, with larger firms generally showing stronger and more consistent reporting.

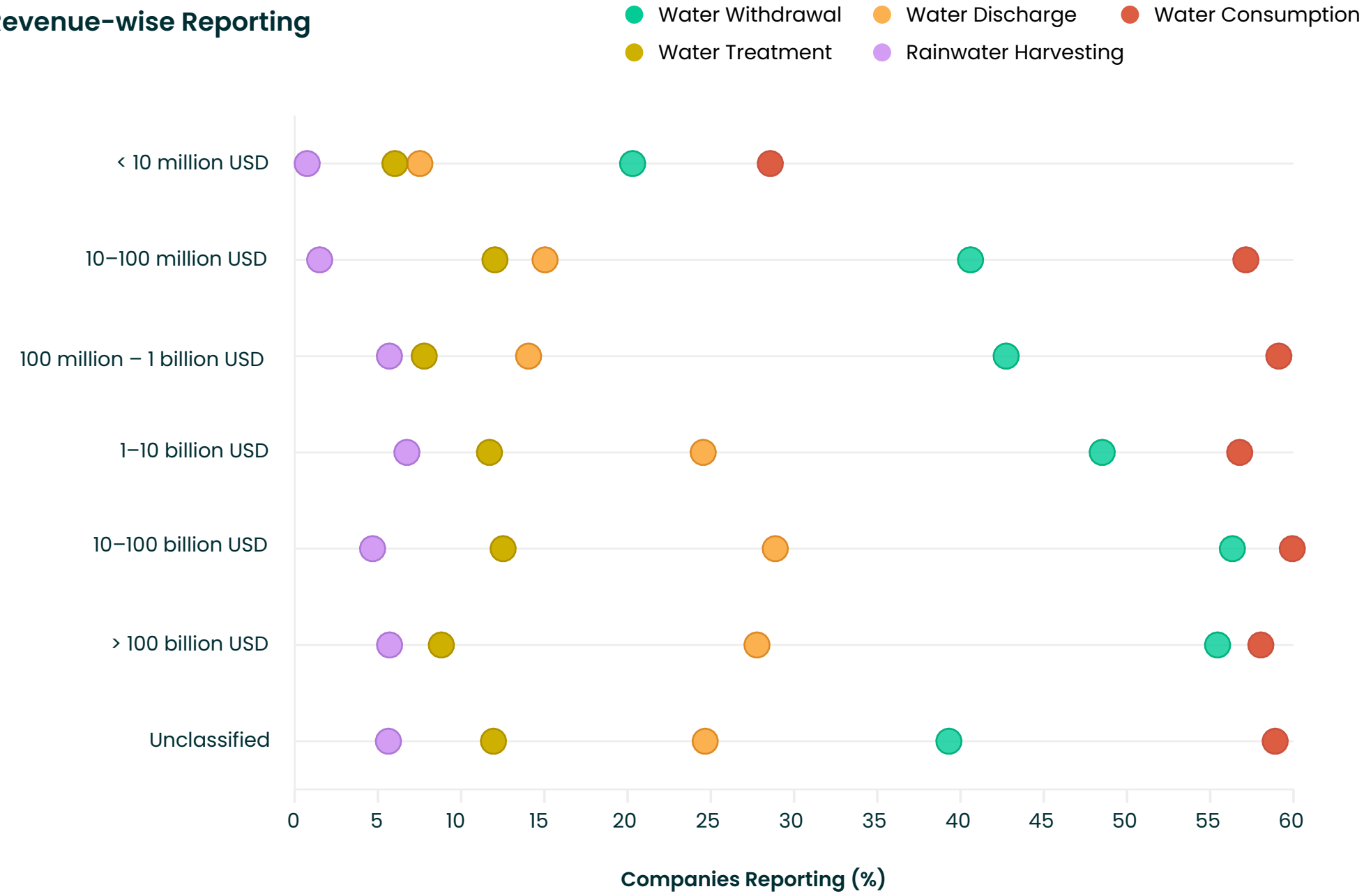
Companies in the upper revenue brackets, especially those between **10–100 billion USD and above 100 billion USD report water withdrawal and total consumption more frequently than smaller firms**, reflecting both regulatory pressure and greater organizational capacity.

At the same time, smaller firms sometimes stand out in specific areas, such as reporting water consumption, suggesting that intensity of local impacts or sectoral exposure can drive transparency even when resources are limited.

However, across all revenue groups, disclosures on water treatment and rainwater harvesting remain notably scarce, pointing to a global gap in how companies capture and communicate practices around reuse and circular water management.

The percentages for water withdrawal, discharge, consumption, treatment, and rainwater harvesting are shown within each revenue range's share of companies, not relative to the global total.

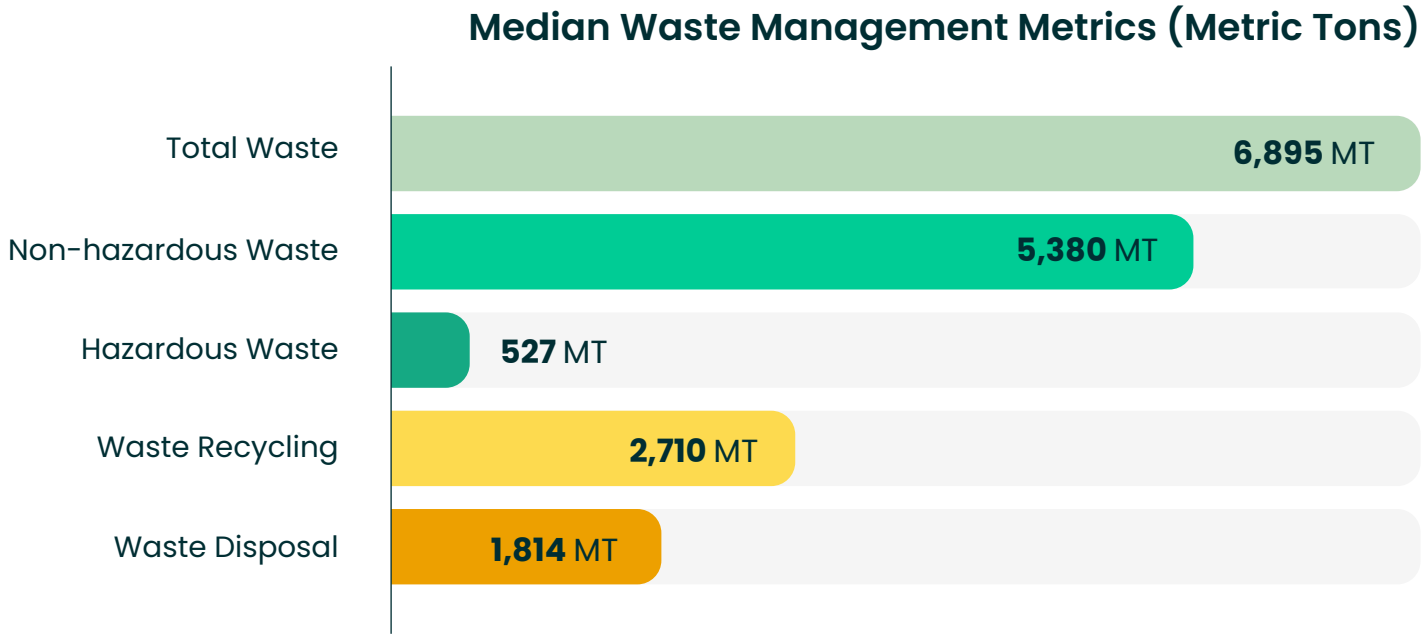
Revenue-wise Reporting



2.4 WASTE

Effective waste management is a key component of corporate sustainability, impacting environmental performance and regulatory compliance. This section analyzes waste-related reporting metrics from thousands of companies, focusing on total waste generation, hazardous waste, non-hazardous waste, waste recycling, and waste disposal.

The analysis reveals that larger companies generally report waste metrics more consistently, while smaller firms and companies categorized as "Unclassified" show significant gaps in waste reporting. These findings help identify opportunities for improving transparency and driving more sustainable waste management practices.



2.4.1 Regional Analysis of Waste Data

Waste disclosure patterns vary considerably across regions, influenced by differences in industrial structures, regulatory requirements, and the maturity of corporate reporting practices.

