Sustainability: Jobs and Skills For the Accountancy Profession

CONTENTS

EXECUTIVE SUMMARY

Sustainability is a megatrend that is changing the way we think about business and offering new opportunities and jobs for the accountancy sector. At the 26th Conference of the Parties (COP26), also known as the United Nations Climate Change Conference, the international business community was galvanised into action. Singapore, too, has intensified its sustainability plans with the Singapore Green Plan 2030.

Recognising the importance of sustainability for the accountancy sector, the Institute of Singapore Chartered Accountants (ISCA), together with Ernst & Young Advisory Pte. Ltd. (EY), Singapore Management University (SMU), and Singapore Accountancy Commission (SAC), embarked on an exploratory study; the study sought to understand the impact of sustainability on emerging job roles, skill gaps, and skill needs for accountancy and finance professionals.

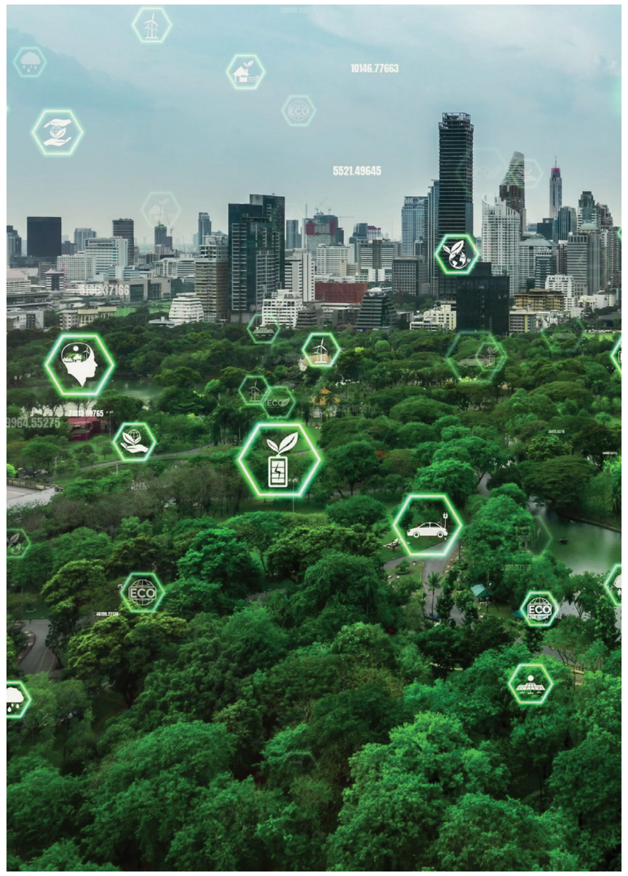
The approach that this report has taken is to first outline the global and local trends in sustainability for accountancy and finance professionals. Three themes appeared strongly on both fronts. The first trend is decarbonisation. The establishment of international carbon markets saw growing demand for carbon and greenhouse gas accounting as companies engage in carbon trading. The second trend is sustainability reporting. Since the establishment of the International Sustainability Standards Board (ISSB), there is much abuzz about the changing sustainability reporting landscape brought forth by ISSB's universal global baseline of standards. The third trend is green financing. The expansion of green loans, bonds, and markets is shaping the audit and assurance landscape. It is also changing the way business is financed, imposing a 'green tax' on companies that are slow in their sustainability transition.

The report, then, delves into the research findings of our study. We distilled the perspectives of industry leaders from ten different business sectors. The industry leaders, comprising C-suite executives, finance and sustainability leads, partners and consultants, represent a cross-section of company sizes and organisation types. They shared their insights on the skills that accountancy and finance professionals would need, in order to perform new and emerging sustainability roles, and where the skill gaps may lie.

Through interviews and engagements, we uncovered three key findings. First, we found that Chief Financial Officers already play important roles in sustainability for businesses today. More than half of the companies with a dedicated Chief Sustainability Officer report to the Chief Financial Officer. Second, accountancy and finance professionals are poised to take the lead for sustainability transition in businesses of all sizes but will require additional skills. Accountancy and finance professionals are increasingly called to drive sustainable business developments by analysing and translating non-financial climate-related risks and opportunities into financial impact for business. Third, there are new and emerging roles in sustainability for the accountancy profession, such as, the Chief Finance & Sustainability Officer (CFSO), a combination of responsibilities typically found from Chief Financial Officer and Chief Sustainability Officer roles today. The CFSO is called to be the sustainability finance business partner and the representative on non-financial performance to bolster the credibility of the sustainability performance of the organisation. Integrating sustainability into a business requires intimate and in-depth finance knowledge. This puts accountancy and finance professionals in an advantageous position to lead their organisation's sustainability agenda and take on the role of CFSO.

All signs suggest that the expansion of sustainability will lead to a bright future for the accountancy sector. As sustainability is increasingly integrated into corporate strategies, accountancy and finance professionals will see greater demands for regulatory compliance for sustainability reporting and disclosure, as well as the need to identify sustainability risks and opportunities for businesses. Accountancy and finance professionals who invest in their continuous professional development can look forward to making their mark in the sustainability space.

CHAPTER 1:
INTRODUCTION AND METHODOLOGY



Sustainability is an emerging megatrend for businesses everywhere. In the last five years, sustainability regulations, concerns, and opportunities in business have accelerated. In 2021, at the 26th Conference of the Parties (COP26), also known as the United Nations Climate Change Conference, the International Financial Reporting Standards (IFRS) Foundation Trustees announced the establishment of the International Sustainability Standards Board (ISSB). The new standard-setting board was created to meet the growing demand for globally consistent, high-quality, reliable and comparable reporting by companies on climate and other environmental and governance (ESG) matters.

COP26 also saw the strengthening of regulations for international cooperation on carbon markets. Countries agreed on the principles behind governing and implementing international carbon market mechanisms using carbon credits.

There are strong indications that businesses are becoming more concerned about achieving their sustainability goals. According to the 2021 Sustainable Procurement Barometer, 63% of executives from global companies indicated that corporate sustainability goals shifted to the top of their agenda, compared to only 25% of executives in 2019. This may be sparked by growing business opportunities in the sustainability space. For instance, the 2021 SEC Newgate report shows that in Singapore, consumers are willing to pay more for sustainable products. Over eight in 10 Singapore consumers are willing to bear increased costs for products and services in the food, technology, and pharmaceutical sectors, which is significantly higher than the report's global baseline by 5 to 10%.

Accountants Are Poised to Lead, but Need Additional Skills

The growing attention on sustainability is a development that the finance function must respond to. For accountancy and finance professionals, this means a tighter focus on three important areas, namely new reporting standards, green finance, and carbon pricing, and their implications on the profession.

In this brave new green world, accountancy and finance professionals are key to linking corporate strategy and governance for sustainability. As the integration of sustainability into business requires an intimate financial knowledge of the business, they can expect to be tasked to drive their organisation's sustainability agenda, and lead change across functions and departments, to align with the overall sustainability thrust.

As new sustainability reporting standards, green finance, and carbon pricing are fast becoming part of the business norm, the workforce would require new skill sets to participate in this as-yet unfamiliar territory.

Accountancy and finance professionals, whose responsibilities provide them with in-depth knowledge of the holistic workings of a company, are well placed to incorporate sustainability goals into company strategy. Accountancy and finance professionals are front and centre from setting a sustainability agenda as part of business strategy to driving it throughout the organisation. They are needed to manage risks and consider how sustainability efforts can be channelled towards creating more value.

The market for green finance has grown exponentially but as a nascent market, there are questions and concerns about the nature and legitimacy of some of the financial products. Similarly, the emerging carbon market, which is complex and somewhat fragmented, continues to face uncertainties and controversies. Additionally, they need to keep in tune with the new regulations governing sustainability, such as those to be issued by ISSB, and ensure the company's compliance to these, and other globally accepted reporting standards and benchmarks.

New Sustainability Reporting standards refer to the emerging global baseline of sustainability-related disclosure standards by ISSB.

Green financing has a critical role to play in working towards net zero and in the fight against climate change. A simple definition by the Lloyds Banking Group says that green financing is a loan or investment that supports environmentally-friendly activity, such as purchasing environmentally friendly goods and services or building environmentally friendly infrastructure.

Carbon pricing is the practice of applying a financial value to carbon and/or greenhouse gas (GHG) emissions.

From setting up a sustainability framework that involves implementation, reporting and controls to developing the skills to handle the myriad of related activities such as tracking, monitoring, and reporting to the internal and external audience, much needs to be done to equip the accountancy profession with the requisite capabilities.

Research and Methodology

Recognising the importance of sustainability for the accountancy sector, the Institute of Singapore Chartered Accountants (ISCA), together with Ernst & Young Advisory Pte. Ltd. (EY), Singapore Management University (SMU), and Singapore Accountancy Commission (SAC) embarked on an exploratory research study to understand the impact of sustainability on emerging job roles, skill gaps, and skill needs for accountancy and finance professionals.

