

# Driving Sustainable Growth: ESG & CSR Excellence in Singapore

Navigating Regulatory Frameworks, Market Opportunities & Strategic Implementation

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# Singapore Emerges as Asia's ESG Leadership Hub

100%

of top 100 Singapore companies report on sustainability (vs. 79% global average)

76%

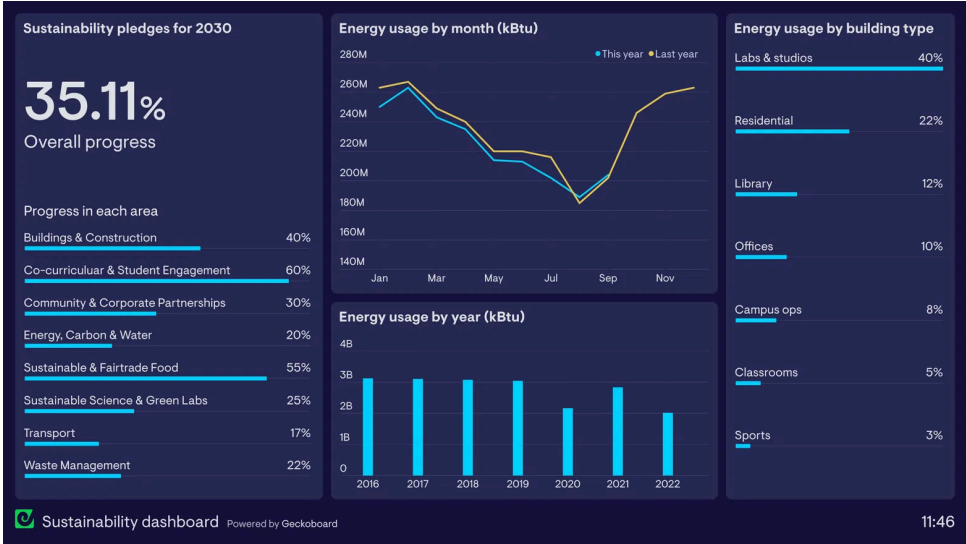
recognize climate change as financial risk (up from 49% in 2022; global: 55%)

84%

integrate ESG into annual reports (up from 68% in 2022; global: 62%)

Singapore's remarkable achievement in sustainability reporting reflects a deliberate national strategy combining robust regulatory frameworks, government-led initiatives, and strong corporate commitment. According to KPMG's 2024 survey, Singapore is among an elite group of seven countries globally where all top 100 companies report on sustainability.

This achievement demonstrates a fundamental shift in how Singapore corporations view sustainability—not merely as a compliance exercise, but as a strategic imperative integral to risk management and long-term value creation. The rapid adoption reflects both regulatory pressure and genuine recognition that stakeholders increasingly demand transparency on environmental, social, and governance performance.

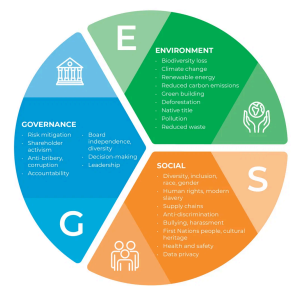


# Understanding ESG Reporting vs. Corporate Social Responsibility

## ESG Reporting

Systematic practice of disclosing environmental, social, and governance performance through standardized metrics and frameworks. Provides stakeholders with transparent, measurable data on how businesses manage sustainability risks and opportunities.

Emphasis on quantifiable metrics, standardized frameworks (GRI, SASB, ISSB), and external assurance to ensure credibility and comparability.



## Corporate Social Responsibility

Voluntary efforts companies undertake to make positive impacts on society, support economic development, and protect the environment, often going beyond legal obligations.

Includes community outreach, charitable giving, employee volunteerism, eco-friendly product design, and carbon footprint reduction initiatives demonstrating corporate values.

Dimension	ESG Reporting	Corporate Social Responsibility
Approach	Data-driven, standardized metrics	Values-driven, voluntary initiatives
Focus	Investor-focused, risk management	Community-focused, stakeholder engagement
Timeframe	Long-term strategic alignment	Short-term impact and responsiveness
Verification	External assurance required	Self-reported, narrative-based

**The Intersection:** ESG reporting ensures CSR activities are measured, tracked, and communicated with credible data, transforming well-intentioned initiatives into accountable commitments aligned with long-term sustainability objectives.

