Centre for Governance and Sustainability
NUS Business School

15 LESSONS IN CORPORATE SUSTAINABILITY AND GOVERNANCE

LAWRENCE LOH AND ANG HUI MIN (EDITORS)

MAY 2025

A COMMEMORATION OF CGS' 15TH ANNIVERSARY

15 Lessons in Corporate Sustainability and Governance

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This e-book is published in commemoration of the 15th anniversary of the Centre for Governance and Sustainability (CGS) at the National University of Singapore (NUS) Business School.

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About NUS Centre for Governance and Sustainability

Founded in 2010, the Centre for Governance and Sustainability (CGS) is housed at the National University of Singapore Business School. Our research empowers leaders, organisations and regulators in making informed decisions related to corporate sustainability and corporate governance. We bridge knowledge with industry needs, enabling organisations in the Asia Pacific, including ASEAN and Singapore, to go further in their sustainability journeys.

Our research pillars are as diverse as they are profound, covering initiatives in sustainability reporting, climate and nature-related reporting, the Singapore Governance and Transparency Index, the ASEAN Corporate Governance Scorecard and more. Visit https://bschool.nus.edu.sg/cgs/ to find out more about our work.

About NUS Business School

Founded in 1965, the same year that Singapore gained independence, NUS Business School stands among the world's leading business schools today. We are distinctive for offering the best of global business knowledge with deep Asian insights, preparing students to lead Asian businesses to international success and to help global businesses succeed in Asia.

The School attracts diverse and talented students to our broad portfolio of academic programmes, including The NUS BBA, The NUS MBA, The NUS Executive MBA, The NUS MSc Programmes and PhD programmes in addition to our customised and open-enrolment Executive Education courses. Admission to NUS Business School is highly competitive, and we are proud of the exceptional quality of our students. For more information, please visit https://bschool.nus.edu.sg/.

Table of Contents

Foreword

Corporate sustainability and governance are ever more pertinent in today's business landscape. As organisations navigate complex challenges and stakeholder expectations, the need for robust research and education in these fields has never been more apparent.

At the National University of Singapore (NUS) Business School, our Centre for Governance and Sustainability (CGS) has been at the forefront of this agenda for 15 years. Since its inception in 2010, CGS has been a powerhouse of insights, producing valuable research on leadership diversity, family businesses, governance and sustainability reporting. A notable longstanding project is the annual Singapore Governance and Transparency Index which reveals trends and improvement areas in transparent corporate disclosures.

The centre's expertise has not gone unnoticed. The Monetary Authority of Singapore appointed CGS to be the assessor for Singapore-listed companies in the exercise for the ASEAN Corporate Governance Scorecard. In 2019, the Singapore Exchange entrusted the centre with the biennial assessment of sustainability reporting for all Singapore-listed companies.

CGS has also expanded its reach through international collaborations, enhancing the global reputation of NUS Business School. Partnerships with Universitas Airlangga in Indonesia, Tencent Foundation in China, the International ESG Association in South Korea, and luxury conglomerate Kering in France have amplified the centre's impact on a global scale.

This year, as we celebrate the 60th anniversary of NUS Business School and the 15th anniversary of CGS, we reflect on the remarkable journey that has brought us to this point. We have delivered impactful business education and research. However, our work is far from over. The challenges of corporate sustainability and governance continue to evolve, and so must our approaches to addressing them.

With a strong track record, CGS is well-positioned to lead the way in shaping the next sustainability era. We look forward to its continued impact and success.

Distinguished Professor Andrew K Rose
Dean, NUS Business School

Introduction

Over the years, the Centre for Governance and Sustainability (CGS) at NUS Business School has been driving research and education. To mark our 15th anniversary in 2025, we produce the e-book "15 Lessons in Corporate Sustainability and Governance".

A collection of commentaries, it informs the lay audience why and how organisations can stay on the sustainability journey.

The e-book is divided into four themes. The first theme delves into the mindset that will encourage sustainability. Intentions will influence action. Much more can be achieved if we break through the mindset of seeing corporate sustainability and governance as just compliance matters. With a tug-of-war often seen between sustainability and profits, a mindset change is needed to view them as part of the whole equation instead of two separate entities.

The second theme explores steps to implement sustainability. An approach is to make it into smaller, feasible tasks. One should also understand what makes good governance and leadership diversity. We go into important concepts for carbon management, climate reporting and nature reporting. Lastly, in view of the growing digital economy, we see how community impact can be harnessed from digital companies.

The journey does not stop with action. Organisations should communicate what they have done clearly. The third theme concentrates on demonstrating actions and impact. Both greenwashing and greenhushing will not bring benefits to the firms. It is still vital to disclose business integrity policies and strategies. On a broader view, when businesses demonstrate their impact, they can inspire more to create impact.

In the fourth theme, we look to the future. Despite certain global developments, there are still strong reasons for organisations to stay on the sustainability track. We need to invest in the new generation of sustainability leaders.

And we start now.

CGS' Journey

The Centre for Governance and Sustainability (CGS) has its roots in the Centre for Governance, Institutions and Organisations (CGIO). Founded in 2010, CGIO produced research focusing on family businesses, governance and leadership diversity. In 2014, a study on sustainability reporting in Singapore, co-authored by Professor Lawrence Loh, then a research affiliate at CGIO, marked the start of a new focus in corporate sustainability research.

Meanwhile, we built on our flagship projects, the Singapore Governance and Transparency Index and ASEAN Corporate Governance Scorecard (Singapore results). Our research scope grew to cover ASEAN and Asia Pacific, and our network of collaborators expanded.

Today, CGS is recognised for its research expertise. It has been commissioned for research by organisations such as the Monetary Authority of Singapore (MAS) and the Singapore Exchange (SGX). It also lends its assessing expertise to sustainability and governance awards and competitions.

Collaborating with industry partners, CGS advances sustainability education through initiatives such as the Tee Up Capital-NUS CGS Programme in Governance and Sustainability and the NKH-CGS Masterclasses in Governance and Sustainability.

The future is one of collaborations and collective impact. CGS has launched a three-year research partnership with Kering to benchmark and analyse corporate climate and nature-related transition strategies across the Asia-Pacific region. In addition, the centre is collaborating with Tencent Foundation and the China Association for NGO Cooperation (CANGO) to co-organise a 2025 conference that looks at how technology can be used to drive social impact. Another key collaboration is with the Tsao Pao Chee (TPC) Group in establishing the Well-being and EESG Alliance (WEGA) and spearheading a three-year research initiative on sustainable well-being economies. Our rhythm continues.

Timeline

2010 Our Founding

The Centre for Governance, Institutions and Organisations (CGIO) was founded at NUS Business School.

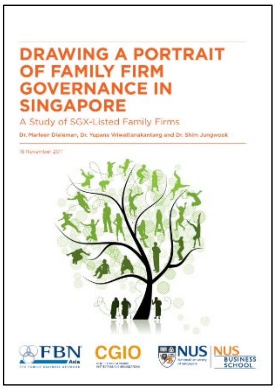
2011 Official Launch

CGIO was officially launched in July 2011 with Professor Chang Sea-Jin as Executive Director. The same year, the centre organised a roundtable on Asian family businesses; and unveiled the Governance and Transparency Index (GTI) and the Singapore Board Diversity Report. More board diversity reports with various partners followed in the years to come.

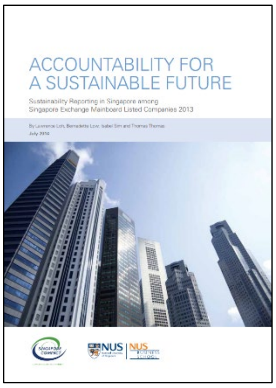
Professor Chang Sea-Jin at the launch of CGIO.

2012 Gaining Momentum in Family Business Research

The centre's inaugural co-published report on family firms, Drawing a Portrait of Family Firm Governance in Singapore, garnered media attention. Subsequent years saw more events and research findings on family businesses, which at that time represented about 30 per cent of the total market capitalisation of Singapore.



2014 A New Flagship Project in Corporate Governance and the Beginnings of Corporate Sustainability Research

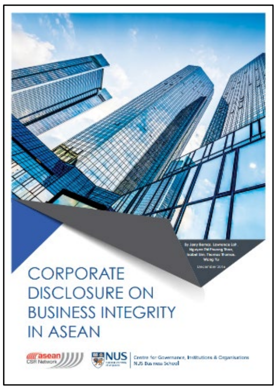


As the domestic assessor appointed by the MAS, CGIO, together with the Singapore Institute of Directors, released the Singapore results of the ASEAN Corporate Governance Scorecard. Later that year, Professor Lawrence Loh, then a research affiliate at CGIO, co-authored a report on sustainability reporting in Singapore.

2015 A New Director

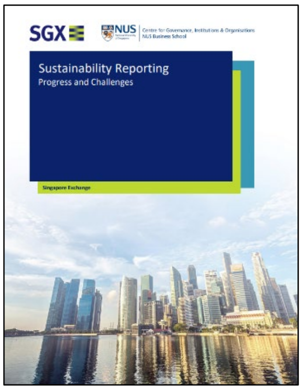
Professor Lawrence Loh assumed the role of Director, CGIO.

2016 Launch of SGTI and New Series on Business Integrity



The GTI was revamped to form the Singapore Governance and Transparency Index (SGTI). In addition, the centre's research scope on sustainability reporting grew to include ASEAN with a new biennial series on business integrity.

2019 Appointed to Assess the Sustainability Reporting of All Singapore-listed Companies



SGX appointed CGS as an independent assessor to conduct biennial assessments of the sustainability reporting of all Singapore-listed companies. The first report, Sustainability Reporting: Progress and Challenges, was published in December 2019.

2021 New Focus, New Identity

With corporate sustainability becoming a prominent research pillar, the Centre for Governance, Institutions and Organisations (CGIO) was relaunched as the Centre for Governance and Sustainability (CGS) to better reflect its work.

2022 Research Scope on Sustainability Reporting Extended to Asia Pacific

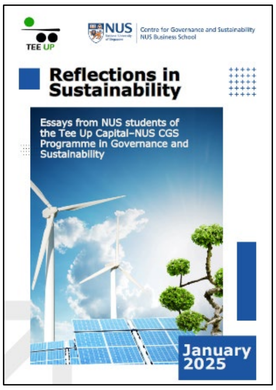
CGS published numerous studies in climate- and nature-related reporting. Sustainability Counts, a new report series with PwC, examined Asia-Pacific-listed companies' sustainability reporting. CGS also partnered with the Global Reporting Initiative (GRI) ASEAN in producing a report on climate reporting in ASEAN. Another publication examined the state of readiness for nature-related reporting among Asia-Pacific corporations.

2023 Expanded Engagement

CGS hosted the Global ESG Forum in Singapore with the International ESG Association. It also conducted assessments for the Sustainability Impact Awards which recognise exemplary individuals and businesses in sustainability. Other firsts included assessing SGX-listed issuers' climate-related disclosures and researching the impact of digital economies in Southeast Asia and greenwashing in e-commerce platforms.

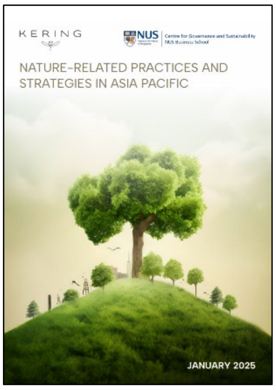
2024-2025 Advancing Sustainability and Governance Education

With industry support, CGS rolled out the Tee Up Capital-NUS CGS Programme in Governance and Sustainability and the NKH-CGS Masterclasses in Governance and Sustainability, which impart sustainable governance knowledge to students and professionals. Sustainability education for students also resulted in the publication of casebooks, which can serve as a reference for the industry.



2024-2025 Embarking on New Partnerships to Scale Impact

Several new partnerships were forged. CGS teamed up with global luxury group Kering for a three-year research collaboration in climate- and nature-related transition strategies in Asia Pacific. Together with Tencent Foundation and the China Association for NGO Cooperation (CANGO), CGS will hold a conference in late 2025 with the theme "Technology for Good: Driving Social Impact". It also inked an MOU with Tsao Pao Chee (TPC) Group to drive a three-year research project on sustainable well-being economies.



In July 2024, CGS and TPC signed an MOU to set up the Well-being and EESG Alliance (WEGA), where EESG stands for Economics, Environmental, Social and Governance.

THE MINDSET

Lesson 1 The Incentive for Sustainability

Lesson 2 Beyond Compliance

Lesson 3 From ESG to EESG

Lesson 1

The Incentive for Sustainability

Lawrence LOH

Loh, L., & Ang, H.M. (Eds.). (2025). *15 lessons in corporate sustainability and governance.* Centre for Governance and Sustainability, NUS Business School.

Singapore has submitted a new climate target to the United Nations in February 2025. It aims to reduce its emissions to between 45 and 50 million tonnes (Mt) by 2035, a lower target than the 60 Mt pledged for 2030. This commitment could not have been made at a more critical time. It came on the heels of shattering global heat records and rising sea levels.

Businesses will now have to go back to the drawing board to reassess the emerging threats from climate change as well as map out responses demanded by stakeholders. Most significantly, they have to build a new case to fight climate change that goes beyond responsibility and risks.

For businesses, the starting point to consider climate change is normally via sustainability. Along this vein, I remember advocating the importance of sustainability even with smaller enterprises.