The research team adopted a qualitative methodology and conducted 23 structured interviews with industry leaders from 10 business sectors. The business sectors include those that will require mandatory climate reporting in Singapore in 2023:

1. Professional Services
2. Banking & Finance
3. Manufacturing
4. Technology
5. Materials and Building
6. Real Estate
7. Energy
8. Transportation
9. Food and Beverages
10. Forest Products and Agriculture

The interviewees include corporate executives, finance professionals, and representatives of government agencies and non-government organisations (NGOs) in Singapore. The executives and finance professionals hold titles such as Chief Executive Officer (CEO), Chief Financial Officer (CFO), Chief Sustainability Officer (CSO), Head of Finance, Head of Sustainability, and Partners and Consultants.

CHAPTER 2:
SUSTAINABILITY – TRENDS AND WHAT IT MEANS FOR ACCOUNTANCY PROFESSIONALS

The research team conducted a literature review to uncover both global and local sustainability trends for business. Recent sustainability literature places emphasis on climate and environmental issues, and less on social issues. This may be a reflection of the global spotlight on these topics, such as COP26, which galvanised major companies and governments into action.

GLOBAL TRENDS

Decarbonisation is Mainstream but More Needs to be Done

Decarbonisation is about reducing carbon dioxide (CO2) emissions arising from human and economic activities to limit CO2's impact on the climate. Decarbonisation is the most important effort to check global warming. The 2015 Paris Agreement established the ambition to limit global warming to below 2-degree Celsius (2˚C) above pre-industrial levels while pursuing a 1.5˚C target. According to the United Nations Climate Action, to limit global warming to no more than 1.5˚C, greenhouse gas (GHG) emissions (CO2 accounts for 74% of total human GHG emissions) need to be reduced by 45% by 2030 and reach net zero by 2050.

Net-zero commitments are more ambitious than decarbonisation. Net zero refers to the removal of an equal amount of CO2 from the atmosphere as that released into it.

To date, more than 70 countries including the biggest polluters, namely China, the United States (US), and European Union (EU), have set a net-zero target. Together, they account for about 76% of global emissions. Despite these commitments, efforts to reduce emissions continue to fall short of what is required to reach net zero by 2050. Moreover, climate plans, for all 193 Parties to the Paris Agreement, will still lead to a sizeable increase of nearly 14% of global GHG emissions by 2030, compared to 2010 levels.

The 2022 Intergovernmental Panel on Climate Change (IPCC) report finds that communities most vulnerable to climate change are the least able to adapt to climate change. Persistent socioeconomic problems, such as poverty, the lack of healthcare, and limited educational opportunities, are roadblocks to climate change adaptation. The estimated adaptation costs in developing countries could reach US$300 billion per year by 2030 but only US$16.8 billion, or 21% of climate finance provided by wealthier countries each year to assist developing nations, goes towards the much-needed adaptation and development of resilience.

On the business front, one-fifth of the world's largest companies have set net-zero targets. However, certain sectors face huge challenges in decarbonisation, either due to the nature of the sectors themselves and/or because of their supply chains, such as those in oil & gas.

agriculture, and forestry. With the renewable energy market still in an early phase of growth, some sectors will have to look towards carbon credits to offset their emissions while they work towards more permanent solutions to reduce emissions in the longer term. However, the carbon market is itself in a developing phase with regard to regulations, carbon measurement approaches and accounting frameworks, which may pose an additional complication.

There is a growing demand for carbon and GHG accounting as companies seek to track, monitor, audit and reduce their carbon footprint. Mandatory disclosure requirements for emission data escalate the need for both internal accounting functions and external auditing services. Many countries, Singapore included, have mandated ESG disclosure. Companies will therefore increase their investment in ESG disclosure-related personnel, and audit firms will have to double down their focus and invest more in related services.

Green Finance Is Growing

The green bond market continues to lead financing for sustainable development. According to a Bloomberg report, the EU is now the leader in the green bond market, followed by China, the US, and other countries. Western Europe dominates with 50% of the global green bond market, while China's 15% share pushed it past the US in 2021. The green bond markets in emerging nations (excluding China) have grown threefold since 2019 and this trend is set to accelerate in the coming years. Although the green bond market has already tripled in the past two years, investors' appetites for green bonds will likely see them oversubscribed by twice the supply.

In Singapore, the Monetary Authority of Singapore (MAS) launched the Green Finance Action Plan in 2019 to develop Singapore into a leading global centre for green finance. Today, Singapore ranks as ASEAN's largest green finance market, responsible for half the cumulative ASEAN green bond and loan issuances.

Case Study **Carbon Market and Carbon Tax**

There are two ways to price carbon - carbon trading and carbon tax. Carbon tax is more straightforward; it simply imposes a tax on GHG emissions. In 2019, Singapore became the first Southeast Asian country to introduce a carbon tax.

Carbon trading is a market-based system trading to reduce GHG emissions through financial incentives. Key to this market is the concept of the carbon credit; a carbon credit is a permit that allows its owner to emit a certain amount of GHG. Each carbon credit refers to one tonne of CO2 removed from the atmosphere or prevented from being produced. At present, there are two types of carbon markets – Compliance or Voluntary. Compliance carbon markets, such as the European Union's emissions trading systems (ETS), operating by issuing a ceiling by on the emissions allowed by the government. Businesses exceeding that amount would be required to buy carbon credits. Voluntary carbon markets on the other hand, allow businesses to buy and sell carbon credits to achieve sustainability targets. Voluntary carbon credits come from projects that generate or reduce GHG removals, for instance, forest protection projects.

There is a concerted effort now to go one step further by securing the governance of carbon trading. Today, carbon credit registries track sources of carbon credits. However, these registries are self-contained, raising the possibility of double issuance of the same credit across multiple registries. But this is soon to change, according to the Singapore Economic Development Board (EDB Singapore), "the World Bank has asked Singapore to anchor an international effort that aims to make the international trade in carbon credits more transparent and trustworthy". The project, known as the Climate Warehouse, aims to improve transparency and give creditability to carbon credits by minimising double counting internationally.

Despite the growing popularity of green finance, an EY report points out that financial institutions may lack the necessary expertise in green financing. Also, their role in financing small-scale initiatives and start-ups may require coordination with political leaders. The report reveals that the green finance market is still maturing, and challenges remain, especially in the determination of accurate pricing for green commodities and identification of greenwashing.

The growing appetite for green finance calls for more regulation and audits to ensure that sustainability claims are not exaggerated or inaccurate, as in the case of greenwashing. A survey on ESG investing by Quilter Investors in 2021 found that greenwashing is the biggest concern for 44% of investors. Their concerns over greenwashing are compounded by the variance in sustainability commitments and reporting among companies. This reinforces the need for greater consistency and tighter regulations. Certainly, it also points to the need for greater knowledge of green financing tools, particularly in its evaluation, auditing, and reporting. With greater regulations in place, there will be greater demand for green bond and green loan verification services.

Cheaper, Renewable Energy

The price of renewable energy has been trending downward rapidly and it is the cheapest power option in most parts of the world today, according to figures from the United Nations (UN). The cost of electricity from solar power fell by 85% between 2010 and 2020, and the costs of onshore and offshore wind energy fell by 56% and 48%, respectively. While the transition from traditional energy to renewable energy may incur daunting upfront costs, investments in renewable energy will pay off, especially in the long run. The reduction of pollution and

Understanding Scopes 1, 2, and 3 of GHG Emissions

The Greenhouse Gas Protocol introduced the concept of Scopes 1, 2, and 3 for the emissions of GHG. The intention is to identify direct and indirect emission sources for GHG accounting and reporting purposes.

Scope 1 refers to direct GHG emissions. This includes GHG emission sources that are under the ownership or control of the company. For example, under Scope 1, a semiconductor company must account for the GHG emissions of its factories.

Scope 2 refers to indirect GHG emissions stemming from purchasing electricity, steam, heating and cooling. Most methods of generating electricity and other forms of power result in GHG emissions, hence, the company is responsible for its indirect GHG emissions. For example, under Scope 2, a semiconductor company must account for the electricity purchased for use at its factories.

Scope 3 refers to other indirect GHG emissions. This is a broad category that captures all indirect emissions across a company's value chain. For example, under Scope 3, a semiconductor company must account for the GHG emissions in the transportation of its raw products, the GHG emissions at the point of extraction of its raw products, and more.

climate impacts alone could save the world up to US$4.2 trillion per year by 2030, therefore, the transition makes economic sense. Significantly, the transition to renewable energy could allow the world to achieve net zero by 2050. In terms of sustainability, the International Renewable Energy Agency (IRENA) has estimated that 90% of the world's electricity can and should come from renewable energy by 2050.