# Singapore's Regulatory Architecture Drives Mandatory Compliance

Singapore's regulatory approach to ESG represents a carefully calibrated progression from voluntary guidelines to mandatory compliance. The Singapore Exchange (SGX) and Monetary Authority of Singapore (MAS) have established one of Asia's most comprehensive ESG regulatory frameworks, with mandatory climate reporting from 2025 and progressive expansion of disclosure requirements.



## 2022: Climate Reporting Begins

Mandatory climate reporting on "comply or explain" basis for all SGX-listed issuers. Companies must adopt recognized frameworks and identify material ESG factors.

## 2023–2024: Sector-Specific Requirements

Compulsory climate reporting introduced for specified sectors, with additional sectors added progressively. Enhanced disclosure standards adopted.

## FY 2025: Scope 1 & 2 Mandatory

All SGX-listed issuers must include Scope 1 (direct emissions) and Scope 2 (indirect emissions from energy) in sustainability reports. ISSB standards adopted.

## 2026: Scope 3 Expected

Scope 3 emissions (value chain emissions) expected to become mandatory for listed companies, requiring supply chain collaboration and data sharing.

## FY 2027: External Assurance Required

SGX-listed issuers must obtain external limited assurance for Scope 1 and 2 GHG emissions disclosures. Large non-listed companies (NLCos) begin GHG reporting.

## FY 2029: NLCos Full Compliance

Large non-listed companies (revenue ≥ S\$1B, assets ≥ S\$500M) follow similar disclosure and assurance requirements. Scope 3 reporting expected no earlier than FY 2029.

**Global Compatibility:** Singapore adopted International Sustainability Standards Board (ISSB) standards into enhanced reporting framework, ensuring global compatibility and comparability of ESG reports.



# MAS Project Greenprint Leverages Technology for ESG Transparency

Project Greenprint, launched by the Monetary Authority of Singapore, represents a pioneering technology-enabled infrastructure that addresses greenwashing, enhances data quality, and facilitates sustainable finance through blockchain, data orchestration, and standardized taxonomies.

## ESGpedia Registry

Blockchain-powered platform serving as comprehensive repository of ESG data from certified sources, ensuring data integrity, traceability, and immutability to combat greenwashing.

## MData Orchestrator

Central hub aggregating sustainability data from diverse sources, enhancing information depth for detailed ESG analysis and facilitating seamless data exchange between stakeholders.

## Green Taxonomy

Traffic light system categorizing activities as green, amber (transitioning), or red, providing common language for sustainable finance with international recognition including ASEAN and EU adoption.

## Greenprint Marketplace

Upcoming platform connecting green fintech and technology providers with investors and financial institutions, fostering partnerships and accelerating commercialization of green technologies.

## ESGenome Portal

Centralized platform providing free access to ESG data for investors, democratizing sustainability information while maintaining company reporting obligations on SGXNet.



# Case Study: DBS Bank Pioneers Sustainable Finance in Asia

DBS Bank exemplifies how financial institutions can embed sustainability into their core business model, achieving recognition as Asia's leading sustainable finance institution and the first Singapore bank to join the Net-Zero Banking Alliance.

## Three Sustainability Pillars

### 1. Responsible Banking

Delivers products and services promoting sustainable development; provides financing for renewable energy, green buildings, sustainable agriculture, and alternatives for scarce materials.

### 2. Responsible Business Practices

Focuses on people as most important resource; integrates environmental and societal considerations into operations including employee development and ethical conduct.

### 3. Creating Social Impact

Supports social enterprises and businesses with double bottom lines; gives back to communities where the bank operates.