On one occasion, this was met with a memorable rebuttal from the CEO of a printing company. He proclaimed that if his company embraced sustainability, he would have to close his business. He further retorted that his greatest enemy is the PDF file format which greatly affected his paper printing business.

Companies play a pivotal role in the climate crisis due to their often intense environmental impact, particularly from carbon emissions. Building a compelling business case is a crucial lever for action.

The reaction epitomises the real sentiments, even anguish, amongst companies on sustainability. To them, it is basic survival that matters first. "Sustainability is for the rest of the world but leave me alone to upkeep the business"—goes the sentiment so often felt.

The "not-for-me" free-riding syndrome will be even more protracted in the battle against climate change. If anything, the impact is distant and indirect. It will be difficult to conceive that business leaders will commit to fighting climate change fully and immediately.

Turning point

Climate change is not an overnight revelation. The initiating milestone was the United Nations' Earth Summit held in Rio de Janeiro in June 1992 where countries sought to reduce damage to the environment, especially in the use of fossil fuels.

But the key turning point was the 2015 Paris Agreement which aimed to keep global temperature increase to below two degrees centigrade above pre-industrial levels and to pursue an even more stringent limit of 1.5 degrees. While this agreement has been cited frequently, it often goes unnoticed that each of the signatory countries, including Singapore, must act and regularly report on its efforts.

On the home front, Singapore Prime Minister Lawrence Wong announced a S$5 billion top-up to the Coastal and Flood Protection Fund during his speech on Budget 2025. More climate vouchers have been given to Singaporean households to purchase efficient appliances. Climate becomes a national affair.

Companies play a pivotal role in the climate crisis due to their often intense environmental impact, particularly from carbon emissions. Building a compelling business case is a crucial lever for action. In my view, the case has thus far been built on two angles.

The first angle comes in the form of "responsibility" to the community by not degrading the environment. It is something good for companies to do socially, and relies on corporate altruism to place society above profit.

In the second angle, consideration of climate change takes the form of "risk". Companies make assessment of two types of risk that may come about from climate change—direct risk and derived risk.

New demands

Direct risk refers to physical impact that may actually damage the company's products and markets, including the supply chains, through severe weather patterns such as floods and hurricanes.

Derived risk comes from new demands by consumers and investors for the company to adopt climate change actions. These may have implications for sales revenues and capital costs. The risk may also emanate from changes in regulation that require the company to pursue climate-related actions thus entailing not only costs but also operational modifications.

However, for businesses to fully accept climate change, a third angle to complete the triangle is needed—that of "rationale". Companies must see that it is in their very own self-interest to take on climate change. This will entail assessing implications of climate change actions against financial bottom lines.

On business benefits, there has been clear evidence of the financial impact of sustainability as a broader whole. In a study[1] of Singapore-listed companies conducted by the NUS Centre for Governance and Sustainability and the ASEAN CSR Network, we found a significant positive relationship between sustainability reporting and firm value.

In a summative analysis conducted by the University of Oxford and Arabesque Partners of more than 200 studies, it was found that 88 per cent show that good sustainability practices result in better operational performance. Moreover, 80 per cent indicate that such good practices give rise to better stock price performance.

On business benefits, there has been clear evidence of the financial impact of sustainability as a broader whole.

But the greatest challenge is to demonstrate that climate change practices are beneficial to the company, one company at a time.

The rationale view is the most crucial third angle to be triangulated with the angles of responsibility and risk. Only then will we see companies voluntarily embracing the battle of climate change.

Returning to the story of the printing house and its resistance to sustainability—it is clear that if the company sees the tangible returns, it

[1] Loh, L., Thomas, T., & Wang, Y. (2017). Sustainability Reporting and Firm Value: Evidence from Singapore-Listed Companies. *Sustainability*, *9*(11), 2112. https://doi.org/10.3390/su9112112

will be serious about sustainability including climate change.

The PDF threat, as feared by the firm's CEO, suggests that the company should switch to a new business model. And this will be rationalised on the fundamental reasoning of self-interest—business benefit.

An older version of this article was first published in The Business Times[1].

Companies must see that it is in their very own self-interest to take on climate change.

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[1] Loh, L. (2019, November 20). Building the business case to fight climate change. *The Business Times*. https://www.businesstimes.com.sg/opinion-features/columns/building-business-case-fight-climate-change
Full text available at https://bizbeat.nus.edu.sg/thought-leadership/article/incentives-for-a-greener-approach-to-business/

Lesson 2

Beyond Compliance

Lawrence LOH and HUANG Minjun

Loh, L., & Ang, H.M. (Eds.). (2025). *15 lessons in corporate sustainability and governance.* Centre for Governance and Sustainability, NUS Business School.

Every so often, sustainability in businesses is touted as a "check-the-box" exercise, often laced with esoteric acronyms in a massive alphabet soup. Yet, this is necessary to convey alignment to good practices, particularly through frameworks and standards.

But this so-called compliance is not enough—never.

Businesses have to go beyond disclosures to demonstrate the impact of any sustainability initiative. They have to move from an input orientation towards not only looking at outputs, but more importantly assessing outcomes and impact.

Emerging imperative

It is clear that sustainability and climate change, in particular, have transcended from being buzzwords to becoming strategic imperatives for businesses.

Research by PwC and the NUS Centre for Governance and Sustainability (CGS) showed that out of 700 assessed top-listed companies across Asia-Pacific, 84 per cent of companies have boards with responsibilities covering sustainability issues, and 79 per cent have sustainability governance structures[1].

Businesses have to go beyond disclosures to demonstrate the impact of any sustainability initiative.

Further, 88 per cent of companies assessed by PwC and CGS have identified risks and opportunities for climate change; 74 per cent have disclosed ways to manage these.

Another study[2] conducted by Tech for Good Institute (TFGI) and CGS showed that 85 per cent of digital economy companies in Southeast Asia have intentions to address sustainability issues. But notably, less than half have carried out initiatives to put these intentions into action.

It seems that businesses are often checking boxes about sustainability issues, but not bringing out enough solutions.

Mindset change

For longer-term development, businesses should shift from an initiative-centric mindset to an impact-centric mindset when considering sustainability issues. Such a mindset connotes the actual changes resulting from a business' initiatives.

We propose three essential aspects to build an impact-centric mindset.

1) Target setting

No action should be taken until a clearly defined target is set. Establishing a target helps businesses to determine what sustainability impact they want to achieve in the first place.

Our stream of research at CGS on companies listed on the Singapore Exchange indicated that there are positive and significant relationships between sustainability and financial impact through measures such as market value and brand value. Perhaps this finding can serve as an impetus for businesses to define sustainability-related goals.

[1] Fang, E.-L., & Loh, L. (2023). *Sustainability Counts II: State of Sustainability Reporting in Asia Pacific* (Sustainability Counts, Issue 2). PwC & NUS Centre for Governance and Sustainability. https://bschool.nus.edu.sg/cgs/wp-content/uploads/sites/7/2023/06/CGS-PwC-Sustainability-Counts-II-2023.pdf

[2] Tech for Good Institute, & NUS Centre for Governance and Sustainability. (2023). *What Impact Means to Digital Economy Companies in Southeast Asia*. https://bschool.nus.edu.sg/cgs/wp-content/uploads/sites/7/2023/06/CGS-TFGI-What-Impact-Means-to-Digital-Economy-Companies-in-Southeast-Asia-2023.pdf

For longer-term development, businesses should shift from an initiative-centric mindset to an impact-centric mindset when considering sustainability issues.

To set sustainability targets, useful references may be made using the United Nations Sustainable Development Goal (SDGs). In fact, the TFGI-CGS study highlights the areas that are ripe for investors' interests.

These areas can be based on the United Nations Development Programme's SDG Investor Maps.

These are market intelligence tools that help the private sector identify investment themes in emerging markets and advance the SDGs for sustainable national-development needs.

Another way to decide on sustainability targets is to look at the value to society. In essence, this considers the extent in which the intended outcome can deliver such value.

This is one of the core dimensions of impact according to the Impact Compass developed by the Center for Social Innovation (CSI) at Stanford University. The Impact Compass conceptualises impact and provides useful tools to assess relative social-impact potential.

Value to society does not necessarily mean only positive impact; it can also refer to the mitigation or reduction of negative impact. For instance, carbon-capture technologies or solar panels decrease negative impacts on the environment.

2) Backward mapping

Once targets have been set, solutions and projects can be rolled out. We recommend that businesses consider the following four dimensions: efficacy, magnitude, scalability and alignment.

Efficacy refers to the effect of a solution in achieving impact. For example, many businesses have set net-zero targets for carbon emissions. They may have carried out solutions such as installing solar panels, improving waste management and developing decarbonised products. The efficacy of these solutions is determined by the environmental impact of decarbonisation.

Magnitude looks at the extent of the problem that a solution can solve. For instance, installing solar panels could help to improve the proportion of clean energy, resulting in an energy switch that contributes to decarbonisation.

Scalability refers to the population affected by a solution. As an example, digital development brings opportunities for technology companies to expand their products and solve user needs massively. Digitalisation is thus a means for businesses to extend social impact to the larger population.

Alignment focuses on how businesses drive outcomes to achieve impact along with their mission. To illustrate, a digital-economy company may start planting trees to save the environment. But it may be better mission-aligned if the company focuses on the impact of digitalisation for impact.

3) Diverse collaborating

Sustainability impact cannot be achieved by just singular efforts, but by extensive collaboration that involves partnerships amongst different entities.

Diverse businesses should cooperate to create a multiplier effect for impact creation.

For example, smaller companies such as startups are flexible, purpose-driven enterprises. These are usually founded with sustainability or social impact missions at their core. The inherent focus gives them a natural alignment with sustainability values and helps them integrate these principles into their business model at the outset.

But businesses must now evaluate impact from a holistic angle that includes the environment and society.

Larger businesses have more substantial financial and operational resources at their disposal. This means they have the capacity to invest in large-scale sustainability projects that bring substantial impact.

Impact revolution

Small and large businesses can thus synergise their strengths to amplify the impact.

Beyond mindset change, we have to consider how we analyse impact.

The real tragedy of the horizon is to lose our compass for double materiality.

Businesses normally view impact through the lens of their survival mandate alone—that is, their financial viability. Perhaps this is rightly so. After all, finances are the lifeblood of every business. Such is the so-called notion of “single materiality”, which focuses on the company itself.

But businesses must now evaluate impact from a holistic angle that includes the environment and society. The dual lens will be even more critical, especially over a longer timeframe where these external influences will be crucial for their existence.

Indeed, businesses will have to adopt a “double materiality” approach which encompasses a broader impact beyond themselves. The proper role of governance is to galvanise this approach. Governance will have to view issues beyond "outside-in" but also "inside-out" for impact.

Horizon crisis

Even if current sustainability initiatives are less focused on impact than the initiatives themselves, the more serious problem is that businesses are not even mounting these initiatives. We need to get all businesses onboard the impact ship.

Once they have come aboard, we will need directions into the horizon. Rooting on a single materiality of businesses, even for financial impact, is necessary but not sufficient. Steered by good governance, the actual impact for businesses and the world will be on the environment and society.

The real tragedy of the horizon is to lose our compass for double materiality.

An older version of this article was first published in The Business Times[1].

[1] Loh, L., & Huang, M. (2023, August 3). From initiatives to impact: Advancing a new priority for businesses in sustainability. *The Business Times*. https://www.businesstimes.com.sg/events-awards/sustainability-impact-awards/sustainability-impact-awards-2023/initiatives-impact Full text available at https://bizbeat.nus.edu.sg/thought-leadership/article/from-initiatives-to-impact-advancing-a-new-priority-for-businesses-in-sustainability/

Lesson 3

From ESG to EESG

Incorporating Economics into Sustainability

Lawrence LOH

Loh, L., & Ang, H.M. (Eds.). (2025). *15 lessons in corporate sustainability and governance.* Centre for Governance and Sustainability, NUS Business School.

ESG turned 20 in 2024. The widely used acronym for "environmental, social and governance", ESG was introduced in the report "Who Cares Wins", which was published by the Global Compact of the United Nations in 2004.

Since then, ESG has influenced practices in companies and countries. It is an easy-to-use operational framework for the more abstract notion of sustainability.

Yet, ESG has almost taken on a life of its own and is often pursued as an end in itself. But that can backfire because ESG misses a vital part of the puzzle—economics. To keep that key in mind, we should recast ESG as "EESG", with economics firmly in the frame.

Business imperative

As a starting point, there can be no sustainability if there is no business to begin with (business here is used in the broad sense to cover for-profit and non-profit entities, including public sector agencies and non-governmental organisations).

Business needs finance as its lifeblood, and this is where adding economics is critical to balance the ESG aspects of sustainability.

Consider some business episodes that cast economics squarely into the sustainability equation.

In January 2024, the Texas oil giant ExxonMobil, which is well known by its trading name of Esso, filed lawsuits against climate activists in an effort to remove what the company described as an "extreme agenda" for its annual general meeting (AGM). The activists had pushed for an accelerated greenhouse gas emissions cut, which the company felt would not serve investor interests.

In its AGM in 2023, ExxonMobil shareholders rejected all 12 climate-related resolutions, which included calls for the company to align with the Paris Agreement goals—the critical centrepiece of the international accord for countries to commit to reduced emissions to fight climate change.

Interestingly, also at their latest AGMs, other big oil companies like California-based Chevron—known for its petrol brand of Caltex—and Shell have seen shareholders voting against climate action proposals.