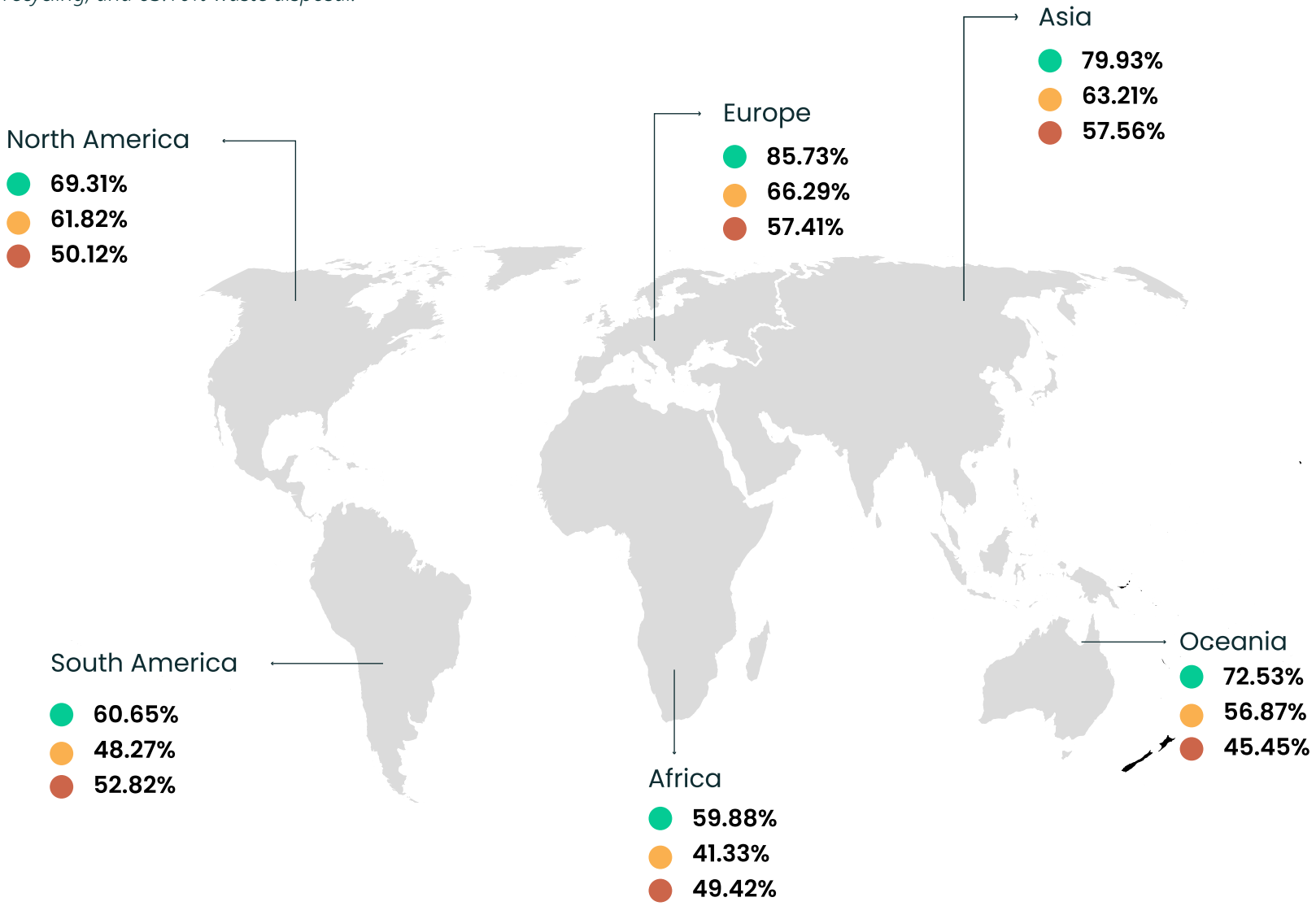
Total waste generation is the most consistently reported metric, with Europe leading, followed by Asia. Waste recycling shows moderate reporting. Europe and Asia demonstrate the highest overall consistency due to regulatory frameworks like the EU Waste Framework Directive and emerging sustainability mandates in Asia.

However, the lack of detailed categorization between waste treated and disposed across regions highlights challenges in standardization, affecting global comparability and underscoring the need for harmonized waste reporting practices.

The percentages for total waste generation, waste recycling, and waste disposal are calculated within each region's share of companies, not relative to the global total.

Region-wise Reporting

Unclassified companies (2.63%) are excluded from the map; 71.43% reported total waste generation, 51.19% hazardous waste, 58.33% non-hazardous waste, 53.57% waste recycling, and 63.10% waste disposal.



2.4.2 Sectoral Analysis of Waste Data

Sectoral patterns in waste reporting reveal how industry context shapes both the scope and quality of disclosures. Total waste generation is the most consistently reported metric across all sectors, while waste recycling and disposal lags, underscoring persistent challenges in categorization and transparency.

Sectors with heavy material use and regulatory scrutiny, such as Health Care and Consumer Discretionary, demonstrate stronger reporting across all metrics, particularly on hazardous and non-hazardous waste, reflecting their higher environmental footprint and compliance obligations.

By contrast, service-oriented sectors like Financials and Communication Services show the weakest coverage across nearly all categories, likely due to lower direct waste generation but also a lack of standardized expectations for reporting indirect impacts.

Notably, recycling disclosure is strongest in Information Technology and Health Care, suggesting that sectors tied to consumer-facing or highly regulated markets may be quicker to emphasize circular economy practices. Enhanced waste recycling disclosures in the Information Technology sector are often driven by the intrinsic value of e-waste, which includes recoverable metals and components.

On the other hand, waste disposal reporting is most consistent in Health Care and Materials, aligning with sectors that face strict regulations on waste disposal. The Energy sector shows relatively weaker overall reporting, highlighting the tension between transparency and the reputational risks of disclosing fossil-fuel-related waste streams.

The percentages for total waste generation, hazardous waste, non-hazardous waste, waste recycling, and waste disposal are calculated relative to the number of companies within each sector, not to the global dataset.

Sector-wise Reporting

2.4.3 Analysis of Waste Data by Revenue

Waste reporting patterns vary significantly with company size, reflecting both the resources available for disclosure and the operational scale of waste generation. Larger firms, particularly those in the 10–100 billion USD and >100 billion USD revenue ranges, demonstrate stronger coverage across most waste categories, consistent with higher regulatory scrutiny and stakeholder expectations. These companies also lead in disclosing recycling and disposal practices, suggesting that size enables both greater reporting capacity and more structured waste management programs.

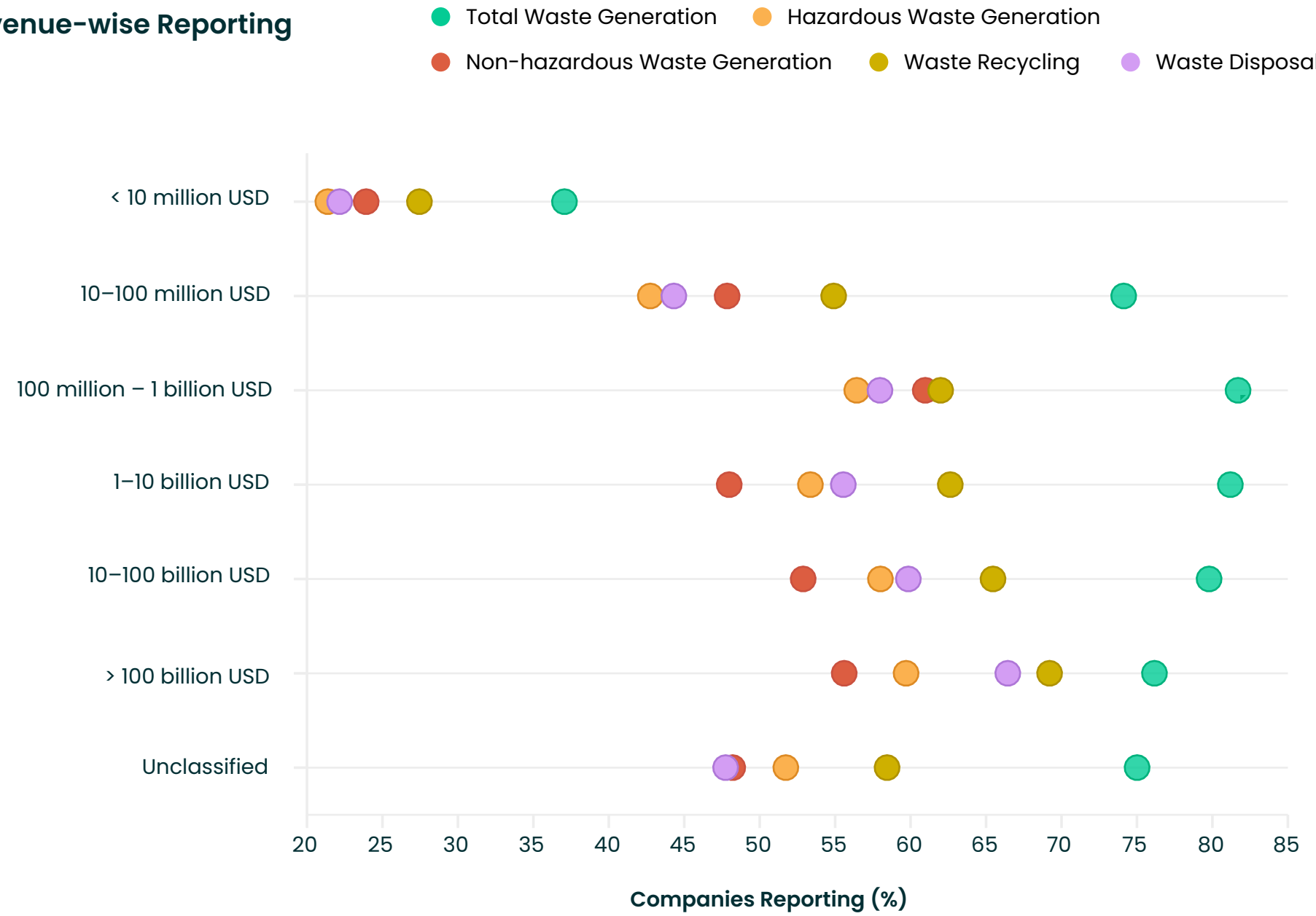
Mid-sized firms, especially those in the 100 million to 1 billion USD range, perform relatively well, particularly in reporting non-hazardous waste, but show less consistency in hazardous waste and recycling disclosures.

Smaller companies, including those in the 1 to 10 million USD and 10 to 100 million USD ranges, generally lag behind, with especially weak coverage on hazardous and non-hazardous waste, likely reflecting both limited reporting capacity and lower regulatory pressure.

Across all revenue categories, total waste generation remains the most consistently reported metric, while there seems to be a challenge in categorization and transparency. Recycling disclosure improves markedly with firm size, suggesting a maturity gap in circular economy practices between smaller and larger companies.

The percentages for total waste generation, hazardous waste, non-hazardous waste, waste recycling, and waste disposal are calculated relative to the number of companies within each revenue range, not to the global dataset.

Revenue-wise Reporting



2.5 TARGETS

Setting clear and measurable sustainability targets is a critical step for companies to drive meaningful environmental action and track progress over time. This section analyzes the disclosure of sustainability targets related to emission reduction.

It categorizes companies based on their target status across three target types - near-term, long-term, and net-zero targets - whether they have set targets, committed to set targets, not set any targets, or have no data available.

The analysis highlights trends in target setting across regions, sectors, and company sizes, providing insights into where companies are leading in sustainability goal-setting and where gaps in ambition or disclosure remain.