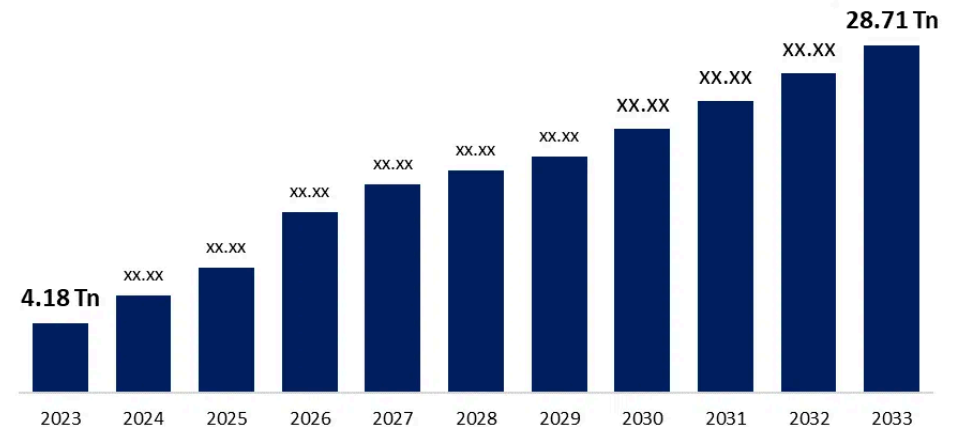
## Key Initiatives & Impact

**ESG Ready Programme:** Helps SMEs enhance sustainability practices and integrate ESG principles, almost doubling sustainable finance volumes. Demonstrates that supporting clients' sustainability journeys creates business value while advancing environmental and social goals.

## Recognition & Leadership

- Outstanding Leadership in Sustainable Project Finance (Global & APAC)
- Outstanding Leadership in Green Bonds (Global)
- Best ESG Transaction Bank (APAC)
- Best Sustainable Bank - Singapore

## Global Green Finance Market



## Strategic Focus Areas

DBS actively directs capital flows toward projects with positive environmental and social impact, recognizing that financial institutions play a critical role in enabling the transition to a sustainable economy.

**Investment Priorities:** Renewable energy • Green buildings • Sustainable food and agricultural systems • Alternatives for scarce materials

*"DBS publishes annual standalone and externally assured sustainability reports (since 2018) complying with GRI Standards and referencing SASB, ensuring transparency and accountability."*

# Case Study: CapitaLand Investment Quantifies Financial Returns of Green Investments

**CapitaLand Investment (CLI)**, a leading real estate investment manager in Asia, has pioneered an innovative approach to sustainability by developing frameworks that quantify the financial value of green investments, transforming ESG from a perceived cost center into a strategic driver of competitive advantage.

## Return on Sustainability (RoS) Framework

Launched in 2025, the **RoS framework** represents a breakthrough in demonstrating the business case for sustainability investments. It systematically quantifies how green investments—such as energy-efficient systems, renewable energy installations, and sustainable building materials—generate financial returns through reduced operating costs, enhanced asset values, improved tenant satisfaction, and risk mitigation.

## Eco-nomics of Green Investments

CLI's proprietary methodology to assess the green financial impact of sustainability investments enables data-driven decision-making, allowing the company to prioritize investments with the highest environmental and financial returns. By making the financial case explicit, CLI secures stakeholder buy-in and demonstrates that sustainability drives shareholder value.

## Charging Up REITs with Renewable Energy

CLI explores how real estate investment trusts can integrate renewable energy generation, transforming properties from energy consumers into energy producers. This addresses both environmental goals (reducing carbon emissions) and financial objectives (generating revenue from energy sales and reducing operating costs).

## Net-Zero Commitment and Reporting

CLI's commitment to **net-zero carbon emissions** reflects long-term strategic planning aligned with global climate goals. The company publishes annual Global Sustainability Reports and CapitaLand Hope Foundation Social Impact Reports, ensuring transparency and accountability.

CLI's sustainability-linked loan facilities demonstrate how ESG performance can be integrated into financial instruments, with loan terms tied to achieving specific sustainability targets.

## Recognition and Impact

CLI has been recognized for **innovating sustainability for the built environment**, with case studies showcasing how sustainability plans are translated into actions with real impact. The company's focus on smart and sustainable buildings leverages technology to optimize energy use, enhance occupant comfort, and reduce environmental footprint.

**Key Insight:** CapitaLand's approach demonstrates that sustainability is not a compliance burden but a source of competitive advantage. By quantifying financial returns and integrating ESG into core business strategy, CLI shows that purpose and profit are mutually reinforcing in the real estate sector.