It is not just the big oil firms that are doing it.

Comcast, the multinational telecommunications and media monolith—which owns and operates famed brand names like CNBC, Universal Pictures and DreamWorks Animation within its gigantic business portfolio—has also seen its shareholders reject climate-related initiatives.

The war about ESG is fought over economics, and I say: Why don't we just use "EESG" so that all can consider the entirety of the equation and resolve the tension?

Economic battle

It is apparent that in the contest between economics and ESG, the former has won. Shareholders, whether rightly or not, prefer financial returns as an overemphasis on sustainability may decrease business performance.

The tension is even more pronounced when we see that the world's largest asset management company—BlackRock—has literally blacklisted the word "ESG". It is not that it does not believe in ESG anymore; it is just that the term has become a contentious battleground. As BlackRock chief executive Larry Fink starkly puts it: "I don't use the word ESG any more, because it has been entirely weaponised."

The war about ESG is fought over economics, and I say: Why don't we just use "EESG" so that all can consider the entirety of the equation and resolve the tension? What if we can even demonstrate that sustainability and profitability are not mutually exclusive but can perfectly coexist?

Performance effect

Most academic business research seems to reveal positive relationships between sustainability and business performance.

A Harvard Business School study analysing 180 companies over 18 years discovered that firms which prioritise sustainability outperformed their peers in the long run—they had better financial performance through return on assets and return on equity.

Another study, by MSCI ESG Research, established that companies with higher ESG ratings have lower costs of capital, which suggests that investors may view them as less risky.

In the Singapore context, in a published study [1] co-authored with researchers Thomas Thomas and Wang Yu, I found that there is a significant and positive relationship between sustainability reporting and market value among listed companies here. This same result was also obtained for the quality of the reporting. The relationship seems to be independent of broad industry classification and firm status, such as whether the entity is a government-linked corporation or a family business.

In a separate published study [2] of Singapore-listed companies together with co-author Sharmine Tan, I have determined that adoption and quality of sustainability reporting led to better brand value. A lag effect is also present, which connotes that the performance impact takes time.

The two studies form an interesting compendium that covers both investor and consumer angles in the economic conundrum of ESG. Indeed, economics and ESG can swim in the same lake and are not necessarily at odds with each other.

Most academic business research seems to reveal positive relationships between sustainability and business performance.

Valuation puzzle

But again, the relationship is not straightforward if we nail it down to a very specific domain that is key to the

[1] Loh, L., Thomas, T., & Wang, Y. (2017). Sustainability Reporting and Firm Value: Evidence from Singapore-Listed Companies. *Sustainability*, *9*(11), 2112. https://doi.org/10.3390/su9112112

[2] Loh, L., & Tan, S. (2020). Impact of Sustainability Reporting on Brand Value: An Examination of 100 Leading Brands in Singapore. *Sustainability*, 12(18), 7392. https://doi.org/10.3390/su12187392

fight against climate change—the palm oil sector.

In another study[1], my co-author Tricia Chong and I found a valuation discount for global palm oil companies that disclose more ESG. We used an established ESG framework known as the Sustainability Policy Transparency Toolkit, or Spott, developed by the Zoological Society of London, together with valuation data from Thomson Reuters.

Strikingly, we found a significant negative relationship between ESG transparency and firm valuation. In other words, the more transparent a firm is on ESG, the poorer its valuation. This relationship is even stronger among the larger palm oil companies.

The study results connote a stark reality of EESG—economics can overwhelm ESG in certain circumstances which validate shareholder tensions at the big oil, telecoms and media companies.

That is because sustainability is not just about environmental sustainability, but is more about the business which needs the lifeblood of finance.

That is why ESG must integrate economics into its fold. EESG is the way to go, but the colour of money has to be green too.

An older version of this article was first published in The Straits Times[2].

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[1] Chong, T., & Loh, L. (2023). Innovating ESG Integration as Sustainable Strategy: ESG Transparency and Firm Valuation in the Palm Oil Sector. *Sustainability*, *15*(22), 15943. https://doi.org/10.3390/su152215943

[2] Loh, L. (2024, May 5). What's missing in ESG? Economics, of course. *The Straits Times*. https://www.straitstimes.com/opinion/what-s-missing-in-esg-economics-of-course Full text available at https://bizbeat.nus.edu.sg/thought-leadership/article/whats-missing-in-esg-economics-of-course/

TAKING STEPS

Lesson 4 Pack Sustainability into Smaller Servings

Lesson 5 Corporate Governance is BREAD and SLICE and more

Lesson 6 Make Your Leadership Diverse

Lesson 7 Know Your Carbon

Lesson 8 ASEAN’s Climate Conversation

Lesson 9 The Steps for Integrating Nature

Lesson 10 How Digital Companies Can Serve Diverse Needs

Lesson 4

Pack Sustainability into Smaller Servings

Lawrence LOH and ANG Hui Min

Loh, L., & Ang, H.M. (Eds.). (2025). *15 lessons in corporate sustainability and governance.* Centre for Governance and Sustainability, NUS Business School.

Sustainability has seen both the good and bad. There have been increasing greenwashing incidents but also tighter regulations across the world. An approach to packing sustainability into smaller and easier-to-understand servings may tilt the needle towards the good.

When sustainability is viewed as a lofty goal, achieving it may seem too monumental, a deadline years into the too-distant future. Behavioural change, deviating from the unsustainable habits of the past, may easily get thwarted. Or they may head in the wrong direction.

Numerous brands, such as Coca-Cola, Lufthansa and Nike, were called out for greenwashing in 2023. In December 2024, the Advertising Standards Authority of Singapore deemed a video advertisement about a Prism+ air-conditioner to be misleading in its environmental claims. This was the first time that the authority found a company to be in breach of advertising regulations relating to greenwashing.

On a wider scale, a study[1] by the NUS Centre for Governance and Sustainability found that over half of online products' environmental claims were vague or could not be substantiated with evidence.

Behind misleading claims could be an intention to deceive. But they could also stem from unfamiliarity with sustainability and regulations.

The concept stretches beyond reducing carbon emissions or water and energy usage.

For organisations, sustainability extends to supply chain, risk and finance considerations. For consumers, leading a sustainable lifestyle includes considering the broad environmental impact of potential purchases. Hence, packing vast sustainability knowledge into smaller servings can increase the impetus to act for both consumers and organisations alike.

Assuming an organisation has already charted its sustainability vision, the next step would be to break down what that means for stakeholders such as employees, partners and customers.

Think of tailored sustainability resource toolkits. Employees would understand what sustainable operations for their unit look like, what metrics to track, and common pitfalls to avoid. The information could be communicated through infographics, checklists or jargon-free videos.

In the "smaller serving" approach, employees stand to be more engaged as they better appreciate how their actions contribute to the larger sustainability goal.

For example, in launching the NUS Sustainable Procurement Framework, the university's Central Procurement Office included a listicle of guiding principles and a graphic on the framework highlights.

With prospective partners and customers, sustainability collaborations and initiatives could be presented in manageable portions, for instance, project descriptions, beneficiaries, resources, timelines and progress reports, such as those on the United Nations' Sustainable Development Goal Actions Platform.

[1] Loh, L., Yock, Y., & Lee, J. (2023). Promoting Best Practices in Online Marketing: An Examination of Greenwashing in Singapore. NUS Centre for Governance and Sustainability. https://bschool.nus.edu.sg/cgs/wp-content/uploads/sites/7/2023/12/CGS-CCCS-Promoting-Best-Practices-in-Online-Marketing-November-2023.pdf

In the "smaller serving" approach, employees stand to be more engaged as they better appreciate how their actions contribute to the larger sustainability goal. Partners, customers and even regulators can also clearly and better evaluate an organisation when its sustainability efforts are transparent and easy to understand.

Communicating efforts

Organisations can refer to local codes of advertising practice to learn the do's and don'ts in environmental communication. There are also numerous online resources for avoiding greenwashing. In October 2023, the Asia chapter of the Public Relations and Communications Association released the Guidelines on Environmental Sustainability Claims, a resource for practitioners.

Amid all the advice, three tips stand out:

1) Consider the overall impact of the product or service.

2) Be ethical, don't deceive; and

3) Substantiate your claims.

In the case of missing evidence, organisations need to go back to the drawing board. Plans need to be charted. Impact needs to be achieved before being publicised. It is short-term publicity exchanged for long-term credibility.

For individuals, leading a sustainable lifestyle may also seem like a lofty goal.

Consumers in Asia-Pacific were willing to pay more for sustainable products in general, according to a 2022 report by Bain & Co. Out of 16,000 consumers surveyed, 90 per cent said they were willing to pay the sustainability premium. However, few did so in practice due to a lack of information, a mistrust of sustainability claims and low availability of sustainable products.

A possible option may be to break down sustainable lifestyles into bite-sized pieces: seeking information, planning and habits.

When sustainable practices become habitual, be they for individuals or organisations, we will be nearer to our goal. Indeed, for sustainability and to eradicate greenwashing, small can be beautiful.

Consumers aware of environmental issues would know that cars and planes, despite more efficient technologies, are still emitting pollutive gases, and hence reduced car or plane rides are better than more rides with efficient engines. In deciding whether a product is eco-friendly, these consumers would also know to check for substantiation and clear comparison levels in the promotional materials.

Planning the day's schedule may also help to reduce consumption. For example, if one plans to get takeaway lunch from the hawker centre, he could prepare an appropriate food container in the bag the night before. Or if one plans to visit the supermarket, then he should bring enough reusable bags for groceries.

Individuals can choose to adopt sustainable habits, one at a time. It's easier to make one change rather than many changes all at once. Shortening the air-conditioning hours at night sounds feasible. Doing that plus cycling to work and growing vegetables at home seems daunting. Accumulation of the right habits will pave the way for a sustainable lifestyle.

In conclusion, lofty sustainability goals can be achieved when they are viewed as tractable actions to take. When sustainable practices become habitual, be they for individuals or organisations, we will be nearer to our goal. Indeed, for sustainability and to eradicate greenwashing, small can be beautiful.

An older version of this article was first published in The Business Times[1].

[1] Loh, L., & Ang, H. M. (2024, January 9). This year, let's pack sustainability into smaller servings. *The Business Times*. https://www.businesstimes.com.sg/opinion-features/year-lets-pack-sustainability-smaller-servings
Full text available at https://www.nus.edu.sg/newshub/news/2024/2024-01/2024-01-09/PACK-bt-9jan-p19.pdf

Lesson 5

Corporate Governance is BREAD and SLICE and more

Lawrence LOH and ANG Hui Min

Loh, L., & Ang, H.M. (Eds.). (2025). *15 lessons in corporate sustainability and governance.* Centre for Governance and Sustainability, NUS Business School.

A humble slice of bread lies on a plate, ready for breakfast. This daily occurrence might not happen in certain situations. Take for example the situation where food safety lapses happened in the factory, and related bread products get recalled from the stores. Or delivery workers go on a strike, resulting in supply chain disruptions. When organisations are not governed well, the effect could be felt in many areas.

Corporate governance refers to a system of rules, practices and processes for responsible management in an organisation. It guides business activity and offers benefits such as lowered risks, enhanced reputation and better firm performance.

Introducing the Singapore Governance and Transparency Index

The NUS Centre for Governance and Sustainability (CGS) has been raising discussions on corporate governance since its founding. The Governance and Transparency Index, developed jointly by the Corporate Governance and Financial Reporting Centre (co-led by NUS Professor Mak Yuen Teen) and The Business Times in 2009, examined the disclosure practices and governance practices of Singapore-listed firms. From 2011, CGS (then the Centre for Governance, Institutions and Organisations, CGIO) worked with The Business Times and CPA Australia in conducting the GTI project.

With an update in the assessing framework in 2016, GTI was revised to form the Singapore Governance and Transparency Index (SGTI)[1]. To include sustainability considerations, the framework was revised again in 2024. Today, the annual event is an indicator of Singapore's corporate governance health. Jointly organised by CPA Australia, CGS and the Singapore Institute of Directors, SGTI have pointed out both strengths and areas of improvement in the corporate governance field.

What then are areas of focus in corporate governance? SGTI adopts the BREAD assessment framework, which consists of five domains:

1) Board Responsibilities;

2) Rights of Shareholders;

3) ESG and Stakeholders (previously Engagement of Stakeholders);

4) Accountability and Audit; and

5) Disclosure and Transparency.

While the above applies to both the General Category for listed firms and the Real Estate Investment Trusts (REITs) and Business Trusts Category, the latter has an additional SLICE framework:

1) Structure;

2) Leverage;

3) Interested Person Transactions;

4) Competency of Trust Manager;

5) Emoluments.

The final scores are derived after considering bonus points for exemplary practices and penalty points for certain practices.

[1] Singapore Governance and Transparency Index. NUS Centre for Governance and Sustainability. https://bschool.nus.edu.sg/cgs/applied-research-in-corporate-governance/singapore-governance-and-transparency-index/

Trends from 2020 to 2024

Here are some trends in the SGTI in the last five years from 2020 to 2024:

1) Rising scores despite the pandemic

From 2020 to 2023, records have been broken yearly for the SGTI score in the General Category. In 2020, its score was an all-time high of 67.9 points, a big leap from the 59.3 points in 2019. A marginal increase in 2021 edged the score to 68.7 points. In 2022, it hit 70.6 points, the first time it crossed the 70-point threshold in the index's history. 2023 would see a further rise to 74.8 points.