There is also positive news from the renewable energy front. According to the 2021 International Energy Agency's (IEA) Annual Renewables Market Report, despite the escalating costs for key materials used to make solar panels and wind turbines, the total renewable power capacity has reached an all-time record high of 3,310 gigawatts (GW), which represents yet another annual record – of a net addition of 290 GW in 2021. More than half of all additions to renewable power capacity in 2021 came from solar photovoltaic (PV), followed by wind and hydropower. The report also forecasts that global renewable electricity capacity will grow by more than 45% between 2021 and 2026 to reach more than 4,800 GW, which is equivalent to the current global power capacity of fossil fuels and nuclear combined. This provides assurance to companies and countries that their energy needs will be taken care of.

The top four renewable energy markets are China, Europe, the US and India, with China behind 43% of the global renewable capacity growth. In the next five years, the Big Four will account for 80% of the worldwide renewable capacity expansion.

More Companies Adopt Sustainability Risk Management

Large companies are leading the effort to integrate sustainability into their corporate strategies. For example, in its 2020 proxy statement, Intel Corporation shared that "under the Board's oversight, we have embedded corporate responsibility and sustainability considerations into our corporate strategy, compensation, disclosure, and long-term goals". It also shared that "a portion of the operational performance component of our annual incentive cash program has been tied to key corporate responsibility goals within our executive and employee compensation, including inclusion and environmental metrics". Regarding the specific sustainability metrics linked to the compensation plans, it included "specific goals around promoting parity in the number of women in leadership positions, promoting an inclusive work culture, customer obsession in Intel's culture, and product quality enhancements". It also disclosed the impact of ESG metrics on compensation and financial performance.

Companies are also applying enterprise risk management (ERM) to their ESG-related risks. In 2019, the Committee of Sponsoring Organizations of the Treadway Commission and World Business Council for Sustainable Development released draft guidance for companies to navigate emerging ESG-related risks by integrating them into ERM governance and processes. Many of the ERM's concepts and processes are aimed at helping organisations to define, identify, and manage sustainability risks.

Sustainability is Mushrooming in Boards Everywhere

Increasingly, company boards are establishing dedicated committees and/or working groups for sustainability risk and sustainable finance. An analysis of 50 S&P 100 proxy statements found that 78% of companies have at least one board committee charged with overseeing environmental sustainability matters. As a case in point, the Bank of America announced, in a 2020 proxy statement, that it has changed the name of its Corporate Governance Committee to Corporate Governance, ESG, and Sustainability Committee".

While most large companies state that they oversee sustainability at the board level, only a minority have formal mandates and demonstrate board management and engagement in sustainability. This is likely due to a dearth of sustainability expertise. Nevertheless, more companies have started to link executive pay to sustainability targets though they typically do not disclose the targets or details of their compensation schemes.

It is encouraging that some firms have appointed a CSO, Chief Impact Officer, Head of ESG, or leaders with similar titles to ensure accountability for sustainability. They play a central role in defining, assessing, and managing sustainability goals and risks, and setting the risk appetites and key risk indicators.

Large Firms Are Taking the Lead in Sustainability Disclosures

Sustainability reporting for large companies is becoming more commonplace around the world and across almost all sectors. Sectors with high environmental and social impacts, such as oil & gas and mining, typically have higher sustainability reporting rates. The KPMG Survey of Sustainability Reporting 2020 reveals that 80% of a worldwide sample of 5,200 companies reported on sustainability. The 5,200 companies consist of the top 100 companies by revenue in each of the 52 countries and jurisdictions surveyed. Around one in five companies labels its annual report as "integrated", indicating that sustainability reporting has been integrated into the annual report. Recent evidence also shows that more sustainability disclosures have been integrated into regulatory filings such as annual reports, according to a White & Case survey. Its survey, ESG Disclosure Trends in SEC Filings – Annual Survey 2022, which examined the US Securities and Exchange Commission (SEC) filings of 50 companies listed in Fortune 100, found that climate-related disclosures significantly increased in both Form 10-K and proxy statement filings, with many companies including such disclosures for the first time in 2022. The survey also reveals that environmental disclosure, human capital management, and environmental & social targets and goals are the three main topics on sustainability.

Disclosure quality, however, tends to vary significantly across firms. According to a 2020 BlackRock survey of its clients, more than half (53%) of global respondents cited "poor quality or availability of ESG data and analytics", and another 33% cited "poor quality of sustainability investment reporting" as the two biggest barriers to deeper or broader implementation of sustainable investing. Moreover, due to a shortage of widely recognised or agreed-upon standards, attaining comparability and reliability of sustainability reporting and disclosure is a challenge. When a globally accepted set of common standards is adopted for use, such as those to be issued by ISSB, it would address the current hurdles facing sustainability reporting and disclosure.

What Lies Ahead
In light of the demand for greater transparency and disclosure from investors, governments and consumers alike, the rate of sustainability reporting has increased rapidly. Demand for third-party assurance of sustainability information has also grown in tandem. Given the borderless markets for funds as well as for goods and services, it is essential that corporate reporting standards align with global best practices. Adhering closely or fully to internationally recognised frameworks also allows for comparability and wider acceptance of a company's sustainability report in other jurisdictions.

On 3 November 2021, at COP26, the IFRS Foundation Trustees announced the creation of the ISSB. The ISSB aims to develop a comprehensive global baseline of sustainability-related disclosures to meet capital market needs. Widespread use of the baseline will reduce the costs for data preparers and improve information usability for data users.

The ISSB's global baseline presents a unique opportunity to streamline sustainability disclosure requirements. The ISSB has consolidated two existing leading investor-focused sustainability disclosure organisations comprising the Climate Disclosure Standards Board (CDSB, an initiative of CDP, formerly the Carbon Disclosure Project), and Value Reporting Foundation (VRF, which houses the Integrated Reporting Framework and Sustainability Accounting Standards Board Standards). In March 2022, the ISSB signed a cooperation agreement with the Global Reporting Initiative (GRI) with the objective to coordinate the standard-setting activities of the two organisations. These efforts have paved the way for establishing a comprehensive global baseline of sustainability disclosures.

On 31 March 2022, ISSB launched a consultation on its first two proposed standards. Exposure Draft IFRS S1 sets out general sustainability-related disclosure requirements, while Exposure Draft IFRS S2 specifies climate-related disclosure requirements. ISSB plans to complete the necessary institutional and technical standard-setting work to establish the core elements of the global baseline by the end of 2022.

In May 2022, the Financial Accounting Foundation, which oversees the Financial Accounting Standards Board for the promulgation of financial accounting standards in the US, published the Strategic Plan Draft. Goal 6 of the Strategic Plan Draft is to "engage with stakeholders, regulators, and Congress to determine the appropriate way, if any, for the organisation to contribute to future sustainability reporting". Although the US SEC has expressed its concern about Goal 6, it proposed its own rules, which would require public-listed companies to incorporate climate-related disclosures into their periodic reports.

Expected Growth in Sustainability Assurance
Assurance of sustainability information has now become standard practice for large and mid-cap companies worldwide. According to Disclosure 102-56 in GRI 102: General Disclosures, which is part of the set of GRI Sustainability Reporting Standards, organisations are advised to use external assurance to increase the confidence of decision-makers in the accuracy and reliability of the reported sustainability information.

Independent sustainability assurance may also become mandatory soon. In the proposed rules for climate-related disclosures released in March 2022, the US SEC wants companies to include an attestation report from an independent attestation service provider covering climate-related disclosures.

Among the Big Four accountancy firms, there have been strategic shifts to develop their sustainability capabilities. Deloitte has launched a climate learning programme to empower its staff to contribute towards addressing climate change. In the United Kingdom (UK), EY has launched a new sustainability service called EY Carbon, which is looking to recruit some 1,300 professionals. In 2021, PwC announced that it was planning to create 100,000 new jobs over five years for climate and diversity reporting. KPMG is working with the University of Cambridge Judge Business School and NYU Stern Executive Education to provide ESG training for all its employees.

LOCAL TRENDS

Singapore's long-term low-emission development strategy is to halve its 2030 peak GHG emissions by 2050, with the aim to achieve net-zero emissions as soon as viable in the second half of the century. In February 2021, the government unveiled the Singapore Green Plan 2030 to advance the national agenda on sustainable development by 2030. The Green Plan charts ambitious and concrete targets over the next 10 years under five key pillars, namely city in nature, sustainable living, energy reset, green economy and resilient future.

The Singapore Green Plan 2030 is a whole-of-government effort which builds on the sustainability developments of preceding decades. It is spearheaded by five ministries comprising the Ministry of Sustainability, and the Environment (MSE), Ministry of Education (MOE), Ministry of National Development (MND), Ministry of Trade and Industry (MTI), and Ministry of Transport (MOT). The Green Plan has been described as a "living plan" which will evolve as strategies develop and are refined according to the changes in technology and other considerations.