We have adopted the target type definitions provided by the Science Based Targets initiative (SBTi). The definitions are as follows:

- **Near-Term Targets:** Typically cover a period of up to 5–10 years from the target-setting date.
- **Long-Term Targets:** Cover a period of more than 10 years, often up to 15–30 years.
- **Net-Zero Targets:** Aim for the company to reach net-zero greenhouse gas emissions by a specified future year, typically 2050 or sooner.

KEY METRICS

- **Most Likely Net Zero Target Year:** 2050
- **Most Likely Long-term Target Year:** 2050
- **Most Likely Near-term Target Year:** 2030

2.5.1 Regional Analysis of Net Zero, Long-term, and Near-term Targets

The global landscape of corporate climate commitments reveals distinct regional patterns in the adoption of net zero, long-term, and near-term targets, shaped by varying regulatory environments, economic priorities, and corporate maturity. Europe leads in climate target disclosures, driven by strict regulations. Asia lags with fewer net zero pledges amid industrial priorities and uneven rules. North America shows mixed progress, shaped by fragmented policies. Oceania stands out with strong proportional commitments despite its size. Africa and South America show early engagement but face infrastructure and scaling challenges.

Long-term climate commitments reflect a similar regional dynamic. Europe's leadership in long-term target setting is reinforced by robust policy frameworks, while Oceania's high adoption rate reflects a forward-looking approach. North America shows steady progress, driven by financial and regulatory pressures, whereas Asia's slower uptake points to challenges in aligning long-term strategies with immediate economic demands. Africa and South America exhibit uneven progress, with structural barriers limiting broader adoption.

Near-term targets enjoy the highest global adoption, as companies find shorter planning horizons more actionable, often driven by compliance cycles and investor demands. Europe and Asia are at the forefront of adopting these goals, underpinned by established reporting systems, while North America shows comparatively lower uptake. Africa and South America, despite less mature frameworks, show promising momentum in near-term target-setting, indicating growing awareness of immediate climate priorities

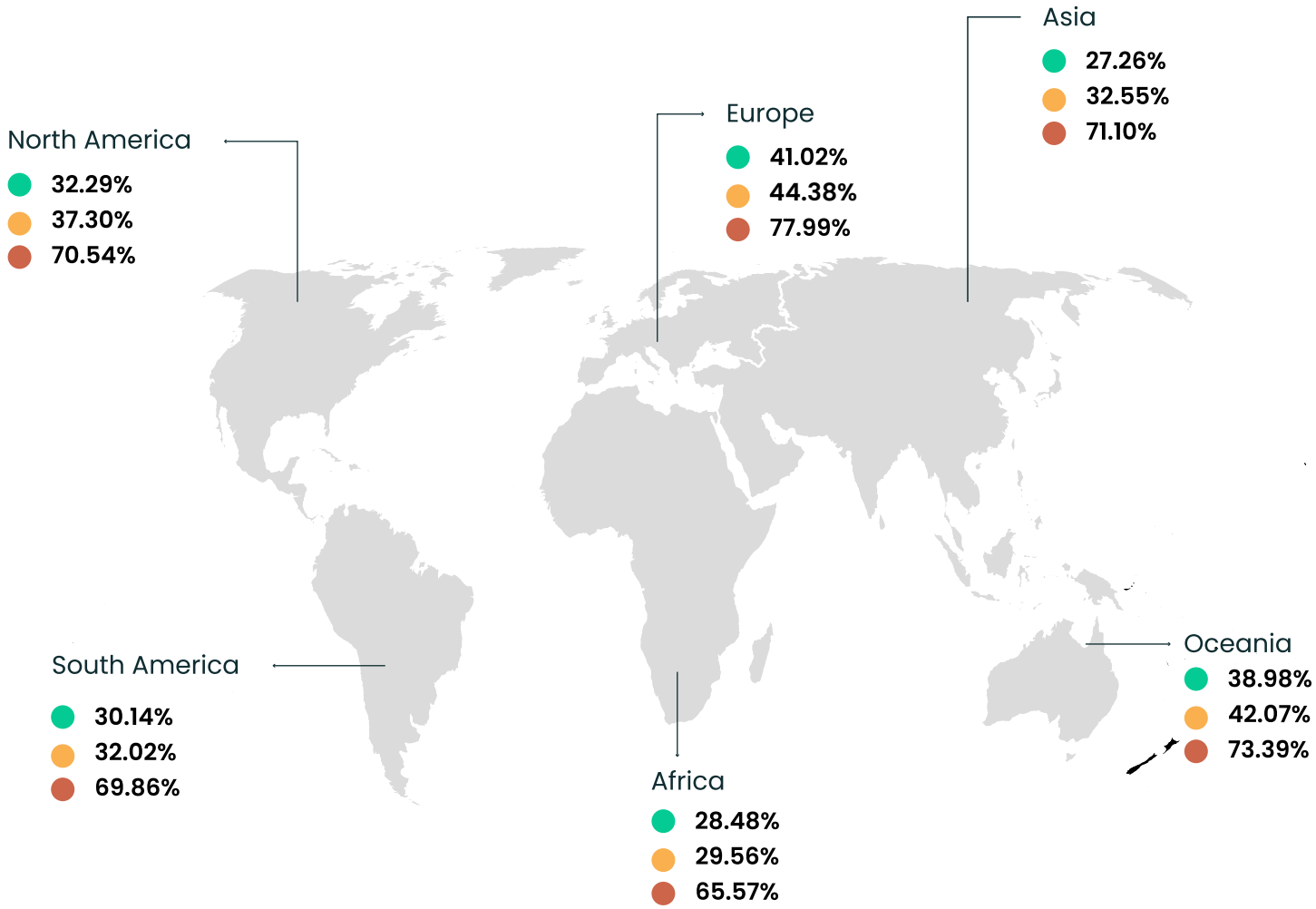
This regional analysis underscores a global shift toward climate accountability, with near-term targets serving as a practical entry point for companies. However, the uneven adoption of net zero and long-term commitments, particularly in resource-constrained regions, highlights the need for enhanced regulatory clarity, capacity building, and incentives to bridge gaps and foster cohesive global progress toward climate goals.

The percentages for companies with targets set, committed, without targets, and with data not available are calculated within each regional share, meaning they reflect the distribution of target status among companies in that specific region rather than across the entire dataset.

Region-wise Reporting

Net Zero - Target Set Long Term - Target Set Near Term - Target Set

Unclassified companies (2.63%) are excluded from the maps. For the Net-Zero category: 54.39% have targets set, 0.00% are committed to set targets, 37.72% have no targets, and 7.89% have data not available. For Long-Term targets: 74.56% have targets set, 1.75% are committed to set targets, 1.75% have no targets, and 21.93% have data not available. For Near-Term targets: 88.60% have targets set, 0.88% are committed to set targets, 0.00% have no targets, and 10.53% have data not available.



2.5.2 Sectoral Analysis of Net Zero, Long-term, and Near-term Targets

Across sectors, climate target adoption remains uneven. Industrials and Materials, two of the largest and most emission-intensive sectors, show some of the widest gaps. Energy and Financials stand out, with more than half of Energy companies and nearly half of Financials setting net zero targets, while Utilities also show relatively strong uptake.

By contrast, Consumer Staples and Consumer Discretionary lag significantly, with fewer than a quarter setting net-zero targets despite their extensive supply-chain influence.

When shifting focus to long-term goals, adoption improves but gaps remain. Utilities lead with over half of companies establishing long-term plans, followed by Energy and Financials, reflecting regulatory and investor pressure.

Real Estate also shows strong uptake, while Industrials and Consumer Staples fall behind, underscoring the slow pace of commitment in sectors with large operational and resource footprints.

Near-term targets, however, see the highest adoption. About three-quarters of companies across most sectors report them, with Industrials and Materials leading. Consumer sectors also show solid participation, while Utilities and Financials sit mid-range.

The percentages for companies with targets set, without targets, committed, and with data not available are calculated within each sector's share, showing the distribution of target status among companies in that specific sector rather than across the total dataset.

Sector-wise Reporting for Net-Zero Targets

Sector-wise Reporting for Long-Term Targets

Sector-wise Reporting for Near-Term Targets

2.5.3 Analysis of Net Zero, Long-term, and Near-term Targets by Revenue

The data reveals a clear relationship between company size and the maturity of climate target-setting. Larger firms, especially those above 10 billion USD in revenue, are more likely to have long-term and net-zero commitments in place, reflecting stronger regulatory pressure, investor scrutiny, and resource capacity.

Smaller companies, particularly those under 100 million USD, show far lower adoption, with many yet to set targets or not disclosing any data, underscoring reporting and capability gaps in the SME segment.

Near-term targets are far more common across all revenue ranges, suggesting companies are more comfortable disclosing short-horizon goals while deferring long-term or net-zero commitments.