The progress was remarkable considering that Singapore was navigating the challenges of the COVID-19 pandemic during this time, from the first reported case in January 2020 to the country's transition out of the acute phase in February 2023.

While there was a dip in the score to 69.3 points in 2024, we noted a change in the assessment framework for 2024.

As regulations and corporate governance practices mature in Singapore, several existing questions with disclosure rates reaching 100 per cent due to mandatory compliance were removed.

Stricter assessment criteria were also applied to the remaining questions. With these comprehensive changes, score comparisons with previous years can be misleading.

2) The size effect remains

From 2020 to 2024, it was observed that firms' SGTI scores were directly proportional to the firm size. The larger their market capitalisation, the higher their total score. In SGTI 2024, the mean overall score of smaller companies was 20 points less than that of large companies.

The results imply that more attention needs to be paid to smaller firms in their corporate sustainable governance journey. In particular, efforts could target areas where small firms lag behind the most.

The largest size effect was most noticeable in the domains Disclosure & Transparency, Board Responsibilities and ESG & Stakeholders.

Large companies showed a clear advantage in sustainability governance—the disclosure rate for having a board member or board committee responsible for managing sustainability is 23 percentage points lower for smaller companies. The results imply that more attention needs to be paid to smaller firms in their corporate sustainable governance journey. In particular, efforts could target areas where small firms lag behind the most.

3) A new dynamic yardstick

Over the years, SGTI's assessment framework has been revised in certain years to cater to the evolving corporate and regulatory landscape. Looking ahead, future SGTI frameworks will be even more dynamic [1] to cater to changing regulatory requirements. Recent years have seen new listing rules relating to independent directors, climate disclosures and more. Incorporating these changes more frequently will paint a more accurate picture of Singapore's corporate governance field.

From the SGTI scores over the years, an improvement can be seen in Singapore's corporate governance. Efforts need to continue. Corporate governance is like a slice of bread and more. You might not think too much about it on a daily basis, but you will definitely notice it when it goes missing.

Looking ahead, future SGTI frameworks will be even more dynamic to cater to changing regulatory requirements.

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[1] Loh, L., Nguyen, H. T., & Singh, A. (2024, August 2). Navigating sustainable governance – introducing a new dynamic SGTI. *The Business Times*. https://www.businesstimes.com.sg/esg/governance-diversity/navigating-sustainable-governance-introducing-new-dynamic-sgti
Full text available at https://bizbeat.nus.edu.sg/thought-leadership/article/navigating-sustainable-governance-introducing-a-new-dynamic-sgti/

Lesson 6

Make Your Leadership Diverse

Lawrence LOH and YEO Kai Ting

Loh, L., & Ang, H.M. (Eds.). (2025). *15 lessons in corporate sustainability and governance.* Centre for Governance and Sustainability, NUS Business School.

Diversity is the art of thinking independently together, Malcolm Forbes once said. He transformed his family's small publishing company into a global powerhouse, with a brand synonymous to innovation and entrepreneurship, with the philosophy of diverse leadership at its core—the secret sauce to his success.

Forbes did not just revolutionise a company; he revolutionised the idea of leadership. His success wasn't just about who led, it was about how diverse minds could work in harmony to drive innovation, spark new ideas, and break boundaries. Diversity in leadership isn't just a moral imperative, but a strategic one.

Fast forward to today's fast-paced and ever-evolving business world, one thing is clear: diverse leadership is not just a trend—it is a game-changer.

Findings from a study[1] on leadership diversity, conducted by the NUS Centre for Governance and Sustainability (CGS) in 2022, echoes that powerful truth. And the proof is in the numbers.

Equal number of male and female leaders is ideal

The study, which analysed 577 publicly listed companies in Singapore, found that one part of the magic formula for optimum business performance is gender parity. Firms that achieve a 50/50 split between male and female leaders in their senior management and boardrooms not just perform at their peak but outperform those with a less diverse leadership team.

A 10-percentage point increase in female leaders leads to a measurable bump (0.44-percentage point increase) in return on assets (ROA).

However, this growth plateaus and even declines when the proportion of women exceeds 50 per cent. What this tells us is that a gender-balanced leadership team, rather than simply increasing female representation, is the key to performance.

This insight mirrors findings from previous leadership diversity reports. A 2018 study[2] found board gender diversity to have a positive and significant impact on listed companies' corporate governance scores, with the latter having a positive and significant impact on firms' financial performance.

A gender-balanced leadership team, rather than simply increasing female representation, is the key to performance.

In a 2016 report[3] on diversity in Asia-Pacific boardrooms, companies with at least 10 per cent female board members on average have a higher ROA and return on equity (ROE) than those with fewer than 10 per cent female board members.

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[1] Loh, L., Nguyen, T. T., & Singh, A. (2022). The impact of leadership diversity on firm performance in Singapore. *Sustainability*, *14*(10), 6223. https://www.mdpi.com/2071-1050/14/10/6223#:~:text=Gender%2C%20age%2C%20and%20education%20diversity,inflexion%20point%20being%20gender%20parity.

[2] Loh, L., & Nguyen, M. H. (2018). Board diversity and business performance in Singapore-listed companies the role of corporate governance. *Research Journal of Social Science & Management*, *7*, 95-104. https://bschool.nus.edu.sg/cgs/wp-content/uploads/sites/7/2020/10/CGIO-Board-Diversity-and-Business-Performance-In-Singapore-Listed-Companies-The-Role-of-Corporate-Governance.pdf

[3] Dieleman, M., Ibrahim, M., & Khor, J. (2016). *Korn Ferry Diversity Scorecard 2016 - Building Diversity in Asia Pacific Boardrooms*. Korn Ferry & NUS CGIO. https://bschool.nus.edu.sg/cgs/wp-content/uploads/sites/7/2018/10/Korn-Ferry-Diversity-Scorecard-2016.pdf

The above findings imply that having more women in leadership roles isn't just a "nice-to-have". It's a necessity.

Diversity in experience counts too

But gender isn't the only piece of the puzzle when it comes to leadership diversity. Experience matters.

Leaders with more than 10 years of industry experience have a significant positive impact on the firm's performance.

In fact, CGS's study[1] in 2022 found that for every 10-percentage-point increase in the proportion of experienced leaders, there is a 0.59- to 0.68-percentage-point boost in ROA. This demonstrates that experience in the trenches makes a tangible difference.

However, research has also found that when firms are led by too many senior leaders over the age of 60, their performance starts to dip.

Specifically, a 10-percentage-point increase in the proportion of leaders aged over 60 is related to a 0.41- to 0.63-percentage-point decrease in ROA.

Therefore, it is important for companies to find that sweet spot between the wisdom of experience and the fresh ideas that younger leaders bring to the table.

So, here's the bottom line: diverse leadership is a win-win for businesses.

Embracing diversity

Various studies over the years have vouched for the benefits of leadership diversity. Across the board, companies with diverse leadership teams, whether in terms of gender, age, or experience, consistently outperform their competitors.

Diverse teams are more innovative, adaptable, and equipped with the necessary diversity in skill sets to navigate the complexities of today's rapidly changing business landscape, alongside an uncertain geopolitical landscape. Embracing diversity is the smart move for any company seeking to stay ahead of the curve.

There is no better time than now, for businesses to embrace diversity to power their future success.

[1] Loh, L., Nguyen, T. T., & Singh, A. (2022). The impact of leadership diversity on firm performance in Singapore. *Sustainability*, *14*(10), 6223. https://www.mdpi.com/2071-1050/14/10/6223#:~:text=Gender%2C%20age%2C%20and%20education%20diversity,inflexion%20point%20being%20gender%20parity.

Lesson 7

Know Your Carbon

Lawrence LOH and Sabrina SOON

Loh, L., & Ang, H.M. (Eds.). (2025). *15 lessons in corporate sustainability and governance.* Centre for Governance and Sustainability, NUS Business School.

Carbon management has become a core business priority in Singapore. The reporting of carbon emissions is driven by new local regulations for listed companies and large non-listed companies. More importantly, it is critical for other companies, including the smaller ones, to provide emissions information as part of their business dealings with the affected companies.

Emerging requirement

The current global standards for sustainability and climate reporting are issued by the International Sustainability Standards Board (ISSB). These are the International Financial Reporting Standards (IFRS) S1 General Requirements for Disclosure of Sustainability-related Financial Information and the IFRS S2 Climate-related Disclosures.

In particular for carbon management, the coverage will be comprehensive involving all three scopes of carbon emissions. Scope 1 emissions are those emanating from the company's operations while Scope 2 emissions pertain to sources from purchased energy. The Scope 3 emissions implicate the entire value chain, particularly suppliers and customers.

The Singapore Exchange (SGX) has integrated the ISSB standards into its regulatory framework through the most recent amendments to the listing rules. Starting in 2025, SGX-listed issuers are mandated to report Scope 1 and Scope 2 emissions while the regulation for Scope 3 disclosures is expected to extend to large issuers (by market capitalisation) from 2026 onwards.

Beyond the listed companies, large non-listed companies—defined as those at or over S$1 billion in annual revenue and at or over S$500 million in total assets—will be required to report Scope 1 and Scope 2 emissions from 2027.

Although the new focus is on larger firms, the ripple effects will be felt across the entire business ecosystem. Small and medium-sized enterprises, often integral to the supply chains of these larger firms, need to determine their carbon footprints. This is because Scope 3 emissions encompass the entire value chain from upstream suppliers to downstream customer usage.

Carbon strategy

The carbon management process can be structured into three key steps: measurement, reduction and mitigation of greenhouse gas (GHG) emissions. Each is crucial for building a comprehensive carbon strategy.

1) Measurement

Companies must begin by establishing a clear emissions baseline, covering Scope 1, Scope 2 and relevant Scope 3 categories:

- Scope 1 emissions are direct emissions from owned or controlled sources, such as company vehicles and manufacturing equipment. Data can be gathered from fuel consumption and maintenance records.

- Scope 2 emissions are indirect emissions from the consumption of purchased energy like electricity, steam or heat. Data from utility bills or energy meters, combined with grid-specific emission factors, can help calculate these emissions.

- Scope 3 emissions are the most complex and cover indirect emissions from a company's value chain, ranging from employee commuting to purchased goods and services. Businesses should focus on categories relevant to their operations and apply emission factors based on data sources like employee surveys, supplier reports and logistics information.

2) Reduction

Setting clear, science-based reduction targets is the next step. While there are various frameworks available, the emphasis should be on prioritising reduction and substitution such as the use of renewable energy before considering offset measures. Companies should align long-term carbon goals with interim milestones to track progress.

3) Mitigation

Mitigation involves integrating carbon management into core business strategies as well as influencing decisions on capital investments, product development and supply chain management. Key actions include:

- Use energy management systems to monitor and improve energy efficiency. Automated monitoring tools can track energy usage and carbon emissions in real time, highlighting the inefficiencies and opportunities for improvement.

The carbon management process can be structured into three key steps: measurement, reduction and mitigation of greenhouse gas (GHG) emissions.

- Practise sustainable procurement that favours suppliers with strong environmental credentials. This is particularly effective for managing Scope 3 emissions, which can often constitute the largest share of the company's carbon footprint.

- Conduct life cycle assessment to measure the environmental impact of products and redesign them with sustainability in mind. This may involve using recyclable materials, reducing packaging, improving energy efficiency or developing products that require fewer resources to produce and use.

Carbon offsetting

Singapore's carbon pricing framework, introduced in 2019, mandates an initial carbon tax of S$5 per tonne carbon dioxide equivalent (tCO_2e) for large emitters. Currently at S$25 per tCO_2e, the tax will increase to between S$50 and S$80 per tCO_2e by 2030.

Companies operating locally need to be prepared for higher costs associated with carbon-intensive activities, further underscoring the business case for robust carbon management strategies.

Businesses may also use verified carbon credits from the voluntary carbon markets to offset their emissions footprints. The widely accepted standards for carbon credits are Verra's Verified Carbon Standard and Gold Standard. These carbon crediting programmes will be key platforms for companies to pursue market solutions in carbon management.

While carbon credits can support a company's sustainability goals, they should be viewed as a complementary measure rather than a primary strategy in carbon management.

Carbon targets

The goal of carbon management is often expressed as "carbon neutrality" or "net zero" which are different in concept. Carbon neutrality refers to balancing just carbon dioxide emissions, while net zero refers to balancing all GHG emissions.

While carbon credits can support a company's sustainability goals, they should be viewed as a complementary measure rather than a primary strategy in carbon management.

Companies can achieve carbon neutrality by measuring particularly its Scope 1 and Scope 2 emissions and allowing a significant proportion of the emissions to be offset through carbon credits, without requiring a commitment to reduce overall GHG emissions. Some standards-setting bodies such as British Standards Institution specify that Scope 3 emissions will be counted if these exceed a certain proportion of the total emissions.

Net zero, on the other hand, is a more ambitious target that focuses on the abatement of all scopes of emissions, while only using offsets for residual emissions as the last resort.

The Science Based Targets initiative first introduced the Corporate Net-Zero Standard in 2021. Currently under revisions, this offers a clear framework for companies to commit to net-zero targets.

The distinction between carbon neutrality and net zero is critical for companies setting long-term decarbonisation targets. While carbon neutrality is a step in the right direction by balancing emitted carbon with an equivalent amount of carbon offsets, net zero reflects a commitment to more comprehensive emissions reductions in line with global climate goals.