The comprehensive and holistic plan strengthens Singapore's commitments under the UN's 2030 Sustainable Development Agenda and the Paris Agreement. It also serves to progress the country's ambition towards net zero. The Green Plan is envisioned to strengthen the country's economic, climate and resource resilience, improve the living environment, and bring new business and job opportunities.

Singapore Green Plan 2030 – Green Economy
One of the five pillars of the Green Plan is the green economy. This pillar seeks to find green growth opportunities to create new jobs, transform industries, and harness sustainability as a competitive advantage.

Accountancy and finance professionals interested in the growing sustainability space would be interested to know that current initiatives and targets include ensuring that new carbon-intensive investments are the best-in-class for carbon and energy efficiency. Other initiatives include developing Singapore into a carbon services hub and leading global and regional centre for green finance. There are also plans for supporting local enterprises to adopt sustainability practices, solutions, and standards to enhance resource efficiency, as well as take advantage of new business opportunities in sustainability.

Since 1 January 2019, the Singapore government has implemented a carbon tax of S$5 per tonne of carbon dioxide uniformly across all sectors. The carbon tax will be raised to S$25 per tonne of carbon dioxide in 2024 and 2025, followed by S$45 in 2026 and 2027, and S$50 to S$80 by 2030. In March 2022, a digital platform allowing businesses to trade carbon credits was launched; Climate Impact X is a Singapore-based global carbon exchange and marketplace for the voluntary carbon market. It is led by DBS Bank, SGX, Standard Chartered and Temasek. Using satellite monitoring, machine learning and blockchain technology, Climate Impact X aims to deliver high-quality carbon credits transparently.

Taken together, these initiatives indicate strong growth in financial carbon accounting, which in turn spell new opportunities for accounting and finance professionals. As more companies will soon require carbon accounting for GHG reporting, investment due diligence, shareholder and stakeholder engagement, employee participation, and green messaging, those with the right skills can step up to offer their professional services.

Sustainable Finance Is in Great Demand in Singapore
According to the MAS estimates, Singapore and other ASEAN countries will experience major growth in sustainable finance. Approximately US$200 billion is needed for green investment per year in ASEAN till 2030. Over 80% of top asset managers in Singapore are already UN Principles for Responsible Investment (PRI) signatories and 57 investment organisations have expressed support for the Singapore Stewardship Principles (SSP), a framework intended to enhance the investment environment by providing guidance to institutional investors.

With the continued efforts of the MAS and financial institutions, Singapore has become the largest sustainable finance market in ASEAN, accounting for almost 50% of cumulative ASEAN sustainable bond and loan issuances. Between 2018 and 2021, over S$39.8 billion of sustainable bonds and loans were issued in Singapore.

As sustainable finance can be a powerful enabler for an effective yet inclusive transition to net zero, the most notable development of sustainability lies in the financial industry. On 31 May 2022, the MAS issued three information papers on environmental risk management, tailored for banks, asset managers, and insurers. The guidelines aim to enhance the financial institutions' resilience to environmental risk and strengthen the financial sector's role in supporting the transition to an environmentally sustainable economy for Singapore, and for the region. This effort is part of the MAS Green Finance Action Plan introduced in 2019, which seeks to make Singapore a leading global centre for green finance. To empower sustainable financing, the MAS has launched a series of programmes including the 2019 Green Finance Action Plan, and 2020 Green and Sustainability-Linked Loans Grant Scheme, and updated the Sustainable Bond Grant Scheme in early 2021.

Mandatory Sustainability and Climate Disclosures in Singapore

Sustainability reporting has been mandated on a "comply or explain" basis by SGX since July 2016; and since 1 January 2022, climate-related reporting became mandatory. As the impact of climate change becomes increasingly pronounced, the global call for efforts to combat climate change has assumed new urgency. To this end, SGX has introduced a phased approach to mandatory climate reporting based on the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD).

All SGX-listed companies are required to provide climate disclosures on a "comply or explain" basis for the financial year commencing between 1 January 2022 and 31 December 2022. Companies in the finance industry, agriculture, food and forest products industry, and energy industry will be mandated to report climate disclosures for the financial year commencing between 1 January 2023 and 31 December 2023. Climate reporting will also be mandatory for companies from the materials and buildings industry, and transportation industry for the financial year commencing between 1 January 2024 and 31 December 2024. For companies in other industries, climate reporting will remain on a "comply or explain" basis. Climate disclosures will thus become an important part of mandatory sustainability reporting for listed companies in Singapore. Because sustainability is becoming a business norm, in the foreseeable future, we expect to see more companies engage in sustainability disclosures.

SGX recognises the importance of a common global standard for sustainability reporting as it enhances the consistency and comparability of sustainability information. It will be incorporating the forthcoming ISSB standards into its listing rules as mandatory disclosure requirements. In 2022, Singapore Exchange Regulation (SGX RegCo) and the Accounting and Corporate Regulatory Authority (ACRA) set up a Sustainability Reporting Advisory Committee (SRAC) to advise companies on their sustainability reporting roadmap. The SRAC will also provide input on the suitability of international sustainability reporting standards for implementation in Singapore. Both organisations are working on developing a roadmap for wider implementation of sustainability reporting for Singapore-incorporated companies, beyond companies listed on the SGX.

Demand for External Assurance is on the Rise

Effective 1 January 2022, all SGX issuers must subject their sustainability reporting processes to review by the internal audit function. Although external assurance is not yet mandated, the demand for external sustainability assurance in Singapore is rapidly growing. The KPMG Survey of Sustainability Reporting 2020 shares that Singapore and Spain were the two countries that have shown the greatest growth in the third-party assurance of sustainability reporting since 2017.

WHAT IT MEANS FOR ACCOUNTANCY AND FINANCE PROFESSIONALS

Accountancy and Finance Professionals are Stewards of Corporate Sustainability Strategies

Many current accounting standards already require accountants to consider sustainability matters when they have a material effect on the financial statements, especially where judgements and estimates are required, for example, in assessing impairment. Accountancy and finance professionals can leverage their existing knowledge and skills to support top management in identifying sustainability risks and assessing the short- and long-term financial impact of such risks on the organisation.

Accountancy and finance professionals can also help translate various ESG initiatives into monetary terms. As the experts in finance, they are the best people to design and implement sustainability strategies and advise on the potential financial and other consequences. They offer critical support to business leaders in identifying ways to pivot their business models to be more competitive and sustainable.

Accountants Must be Skilled in Emerging Sustainability Reporting Standards

Compliance with related disclosure mandates will allow companies to communicate their sustainability performance to the public in a more effective way. As the SGX has indicated that Singapore will adopt the ISSB standards when they are issued, it is pertinent for accountancy professionals in Singapore to ensure they have the updated knowledge and skills for the impending sustainability reporting requirements, and other new ones that might come on stream in the future.

Internal Audit Functions Safeguard Sustainability Information

Internal audit is important for data assurance. As sustainability encompasses more aspects of an organisation, the independent and objective assurance provided by internal auditors is necessary to ensure high-quality sustainability information. In Singapore, listed companies are required to conduct an internal review for sustainability information. In addition, the finance teams will have to engage external assurance providers, which again emphasises the need to understand and monitor sustainability information.

Growing Demand for Third-Party Assurance in the Sustainability Space

External assurance is growing in demand and the upward trend is expected to continue. With the proliferation of green bonds, or funds for new and/or existing projects that deliver ESG benefits, there are opportunities for public auditors to provide green loan/bond verification services.

Public accountants with acumen in the evaluation of green bonds and an understanding of green finance-related regulatory compliance would be well qualified to provide two types of services. In the pre-issuance reviews, they can assess whether the product aligns with the established standards prior to being issued, and in the post-issuance reviews, they can ascertain if the issuer has allocated the funds raised by the product to the promised economic activities.

CHAPTER 3:
WHAT WE FOUND

Organisation Size Matters
Consistent with the global trend, the research finds that company size is a key determinant of companies' decisions to incorporate sustainability into corporate strategy. With more resources at their disposal, many large companies have begun considering sustainability issues at the corporate strategy level and are making the organisational arrangements to develop and implement their sustainability initiatives. Relative to large companies, small and medium-sized enterprises (SMEs) have limited financial, human and other resources to develop and implement sustainability strategies.

Nevertheless, some smaller companies are finding new sustainability opportunities through better metrics tracking. At KTC Group, the CFO tracks the company's monthly diesel and electricity expenditure for reporting purposes, even though they are not mandated to do so. Following that, he proceeds to find ways to reduce diesel consumption. He also searched for alternative renewable energy sources, such as electric power generators; at present, they are in the process of finding sustainable alternatives for all their machinery. For electricity, the company invested S$500,000 on a solar panel system for their office. This resulted in close to an 80% reduction in their monthly electricity costs. The CFO expects to recover his investment in the solar panel system within four years. As the CFO explains it, this form of creative and investigative thinking helps to make for a strong sustainability case as the effort translates into direct impacts on the financial bottom line.