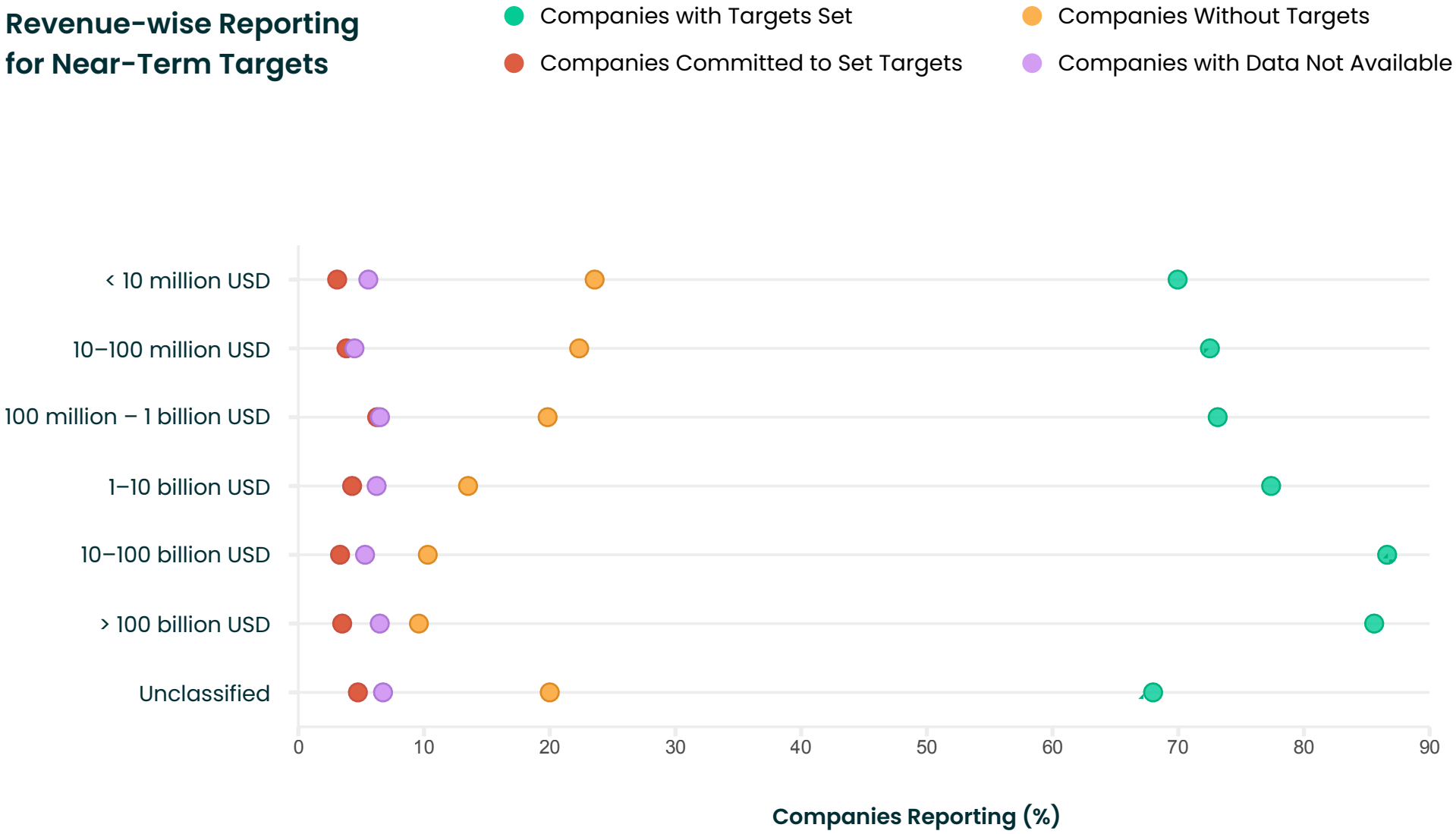
Overall, the findings highlight a maturity gradient by revenue: smaller firms lag, mid-sized companies are inconsistent, and the largest firms are more likely to set targets—whether net-zero, long-term, or near-term. This uneven landscape highlights where policy support, capacity building, and accountability mechanisms are most urgently needed.

The percentages for energy efficiency, company policy, low carbon energy, waste reduction, emission reduction, transportation, and fugitives reduction are calculated within each revenue group's share. They reflect the proportion of companies in that specific revenue category implementing the initiative, not a share of the overall dataset.

Revenue-wise Reporting for Net-Zero Targets

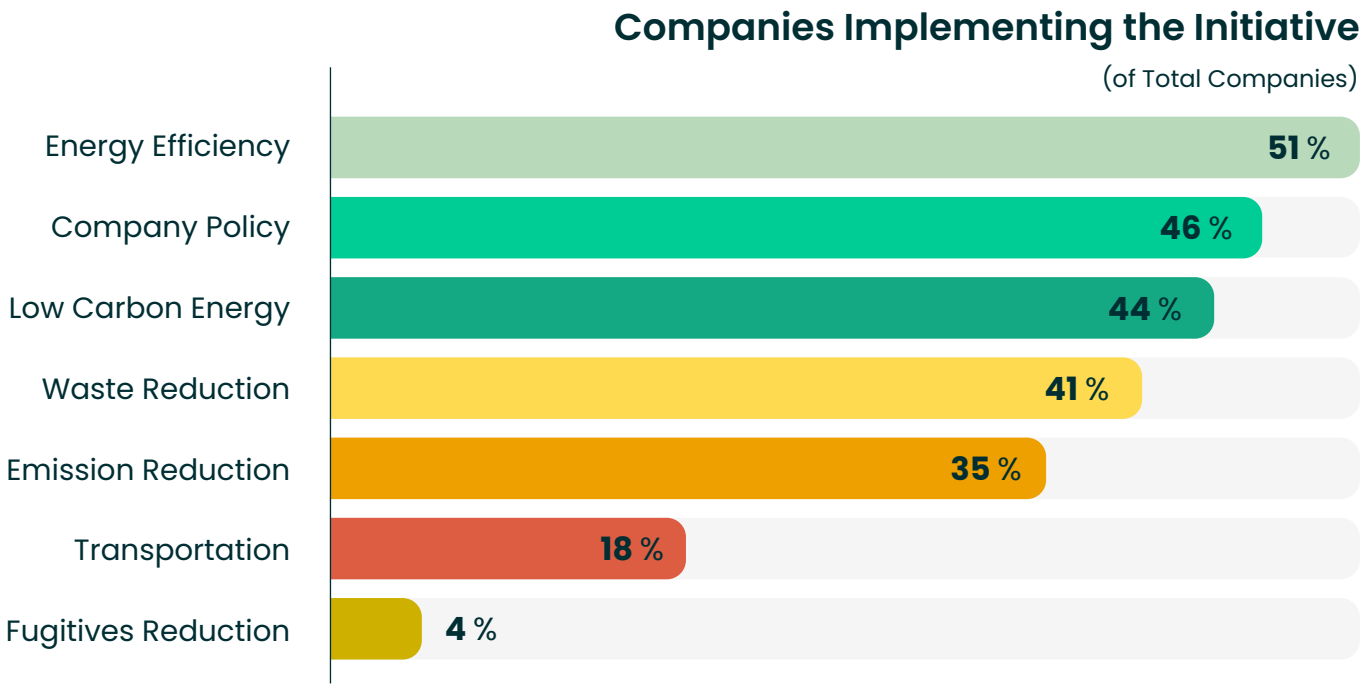
Revenue-wise Reporting for Long-Term Targets

Revenue-wise Reporting for Near-Term Targets



2.6 INITIATIVES

Corporate sustainability initiatives reflect the concrete actions companies are taking to reduce their environmental impact beyond regulatory requirements. This section analyzes various sustainability initiatives disclosed by companies, categorized into key areas such as Energy Efficiency, Low Carbon Energy, Emission Reduction, Company Policy, Waste Reduction, Transportation and Fugitives Reduction. The analysis provides insights into which types of initiatives are most commonly adopted, how they vary across regions and sectors, and highlights the role of proactive strategies in advancing corporate sustainability performance.



2.6.1 Regional Analysis of Sustainability Initiatives

The regional breakdown of sustainability initiatives shows that while adoption is widespread, priorities vary sharply across geographies.

Asia and Europe lead in low-carbon energy adoption, with Asia showing particular strength in energy efficiency initiatives.

Oceania and Europe are ahead in implementing robust company policies. Africa demonstrates a high reliance on low-carbon energy but limited action in transport and emissions reduction.

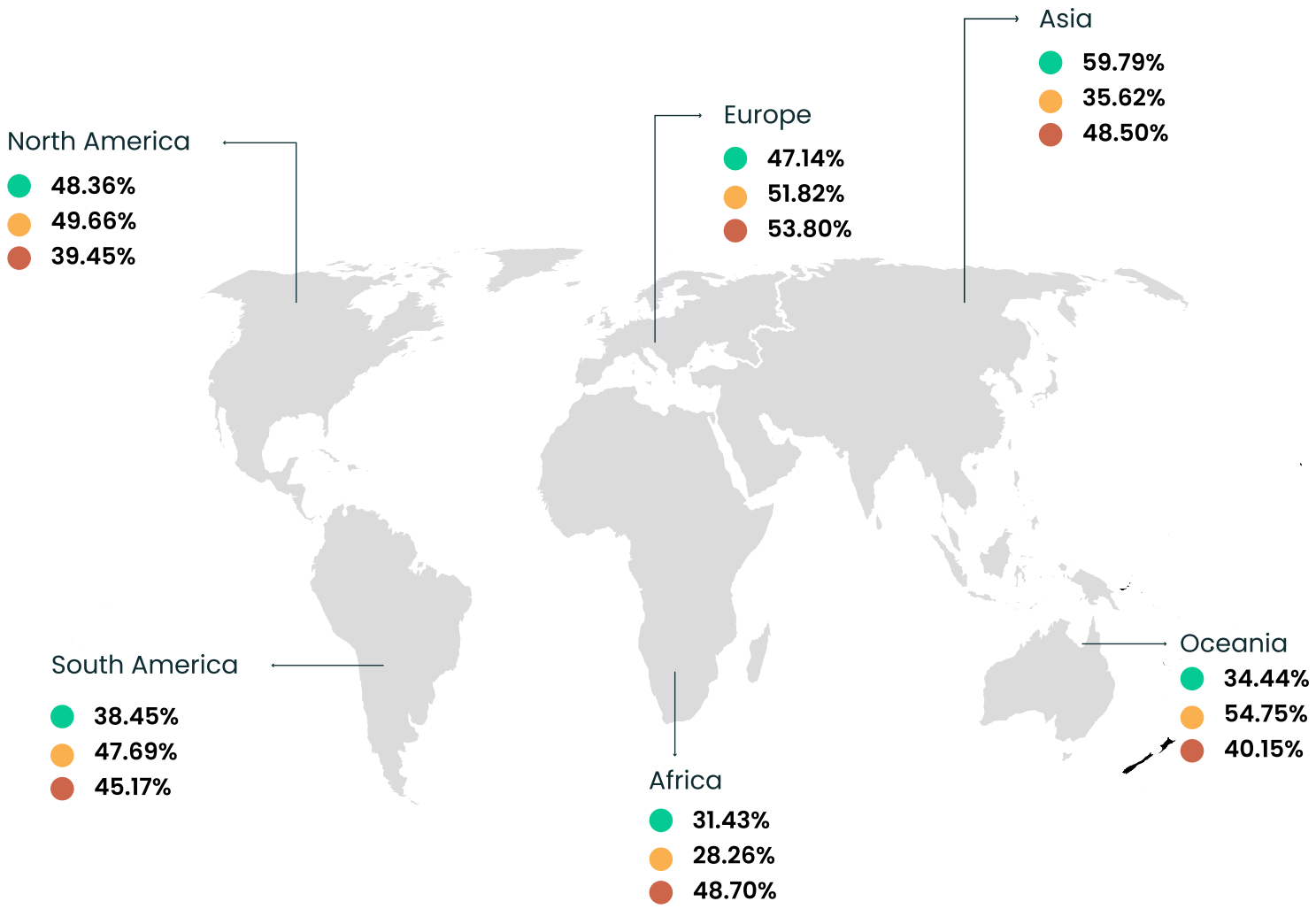
These contrasts highlight how local contexts such as regulatory environments, infrastructure, and economic structure shape corporate sustainability strategies, and point to where policy support and capacity building are most urgently needed.