Future mandate

For boards and senior management, carbon management is no longer optional—it is a strategic imperative. Leading in the carbon space not only mitigates risks but also unlocks growth opportunities and strengthens organisational resilience.

Understanding the emerging carbon reporting landscape and implementing robust carbon strategies will position companies to thrive in a low-carbon economy for overall competitiveness.

An older version of this article was first published in The Business Times[1].

[1] Loh, L., & Soon, S. (2024, October 23). The strategic imperative around carbon management. *The Business Times*. https://www.businesstimes.com.sg/opinion-features/strategic-imperative-around-carbon-management
Full text available at https://bizbeat.nus.edu.sg/thought-leadership/article/the-strategic-imperative-around-carbon-management/

Lesson 8

ASEAN's Climate Conversation

Lawrence LOH and YEO Kai Ting

Loh, L., & Ang, H.M. (Eds.). (2025). *15 lessons in corporate sustainability and governance.* Centre for Governance and Sustainability, NUS Business School.

The "1.5°C" figure has become iconic, rarely far from the conversations on climate change. But what does it really mean? How do we measure it? And what will happen if we overshoot this target? The science is clear: to avert the worst impacts of climate change and preserve a liveable planet, global warming needs to be limited as much as possible and with urgency.

The climate crisis is no longer a distant worry—it is happening here and now. Whether it is the increasing frequency of extreme weather events, rising sea levels, or unpredictable temperature shifts, you've probably felt the effects of climate change in one way or another.

And while this global challenge may seem daunting, particularly in the Association of Southeast Asian Nations (ASEAN) region which has already been exposed to many climate change-related impacts, such as floods, droughts, urban heat, as well as biodiversity and habitat losses, it presents a window of opportunity for an urgent call to action for businesses in the region—and the best chance is now.

Climate risks have slowly but surely crept into business conversations, with an increasing recognition that corporate strategies can no longer afford to ignore the environment.

It is truly paradoxical that ASEAN's climate change mitigation efforts to date are not commensurate with the multifaceted risks that climate change poses to the region. Hence, the question remains: are ASEAN businesses ready for the long-term impact of climate risks?

The answer, according to the 2022 Climate Reporting in ASEAN: State of Corporate Practices report[1] by the NUS Centre for Governance and Sustainability (CGS), is far from straightforward. While some positive strides towards climate risk management have been made, there are stark gaps in how companies are addressing these risks.

Ignoring these risks today, quite simply means a higher price tag tomorrow, not just for the planet, but for the future of businesses.

Climate risk reporting: a critical imperative

While there is growing interest in climate-related disclosures, many companies are still fumbling through the process. More firms are starting to report on their climate-related risks, but the quality and depth of these disclosures are inconsistent, and they vary widely even within ASEAN.

Notably, CGS' 2022 study found significant variation in how companies across ASEAN report on climate-related risks and strategies, with some countries making notable progress and others lagging behind. Among the six ASEAN countries (Indonesia, Malaysia, the Philippines, Singapore, Thailand and Vietnam) studied, Thailand took the lead in the climate disclosure rate (57 per cent), followed closely by Singapore and Malaysia (48 per cent). These were largely due to a combination of regulatory mandates and stakeholder engagement. Still, the overall climate disclosure rate for the six countries was 46 per cent, a figure which has room for much improvement.

It is truly paradoxical that ASEAN's climate change mitigation efforts to date are not commensurate with the multifaceted risks that climate change poses to the region.

[1] Adigue, A. G., Loh, L., & Yock, Y. (2022). *Climate Reporting in ASEAN: State of Corporate Practices*. Global Reporting Initiative ASEAN & NUS Centre for Governance and Sustainability. https://bschool.nus.edu.sg/cgs/wp-content/uploads/sites/7/2022/11/CGS-GRI-Climate-Reporting-in-ASEAN-State-of-Corporate-Practices-Report-2022.pdf

In addition, companies in ASEAN are generally stronger at reporting on areas like materiality, targets, and risks and opportunities, but less adept at linking those risks to the long-term impact on their organisations.

Many companies in the region are still treating climate-related risks as peripheral issues rather than addressing them as part of their core strategic priorities.

More alarmingly, many boards still lack the expertise to understand the complexities of climate risks, let alone manage them effectively. As the study points out, establishing clear climate strategies are crucial apparatus in the fight against climate change. Without climate risk integrated at the board level, companies miss a critical opportunity to prepare for the inevitable disruptions ahead.

Long-term consequences of ignoring climate risks

The influence of climate risk on asset and company valuations is growing, particularly with extreme weather events and regulatory changes beginning to impact industries.

For instance, companies that are unprepared for rising sea levels could find their facilities, especially those in coastal areas, at risk of flooding. Similarly, businesses in industries heavily reliant on natural resources could face disruptions as resource scarcity or ecosystem degradation makes it harder to access essential inputs. Meanwhile, transition risks such as carbon taxes could erode profit margins for companies with high emissions.

Without climate risk integrated at the board level, companies miss a critical opportunity to prepare for the inevitable disruptions ahead.

These risks, if not managed properly, will significantly impact a company's ability to generate future cash flows and affect its overall market valuation.

The cost of inaction does not just end in financial losses.

It hits companies' reputations too. In this age, consumers, investors and even employees are increasingly examining companies' readiness for the future, including how they plan to transition to a low-carbon economy. Companies that cause environmental damage and those with little climate action will not score high for brand affinity.

From reputational blows to supply chain disruptions and regulatory fines, any company that fails to prepare itself to tackle the impacts of climate change will eventually find itself at a competitive disadvantage, unable to weather the storm, both literally and figuratively.

Turning climate risks into opportunities: progress beats perfection

While the risks are real, it is not all doom and gloom. As the global economy moves towards decarbonisation, companies that take early steps to mitigate their climate risks will not only survive—they'll thrive.

From green innovations to renewable energy solutions, companies in ASEAN that are prepared to embrace change by integrating climate risks into their business models can unlock a bounty of opportunities, especially with the region's growing focus on sustainability.

The good news is that there is still time for companies to make the necessary adjustments, integrate climate risks into their governance structures, and take steps towards more sustainable business practices.

The question is not whether climate risks are a priority, but whether companies are willing to take the necessary steps to face them head-on.

As the global economy moves towards decarbonisation, companies that take early steps to mitigate their climate risks will not only survive—they'll thrive.

Lesson 9

The Steps for Integrating Nature

Lawrence LOH and Sabrina SOON

Loh, L., & Ang, H.M. (Eds.). (2025). *15 lessons in corporate sustainability and governance.* Centre for Governance and Sustainability, NUS Business School.

Climate change has dominated the sustainability agenda for businesses across the world. This is rightly so, as the pressing need to moderate global warming has resulted in a climate-first approach.

Yet, fighting climate change is only half the story.

The neglected half is about nature and biodiversity. Indeed, climate action is only the "means" and addressing nature issues is the "ends". If there is no nature, including humans, climate change is irrelevant.

There is, in fact, a deep interconnectedness of climate change with nature. For businesses, acknowledging and acting on this interrelationship is essential for sustainability and long-term resilience. For corporate regulation, there is a need to progress beyond climate action towards an even sharper focus on nature policy.

Inextricable link between nature and climate

Climate goals cannot be achieved without nature. Nature and biodiversity loss will exacerbate climate change.

As an example, forests, wetlands and marine ecosystems play a crucial role in regulating the earth's climate by storing carbon, controlling water cycles and protecting against extreme weather events.

When ecosystems are destroyed, the carbon stored in trees, plants and soils are released into the atmosphere, contributing to global warming. Conversely, the impacts of climate change, such as rising temperatures, changing rain and ocean acidification will place enormous stress on natural systems.

In the Asia-Pacific region, the economy's reliance on nature is even more pronounced as natural ecosystems support industries such as agriculture, fisheries, forestry and tourism, contributing significantly to regional economies.

Despite this reality, most corporate sustainability strategies continue to treat climate and nature as separate issues.

In a nature-related study[1] released in January 2025 and conducted jointly by the Centre for Governance and Sustainability at NUS Business School and the global luxury group Kering, it was revealed that 72 per cent of companies considered climate change as a material issue, while only less than half of that (35 per cent) deemed nature and biodiversity to be material to their business.

There is, in fact, a deep interconnectedness of climate change with nature. For businesses, acknowledging and acting on this interrelationship is essential for sustainability and long-term resilience.

The study involved 700 of the largest listed companies covering 11 industries across 14 Asia-Pacific jurisdictions.

When looking at the level of priority, 82 per cent of the companies that disclosed climate change as a material issue placed it as a mid to high-priority issue, while only 31 per cent of companies placed nature and biodiversity as a mid to high-priority issue.

[1] Daveu, M.-C., Loh, L., & Marty, T. (2025). *Nature-related Practices and Strategies in Asia Pacific*. Kering & NUS Centre for Governance and Sustainability. https://bschool.nus.edu.sg/cgs/wp-content/uploads/sites/145/2025/01/Nature-Related-Practices-and-Strategies-in-Asia-Pacific-Report-Jan-2025.pdf

Business case for nature-inclusive strategy

In Singapore, about four out of 10 companies recognise the material importance of nature and biodiversity to their operations, and have begun setting targets to address these issues.

Adopting nature-positive strategies opens new market opportunities and enhances brand reputation. With growing consumer and investor demand for sustainable and ethically sourced products, businesses that integrate nature into their value proposition can differentiate themselves and attract eco-conscious customers. This strategic focus not only drives innovation, but also positions companies as leaders in sustainability.

For instance, in June 2024, City Developments Ltd (CDL) secured a S$400 million landmark sustainability-linked loan from DBS, due to its pioneering commitment to nature conservation and sustainable development. It is widely recognised as a sustainability champion, and leads in aligning its 2024 sustainability report with the Taskforce on Nature-related Financial Disclosures (TNFD), a pioneering global standard for organisation actions for nature.

Addressing nature-related risks such as biodiversity loss, deforestation and resource scarcities can help companies mitigate potential disruptions to their operations and supply chains.

By fostering a positive relationship with nature through responsible sourcing, ecosystem restoration and sustainable land management, companies can ensure the continued availability of essential natural resources. This, in turn, enhances their long-term viability, and strengthens their capacity to navigate future environmental and economic uncertainties.

As yet another example, CapitaLand Integrated Commercial Trust has committed to preserving biodiversity by ensuring no sites are situated within protected areas, using sustainable and certified wood materials as part of its Sustainable Building Guidelines, and ensuring wastewater is responsibly disposed to prevent water pollution.

The regulatory landscape is evolving rapidly, with governments worldwide implementing new laws and regulations to address nature-related issues.

Addressing nature-related risks such as biodiversity loss, deforestation and resource scarcities can help companies mitigate potential disruptions to their operations and supply chains.

Target 15 of the Kunming-Montreal Global Biodiversity Framework requires governments to ensure that large companies and financial institutions monitor, assess and disclose biodiversity-related risks, dependencies and impacts by 2030.

Companies that embed nature considerations into their strategies will be better positioned to comply with emerging regulations, avoiding legal risks and potential penalties.

For instance, UOB, also an early adopter of TNFD, set targets to strengthen its nature risk assessment capabilities and develop a pilot approach on nature-related scenario analysis. It continues to be recognised as a leader among Asean banks on the World Wide Fund for Nature's Sustainable Banking Assessment.

Recommendations for nature-related actions

To future-proof operations and align with evolving global, regional and local standards for nature, businesses, including those based in Singapore, should broaden their scope from climate-only to nature-related actions.

1) Adopt the TNFD LEAP (Locate, Evaluate, Access and Prepare) approach to identify nature-related dependencies, impacts, risks and opportunities

Start by assessing where and how the company's activities affect and depend on nature. For example, is the business dependent on water, land or raw materials from nature? What will happen if these resources become scarce or degraded? Similarly, assess material risks and opportunities for nature-based solutions, such as restoring mangroves to enhance flood resilience or investing in sustainable sourcing to secure long-term supply chains.

2) Set science-based targets for nature

Just as companies have adopted science-based targets for carbon emissions, similar targets should be set for nature. This may include commitments such as zero deforestation, reducing impacts on water bodies, and enhancing biodiversity in areas where the business operates. The Science Based Targets Network provides technical guidance and materials for companies to set science-based targets for nature.

Companies that embed nature considerations into their strategies will be better positioned to comply with emerging regulations, avoiding legal risks and potential penalties.

3) Engage with value chains to implement nature-based solutions

Nature-based solutions, such as reforestation, wetland restoration or urban greening, can offer cost-effective ways to address environmental challenges while providing social and economic benefits. By collaborating with suppliers, partners and customers when integrating nature-based solutions, companies can not only mitigate environmental impacts, but also unlock avenues for partnerships and innovation.

Businesses must recognise that addressing both climate and nature is imperative for long-term success. By understanding the interconnectedness of these two pillars, identifying nature-related risks and opportunities, and learning from industry leaders who have successfully integrated biodiversity into their operations, companies can build resilient and sustainable business models.

An older version of this article was first published in The Business Times[1]*.*

[1] Loh, L., & Soon, S. (2025, February 10). Sustainability beyond climate: The business imperative to include nature. *The Business Times*. https://www.businesstimes.com.sg/opinion-features/sustainability-beyond-climate-business-imperative-include-nature
Full text available at https://bizbeat.nus.edu.sg/thought-leadership/article/sustainability-beyond-climate-the-business-imperative-to-include-nature/

Lesson 10

How Digital Companies Can Serve Diverse Needs

Ming TAN, Lawrence LOH and Sabrina SOON

Loh, L., & Ang, H.M. (Eds.). (2025). *15 lessons in corporate sustainability and governance.* Centre for Governance and Sustainability, NUS Business School.