Among SMEs, since SGX introduced the "comply or explain" regulation on sustainability reporting in 2016, there have been some positive shifts. More SMEs are beginning to be aware of the potential offered by sustainability, thanks to the efforts put in by industry and government bodies to furnish financial and knowledge support to build the sustainability capabilities of SMEs. For example, Enterprise Singapore's Enterprise Sustainability Programme offers capacity development grants and sustainability courses tailored to SMEs. Additionally, the efforts of financial institutions, such as the banks' sustainability-linked loans, further motivate SMEs to invest sustainably.

In terms of integrating sustainability into corporate strategy, SMEs are still at an early phase of development. For many of them, sustainability remains an afterthought, although their views are shifting. It will take time for SMEs, with their lean resources, to reconcile sustainability with their other pressing needs.

Case Study CapitaLand Group

Every organisation that cares about its reputation and competitiveness should have a sustainability strategy, which is very important in the eyes of both internal and external stakeholders, says CapitaLand, where sustainability is at the core of everything it does. This motto suggests that sustainability is embedded into every aspect of the organisation's decisions, including investments, business operations, and disclosure. Greenwashing is a big concern as walking the talk is very different from just making broad claims. To this end, it ensures that it provides substantive evidence of its sustainability efforts, including external certifications.

CapitaLand started sustainability disclosure way before it became mandatory. In 2020, it took disclosure a step further by publishing the CapitaLand 2030 Sustainability Master Plan as a group-wide strategy – a 10-year roadmap with many ambitions and specific targets in each of the E, S, and G pillars. CapitaLand will prioritise eight of the 17 UN Sustainable Development Goals (SDGs) that are most consistent with the organisation's strategic targets, and where it can achieve the greatest positive impact. The Master Plan also includes a set of criteria to identify the gap between where it is today and its set targets in 10 years' time. CapitaLand will review the targets every two years as it recognises that the goalposts are constantly changing.

SOME UNIQUE SUSTAINABILITY NEEDS

In general, the research finds that sustainability activities are closely tied to business operations and government regulations. If a company operates in multiple jurisdictions or has suppliers and customers in other countries, it will need to consider the sustainability performance of its foreign subsidiaries to fulfil the compliance requirements, as well as that of its supply chain partners under Scope 3 of Greenhouse Gas Protocol. Scope 3 is a broad category that captures all indirect emissions across a company's value chain. For example, a company selling soybeans to the EU and China will be subject to different sustainability-related controls.

The research has identified some unique sustainability needs in certain sectors, which we will further discuss.

Banking and Finance:
Creating New Financial Norms
Unlike other sectors, financial institutions do not have substantial emissions from their own operations. Instead, their climate impact and risk are largely driven by the activities they finance in the wider economy. Thus, the reporting on Scope 3 emissions is of the greatest importance and relevance for financial institutions.

We found that banks are shaping new financial norms and integrating sustainability into their assessment of companies' viability. In an interview with a bank, the interviewee explained that banks are long-term in their focus. Companies that do not embark on a sustainability transition may become less competitive than those who transition; this is because funding costs would be higher for companies that do not embark on a sustainability transition. Moreover, customers are becoming savvier in their consumption patterns and are starting to avoid heavy polluting companies. Hence, in the long-term, sustainability leads to greater resilience and viability for companies.

Case Study United Overseas Bank (UOB)

UOB, as a commercial bank, believes that sustainability lies in supporting its customers in the real economy to make the transition to a net-zero future and contributing to sustainable development. In its role as a catalyst and enabler, UOB seeks to provide customers with the right sustainable finance solutions so that they can transform their business models, practices and behaviours. In particular, UOB has in place sustainable finance frameworks covering real estate, smart city, circular economy, trade finance, transition finance, as well as deposits. These frameworks are applicable across geographies and sectors. The bank also makes sustainable financing as easy to access as possible through three ecosystem solutions, namely U-Solar, U-Energy, and U-Drive. In addition, UOB acts as a bridge between the sustainable finance needs in the ASEAN markets and the sustainable investment opportunities that capital providers from developed territories, such as Europe and North America, are seeking.

Organisations in the energy sector focus on energy consumption, production, and advisory services for business partners, including solutions to decarbonise and reduce GHG emissions. Some segments of the energy sector, such as renewable energy companies, have made decarbonisation its business model. These companies play a pivotal role in achieving the net-zero target by providing more efficient instruments and solutions to sustainable development for other energy companies.

Case Study

Renewable Energy Company

A multinational renewable energy developer has made responsible consumption and energy production its business model. The company has clear targets for sustainability and contributes to decarbonisation in every country where it has operations. As recycling waste products is an important consideration, it sets a close-to-complete circular recycling rate for its products. Within the organisation, it integrates gender equality, fair compensation, workplace safety, etc. as part of its sustainability strategy. To address Scope 3 emissions, the company also helps its suppliers enter green contracts at competitive costs.

Construction:
Regulations could be Streamlined

The construction sector is closely regulated by several government agencies. The construction sector is concerned with sustainability considerations involving - emissions, disposals, and recycling. However, applying industry standards is often a complex process. A one-stop centre on sustainability matters for business sectors like construction would make it easier for companies to comply with the different regulations.

Case Study **KTC Group**

KTC Group focuses on civil engineering and earth-moving projects. Civil engineering projects deal with the design, construction, and maintenance of infrastructures such as subway stations/ tunnels, roads/highways and land preparation for future developments. The other major business is earthmoving and KTC is one of the largest earthworks companies in Singapore. Some of these businesses have a lot of impacts on the environment. For example, KTC may be engaged to do land preparation work that involves clearing existing forests and preparing the land for new development. In such an engagement, KTC will pay special and extra attention to the environmental impact of their activities, such as disposal of horticulture wastes, shepherding of wildlife and disposal of earth. Before any land preparation or site clearance, a detailed plan known as Environmental Monitoring & Management Plan (EMMP) will be carried out and submitted for approval from all relevant agencies. Wildlife within the forest will be channelled progressively to adjacent habitats as directed by the clients. It also aims to recycle good earth, tree wastes and salvageable materials of existing buildings within the site.

The company is very mindful of the impact on environment. Nevertheless, challenges remain. Currently, construction companies need to work with various government agencies and regulators. For civil construction, the guidance mostly comes from the Building and Construction Authority. Construction companies also need to work closely with the National Environment Agency, especially on issues related to the environment. If they are involved in the construction of houses, construction companies may need to work with the Housing & Development Board on how to recycle and dispose of earthen materials.

Food and Beverage: Innovations, Partnerships, and Waste Reduction

In the food and beverages sector, companies are most concerned about waste reduction. Reducing food waste has a direct impact on issues like climate change and food scarcity. Innovations are shaping waste reduction. For instance, sustainable packaging is making an impact on reducing waste. Using biodegradable, compostable, or recycled material helps achieve environmental goals. It also enhances companies' brand image among the consumers. However, food and beverages often have a long value chain, making it difficult to manage its scope 3 emissions. Stronger partnerships that are committed to sustainability goals would be key to creating a greener sector.

Case Study **SATS**

SATS is Asia's leading provider of food solutions and gateway services. Its purpose is to feed and connect communities while reflecting its ambition to drive positive impact not just across the business but also for its customers, industry partners, shareholders and employees. The company's sustainability framework aligns with the UN 2030 Sustainable Development Goals 9 – Industry, Innovation and Infrastructure, and 13 – Climate Action. SATS's sustainability themes are built upon its core competencies to develop smart infrastructure to reduce its environmental impact; reduce food and packaging waste responsibly; and nurture skills for the future, to enable people and communities to fulfil their fullest potential.

The company aims to halve its food waste intensity for its Singapore operations by 2028, using 2021 as the baseline, and use 100% sustainable packaging by 2030. SATS has set the target to convert 100% of its ground support equipment in its Singapore hub to sustainable energy resources, for example, through electrification, and to reduce its Singapore-based Scopes 1 and 2 carbon footprints by 50% by 2030, using the FY2019–20 baseline.

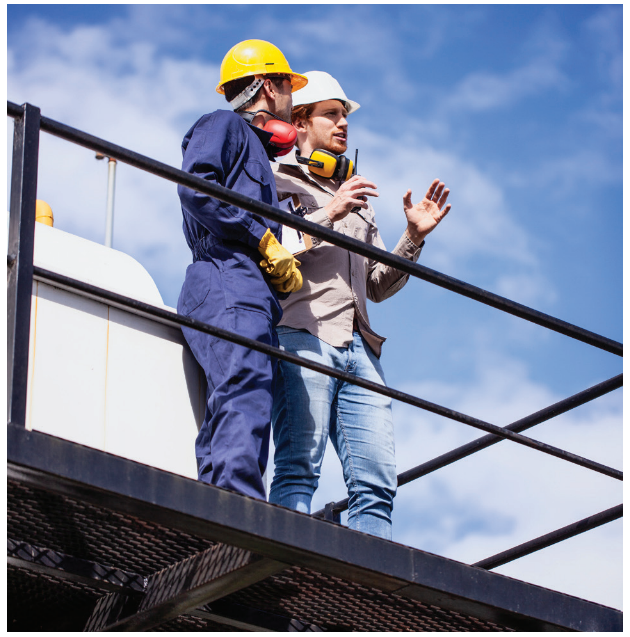
The company acknowledges that its sustainability journey will prove challenging as innovative solutions and cooperation from various stakeholders will be needed for it to achieve its goals. As a case in point, SATS has established its Scope 3 carbon emissions baseline, which makes up 87% of its total carbon footprint. Purchased goods and services, in large part the agricultural products used in its food business, accounted for the biggest share (64%) of the Scope 3 emissions. Therefore, one of the bigger challenges for SATS is in managing its value chain emissions through working with upstream suppliers on decarbonising the supply chain.