# Case Study: Singtel Pioneers Enterprise Sustainability Programs

Singapore Telecommunications Limited (Singtel) has emerged as the **first telecommunications company in Singapore** to launch a comprehensive sustainability programme for enterprises, recognizing that telcos have unique capabilities to enable sustainability at scale through digital infrastructure and connectivity solutions.

## Four Key Sustainability Pillars

Climate Change and Environment

People and Future of Work

Community Impact

Governance and Ethics

This holistic approach ensures that sustainability considerations are integrated across all dimensions of the business, from environmental performance to social responsibility and ethical governance.

## 4D Environmental Sustainability Strategy

**Defend:** Protect natural resources through conservation initiatives and responsible resource management

**Decarbonise:** Reduce carbon emissions across operations and value chain through energy efficiency, renewable energy adoption, and low-carbon technologies

**Dematerialise:** Reduce physical resource consumption by leveraging digital solutions, virtualization, and circular economy principles

**Deliver:** Provide sustainable solutions to customers and partners, enabling them to reduce their environmental footprint through digital transformation

## SPEED Programme

The **SPEED Programme** (Singtel Programme for Enterprise Environmental Development) represents a flagship initiative guiding enterprises on tracking and optimizing energy usage and carbon emissions via Internet of Things (IoT) technology. This 15-month programme provides participating companies with IoT sensors, data analytics platforms, and expert guidance to measure, monitor, and manage their environmental performance.

## Emissions Reduction Targets

**55% reduction** in absolute Scope 1 and 2 emissions by 2030

**40% reduction** in Scope 3 emissions by 2030

Beyond environmental initiatives, Singtel actively supports sustainability startups through investment, mentorship, and partnership programs, fostering innovation in green technologies and sustainable business models.



# Singapore Green Plan 2030: National Sustainability Framework

The Singapore Green Plan 2030 represents a **whole-of-nation movement** to advance Singapore's national agenda on sustainable development. Released in **February 2021**, it charts ambitious targets over the next decade, strengthening commitments under the **UN's 2030 Sustainable Development Agenda** and **Paris Agreement**, positioning Singapore to achieve **net-zero emissions by 2050**.

## Key Targets by 2030

- Plant **1 million more trees** to enhance urban greenery and biodiversity
- **Quadruple solar energy** deployment by 2025
- Reduce waste to landfill by **30%** through circular economy
- At least **20% of schools** to be carbon neutral
- All new cars **cleaner-energy models** from 2030

## Multi-Agency Coordination

Spearheaded by **five ministries**: Education, National Development, Sustainability and the Environment, Trade and Industry, and Transport.

*The Green Plan comprises five interconnected pillars that influence all aspects of life in Singapore, supported by key enablers and initiatives to drive whole-of-nation transformation.*



# Singapore Green Plan 2030: Five Strategic Pillars

## 1. City in Nature

Transforms Singapore into a biophilic city where nature is integrated into urban fabric. Focuses on greening initiatives to plant 1 million more trees, biodiversity conservation to protect and enhance native species and ecosystems, and urban ecology enhancement to create green corridors and nature spaces throughout the city. This pillar recognizes that urban greenery improves quality of life, enhances climate resilience, and supports mental and physical well-being.

## 2. Energy Reset

Addresses Singapore's energy security and decarbonization goals through solar energy deployment (quadrupling capacity by 2025), energy efficiency improvements across buildings and industries, transition to cleaner energy sources including hydrogen and regional renewable energy imports, and grid modernization to support distributed energy resources. Despite limited land for renewable energy, Singapore pursues innovative solutions including floating solar farms and building-integrated photovoltaics.

## 3. Sustainable Living

Shifts behaviors and lifestyles toward sustainability through waste reduction initiatives (30% reduction in waste to landfill by 2030), circular economy practices promoting reuse and recycling, sustainable consumption patterns encouraging responsible purchasing decisions, and community engagement programs. This pillar recognizes that individual and collective action is essential for achieving national sustainability goals, requiring education, infrastructure, and cultural change.

## 4. Green Economy

Ensures economic competitiveness in a carbon-constrained world through green finance and investments (sustainable finance products, green bonds, ESG integration), sustainable business practices (corporate sustainability strategies, supply chain decarbonization), green jobs creation (training and reskilling for green economy), and innovation in sustainability (R&D in clean technologies, green startups support). Singapore positions itself as a regional hub for sustainable finance and green technology.