Digitalisation continues to underpin Southeast Asia's post-pandemic recovery and economic transformation. As creators, distributors and users of digital technology, digital economy companies (DECs) play an influential role in this trajectory.

In 2023, the Tech for Good Institute (TFGI) and the NUS Centre for Governance and Sustainability (CGS) studied [1] how 439 DECs across Southeast Asia currently frame their impact beyond financial numbers.

The research showed that digital economy companies across Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam, collectively the "SEA-6" countries, are currently more focused on immediate "licence to operate" issues such as cybersecurity and data protection.

Meanwhile, environmental impact, from carbon footprint to waste management, were low on the agenda. More than eight in 10 (85 per cent) of DECs assessed expressed intention towards sustainability and impact as corporate information, while fewer than half have implemented initiatives to put these intentions into action.

Only a quarter of DECs assessed had formally reported on their non-financial impact with clear metrics and targets. The "say-do-act" gap exists, but there is opportunity for DECs to make a positive impact through non-financial metrics and clear goals.

Designing responsible products, services and operations, however, will become increasingly important as demand for transparency and accountability gains momentum.

As the urgency for sustainable solutions for social wellbeing, environmental protection and long-term resilience grows, the investment narrative for impact is also emerging. Responsible, supportive, facilitative and transformative digital technologies can create value and advance sustainability at the same time.

Here's how digital economy companies can accelerate Southeast Asia's sustainable development, according to the Tech for Good Institute's framework.

Responsible technology first does no harm

With climate change posing an existential threat to Southeast Asia, many companies are making efforts towards transitioning to a low-carbon future.

As the urgency for sustainable solutions for social wellbeing, environmental protection and long-term resilience grows, the investment narrative for impact is also emerging.

Responsible digital economy companies examine their systems, processes, products and services to identify and mitigate negative

[1] Tech for Good Institute, & NUS Centre for Governance and Sustainability. (2023). *What Impact Means to Digital Economy Companies in Southeast Asia*. https://bschool.nus.edu.sg/cgs/wp-content/uploads/sites/7/2023/06/CGS-TFGI-What-Impact-Means-to-Digital-Economy-Companies-in-Southeast-Asia-2023.pdf

consequences, both upstream and downstream.

For example, digital economy companies should consider areas such as supply chain management of hardware, the operational footprint of products and services, and the management of electronic waste (e-waste). In the long run, DECs will be called upon to account for the technology lifecycle and the entire value chain.

Supportive technology can enable new ways of preventing harm and risks

Digital technologies can support the reduction of greenhouse gas emissions in supporting decision-making and through sensing and control for real-time data and calibration of processes.

These technologies, of course, rely on general enabling technologies such as cloud and 5G, as well as foundational technologies such as data analytics. High-emitting sectors have already incorporated all of these technologies, especially in the energy sector.

Sensors and satellites, together with data collection, processing and modelling, have also greatly enhanced weather monitoring and forecasting, enabling communities to respond proactively to reduce the impact of severe weather events.

Facilitative technology for increased efficiency

Digital technology also optimises benefits by increasing efficiency. This is perhaps the most common use-case for digitalisation, realising outcomes such as streamlined processes, time saved, improved convenience, increased access, reduced waste or lower cost.

Responsible digital economy companies examine their systems, processes, products and services to identify and mitigate negative consequences, both upstream and downstream.

For example, sustainability reporting is a data-intensive exercise, yet climate and nature-related reporting has become a critical tool for companies to assess and communicate their environmental impact, progress towards climate goals, and commitment to sustainability and biodiversity conservation.

The CGS's study[1] on climate reporting, in collaboration with the Global Reporting Initiative (GRI), reveals that

[1] Adigue, A. G., Loh, L., & Yock, Y. (2022). *Climate Reporting in ASEAN: State of Corporate Practices*. Global Reporting Initiative ASEAN & NUS Centre for Governance and Sustainability. https://bschool.nus.edu.sg/cgs/wp-content/uploads/sites/7/2022/11/CGS-GRI-Climate-Reporting-in-ASEAN-State-of-Corporate-Practices-Report-2022.pdf

the overall climate disclosure rate for the SEA-6 is at 46 per cent; while the nature disclosure rate across listed companies in 13 Asia Pacific jurisdictions is at 31 per cent in another CGS study[1] on nature reporting.

Technologies such as building management systems, remote sensing, drones and satellite imagery provide real-time and accurate information about climate conditions, emissions, and energy consumption.

Automated controls can optimise energy consumption, identify energy-saving opportunities and manage energy demand. When it comes to data storage and management, cloud-based solutions ease the process of aggregating, analysing and sharing data.

Southeast Asia faces the dual challenge of responding to the effects of climate change caused by decades of emissions by advanced economies while driving sustainable development for fast-growing populations and economies.

Stakeholders, including investors, employees and customers, can access real-time data, reports and visualisations related to a company's environmental impact. Companies can leverage their websites, digital platforms, and social media networks to share climate reports, goals and progress, thereby fostering open and transparent communication.

Transformative technologies to tackle challenges

Most ambitiously, transformative technologies provide entirely new approaches. Southeast Asia faces the dual challenge of responding to the effects of climate change caused by decades of emissions by advanced economies while driving sustainable development for fast-growing populations and economies.

Ambitious development plans need energy, and energy-related emissions from Southeast Asia are expected to more than double by 2030. The energy transition from fossil fuels will require the efficient capture, storage and distribution of renewable energy.

Solar panels, wind turbines, and energy storage systems enable organisations to generate and utilise clean energy sources. Smart grid systems and energy management platforms allow integration of renewable energy sources into the existing energy

[1] Daveu, M.-C., Loh, L., & Marty, T. (2025). *Nature-related Practices and Strategies in Asia Pacific*. Kering & NUS Centre for Governance and Sustainability. https://bschool.nus.edu.sg/cgs/wp-content/uploads/sites/145/2025/01/Nature-Related-Practices-and-Strategies-in-Asia-Pacific-Report-Jan-2025.pdf

infrastructure, ensuring a reliable and sustainable energy supply.

In summary, SEA-6 is at a critical juncture where digital transformation and sustainability intersect, and digital economy companies are uniquely placed to meet the needs of young, ambitious and mobile-native populations.

Innovation begins with identifying the right problems to solve and then driving the adoption of solutions. DECs embedded within the markets they serve are well-suited to developing and bringing responsible, supportive, facilitative and transformative technologies to the market and at scale.

By supporting Southeast Asia's sustainable developmental priorities, DECs can find a ready market for fit-for-purpose products and services that align with national priorities and generate sustainable value to society, which in turn opens up opportunities for them to scale and grow.

An older version of this article was first published in the World Economic Forum[1].

[1] Tan, M., Loh, L., & Soon, S. (2023, August 2). How digital economy companies can accelerate Southeast Asia's sustainable development. *World Economic Forum*. https://www.weforum.org/stories/2023/08/how-digital-economy-companies-can-accelerate-southeast-asias-sustainable-development/

SHOW AND TELL

Lesson 11 Countering Greenwashing

Lesson 12 Business Integrity Disclosures Still Vital

Lesson 13 How Businesses Can Demonstrate Their Impact

Lesson 11

Countering Greenwashing

Lawrence LOH and Joycelyn LEE

Loh, L., & Ang, H.M. (Eds.). (2025). *15 lessons in corporate sustainability and governance.* Centre for Governance and Sustainability, NUS Business School.

A 2023 study[1] published by the NUS Centre for Governance and Sustainability gives consumers a reason to be sceptical about green product claims.

Titled "Promoting Best Practices in Online Marketing: An Examination of Greenwashing in Singapore", the study is supported by the Competition and Consumer Commission of Singapore (CCCS).

It investigates the prevalence of greenwashing in e-commerce in Singapore, that is, claims that products are more environmentally friendly or sustainable than they really are.

[1] Loh, L., Yock, Y., & Lee, J. (2023). *Promoting Best Practices in Online Marketing: An Examination of Greenwashing in Singapore*. NUS Centre for Governance and Sustainability. https://bschool.nus.edu.sg/cgs/wp-content/uploads/sites/7/2023/12/CGS-CCCS-Promoting-Best-Practices-in-Online-Marketing-November-2023.pdf

The study found greenwashing in the form of unsubstantiated claims in 51 per cent of sampled products.

These claims use vague terms and lack sufficient supporting information. The study also found the use of technical jargon to mislead consumers in 14 per cent of sampled products.

What does this mean and what should consumers and companies do?

Consumers' role

To consumers, it may seem like there's been an increasing number of "green" products but also a proliferation of greenwashing claims. Both can be true at the same time.

As climate-conscious consumers demand more sustainable products, companies have been jumping on the bandwagon to meet this demand.

However, while some companies explore product innovation to create more sustainable products, other companies may capitalise on the marketing opportunity without actually backing up their claims with action.

In all fairness, greenwashing may sometimes be unintentional, as companies could be unfamiliar with how to market their sustainability efforts responsibly and properly.

Amid increasing awareness and concern about the climate crisis, especially amongst younger consumers, studies have found that consumers are willing to pay a premium for more environmentally friendly products to reduce their individual impact on climate change.

But before consumers do so, they should also evaluate environmental claims with a critical eye.

When a company makes a claim, what are they choosing to say and what are they trying to obscure from customers?

Are consumers able to reasonably deduce, from the information provided, how the environmental impact of a particular product differs from another similar product? Are the claims clear and specific?

For example, fashion chain H&M has been repeatedly called out for alleged greenwashing, notably due to its Conscious Collection which claims to be more sustainable.

Critics say that it uses vague and generic claims that do not provide sufficient information about the sustainability of the products in the collection, such as the exact percentage of recycled content used.

Are consumers able to reasonably deduce, from the information provided, how the environmental impact of a particular product differs from another similar product? Are the claims clear and specific?

The type and amount of recycled content can have important implications for the overall environmental impact of a product.

To provide a more accurate representation of a product, companies should quantify and qualify its environmental impact, for example by specifying its exact material composition and explaining the environmental benefits of such attributes.

Consumers vote with their wallets and in this way can exert significant influence on businesses.

In more extreme cases, consumers have sued brands for greenwashing. For example, consumers started a class-action lawsuit against American coffee company Keurig for inaccurately marketing its coffee pods as recyclable despite the pods not being widely recyclable in many communities.

The settlement required Keurig in 2022 to pay US$10 million (S$13.4 million) and qualify any claims on recyclability.

Businesses' role

While consumers can do their part, they also cannot be expected to become experts on climate change overnight.

The onus is on businesses to be transparent and substantiate their claims well, instead of capitalising on consumers' lack of technical knowledge to market a product.

It is critical that the claims or what is implied by the claims do not overstate the positive environmental impact of the product or their overall business.

Businesses should maintain a balance between genuine action and clear communication on sustainability.

The reputational risk of being called out for greenwashing means that companies should exercise caution and restraint in advertising green claims.

With transparency, businesses can also boost their reputations and build consumer trust.

Consumers vote with their wallets and in this way can exert significant influence on businesses.

Take the example of LEGO, the Danish toy company.

In 2023, it candidly announced a setback in experimenting with new sustainable materials.

The company had previously marketed breakthroughs in developing LEGO bricks using recycled polyethylene terephthalate plastic. But after testing, it found the environmental impact to be less positive than anticipated.

LEGO's openness was generally well received, in contrast to other companies that would quietly backtrack on public commitments by taking down statements previously published online.

Over time, normalising such open practices can build a culture of honest communication around sustainability efforts, making it easier for society to track progress on climate action.

It is a positive sign that businesses are responding to consumer demands for environmentally friendly products, but how they choose to respond varies.

Role of regulations

Regulations targeting greenwashing will be key in addressing the current situation in Singapore.

They deter businesses from greenwashing and empower consumers and civil society advocates to hold businesses accountable.

Regulations should also be supported by enforcement and clear guidance that reduces ambiguity around what constitutes greenwashing.

Currently, the Consumer Protection (Fair Trading) Act allows consumers to take legal action against companies engaging in unfair practices.

Over time, normalising such open practices can build a culture of honest communication around sustainability efforts, making it easier for society to track progress on climate action.

CCCS announced in late 2023 that it is developing guidelines to clarify environmental claims that could be considered unfair practices under the Act.

The Federal Trade Commission regulates greenwashing in the United States and has published Green Guides outlining principles on environmental marketing, and substantiation and qualification of claims to ensure responsible communication to consumers.

The proposed European Union's Green Claims Directive, expected to be finalised in 2025, will ban several marketing practices related to greenwashing such as using generic claims without substantiation and claims made based on greenhouse gas emissions offsetting programmes that a product has neutral, reduced or positive environmental impact.

Some critics assert that carbon neutral claims are scientifically inaccurate and function as a smoke screen making companies appear more committed to climate action than they may be.

The proposed directive is seen as a step to protect consumers and facilitate purchasing decisions to empower consumers in the green transition.

Singapore can draw on these regulations as practical examples of how legislation can be implemented to combat greenwashing. Aligning our regulations with other markets also contributes to standardisation across markets, providing more clarity for businesses and imposing a stronger mandate against greenwashing.