WHAT WE FOUND

Manufacturing: Transition to Sustainable Production Poses Unique Challenges
Singapore has issued regulations and initiatives to achieve sustainable production to forward the country's net-zero ambition. To produce sustainably, manufacturers can consider sustainable design, improve resource efficiency, and/or adopt industrial symbiosis where companies can use the waste products of other manufacturers as raw materials for their own operations.

Case Study
Technology Manufacturer

A technology manufacturer has aligned its business strategy with its sustainability initiatives. The company has well-defined internal targets, metrics, and plans for sustainability activities. It has also taken effort to translate its sustainability metrics and efforts into their financial statements. To produce sustainably, the company uses sustainable packaging and seeks sustainable sources for the materials to manufacture its products. In addition, it designs its products to be repairable in order to reduce waste. The company is further improving its product design by making carbon offsets a consideration for production.



IMPLEMENTING SUSTAINABILITY IN ORGANISATIONS

Again, size matters. Larger companies tend to have dedicated offices or departments to deal with sustainability matters. Conversely, smaller companies may not have the resources nor inclination to set up dedicated sustainability teams. As one SME respondent shared, "Assuming we progress to a company with S$1 billion in market cap, [only then] we intend to hire a CSO and have three employees reporting to him/her."

Among the larger companies with dedicated sustainability teams, the research uncovered the following trends:

The Federated Sustainability Organisational Model is Trending
Large companies are likely to have a centralised sustainability team headed by a dedicated CSO. The CSO office typically manages the following three main responsibilities:

The first and also the largest pertains to **compliance and reporting**. Compliance may be in the form of regulatory requirements, such as the SGX-mandated sustainability reporting. It may also arise from requirements from external service providers, such as lenders and indexers who have set up sustainability targets for the company. This responsibility requires data from not only the financial side but also the operating side, such as social data and governance data. Depending on the size and geographic location of the company, a huge volume of documents may require periodic updating. Most importantly, these data must be auditable and credible.

The second responsibility is **workplace safety**. The safety target is expected to be zero tolerance for fatal accidents and for permanent disability. It is necessary to measure and track near-miss incidents before they become actual accidents. This responsibility is particularly important for companies with a large population of employees and vulnerable working conditions, such as those in the construction and transportation sectors. With the experience of the COVID-19 pandemic, workplace safety has also re-focused on employee health and safety.

WHAT WE FOUND

The last responsibility relates to **stakeholder engagement**. This involves engaging with different regulators and organising events to raise awareness of sustainability within the company's ecosystem, both internally and externally. Internal stakeholder engagement is crucial for implementing sustainability initiatives. External stakeholder engagement is equally important as it may bring fresh ideas for sustainability initiatives, which can help the company to achieve its sustainability targets.

However, the centralised CSO office does not work alone as it requires the support from almost all business units. Major business units such as the operations and finance departments typically have dedicated sustainability champions who perform the sustainability role on a full-time basis. If the CSO office requires data from the finance department for periodic reporting purposes, the finance sustainability champions can advise on the feasibility of data acquisition, and how and where to gather the information. Finance sustainability champions may also need to work with the CSO office to analyse and translate sustainability-related risks and opportunities into financial metrics. Some finance champions may even be in charge of climate reporting.

Depending on the strategy and scale of corporate sustainability, not all business units have full-time sustainability personnel. However, there should be certain champions who can work with the centralised CSO team.

The centralised and dedicated CSO team, together with the decentralised sustainability champions in various business units, becomes the hub and spoke to inculcate sustainability in the business. This federated organisational structure model, featuring both centralised and decentralised sustainability personnel, is becoming the trend.

How Do CSOs Operate?
For companies that have a dedicated CSO, the interviews conducted in this study show that more than half report to the CFO, while others report either to other C-level executives or directly to the CEO. With regard to the reporting line of a CSO, the consensus among the interviewees is not to be overly concerned about how it looks on paper. Rather, the focus should be on where the organisation places the sustainability function and how it can work effectively on a day-to-day basis.

As sustainability should be integrated into the corporate strategy, it is natural for the CSO to report to a C-level executive who is more involved in corporate strategy. For example, in one interviewed company, the CFO is deeply involved in corporate strategy and stakeholder communication and thus, its CSO is parked under the CFO. As there are stronger investor and other stakeholder pressures pushing for sustainability to be integrated across an organisation's corporate strategy, we may expect to see more CSOs come under the CFO, or have CFOs take up the CSO function as well. This will best enable sustainability concerns to influence the overarching sustainability strategy for the entire organisation and see the proper execution of what sustainability means for each business unit.

A Five to 10-Person Team is Normally Dedicated to Sustainability
The size of a dedicated sustainability team varies with the different company sizes and strategies. For larger companies with a dedicated sustainability team, the head count for the team ranges from one to 20, and a five- to 10-person team is the norm. As there are many sustainability champions in the business units to support the dedicated sustainability team, the actual number of staff who are involved in sustainability should be much higher. In terms of profiles, the sustainability team members come from various backgrounds spanning accounting, finance, engineering, humanities, human resources and climate specialists.

"Double heading" Is Common among Companies without a Dedicated, Centralised CSO
Where there are no dedicated CSOs, many finance team leaders would "double head" as key sustainability officers. "Double-heading" officers may provide an added advantage in terms of coordination and execution, especially if both their roles are carried out in the same location.

Some Companies Have a Dedicated Sustainability Committee
Consistent with the global trend, to better integrate sustainability into corporate strategies, some companies have established a dedicated sustainability committee at the board level. For example, DBS is the first bank to set up a

committee of sustainability within its board of directors. This allows for a greater focus on the sustainability agenda which is one of the bank's key strategic imperatives. Some companies do not have a separate board committee on sustainability, but their boards have committees which oversee sustainability matters.

Some Companies Have a CSR Head as well as a Sustainability Finance Head

The role of a Corporate Social Responsibility (CSR) Head has been around for at least 40 years, since CSR gained traction among Singapore companies. However, the Sustainability Finance Head is a fairly new position, likely established following SGX's mandated disclosure regulations. The Sustainability Finance Head typically sits within the CFO office and reports directly to the CFO. On the other hand, the CSR Head tends to report directly to the CEO or to other C-level executives.

The study indicates that both the CSR and sustainability finance teams work very closely together to drive an organisation's sustainability strategy. For example, the CSR Head may be the one driving the sustainability initiatives and the GRI report, while the Sustainability Finance Head is responsible for the TCFD report.

HOW HAVE SUSTAINABILITY CONCERNS CHANGED INTERNAL AUDIT FUNCTIONS?

Internal Audit Functions Must Ensure Compliance with the Latest Standards

The reporting landscape for sustainability has been very fragmented. Given that ISSB has issued the two Exposure Drafts, internal audit teams should familiarise themselves with the latest standards to ensure that their company complies with the new standards when they become effective. This is essential as SGX requires listed companies to have an internal audit on sustainability information.

Internal Audit Provides Sustainability Assurance

SGX requires internal auditors to give assurance on their sustainability reporting processes. In this regard, the internal auditors help to ensure data integrity and improve reporting quality; they also serve as a safeguard against greenwashing.

Some companies have embarked on their sustainability audits and reviews. Internal auditors have also been appointed as observers to the sustainability committee and climate steering committee.

Setting Up Shop for Sustainability

All organisations need to establish sustainability roles.

In this study, we found that for SMEs, the CFO usually double hats as a CSO. The company will then form a committee with representations from departments across the organisation; the CFO-CSO will lead this committee to drive sustainability goals. Double hatting as CFO and CSO has many advantages. Given the proliferation of green loans and opportunities, the CFO would be in the know to identify the best green loan alternatives for the organisation. We found evidence that forward-thinking SMEs are starting to dedicate resources into sustainability to benefit from green loans and initiatives.

Large organisations typically have established sustainability roles and structures. Some organisations, however, have not placed sufficient emphasis on sustainability governance. This includes refining the terms of references of sustainability committees, refining the responsibilities of CSO roles, and having key performance indicators. Accountancy and Finance professionals are uniquely placed to set up sustainability governance structures to give clearer directions to sustainability goals and targets. In the short-term, sustainability risk management should be the forefront of concern to identify risks and opportunities for business. This will accelerate the integration of sustainability and long-term strategic goals.