## 5. Resilient Future

Prepares Singapore for climate impacts and resource constraints through climate adaptation measures (coastal protection, flood management, heat mitigation), infrastructure resilience (critical infrastructure hardening against climate risks), food security (local food production, diversified import sources, agri-tech innovation), and water security (NEWater expansion, desalination, water conservation). This pillar addresses Singapore's vulnerability as a low-lying island nation dependent on imports.

## Key Enablers

**Green Citizenry:** Public engagement and education, community action, behavioral change initiatives to ensure whole-of-society participation.

**Green Government:** Policy frameworks, regulatory support, government leadership, and public sector sustainability demonstrating commitment from the top.

## Supporting Initiatives

**Enterprise Sustainability Programme (ESP):** Supports Singapore businesses on sustainability initiatives and helps capture green economy opportunities.

**Sustainability Grants and Incentives:** Energy efficiency grants, carbon efficiency schemes, and green technology adoption support to achieve best-in-class global standards.

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# Challenges and Opportunities in Singapore's ESG Journey

## Critical Challenges

### Assurance Coverage Gap

Only 37% of Singapore's top 100 companies seek assurance for ESG information, significantly below the global standard of 54%. This gap raises concerns about data quality, credibility, and comparability, potentially undermining stakeholder trust and investment decisions.

### Executive Remuneration Linkage Decline

Percentage linking sustainability to executive remuneration decreased from 67% in 2022 to 38% in 2024, despite remaining above the global average of 30%. Without financial incentives tied to ESG performance, sustainability risks becoming a compliance exercise rather than a strategic priority.

### SME Capability Gaps

Small and medium enterprises often lack the expertise, technology, and financial resources to implement robust sustainability practices and reporting. Given that SMEs constitute the majority of Singapore's business ecosystem and are critical to supply chains, addressing this capability gap is essential.

### Scope 3 Emissions Complexity

As Singapore moves toward mandatory Scope 3 emissions reporting (expected from 2026), companies face significant challenges in measuring and managing value chain emissions where they have limited direct control, requiring supply chain collaboration and innovative methodologies.



## Strategic Opportunities

### Growing Demand for ESG Services

The assurance gap creates demand for ESG assurance services, driving growth in sustainability consulting and auditing. Professional services firms can develop specialized capabilities to meet this emerging market need.

### Innovation in Compensation Design

The executive remuneration challenge offers opportunities for innovative compensation design linking financial rewards to long-term sustainability outcomes, aligning incentives with stakeholder expectations.

### SME-Focused Solutions Market

SME capability gaps create markets for affordable ESG technology, training, and consulting services. Scalable, cost-effective solutions can enable widespread sustainability adoption across the business ecosystem.

### Regional Leadership Positioning

Singapore's strong regulatory framework and corporate practices position it as a preferred destination for sustainable investment in Asia, enabling the nation to shape regional and global ESG standards.

# Practical Recommendations for Organizations

Organizations can accelerate ESG maturity by adopting a phased approach that systematically builds capabilities while demonstrating progress. This roadmap establishes governance foundations, develops data infrastructure, integrates ESG into strategy and operations, and engages stakeholders with transparent, assured reporting.

## Phase 1: Establish Governance and Materiality (Months 1–3)

Establish board-level oversight and management accountability for ESG. Designate Chief Sustainability Officer or equivalent role with clear responsibilities. Conduct materiality assessment to identify ESG factors most relevant to business and stakeholders. Engage stakeholders to understand ESG expectations. Benchmark against industry peers and leading practices to identify gaps and opportunities.

## Phase 2: Build Data Infrastructure and Measurement (Months 4–9)

Implement systems and processes to collect, manage, and analyze ESG data. Establish baseline measurements for key metrics (carbon emissions, energy consumption, water use, waste generation, diversity, employee training, governance practices). Invest in technology platforms that automate data collection and improve accuracy. Ensure data quality through internal controls and validation. Define KPIs aligned with material ESG factors and strategic objectives.