As consumers, businesses and regulators direct more attention to greenwashing and climate action, we will start to see more advancement on these fronts. We can remain cautiously optimistic about increasing developments and progress in the green transition.

Greenhushing isn't good either

Moving forward, there is another trend to watch out for: greenhushing. If greenwashing lies on one end of the scale, where companies exaggerate their environmental merit, then greenhushing lies on the other end, where companies say too little.

In greenhushing, companies might deliberately underreport their sustainability initiatives and achievements due to a fear of scrutiny, criticism or greenwashing accusations. Staying quiet about their environmental efforts becomes a shield from potential backlash if the organisations fail to meet expectations or to prevent drawing attention to their other less sustainable practices.

While this approach allows businesses to adjust their sustainability goals privately, it can hinder transparency and stakeholder engagement.

Greenwashing isn't good, but neither is greenhushing. Organisations should plan their sustainability strategies, take action, measure the impact, and report their efforts accordingly.

An older version of this article was first published in TODAY[1].

Greenwashing isn't good, but neither is greenhushing. Organisations should plan their sustainability strategies, take action, measure the impact, and report their efforts accordingly.

[1] Lee, J., & Loh, L. (2023, December 4). How to counter the prevalence of greenwashing in Singapore. *TODAY*. https://www.todayonline.com/commentary/commentary-how-counter-prevalence-greenwashing-singapore-2317726

Lesson 12

Business Integrity Disclosures Still Vital

Lawrence LOH and YEO Kai Ting

Loh, L., & Ang, H.M. (Eds.). (2025). *15 lessons in corporate sustainability and governance.* Centre for Governance and Sustainability, NUS Business School.

Integrity isn't just a buzzword in today's ever-evolving business landscape, where the effects of climate change are deepening—it has become a non-negotiable pillar of sustainable corporate success. This is especially true in Southeast Asia, where corruption continues to present significant barriers to economic development and political stability.

Findings from the NUS Centre for Governance and Sustainability's (CGS) Corporate Disclosure on Business Integrity in ASEAN 2024 report underscore just how critical transparency and integrity disclosures are in shaping the future of business in the region.

The report[1], part of a nearly decade-long commitment and series[2] by CGS and its partners, such as the ASEAN CSR Network and the Securities Investors Association (Singapore), examined the disclosures of the top 50 listed companies by market capitalisation in five ASEAN nations: Indonesia, Malaysia, the Philippines, Singapore, and Thailand.

It evaluated companies based on their internal and external commitments to anti-corruption, and—perhaps most crucially—how effectively they report and monitor these initiatives. What CGS found, unfortunately, is not a glowing testament to the region's progress.

Decline in anti-corruption disclosures

In the 2024 report, the overall score across the 250 companies surveyed fell to 64 per cent, a drop from 69 per cent in 2022.

This may seem like a small dip, but it is no doubt a concerning signal that ASEAN companies are losing momentum in the fight for transparency.

Integrity, after all, is not a checkbox you can tick and forget about. The decline in disclosures is not just an academic issue; it has real-world consequences for investors, customers and employees alike, who rely on these disclosures to understand what a company truly stands for.

Thailand leads the pack

Thailand bucks this trend, emerging as a leader in business integrity with a top score of 80 per cent. That stellar performance highlights a critical truth: strong leadership and a company-wide commitment to integrity can indeed pay off. It is a hopeful sign that, when business leaders put ethics first, real change can happen.

But let's not get too carried away, for Thailand is the exception, not the rule. In Indonesia, for instance, the average score sits at a far less impressive 48 per cent, reflecting the significant hurdles still facing many businesses in the region.

It is a hopeful sign that, when business leaders put ethics first, real change can happen.

Interestingly, only Singapore-listed companies had full disclosures on two indicators: compliance with relevant

[1] Loh, L., & Nguyen, H. T. (2024). *Corporate Disclosure on Business Integrity in ASEAN 2024*. NUS Centre for Governance and Sustainability. https://bschool.nus.edu.sg/cgs/wp-content/uploads/sites/145/2025/01/CGS_Corporate-Disclosure-on-Business-Integrity-in-ASEAN-2024.pdf

[2] *Business Integrity*. NUS Centre for Governance and Sustainability. https://bschool.nus.edu.sg/cgs/applied-research-in-corporate-governance/corporate-disclosure-on-business-integrity/

laws and commitment to protect whistleblowers from reprisal. However, it falls behind in disclosure areas like anti-corruption policy reviews.

Reporting and monitoring dimension experienced sharp drop

It is a grimmer picture when it comes to the reporting and monitoring of anti-corruption measures. Across the five countries, this dimension saw a sharp decline, with companies failing to meet even basic transparency standards.

It is one thing for a company to say they have anti-corruption policies, but it is another to actively report on and monitor the effectiveness of those policies. Without this crucial step, integrity remains little more than a feel-good buzzword. In worse cases, that could leave the door wide open for corruption to thrive unchecked. Business integrity cannot just be an afterthought.

At its core, this is what the CGS report emphasises: business integrity disclosures are not just a formality—they are a vital part of the equation. In parts of Southeast Asia, where corruption remains a persistent issue, businesses cannot afford to ignore transparency. Not only does it affect their internal culture, but it also shapes how the world sees them.

Investors are increasingly prioritising companies that have strong governance frameworks in place, and consumers are no longer willing to turn a blind eye to questionable practices. Hence, integrity disclosures offer a window into how a company operates.

Over the years, CGS' reports on business integrity disclosures have become a benchmark for tracking corporations' progress in this area.

To thrive in the 21st century, ASEAN companies must go beyond mere legal compliance by fostering a culture of transparency, accountability and trust from within.

Since 2016, each report echoes the fact that we are still far from the finish line. The region's top companies can no longer rely on their size or market power to shield them from scrutiny. They need to show and tell their commitment to anti-corruption and ethical practices. They need to make anti-corruption policies and related disclosures a part of their DNA.

Let business integrity be part of the corporate culture

Integrity needs to be more than a written policy; it must be a living, breathing part of the corporate culture. This could start with external commitments, particularly in the selection of new agents and suppliers, to ensure that anti-corruption policies are being followed through.

Internally, businesses need to step up their game in areas where basic policies and disclosures are in place. It is not just about providing a platform; whistleblowers should be kept in the loop and their input valued throughout the investigation process.

Transparency is key, and corporations have to resist the tendency to act without disclosure.

Leaders set the tone

Leadership commitment plays a pivotal role. As evidenced by Thailand's strong performance, when corporate leaders champion integrity, it sets the tone for the entire organisation.

And it is not just about leadership—encouraging collaboration across sectors is key. Governments, civil society and businesses must work together to create an ecosystem where integrity is the default setting, not the exception.

But the real challenge? Moving beyond secrecy.

Companies need to make their anti-corruption efforts visible and public, allowing stakeholders to judge their commitment. To thrive in the 21st century, ASEAN companies must go beyond mere legal compliance by fostering a culture of transparency, accountability and trust from within.

Lesson 13

How Businesses Can Demonstrate Their Impact

Lawrence LOH, HUANG Minjun and Sabrina SOON

Loh, L., & Ang, H.M. (Eds.). (2025). *15 lessons in corporate sustainability and governance.* Centre for Governance and Sustainability, NUS Business School.

Businesses have traditionally focused on disclosing the resources invested in sustainability initiatives, such as financial expenditures and human capital.

However, this approach of reporting only input is no longer sufficient. Businesses must also assess and demonstrate the tangible outcomes and impact of their efforts.

As the demand for meaningful progress in sustainability grows, companies must navigate these complexities with a clear sense of direction and purpose – ensuring that their initiatives lead to significant, lasting changes.

Conceptualising impact

Sustainability in corporations is typically viewed through the environmental, social and governance framework, which consists of components assigned to each of the three domains.

This framework is a convenient way to signify sustainable action but is often characterised by a so-called "check-the-box" mode.

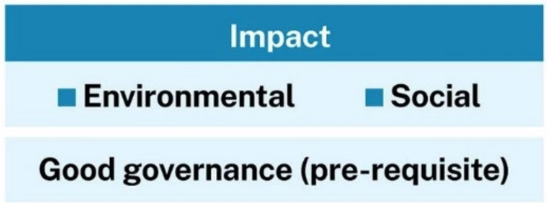
With an aim of demonstrating the changes made possible with sustainability initiatives, the Sustainability Impact Awards[1] strive to appraise sustainability through an examination of impact and the corresponding significance.

The awards, presented by The Business Times and UOB with the Centre for Governance and Sustainability as the knowledge partner, comprise two primary categories: individual and enterprise. The enterprise category is further divided into large enterprises and small and medium-sized enterprises.

The underlying basis of the awards is to consider singular excellence in either environmental or social domains. Excellence may also straddle both domains (Figure 1).

Good governance, meanwhile, is the bedrock for excellence in the environmental or social aspects or both. Governance is the horse that pulls the cart of environmental and social practices.

Figure 1: Underlying basis of impact model



Assessing impact

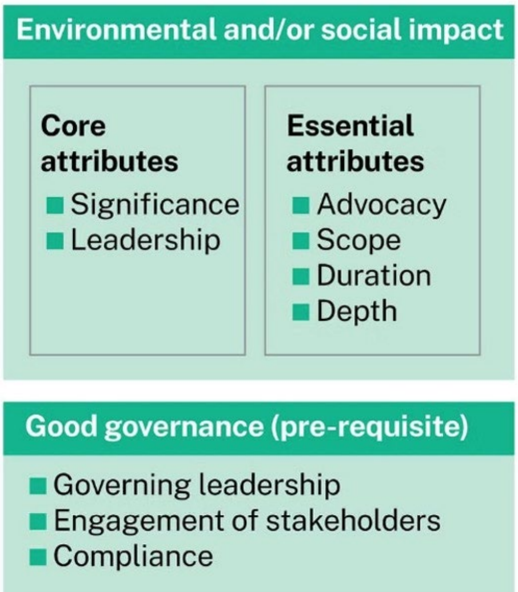
The tailored model for the Sustainability Impact Awards measures both environmental and social impact in a manner comparable across entities and time.

The model is inspired by established impact methodologies, particularly the Impact Compass of the Center for Social Innovation at Stanford Graduate School of Business, the Impact Management Project by Impact Frontiers, and the Sustainability Impact Assessment of the Organisation for Economic Co-operation and Development (OECD).

At the heart of our impact model are two core attributes: significance and leadership (Figures 2 and 3). These are supported by four essential attributes: advocacy for the individual category and scale for the enterprise category; as well as scope; duration; and depth for both categories.

[1] *Sustainability Impact Awards*. The Business Times. https://www.businesstimes.com.sg/events-awards/sustainability-impact-awards

Figure 2: Impact model for individual category



Significance implies an extended outcome beyond an individual's or business' immediate contribution. The importance of this outcome to stakeholders should be clearly articulated in terms of how social progress is advanced, where it is most needed, as well as why additional resources are warranted.

Leadership serves as the compass indicating the desired direction. Demonstrating leadership requires both pioneering efforts in sustainability and the ability to inspire others to join the journey.

Being a pioneer implies that the business or individual has long been investing resources in sustainability, thus driving meaningful outcomes and impact. Inspiring others indicates that the impact has influenced the behaviours and interests of relevant parties, creating a ripple effect for broader-scale impact.

Figure 3: Impact model for enterprise category

The essential attributes—advocacy/scale, scope, duration and depth—complement the two core elements of the model by providing additional clarity and direction.

In the individual category, advocacy highlights an ability to drive change by engagement with both internal and external stakeholders—influencing business strategies or public policies for better sustainability outcomes.

In the enterprise category, scale focuses on demonstrating the groups affected, the magnitude of people reached and the reach of the sustainability initiatives carried out.

The attribute of scope enhances the significance of impact by considering its contribution to community, national or global agendas. Duration and depth speak to the longevity and magnitude of change achieved.

Bonus consideration

Singular initiatives are rarely sufficient to achieve large-scale, lasting impact. Extensive cooperation enables businesses to move from carrying out initiatives to generating a multiplier effect—or synergy—in impact creation. Thus, bonuses may accrue to the fostering of synergy through collaborative efforts.

Innovation is another key driver for scaling up impact. It is the catalyst for transforming the current situation and amplifying the impact, and will be accorded bonuses in the awards.

Financial viability

While impact creation is critical, financial sustainability remains the bottom line for businesses. An excellent corporation must harmonise financial and impact materiality—where financial materiality safeguards the bottom line, and impact materiality charts the path forward for the environmental and social fronts.

While the Sustainability Impact Awards emphasise the impact made by winners on sustainable progress, financial adequacy is also key.

Broader application

The model detailed above may have been developed for the evaluation of the Sustainability Impact Awards, but its relevance goes beyond the awards and the winners.

Leadership serves as the compass indicating the desired direction.

Business leaders committed to joining the impact movement may use these models to guide strategic and sustainability planning. This will enable the transition from input and output metrics to a broader impact for the environment and society.

Most importantly, the impact must be rooted in good governance together with financial viability.

An older version of this article was first published in The Business Times[1].