CHAPTER 4:
JOBS AND SKILLS – PREPARERS, ASSURANCE SERVICE PROVIDERS, AND NEW SUSTAINABILITY CAREERS

PREPARERS

The responses from the interviewees indicate that reporting is the most pressing challenge by far, due to the government regulations and stakeholder expectations.

Financial data is largely quantitative but that is not the case for sustainability data, which can be complex to decipher and quantify. Therefore, there is a need to understand what sustainability data are, and how to report them in the sustainability reports. Given that sustainability reporting is in the nascent stage, it may take some time for reporting frameworks and regulations to be standardised.

Accountancy and finance professionals are emerging as the champions for measuring and translating sustainability-related metrics into financial impact in order to drive more sustainable business development and be accountable for the environmental impact of business activities. They do this in two ways. The first is to analyse and translate non-financial climate-related risks and opportunities into financial impact. The second involves using their understanding of climate-related risks to guide business decisions.

Unfortunately, one of the main barriers to integrating sustainability metrics into financial reports is the difficulty in acquiring accurate, reliable, and consistent data. This is especially so for Scope 3 emissions. The wide range of sustainability metrics and lack of standardisation pose additional hurdles as companies struggle with identifying the different types of data that should be acquired.

Additional Skills for Corporate Finance Function

Overall, accountancy and finance professionals working in the corporate finance function will require additional skills to navigate the green finance market. Roles in the corporate finance function could include, CFOs, Finance Controller, Finance Managers, Accounts Executive, Accountants, and Treasury, among others.

The green finance market is constantly evolving, it is important for corporate finance to stay abreast of global, regional, and local developments pertaining to investment initiatives, coalitions, and pledges. At its core, the accountancy and finance professional must be adept at managing identifying and materialising sustainability opportunities, such as sustainability investments, and find ways to incorporate them into strategies to governance frameworks.

Accountancy and finance professionals in the corporate finance function will also need additional skills for sustainability risk management. Accountancy and finance professionals must be familiar with strategies to maximise stakeholder value and organisational performance. Risk assessments must also be made, particularly,

Additional Skills for Corporate Finance Function

Green Finance

- Key sustainable investment strategies or investment approaches and governance practices
- Sustainable asset classes universe
- Approaches to take into account sustainable factors in investment process
- Sustainable investment trends including new approaches and challenges
- Sustainable investment principles and best practices
- Leading global and regional sustainable investment initiatives, coalitions and pledges

Sustainability Risk Management

- Key sources of sustainability risks, and potential transmission
- Channels through which these risks can impact, or be impacted by the financial institutions
- Regulatory guidelines and requirements and industry standards for sustainability risk management
- Where applicable, firm up internal requirements for sustainability risk management
- Key sustainability risk modelling concepts and approaches
- Selection and use of data, metrics or other indicators relevant for assessing sustainability risks

risk modelling to better frame the sustainability-related impact on the company. As sustainability risks, such as global warming, can have wide-ranging impacts, corporate finance must be proficient in identifying ways to channel sustainability risks.

Additional Skills for Chief Financial Officers and Finance Managers

The Chief Financial Officer and the Finance Manager (FM) would require additional skills to address carbon trading and sustainability reporting. Both the CFO and FM are needed to know the definition of carbon accounting, carbon credits and the different approaches to account for GHG emissions. Approaches to GHG emissions include the calculation approach that converts activities such as fuel burning; the material balance approach that determines carbon emissions of raw materials processed into products; and direct measurement that measures exhaust gas flow using systems like the Continuous Emissions Monitoring System.

The CFO would also need additional skills to understand global carbon markets and carbon trading to identify potential risks and opportunities. As carbon credits can be created through low-carbon or carbon offsetting, the CFO needs to be kept abreast of market developments across different global markets.

There are various global sustainability reporting frameworks and guidelines today. These include the Sustainability Accounting Standards Board (SASB) standards, Global Reporting Initiative (GRI), and Taskforce on Climate-related Financial Disclosures (TCFD) among others. The CFO and FM must be familiar with these frameworks, as different disclosure standards are required for different stakeholders and purposes. For instance, GRI places equal emphasis on environmental, social and governance (ESG) factors and is the official reporting standard of the United Nations Global Compact, in contrast, SASB aims to align organisations and investors on the financial impacts of ESG and contains disclosure standards for more than 75 industries. The CFO should acquire a regional and international perspective on different sustainability reporting standards and how they are applied.

Additional skills for Internal Auditors

Internal auditors will require additional skills to ensure the compliance of various sustainability reporting and frameworks, as well as sustainability reporting to support the Corporate Finance function. This includes understanding the purpose of second-party opinion for assurance that the sustainability bond framework is aligned to acceptable market principles, as well as third-party audits for assurance of compliance with sustainability standards.

Jobs & Additional Skills

CHIEF FINANCIAL OFFICER

Current Skills

- Accounting and tax systems
- Audit Compliance
- Benchmarking
- Business Acumen
- Business Innovation and Improvement
- Business Planning
- Business Process Management
- Capital Expenditure and Investment Evaluation
- Capital Raising
- Change Management
- Conflict Management
- Corporate and business law
- Cost Management
- Data Analytics
- Digital Technology Adoption and Innovation
- Digital Technology Environment Scanning
- Disruption Management
- Finance Business Partnering
- Financial Analysis
- Financial Management
- Financial Planning
- Financial Reporting
- Financial Reporting Quality
- Fraud Risk Management
- Internal Controls
- Macroeconomic Analysis
- Management Decision Making
- Performance Management
- Professional and Business Ethics
- Professional Scepticism and Judgment
- Professional Standards
- Project Execution and Control
- Project Management
- Regulatory Risk Assessment
- Regulatory Strategy
- Risk Management
- Stakeholder Management
- Tax Implications
- Taxation Laws
- Transfer Pricing
- Valuation

Additional Skills

Carbon Markets and Credits

- Key climate-related policy concepts and leading government and corporate commitments driving carbon markets
- Definition of carbon credits as well as the different attributes and qualities
- Global carbon markets
- Key GHG accounting approaches and principles for financial institutions
- GHG (including Scopes 1 to 3) emissions concepts
- Mitigation hierarchy approaches and benefits of carbon trading and how it allows efficient allocation of capital

Sustainability Reporting

- Concepts of sustainability reporting frameworks, guidelines and principles
- Concepts of sustainability accounting frameworks, guidelines and principles
- Domestic, regional and international sustainability reporting and accounting regulations that are applicable to the financial sector

Jobs & Additional Skills

FINANCE MANAGER

Current Skills

- Accounting Standards
- Accounting and Tax Systems
- Audit Compliance
- Audit Frameworks
- Business Acumen
- Business Innovation and Improvement
- Business Planning
- Conflict Management
- Corporate and Business Law
- Cost Management
- Data Analysis
- Digital Technology Adoption and Innovation
- Digital Technology Environment Scanning
- Finance Business Partnering
- Financial Management
- Financial Planning
- Financial Reporting
- Financial Reporting Quality
- Financial Statements Analysis
- Group Accounting and Consolidation
- Internal Controls
- Non-Financial Reporting
- Professional and Business Ethics
- Professional Scepticism and Judgment
- Professional Standards
- Project Management
- Regulatory Compliance
- Regulatory Risk Assessment
- Stakeholder Management
- Tax Implications
- Transfer Pricing

Additional Skills

Carbon Markets and Credits

- Definition of carbon credits as well as the different attributes and qualities
- Key GHG accounting approaches and principles for financial institutions
- GHG (including Scopes 1 to 3) emissions concepts

Sustainability Reporting

- Concepts of sustainability reporting frameworks, guidelines and principles
- Concepts of sustainability accounting frameworks, guidelines and principles

Jobs & Additional Skills

INTERNAL AUDIT

Current Skills

- Audit internal controls
- Monitor audit issues
- Prepare and report audit results
- Assess and identify business risks
- Analyse business processes
- Determine audit scope and plan audit

Additional Skills

- Compliance and voluntary carbon markets, carbon pricing mechanisms and policy considerations
- Sustainability report second-party opinion and third-party audit concepts

ASSURANCE SERVICE PROVIDERS

Assurance service providers are constantly expected to keep up with the rising demand for sustainability assurance and be able to help their auditees identify their reporting parameters. Now more than ever, audit professionals must stay up to date on developments in sustainability issues and have a strong understanding of sustainability and its implications. Such knowledge may be very industry-specific and hence, there is a need for deep sector experience and auditing expertise. Familiarity with reporting standards is a must, just as it is for preparers. In addition to deep expertise in financial data and reporting, there is a critical need for audit professionals to be able to interpret sustainability data, selecting and using the framework most relevant for the auditee.