The percentages for energy efficiency, company policy, low-carbon energy, waste reduction, emission reduction and transportation reflect the share of companies within each region adopting these initiatives, not the global dataset as a whole.

Region-wise Reporting

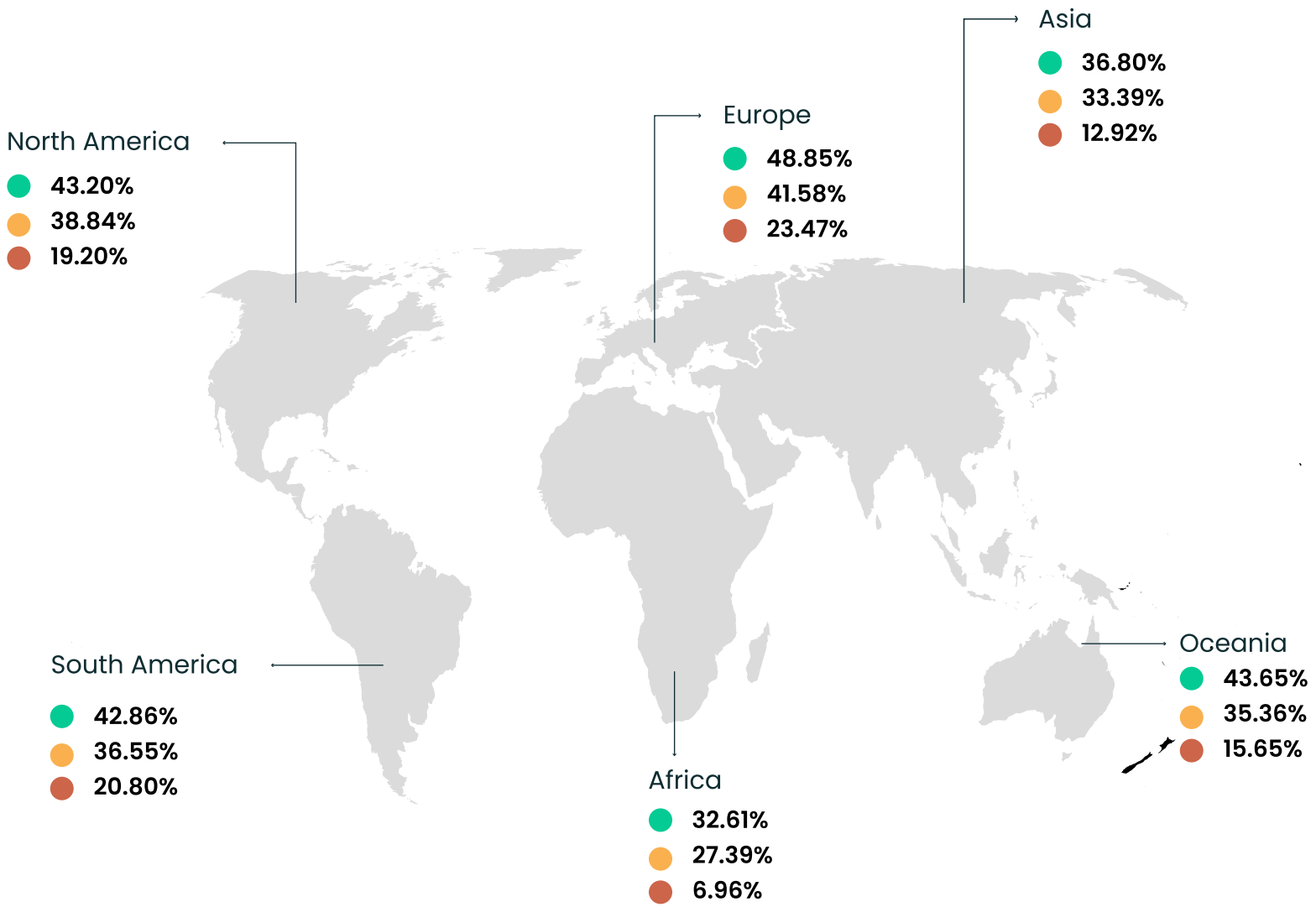
Energy Efficiency Company Policy Low Carbon Energy

Unclassified companies (2.63%) are excluded from the map; 33.01% reported energy efficiency initiatives, 41.13% company policy initiatives, 44.37% low-carbon energy initiatives, 43.26% waste reduction initiatives, 42.44% emission reduction initiatives and 21.02% transportation initiatives.



Region-wise Reporting

Waste Reduction Emission Reduction Transportation



2.6.2 Sectoral Analysis of Sustainability Initiatives

The sectoral analysis reveals that while sustainability initiatives are widely adopted, priorities vary sharply by industry. Industrials and Real Estate show strong progress in energy efficiency but lag in emissions reduction efforts.

Energy and Utilities lead in areas under heavy regulatory pressure, such as emissions reduction, low-carbon energy, and fugitives reduction, while Financials and Real Estate stand out for strong company policies but weaker operational initiatives like waste or transport. Consumer-facing sectors (Staples and Discretionary) display balanced adoption, though emission reduction remains a weak spot.

Information Technology and Health Care show relatively high efficiency and waste-related initiatives, reflecting operational improvements rather than structural decarbonization.

Sectors closest to direct environmental impact emphasize compliance-driven areas, while service-oriented industries lean on policy frameworks, exposing gaps in holistic sustainability integration.

The percentages for energy efficiency, company policy, low-carbon energy, waste reduction, emission reduction, transportation, and fugitives reduction indicate the share of companies within each sector implementing these initiatives, not the total dataset.

Sector-wise Reporting

2.6.3 Analysis of Sustainability Initiatives by Revenue

The revenue-based analysis shows a clear link between company size and the breadth of sustainability initiatives. Large firms, especially those with revenues above 10 billion USD, consistently outperform smaller peers in areas such as low-carbon energy, emission reduction, and transportation, reflecting greater resources, regulatory scrutiny, and investor pressure. Mid-sized firms (100 million to 10 billion USD) strike a balance, with strong energy efficiency and governance policies but mixed performance on waste and emissions.

Smaller companies (under 100 million USD) lag in nearly every initiative, particularly low-carbon energy and emissions reduction, highlighting capacity constraints and weaker external accountability.

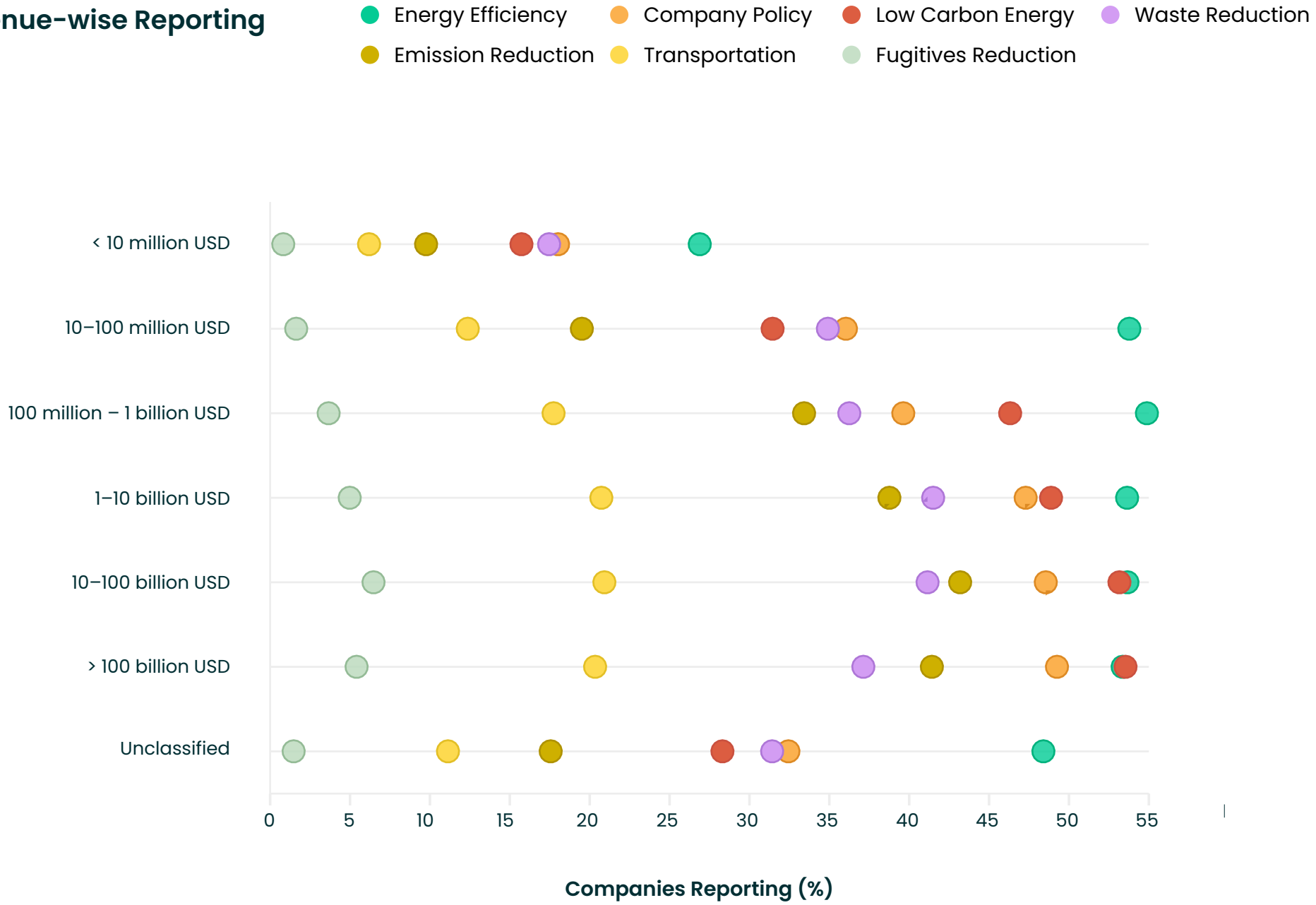
Firms with revenues over 100 billion USD show targeted strengths in energy efficiency, low carbon energy and company policy, though waste reduction remains a weak spot.