[1] Loh, L., Minjun, H., & Soon, S. (2024, September 27). How to demonstrate excellence in the pursuit of sustainability impact. *The Business Times*. https://www.businesstimes.com.sg/events-awards/sustainability-impact-awards/sustainability-impact-awards-2024/how-demonstrate-excellence-pursuit-sustainability-impact

LOOKING TO THE FUTURE

Lesson 14

Stay Steady on the Sustainability Track

Lawrence LOH and ANG Hui Min

Loh, L., & Ang, H.M. (Eds.). (2025). *15 lessons in corporate sustainability and governance.* Centre for Governance and Sustainability, NUS Business School.

For sustainability, the year 2025 is a pivotal watershed. From global climate compacts to political interventions, the future of climate change actions remains on balance between sustained momentum and back-pedalling. Some corporates, too, are rethinking how to weigh sustainability purpose with financial profits.

On the local front in Singapore, 2025 has seen the start of a key sustainability reporting requirement beginning with listed companies. This adds to the array of obligations for sustainability and climate reporting already promulgated by the Singapore Exchange.

From COP29 to COP30

The United Nations Climate Change Conference (COP29), which closed on Nov 22, 2024, had two major outcomes.

The first outcome is that developed nations will pool some US$300 billion per year by 2035 to help developing countries cope with the effects of climate change. This amount is more than the US$100 billion pledge per year which will expire in 2025, but far less than the US$1.3 trillion requested by developing nations.

The second outcome is that there is now a consensus on standards regarding how international carbon credit projects will work. Relating to Article 6 of the Paris Agreement, this development will add confidence to the trading of carbon credits among countries and companies.

The path to the next climate conference (COP30), to be held in Brazil in November 2025, will hold the key to the direction of global climate change actions.

Global political and corporate divides

Donald Trump has been inaugurated as the new US president on 20 January 2025. A process has started to withdraw the US from the Paris Agreement a second time, the first time during his earlier presidential term. The US action may even spur other countries to rethink their involvement in climate action.

There could also be deregulation of certain sectors, leading to less impetus for companies to comply with sustainability-related regulations. The uncertainty could lead companies in the US and other countries to hold back on their sustainability initiatives.

Moreover, the year 2024 has already seen a flurry of businesses adjusting their sustainability targets due to economic and implementation reasons. Air New Zealand withdrew a target to reduce its carbon emissions intensity by 28.9 per cent by 2030, when compared to 2019 levels. This may be a harbinger of what is to come for airlines dropping their emission targets. In the Science Based Targets initiative (SBTi) database, airlines that have removed their commitment to near-term emissions goals included easyJet, Japan Airlines, Latam Airlines Chile, Lufthansa and United Airlines.

How 2025 and beyond unfold will decide the trajectory of the sustainability momentum, particularly in the carbon emissions aspect of climate change actions.

British multinational consumer goods company Unilever changed its goal of halving its use of virgin plastic by 2025 to reducing its use by 30 per cent in 2026 and by 40 per cent in 2028. In fact, the company has adopted a more balanced approach between purpose and profit, delivering on both sustainability commitments and financial goals. Business professors have dubbed this as the new “realistic sustainability” in a case study published in The Financial Times.

How 2025 and beyond unfold will decide the trajectory of the sustainability momentum, particularly in the carbon emissions aspect of climate change actions.

Climate disclosures for Singapore

For Singapore, it is necessary to not be too quick to dismiss the significance of sustainability. How should corporates navigate the global backdrop of uncertainties? Should companies in Singapore sit out and watch the global trend unfold first?

Collectively, the world needs sustainability and the "control" of climate change. Yet, everyone is waiting for others to start.

Even with the doubters, the impetus for sustainability regulation, especially climate change, is reaching an unprecedented criticality point.

Collectively, the world needs sustainability and the "control" of climate change. Yet, everyone is waiting for others to start. It is precisely because of inertia, scepticism or even the free-rider problem that regulation has to step in to address the conundrum.

Sustainability regulation in Singapore has seen the adoption of the IFRS Sustainability Disclosure Standards. Starting from the financial year 2025, all listed companies in Singapore need to report their Scope 1 and Scope 2 greenhouse gas (GHG) emissions.

Yet, even if it is not for compliance with the impending regulation, it is in the self-interest of Singapore companies to report on sustainability, especially in GHG emissions.

Large non-listed companies, defined as those with annual revenue of at least S$1 billion and total assets of at least S$500 million, should also step up their capabilities in climate reporting, as they have to do so from FY2027.

The Singapore imperative

Small Singapore's sustainability drive will probably not make any difference to the world. Its companies are unlikely to move any needle in the global action for climate change.

Yet, even if it is not for compliance with the impending regulation, it is in the self-interest of Singapore companies to report on sustainability, especially in GHG emissions.

Regulations in the European Union, such as the Corporate Sustainability Reporting Directive, are in full swing and among the requirements, businesses there will need to know the carbon footprints of suppliers. Eventually, certain non-EU entities operating in the bloc will have to comply with the sustainability regulations, too.

Thus, Asian companies, not least Singapore companies, will need to up the game in sustainability compliance.

Sustainability, particularly climate actions, is ultimately about the transition. The preparations for climate change may seem even more demanding than climate change itself. Indeed, the journey is sometimes more painful than the destination.

Embarking early on the transition pays off. The penalty to be paid is being left out in the global markets. This is all about revenue, profit and market value.

In 2025, the bottom line is to get on track even if there are obstacles and roadblocks. The grand directions of the COP climate change meetings will be the compass—regulations will be the GPS. There is no room for politics to get in the way.

An older version of this article was first published in The Business Times[1].

In 2025, the bottom line is to get on track even if there are obstacles and roadblocks.

[1] Loh, L., & Ang, H. M. (2024, December 27). 2025: The year to remain steadfast in corporate sustainability. *The Business Times*. https://www.businesstimes.com.sg/opinion-features/2025-year-remain-steadfast-corporate-sustainability
Full text available at https://bizbeat.nus.edu.sg/thought-leadership/article/2025-the-year-to-remain-steadfast-in-corporate-sustainability/

Lesson 15

Invest in the New Generation

ANG Hui Min and Verity THOI

Loh, L., & Ang, H.M. (Eds.). (2025). *15 lessons in corporate sustainability and governance.* Centre for Governance and Sustainability, NUS Business School.

Corporate sustainability and governance can shape businesses and society. It is therefore important that the next generation of leaders who are rising to helm the fort be familiar with these two fields.

At the NUS Centre for Governance and Sustainability (CGS), research and education have been our areas of focus. Through our interactions with the industry, we have noticed a demand for sustainability knowledge and skills. This is corroborated by news reports.

In 2024, the media reported that the Singapore government will invest S$35 million to help those in the finance sector gain skills related to sustainable finance. A job market report by the non-profit organisation Bridgespan pointed out that there could be as many as 30 million sustainability-linked jobs in Southeast Asia by 2030.

To close the global green skills gap, Amy Brachio, Global Vice Chair, Sustainability, EY, suggested four strategies in a World Economic Forum article, one of them being creating green skills education programmes for young people.

With industry support, CGS was honoured to roll out two programmes in sustainability education. Partnering with Singapore's NKH Building Services, we launched the NKH-CGS Masterclasses in Governance and Sustainability. The first masterclass occurred in October 2024, bringing both students and industry professionals through the evolution of sustainability and how it could be applied in real life.

CGS also partnered with dormitory and facility operator Tee Up Capital to launch the Tee Up Capital–NUS CGS Programme in Governance and Sustainability.

Targeted at NUS students from various disciplines, the immersive programme introduced students to sustainability through related research projects, workshops and conferences. Over 30 students have participated in this approximately one-year programme, with their reflections published in an e-book[1].

In addition, CGS has guided NUS Business School's undergraduate and postgraduate students in their sustainability-related projects.

Through the experience, they learnt to analyse different contexts and apply their sustainability knowledge in the creation of business strategies. The efforts culminated in sustainability case studies and field service project reports.

Published on the CGS website, the reports serve as references for organisations that are exploring different sustainability pathways.

By equipping young minds with the knowledge, skills and values needed to navigate complex sustainability issues, we are not just preparing them for the future; we are empowering them to shape it.

[1] Low, K., Loh, P. H. M., & Loh, L. (Eds.). (2025). *Reflections in sustainability: Essays from NUS students of the Tee Up Capital–NUS CGS Programme in Governance and Sustainability* (2nd ed.). Tee Up Capital; NUS Centre for Governance and Sustainability. https://bschool.nus.edu.sg/cgs/wp-content/uploads/sites/145/2025/04/CGS_Tee-Up-Capital_Reflections-in-Sustainability_Second-Edition_2025.pdf

Excerpts from the e-book "Reflections in Sustainability: Essays from NUS students of the Tee Up Capital–NUS CGS Programme in Governance and Sustainability"

Haziqah ESA
Accountancy & Finance
NUS Business School

This programme has significantly influenced my career aspirations. Understanding the pressing demand for governance and sustainability skills has motivated me to explore opportunities within this field. Engaging with industry leaders and participating in workshops provided insights into potential career fields such as sustainability consulting or corporate governance.

In conclusion, my experience with the Tee Up Capital-NUS CGS Programme in Governance and Sustainability has been nothing short of enriching. It has equipped me with practical skills and knowledge that will be crucial as I navigate my future career. As CGS Director Professor Lawrence Loh mentioned, this programme is about developing leaders who can meet the demands of today's job market.

Jonghyeok LEE
Financial Economics
NUS College of Humanities and Sciences

The programme emphasised the importance of robust sustainability and governance policies for organisations and provided opportunities to critically assess and evaluate such areas. The research process for the Singapore Governance and Transparency Index (SGTI) not only enhanced my ability to collect, assess and analyse data but also gave me an appreciation for the transparency and accountability that forward-thinking companies strive to uphold.

I learned how effective governance and sustainability initiatives can enhance corporate reputation, attract investment, and ensure long-term resilience. I am eager to apply the skills and insights I gained from the programme to build a career that prioritises responsible business practices and long-term societal impact.

LIM Shu Wei, Jerin
Environmental Studies
NUS College of Humanities and Sciences

Through the Tee Up Capital-NUS CGS Programme in Governance and Sustainability, I attended a climate change workshop. I was truly glad for this opportunity as I learned a lot from it. One major takeaway was learning about green finance, a subject that I heard about but never had the chance to learn in depth.

This workshop gave me a chance to gain a deeper understanding of the earth systems and economic systems, as well as how finance plays a pivotal role in driving climate action. This foundational knowledge marks an essential starting point in my journey towards sustainability, equipping me with insights that will guide my studies and shape my future career in meaningful ways.

PUA Wei Jun
Real Estate
NUS Business School

Many organisations with historically high emissions now aim to adopt sustainable practices. Transition finance, as we learned, serves as a bridge for these entities, supporting realistic yet ambitious goals for sustainability.

Understanding transition finance encourages me to adopt a constructive approach when promoting sustainable practices in the future. For example, when collaborating with clients or municipalities still in the early stages of sustainability, I intend to provide support and guidance rather than impose rigid expectations.

As I progress in my career, a strong foundation in sustainable finance will be instrumental in shaping my impact on urban planning. Integrating these sustainability insights will allow me to advocate for resilient urban development that harmonises growth with environmental responsibility. With these tools, I feel better prepared to support the creation of sustainable, resilient cities.

Conclusion

Businesses seek profits. As American economist Milton Friedman wrote in 1970, “There is one and only one social responsibility of business—to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud.”

Today, businesses seek both profits and values. More are seeing the need to uphold better sustainable governance standards in their organisations. It is the hope that this e-book will guide individuals and organisations in their endeavours.

NUS Business School’s theme for its 60th anniversary in 2025 is “Shaping the Next”. In the same vein, we at the Centre for Governance and Sustainability hope that our “15 Lessons in Corporate Sustainability and Governance” will help to shape the next sustainability era.

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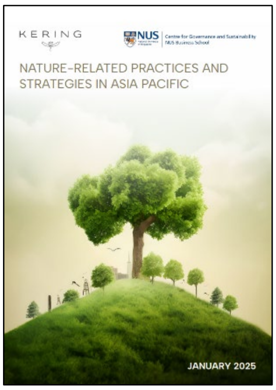

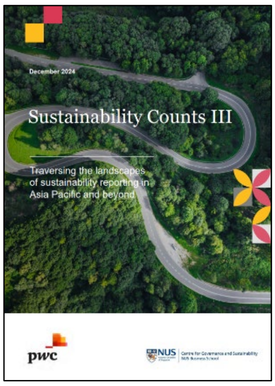

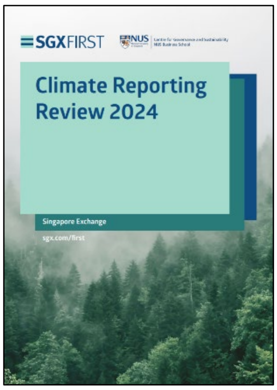

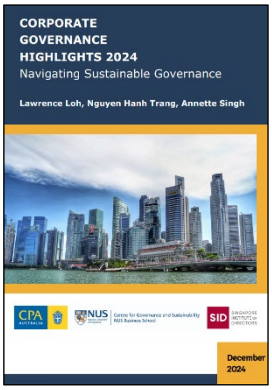

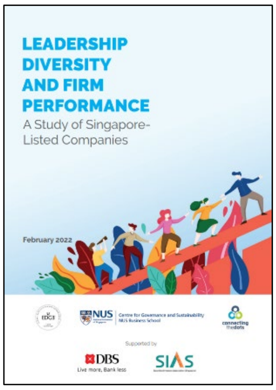

More reports are at https://bschool.nus.edu.sg/cgs/.