## Phase 3: Integrate ESG into Strategy and Operations (Months 10–18)

Embed ESG considerations into strategic planning, capital allocation, risk management, and operational decision-making. Set ambitious but achievable targets for ESG performance improvement, aligned with science-based methodologies where applicable. Link executive and employee compensation to ESG performance to ensure accountability. Engage suppliers and value chain partners to extend ESG practices beyond organizational boundaries, addressing Scope 3 emissions and supply chain risks.

## Phase 4: Report, Assure, and Engage (Months 19–24 and ongoing)

Publish comprehensive sustainability reports aligned with recognized frameworks (GRI, SASB, ISSB, TCFD). Seek external assurance for material ESG disclosures to enhance credibility and stakeholder trust. Integrate ESG information into annual reports and investor communications, demonstrating that sustainability is core to business strategy. Engage proactively with investors, customers, employees, and other stakeholders to communicate progress, challenges, and commitments. Continuously improve based on stakeholder feedback, emerging best practices, and regulatory developments.

## Critical Success Factors

**Leadership Commitment:** Authentic commitment from board and senior management is non-negotiable

**Cross-Functional Collaboration:** ESG requires collaboration across operations, finance, HR, supply chain, and communications

**Capacity Building:** Invest in training and capability development for employees at all levels

**Technology Enablement:** Leverage technology to automate data collection, analysis, and reporting

**Stakeholder Engagement:** Maintain ongoing dialogue with stakeholders to ensure relevance and responsiveness

**Continuous Improvement:** Treat ESG as a journey, not a destination, with regular reviews and updates

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# Singapore's ESG Leadership: Key Takeaways

## Five Critical Lessons from Singapore's ESG Journey

### 1. Regulatory Clarity Drives Action

Singapore's progressive framework, moving from voluntary to mandatory compliance with clear timelines, provides businesses with certainty. Adoption of ISSB standards ensures global compatibility while maintaining local relevance.

### 2. Technology Enables Transparency

MAS Project Greenprint demonstrates how blockchain, data orchestration, and standardized taxonomies address greenwashing and data fragmentation, creating trusted ecosystems for informed decision-making.

### 3. Corporate Leadership Demonstrates Business Value

DBS, CapitaLand, and Singtel show sustainability is not a cost burden but a source of competitive advantage. Quantifying returns and leveraging core capabilities proves purpose and profit are mutually reinforcing.

### 4. National Coordination Amplifies Impact

Singapore Green Plan 2030's whole-of-nation approach aligns government policy, business action, and citizen engagement toward shared goals, maximizing impact through coordinated multi-stakeholder efforts.

### 5. Continuous Improvement is Essential

Despite progress, ongoing challenges in assurance coverage, executive remuneration, and SME capabilities require treating ESG as a continuous improvement journey rather than a destination.

*These five lessons synthesize Singapore's comprehensive approach to ESG and CSR, demonstrating how regulatory clarity, technological innovation, corporate leadership, national coordination, and commitment to continuous improvement create a replicable model for sustainability transformation.*

# Conclusion: Advancing Sustainability in Singapore

## Key Takeaways

- **ESG Integration is Essential:** Organizations in Singapore must integrate ESG principles into their core business strategy to remain competitive and meet stakeholder expectations in an increasingly sustainability-conscious market.
- **Strong Regulatory Framework:** Singapore's comprehensive regulatory environment, supported by initiatives like the Singapore Green Plan 2030 and mandatory climate reporting, provides clear guidance and incentives for businesses to adopt sustainable practices.
- **Opportunities for Competitive Advantage:** Companies that proactively embrace ESG and CSR can differentiate themselves, attract investment, enhance brand reputation, and contribute to Singapore's vision of becoming a leading sustainable finance hub in Asia.

## Call to Action

Organizations operating in Singapore should view ESG and CSR not as compliance burdens but as strategic opportunities to drive innovation, operational efficiency, and long-term value creation. By leveraging Singapore's robust ecosystem of government support, financial incentives, and stakeholder engagement platforms, businesses can position themselves at the forefront of the sustainability transition.

*Singapore's commitment to sustainability, demonstrated through comprehensive policy frameworks and active business participation, positions the nation as a regional leader in sustainable business practices and a model for ESG integration in the Asia-Pacific region.*