Overall, the data underscores a scale effect: the larger the firm, the more comprehensive and structured the sustainability initiatives, while smaller players remain inconsistent and under-reported.

The percentages for energy efficiency, company policy, low-carbon energy, waste reduction, emission reduction, transportation, and fugitives reduction reflect the share of companies within each revenue range implementing these initiatives, not the overall dataset.

The percentages for energy efficiency, company policy, low-carbon energy, waste reduction, emission reduction, transportation, and fugitives reduction reflect the share of companies within each revenue range implementing these initiatives, not the overall dataset.

Revenue-wise Reporting



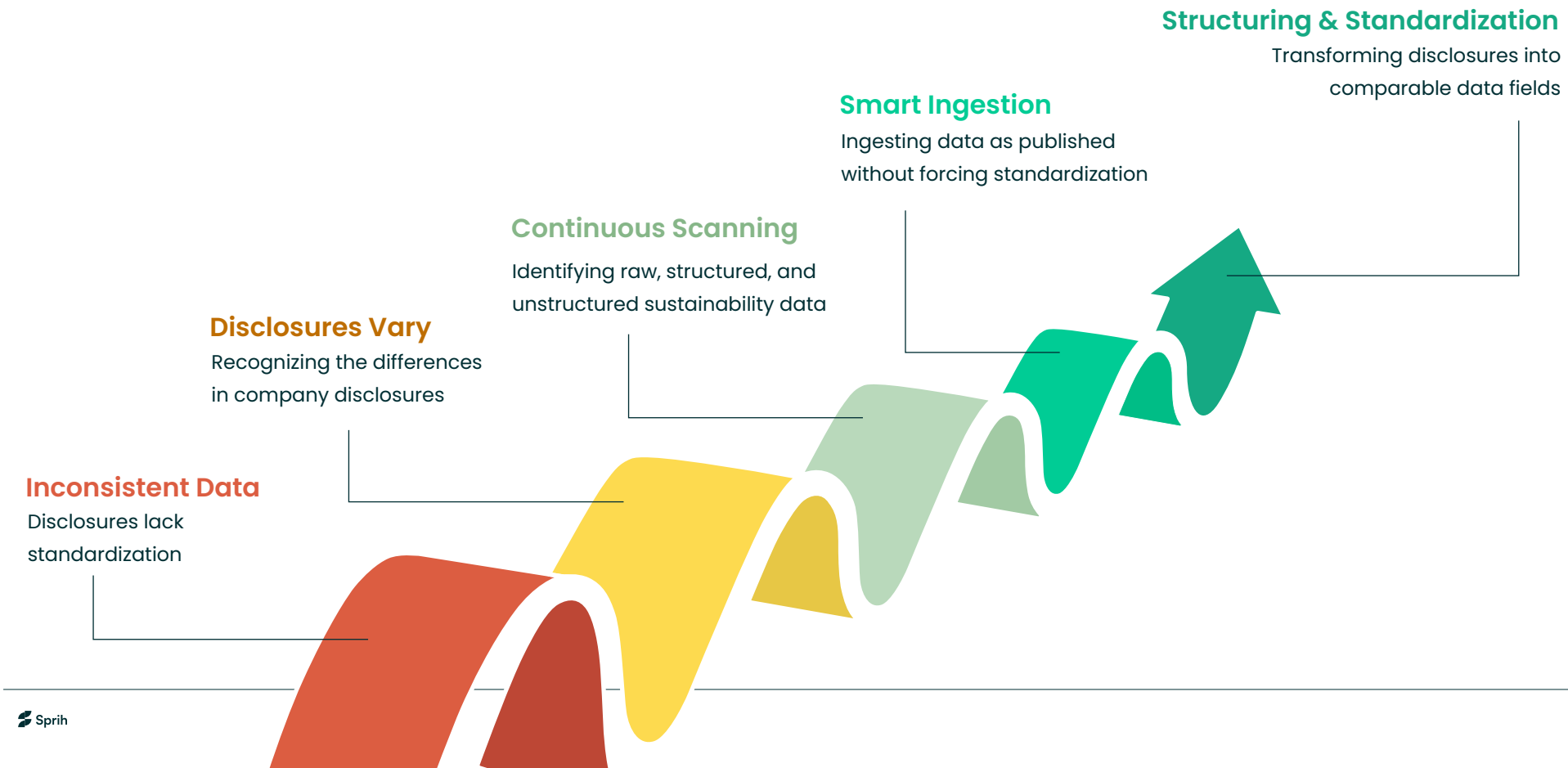
Chapter 3

Inside SustainSense: How AI Turns Noise into Knowledge

The growth of sustainability reporting has expanded the volume of available information, but the data remains fragmented. Disclosures appear across corporate websites, regulatory filings, and stock exchanges, in multiple languages and formats, combining narrative text with quantitative metrics. This diversity makes comparability and analysis challenging for policymakers, auditors, and executives.

SustainSense addresses this by providing an AI-native architecture purpose-built for sustainability. It is built to extract, harmonize, and structure sustainability data at scale, turning dispersed disclosures into a coherent and decision-ready foundation.

3.1 FROM SCATTERED DISCLOSURES TO STANDARDIZED DATA



Sustainability information is published in many forms: PDF reports, web pages, and even scanned documents. The content itself is just as uneven; some companies provide detailed Scope 1 and Scope 2 inventories, others report only partial metrics, while some limit disclosures to high-level pledges without underlying baselines.

The approach taken here starts with continuous collection of publicly available sources, isolating the sections that contain sustainability-relevant information. Rather than imposing a rigid template on these disclosures, the system interprets what each company has already published and restructures it into standardized, comparable data fields.

3.2 AGENTIC AI ARCHITECTURE: EXTRACTION, CLASSIFICATION, VALIDATION, NORMALIZATION

What is crucial now is understanding how AI can be operationalized at scale, across hundreds of thousands of documents, published in diverse formats and styles. SustainSense addresses this challenge through an agentic architecture, not one monolithic model attempting to do everything, but a coordinated system of specialized components, each built for a distinct purpose.

- **Extraction**: The first task is simply finding the data. Whether buried in a scanned PDF, a regulatory annex, or a single line in an annual report, disclosures are located and isolated with minimal noise.

- **Classification**: Once captured, information is sorted into structured categories - emissions, energy, water, waste, targets, governance, supply chain, so that a carbon metric is not confused with a strategic pledge or a policy statement.

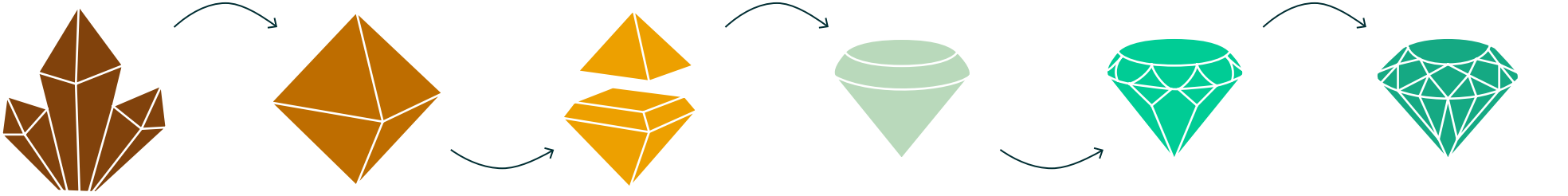
- **Validation**: Numbers are checked against context. Units are harmonized, sudden anomalies (such as a sharp emissions drop without explanation) are flagged, and missing years are preserved as reporting gaps rather than misread as improvements.

- **Normalization**: Finally, the cleaned and validated data is aligned to widely recognized frameworks, GHG Protocol, CSRD, ISSB, TCFD, allowing cross-company comparisons without losing local specificity.

This layered approach transforms scattered and inconsistent disclosures into structured, decision-ready outputs.

In practice, it means that data from a mid-sized manufacturer in Asia, a utility in Europe, and a multinational bank in North America can be placed side by side, interpreted through a common lens, and analyzed as part of the same global picture.

What emerges is not just a database, but a living infrastructure for climate accountability, one that respects the diversity of corporate disclosures while bringing them into a format that policymakers, investors, and businesses can actually use.



3.3 TEACHING AI THE LANGUAGE OF SUSTAINABILITY

Sustainability is not a static field. Its terminology evolves quickly as regulators, investors, and companies introduce new frameworks and refine old ones. Phrases such as carbon neutrality, net zero, location-based Scope 2, double materiality, or circular economy carry specific technical meanings that differ across contexts and can shift over time. Generic AI systems often stumble here. They may conflate aspiration with performance, interpreting a pledge as if it were a reported outcome, or mistake narrative descriptions for quantitative disclosures. Without a nuanced understanding of this vocabulary, analysis risks collapsing complex reporting into misleading simplifications.

To address this, SustainSense has been immersed in hundreds of thousands of sustainability-specific documents. This domain-grounding allows it to parse disclosures with

precision, distinguishing between:

- **Quantitative metrics** — e.g., "Scope 2 emissions: 3,450 tCO_2e."
- **Qualitative commitments** — e.g., "We aspire to reach net zero by 2050."
- **Contextual qualifiers** — e.g., "excludes subsidiaries" or "calculated using location-based methodology."

3.4 DATA HARMONIZATION ACROSS LANGUAGES, FORMATS, AND REGIONS

Corporate sustainability disclosures come in every shape and form: different languages, formats, and cultural practices. A Japanese utility may bury emissions in a scanned PDF, a European chemicals firm may share detailed spreadsheets, while a Latin American retailer folds its targets into narrative text. Without harmonization, comparing these reports is nearly impossible.

SustainSense solves this by processing data across 30+ languages, standardizing formats from spreadsheets to scanned tables, and interpreting regional practices, from intensity-based disclosures in Asia to absolute targets in Europe. Everything is mapped into a common data schema, making an emissions claim from a European cement producer directly comparable to a water-efficiency initiative from an Asian textile manufacturer. The result is a global, decision-ready dataset that enables genuine cross-border benchmarking and systemic insight.

3.5 CONTINUOUS LEARNING: HOW THE SYSTEM IMPROVES WITH EVERY DISCLOSURE

Sustainability reporting is a moving target, new terms enter the lexicon, metrics shift, and disclosure expectations expand each year. A static system built on yesterday's definitions can't keep up. SustainSense addresses this by embedding continuous learning at its core, so every new disclosure strengthens its intelligence.

Each report ingested expands the knowledge base, sharpening recognition of evolving practices. Emerging terms like "nature-positive" or "biodiversity net gain" are absorbed into the taxonomy, keeping the dataset aligned with future

priorities. Feedback loops refine accuracy, reducing false positives and improving anomaly detection. The result is a living dataset, one that grows more nuanced and relevant over time, evolving in lockstep with the sustainability field itself.

3.6 BEYOND COLLECTION: FROM DATA TO INTELLIGENCE

As the system learns and adapts, its role extends well beyond the mechanics of data capture. The real value lies in how raw disclosures are transformed into intelligence that different stakeholders can act upon.

- **Comparative Analytics**: Disclosures are placed side by side, by peer group, sector, or region, to reveal who is advancing and who is lagging. This benchmarking moves the conversation from isolated company reports to systemic patterns.

- **Predictive Signals**: Gaps in reporting are not treated as empty cells but as indicators. When a firm consistently omits Scope 3 emissions or drops a target without explanation, the system highlights these omissions as potential risks.

- **Decision-Oriented Views**: The end product is not a static dataset but dashboards and outputs tailored for use. For executives, it means understanding emissions as a financial exposure; for regulators, it means testing the completeness of disclosures; for investors, it means gauging credibility at scale.

Chapter 4

Key Use Cases of the Global Climate Database

4.1 UNDERSTANDING SECTORAL NUANCES

Sectoral Decarbonization Strategies

Decarbonization initiative data across sectors reveals what actions companies are taking, the outcomes achieved, and the innovations driving progress. This transforms scattered disclosures into a global playbook, enabling industries to benchmark, replicate successful strategies, and accelerate credible, data-driven transition pathways.

Benchmarking performance

Normalized emissions data creates a common yardstick across sectors, enabling direct comparison of companies and industries. With millions of data points processed, it becomes possible to spot trends, identify which sectors are progressing, and assess which carry greater long-term risk. The data highlights leaders and laggards, uncovers structural differences, from utilities' high Scope 1 intensity to finance's outsized financed emissions, driving convergence around best practices.

Identifying material issues

Material issues vary by sector, region, and stakeholder expectations. With millions of data points, the database reveals these distinctions clearly, from water intensity in semiconductors and textiles, to supply-chain emissions in automotive and food processing, to outsized financed emissions in financial institutions. Such insights move strategy beyond generic assumptions, enabling sectors to focus on the real levers of change and allowing regulators, investors, and companies to monitor how material issues evolve, and how they may impact business performance.

Designing credible pathways

Aligning sectoral disclosures with climate goals uncovers sector-specific pathways that make decarbonization planning more precise and practical. With a vast database of initiatives, companies and industries can design pathways that are not only ambitious but also doable, cost-effective, and credible in the eyes of regulators, investors, and other stakeholders. From phasing down coal in power generation to electrifying logistics or tightening financed emissions portfolios, data turns ambition into actionable, credible transition strategies.

4.2 IMPROVING CORPORATE REPORTING & AUDIT READINESS

Gap Analysis

For compliance officers, keeping pace with an evolving global regulatory map is a growing challenge. Rules shift across geographies: CSRD in Europe, ISSB globally, SB 253/261 in California, each demanding different levels of detail. The world's largest climate dataset bridges this gap by mapping disclosures against regulatory requirements, showing precisely where companies are fully compliant, partially aligned, or falling short. This turns regulatory complexity into a data-driven checklist, reducing uncertainty and accelerating audit readiness.

Auditability

This database can directly support the audit process. With industry-average emissions, intensity benchmarks across sectors and geographies, and measurable outcomes of decarbonization plans, it provides a reference layer for validation.

- For companies: it highlights sector-specific data gaps, helps them strengthen disclosures, and prepares them for assurance with credible, comparable evidence.
- For auditors: it offers a benchmark against which reported numbers can be checked, making it easier to distinguish between consistent, well-grounded disclosures and those that fall short.

4.3 REGULATORY BENCHMARKING & COMPLIANCE ACCELERATION

Cross-Regulation Mapping

For policymakers and companies alike, the growing web of regulations has shifted reporting away from being an enabler of action toward a box-ticking exercise. Different formats, varying disclosure levels, and overlapping requirements force global companies to publish the same data in multiple ways, draining resources and slowing progress.

A unified climate dataset changes this dynamic. The database acts as a backbone for regulatory alignment by mapping disclosures across regulatory frameworks. It shows where data points overlap, where gaps exist, and how a single disclosure can satisfy multiple regimes.

The result is twofold: companies reduce the workload of reporting, and regulators gain greater clarity and

comparability, turning compliance complexity into an engine for more effective climate governance.

Early-Warning System

Regulations rarely shift overnight, they evolve through early adopters who begin reporting differently ahead of formal mandates. With millions of disclosures tracked over time, the database acts as an early-warning system, spotting emerging trends before they become regulatory requirements. This allows:

- Companies to prepare in advance, reducing the cost and disruption of last-minute compliance.
- Regulators to monitor adoption patterns and fine-tune policy rollouts based on how the market is already responding.
- Investors and auditors to anticipate the next reporting frontier and adjust expectations accordingly.

Instead of chasing regulatory change, stakeholders can stay one step ahead, turning compliance from a reactive burden into a proactive advantage.

Global Comparability

One of the biggest challenges in climate reporting is the lack of a consistent baseline across regions. A Scope 3 disclosure in Europe may look very different from one in Asia or Latin America, making side-by-side comparison nearly impossible. The database enables global comparability by harmonizing millions of data points. Regulators can assess how disclosure maturity varies across jurisdictions, investors can benchmark companies on a level playing field, and policymakers can identify where alignment with international standards is strong, and where gaps remain.

This creates a feedback loop for smarter governance: companies receive clearer signals about expectations, regulators design more consistent policies, and global markets gain a transparent lens to evaluate progress

4.4 MAPPING SUSTAINABILITY LANDSCAPES

Regional Benchmarking

At scale, the database makes it possible to compare disclosure maturity across regions with clarity. Europe leads in comprehensive reporting, driven by strong regulation and

investor expectations. Asia-Pacific shows contrasts robust in manufacturing hubs yet weaker among smaller enterprises. The Americas split into two patterns: North America's high compliance under regulatory pressure versus South America's uneven progress. Africa, though a smaller share of the dataset, provides early signals of how emerging economies are beginning to approach climate transparency.

These regional benchmarks reveal not just where progress is being made, but where blind spots remain, guiding policymakers, investors, and companies toward the areas most in need of attention.

Industry Clusters

Patterns emerge not only by geography but also by industrial concentration. For instance, European financial institutions are disclosure leaders on financed emissions, while textiles and agriculture show more gaps in Scope 3 and water intensity data.

Clustering allows stakeholders to identify hotspots of robust reporting alongside blind spots, particularly among SMEs that sit deep within global supply chains but are critical to corporate Scope 3 footprints.

4.5 RISK ASSESSMENT FOR INVESTORS & FINANCIAL INSTITUTIONS

Identifying Risks and Opportunities

Data at such a large scale reveals both blind spots and growth opportunities. It shows which sectors are moving faster, which countries are tightening compliance, and which companies are taking sustainability seriously versus lagging behind. For financial institutions, these insights are critical: they help reduce exposure to climate-related risks while identifying opportunities for green investment and capital reallocation.

The result is a dual advantage protecting portfolios from transition and regulatory shocks, while positioning capital to flow toward the companies and sectors best prepared for a low-carbon future.

Disclosure Quality as a Governance Signal

Disclosure practices vary widely within and across sectors, and those differences matter. If one company provides detailed, transparent data while a peer remains silent, it raises a clear red flag. For investors, this variation becomes a proxy for governance quality. Inconsistent or incomplete reporting signals weak oversight and fragile risk

management. By contrast, companies with clear, structured disclosures demonstrate stronger accountability and greater readiness for regulatory and market shifts.

Portfolio Heatmaps

With harmonized data, investors can map risk across portfolios, identifying industries and regions where disclosure maturity is low. These heatmaps reveal where transition risks, such as carbon pricing exposure or energy dependence, are most concentrated. They also highlight markets where reporting practices are improving, pointing to opportunities for capital allocation into more resilient sectors.

Scenario Modeling

The vast dataset provides the freedom to go deeper with insights. Investors can model the impact of climate policies, resource constraints, and shifting consumer demand with far greater accuracy. This takes risk assessment beyond assumptions, delivering a credible view of how climate scenarios may affect valuations, creditworthiness, and long-term resilience.

4.6 SUPPLY CHAIN SUSTAINABILITY VISIBILITY (SCOPE 3, SUPPLIER ENGAGEMENT)

Scope 3 Illumination

Scope 3 emissions are the largest and least transparent part of corporate footprints. With millions of disclosures processed globally, the database makes it possible to see where supply-chain emissions are systematically underreported, across industries, geographies, and tiers.

What was once a blind spot becomes a measurable risk, allowing companies to plan with clarity instead of uncertainty.

Reducing Supplier Burden

Global data also transforms the way suppliers engage with buyers. Instead of being overwhelmed with repetitive surveys and questionnaires, suppliers' publicly available disclosures are consolidated and standardized.

This reduces duplication, eases compliance fatigue, and allows procurement teams to access decision-ready insights without creating additional reporting burdens. The shift frees suppliers to spend less time on paperwork and more time on actual climate action.

Extending Visibility Beyond Tier-1

Supply chains rarely end with direct suppliers. The database extends visibility into Tier-2 and Tier-3 suppliers by drawing from a vast pool of global disclosures, including smaller and mid-tier firms.

This depth enables companies to understand the true scale of value-chain emissions, manage systemic risks, and build

Chapter 5

Stakeholder Perspectives

The database is not an abstract exercise; it directly supports the needs of multiple stakeholders. Each group can leverage the insights differently, but all benefit from having fragmented sustainability disclosures turned into a structured, comparable knowledge system.

5.1 EXECUTIVES (CEOs, CFOs, CSOs): LINKING DISCLOSURES TO STRATEGY & DATA

For today's C-suite, sustainability disclosures are core to enterprise value and resilience. With the world's largest climate dataset, fragmented reports transform into insights that directly inform boardroom decisions.

The data benchmarks entire sectors, enabling CEOs to see whether their company is leading or lagging, and to position sustainability as a driver of competitive advantage rather than a compliance exercise.

It quantifies financial exposure to carbon pricing, subsidies, and tax incentives, giving CFOs clarity on risks that shape cost of capital and credit ratings.

For CSOs, disclosure gaps and inconsistencies become visible, allowing targets to be tied to hard metrics like emissions intensity, renewable energy adoption, or Scope 3 exposure, turning ambition into measurable execution.

These insights move boardrooms from narrative to numbers. Leadership can align strategy, finance, and sustainability in a single conversation ensuring that climate risk is not only managed, but turned into an engine of growth, resilience, and long-term advantage.

5.2 INVESTORS & FINANCIAL INSTITUTIONS: TURNING DATA INTO CAPITAL DECISIONS

For investors and financial institutions, disclosure quality is a signal of governance, resilience, and future value. With the world's largest climate dataset, blind spots turn into measurable insights that directly shape capital allocation.

The data exposes which sectors and regions are progressing, and which are lagging, providing early warnings on transition risks such as carbon pricing, energy dependence, or Scope 3 liabilities. It enables portfolio heatmaps that reveal where risk is concentrated and where resilience is emerging.

Standardized disclosures also power scenario modeling, allowing institutions to stress-test valuations, creditworthiness, and long-term resilience against policy shifts, resource constraints, or consumer trends.
Just as importantly, the dataset highlights opportunity. By benchmarking disclosure maturity, investors can identify leaders demonstrating credible climate strategies and direct financing toward them, accelerating the shift to low-carbon markets while reducing exposure to stranded assets.

In short, the database transforms sustainability data into investment intelligence — helping financial institutions manage downside risks while unlocking the upside of green

5.3 PROCUREMENT & SUPPLY CHAIN LEADERS: EMBEDDING RESILIENCE THROUGH DATA

For procurement and supply chain leaders, Scope 3 is the hardest challenge: vast, fragmented, and largely invisible. With the world's largest climate dataset, these blind spots become measurable, enabling leaders to manage entire ecosystems, not just Tier-1 suppliers.

By consolidating disclosures already published by thousands of suppliers worldwide, the database reduces duplication and reporting fatigue. Instead of chasing endless questionnaires, leaders gain decision-ready insights on supplier maturity, emissions intensity, and sustainability risks. This shifts supplier engagement from paperwork to performance, freeing both buyers and suppliers to focus on real action.

The scale of the data also extends visibility deep into Tier-2 and Tier-3 suppliers, where risks often compound. Leaders can benchmark practices across regions and industries, identify hotspots of water stress, energy intensity, or carbon dependence, and build procurement strategies that balance cost, continuity, and climate resilience.

With global data as the backbone, procurement leaders can turn Scope 3 from a burden into a strategic capability, embedding resilience, credibility, and competitiveness into the value chain.

5.4 REGULATORS & AUDITORS: BUILDING SMARTER, ALIGNED GOVERNANCE

For regulators and policy makers, fragmented disclosures have long made it difficult to track compliance, measure progress, or design effective interventions. The world's largest climate dataset changes this by turning scattered company reports into a global evidence base for governance.

With millions of harmonized data points, regulators can benchmark disclosure maturity across sectors, regions, and jurisdictions. They can see where regulations like CSRD, CSDDD, or California's SB 253/261 are driving stronger transparency, and where gaps persist. This cross-regulation mapping reduces duplication for companies while giving regulators clearer comparability across borders.

The dataset also acts as an early-warning system, revealing market shifts before new rules fully land, whether in Scope 3 reporting detail, double materiality adoption, or net-zero target alignment. Policymakers can use these insights to refine regulations, anticipate industry response, and accelerate harmonization globally.

Data at this scale transforms regulation from static compliance to dynamic, intelligence-driven governance, ensuring policies are smarter, markets are clearer, and progress toward climate goals is measurable.

5.5 TECHNOLOGY COMMUNITY: POWERING THE INFRASTRUCTURE OF CLIMATE INTELLIGENCE

For the technology community, the world's largest climate dataset is more than information, it is a platform for innovation. Sustainability disclosures have traditionally been messy, fragmented, and trapped in PDFs and annexes.

By applying AI to harmonize millions of data points across languages, formats, and geographies, the database proves that climate data can be treated with the same rigor as financial data.

This structured foundation becomes an ecosystem enabler. APIs, dashboards, assurance tools, risk analytics, and even climate-finance products can all plug into a single intelligence layer, reducing duplication and accelerating scale.

For AI researchers and developers, it validates that complex, unstructured disclosures can be parsed, normalized, and improved continuously through machine learning.

The potential doesn't stop at extraction. With continuous learning, the system evolves into predictive and prescriptive intelligence flagging anomalies, suggesting corrective actions, or modeling transition pathways. This creates a feedback loop where technology doesn't just capture climate disclosures, it actively reshapes how they are used to drive action.

For the tech community, this dataset is both proof and platform: proof that AI can solve one of the hardest data challenges in sustainability, and a platform for building the next generation of climate intelligence solutions.

Chapter 6

The Need for a Global Climate Intelligence Layer

Sustainability disclosures are not just compliance paperwork. They are the raw material for accountability, strategy, and climate intelligence. Without them, stakeholders operate in the dark; with them, the global economy gains the visibility needed to navigate one of the greatest transitions in history. Disclosures are only as useful as the systems that connect them.

Today, even as thousands of companies report, the data is scattered across formats, languages, and regulatory contexts. Some firms disclose emissions intensity but omit water usage. Others may pledge net-zero targets without disclosing baselines. Supply chain emissions may be tracked in one jurisdiction and ignored in another. The result is a patchwork that resists comparison and limits its value to those who need it most.

What is missing is a global climate intelligence layer, a unifying infrastructure that can ingest, validate, and harmonize data from across geographies, sectors, and frameworks. Such a layer ensures that a Scope 3 disclosure in São Paulo can be meaningfully compared to one in Seoul, or that energy consumption figures from a manufacturer in Germany can be aligned with those from a supplier in India.

This is more than translation or digitization. It is about turning raw, fragmented reports into structured, decision-ready knowledge. By doing so, sustainability reporting evolves from a compliance burden into the backbone of global climate accountability and strategy.

WHAT THIS CHANGES

You end up with a **single source of truth**: one reconciled set of numbers, one view of coverage and methods, one map to multiple regulations, and one consistent picture that auditors can verify.

The net effect is lower reporting effort, faster compliance preparation, and, most importantly, evidence that can drive action, capital planning that reflects real transition exposure, procurement that prices climate risk alongside cost, and sector roadmaps grounded in comparable data rather than assumptions.

Conclusion

Sustainability reporting has reached a tipping point. For years, companies have published disclosures in fragmented formats, leaving stakeholders to piece together incomplete pictures of climate risk, opportunity, and accountability. That era is ending.

With SustainSense and the world's largest AI-powered climate database, we now have the ability to transform scattered disclosures into a unified climate intelligence system.

Beyond compliance, this is about redefining how sustainability is understood, measured, and acted upon.

The scale and depth of this database deliver something unprecedented:

- **Deeper visibility** into emissions, water, waste, and energy footprints across more than 80,000 companies and every major sector, tracking progress against science-based targets and sustainability initiatives to accelerate impact.
- **Systemic insights** that go beyond anecdotes to reveal global patterns, blind spots, and opportunities for action.
- **Decision-ready intelligence** for enterprises, regulators, investors, and supply chain leaders — linking sustainability directly to strategy, finance, and risk management.

The road ahead requires turning disclosure into decisions, strategy, and impact. With SustainSense, the path is visible. The opportunity is immense. And the transformation has already begun.

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