With the keen focus on decarbonisation, even though the carbon market is still developing and the demand for carbon credits has not yet solidified in Singapore, there is a need for know-how in carbon accounting and carbon tax, especially among the climate change specialists and accountants. This demand is projected to grow in the short term as companies ramp up their decarbonisation efforts and trade carbon credits to meet their targets. A holistic perspective is required in order to account for carbon emissions at all points in the value chain; audit professionals should also possess a comprehensive understanding of sustainability throughout the value chain.

Additional Skills for Assurance

Audit professionals working in assurance require additional skills in carbon accounting and carbon trading. As the carbon markets and credits become regular features for businesses, companies would come to rely on sustainability assurance to affirm or challenge the views expressed by their sustainability finance teams. This would enhance, improve, and complement internal processes, as well as the credibility of information for stakeholders. It is therefore imperative that audit professionals in assurance acquire similar additional skills as the CFO and finance manager.

Additional Skills for Tax

Carbon trading imposes new guidelines, regulations and mechanisms that require additional skills for tax. As carbon tax becomes commonplace, audit professionals would require proficiency in understanding local, regional, and international developments on regulations and guidelines. Larger companies spanning across national boundaries will likely face variations in carbon taxation across the value and supply chain. The carbon tax is also a complement to the voluntary carbon market, hence, accountancy and finance professionals must see the ramifications and implications of changes in carbon tax would have on the cost of carbon credits.

Jobs & Skills

ASSURANCE

Current Skills

- Accounting standards
- Auditing and assurance standards
- Auditor independence
- Business acumen
- Cyber security
- Data analytics
- Data governance
- Digital technology
- Environment scanning
- Engagement execution
- Engagement quality control
- Financial statements analysis
- Internal controls
- Macroeconomic analysis
- Professional and business ethics
- Professional scepticism and judgement
- Programming and coding
- Project execution and control
- Risk assessment
- Stakeholder management
- Taxation laws
- Communication
- Collaboration
- Digital fluency

Additional Skills

Carbon Markets and Credits

- Key climate-related policy concepts and leading government and corporate commitments driving carbon accounting and markets
- Definition of carbon accounting and credits as well as the different attributes and qualities
- Key GHG accounting approaches and principles for financial institutions
- Compliance and voluntary carbon markets, carbon pricing mechanisms and policy considerations
- Mitigation hierarchy approaches and benefits of carbon trading and how it allows efficient allocation of capital
- Global carbon markets

Jobs & Skills

TAX

Current Skills

- Validate business transaction for tax regulatory compliance
- Prepare and file tax returns
- Analyse and develop tax strategies
- Perform scenario analyses of tax exposure
- Assess business scenarios and provide tax advice
- Address inquiries from tax authorities

Additional Skills

Local, Regional, and Global Carbon Tax Regulations and Guidelines

- Environmental sustainability management
- Domestic, regional and international developments on carbon tax and markets as well as major initiatives that will influence the market
- GHG measurement, accounting and reporting approaches
- Carbon market mechanisms – carbon tax, compliance and voluntary markets, and the impact on the financial sector and economy
- Sources of carbon credits, and international and regional standards governing carbon markets and credits

NEW AND EMERGING JOBS

Growth in Demand for Preparers

Tighter regulations and higher pressure from stakeholders mean that companies have to invest more resources in reporting and disclosure. The additional responsibilities may be too heavy for existing accountancy and finance professionals to take on above their existing tasks. Moreover, there appears to be a growing trend for a new job role that marries sustainability and finance.

Chief Finance & Sustainability Officer

The Chief Finance & Sustainability Officer (CFSO) is an uncommon but emerging job role that is more commonly seen in companies which already have well-developed sustainability initiatives and commitments. The CFSO could be placed above CFO and CSO functions, allowing them to oversee the integration of finance and sustainability into the business strategy of the organisation. CFSOs would typically have a background in accountancy. This is because integrating sustainability into a business requires intimate and in-depth finance knowledge. This puts accountancy and finance professionals in an advantageous position to lead their organisation's sustainability agenda and take on the role of CFSO. This presents a potential career option for today's accountancy and finance professionals to transition to in the future.

In some companies, the CFSO oversees ESG reporting, using multi-capital accounting to identify more sustainable strategies for its highest-impact issues related to human, natural and societal capital. The CFSO is responsible for leading finance partnering on sustainability issues and reporting. While this position has slight differences across companies, the main responsibilities are to be the sustainability finance business partner, be the representative for non-financial performance and bolster the credibility of the sustainability numbers produced by the organisation. The CFSO is crucial to translating sustainability measurements and data into the organisation's financial bottom-line.

The CFSO's Key Responsibilities

The CFSO brings end-to-end strategic and financial leadership to the company's sustainability strategy. The CFSO will drive ESG reporting and green financing initiatives. The jobholder will translate the environmental impact of the company's activities, such as carbon emissions and pollution, into financial metrics to guide corporate strategy to meet sustainability targets. The CFSO will steer the company's sustainability targets and initiatives. This role is tasked to:

- Lead overall finance partnering for the company's sustainability strategy, providing finance oversight across overall sustainability investments to objectively enable the "right bets"
- Set and drive the framework for assessment of the value delivered from sustainability initiatives, facilitating trade-off discussions and leading all aspects of progress against key results
- Ensure there is a cohesive, coordinated and aligned finance partnering perspective towards key financial deadlines. This involves financial planning, investment cases, portfolio prioritisation and internal reporting for the executive leadership team and board members
- Act as the sustainability finance business partner for other business units, responsible for several key sustainable finance workstreams

Jobs & Skills

CHIEF FINANCE & SUSTAINABILITY OFFICER

Critical Technical Skills

Sustainability Reporting and Target Setting
- Best practices of methods to set targets in relation to each material sustainability metric
- Best practices of corporate policies, practices and performance measurements in relation to each material sustainability metric

Integrating Sustainability into Corporate Strategy
- Techniques to link the organisation's targets to global environmental goals and United Nations Sustainable Development Goals in a quantifiable manner

Sustainability Reporting
- Techniques to conduct integrated reporting which combines financial and sustainability data

Critical Core Skills

Sustainability Business Partner Skills
- Stakeholder engagement
- Communication
- Collaboration
- Influence
- Problem solving
- Sense making
- Transdisciplinary thinking

Assurance Service Providers Are Needed to Guide Businesses

The demand for skills in sustainability stewardship development indicates that companies need guidance on how to seamlessly integrate sustainability into their business models, operations and reporting. Assurance service providers are discerning a trend where their auditees require help to understand the reporting frameworks and their controls and parameters. While the trend appears promising (as companies are embracing sustainability), it appears that many more companies and especially SMEs do not fully understand what is required for a smooth sustainability integration. Therefore, there is a need to create a focus and a team to help companies better manage the sustainability integration process of their business over and above reporting. The team would ideally bring together a myriad of skills beyond traditional finance, in addition, they would also require climate engineering, social, community and welfare, and other STEM (science, technology, engineering, and mathematics) knowledge.

ESG Specialist

ESG Specialists can be found in many assurance service providers today, particularly in larger professional services firms where the multidisciplinary expertise and capabilities help clients with non-financial reporting and disclosures, and strategies to attain sustainability targets. This emerging role also helps clients to navigate the changes brought about by sustainability developments.

The ESG Specialist is responsible for implementing and reviewing the company's ESG philosophy and policies. The jobholder will develop and evaluate ESG reporting and risk management structures according to the relevant and/or applicable industry standards and best practices. The role will assess the impact of ESG megatrends on the organisation, develop or recommend improvements to its ESG framework, and monitor activities according to the framework.

JOBS AND SKILLS – PREPARERS, ASSURANCE SERVICE PROVIDERS, AND NEW SUSTAINABILITY CAREERS

ESG Specialist's Key Responsibilities

ESG specialists would be responsible for sustainability governance and internal controls, sustainability policy implementation, sustainability risk management, and sustainability business partnerships.

- Identify and assess the impact of emerging social and environmental megatrends on the organisation and assess business strategies, processes and activities by performing due diligence and/or benchmarking the organisation's ESG policies, procedures and performance against its peers and sector best practices
- Implement and/or review the ESG reporting structures by ensuring compliance to local and international regulations and standards, and ensure the timely and correct submission or publication of required ESG reports
- Articulate the ESG strategy that is aligned to the business strategies and goals, and develop, monitor, review and update ESG initiatives such as policies, framework, guidelines, programmes and metrics to ensure that the ESG strategy is properly implemented
- Engage internal stakeholders by presenting and developing communication materials to ensure buy-in from investors, board and operational teams, and provide subject-matter expertise

Jobs & Skills

ESG SPECIALIST

Critical Technical Skills

Sustainability Governance and Internal Controls
- Audit and review management
- Benchmarking
- Business continuity management
- Business process analysis
- Environment and social governance
- Financial analysis governance
- Internal controls

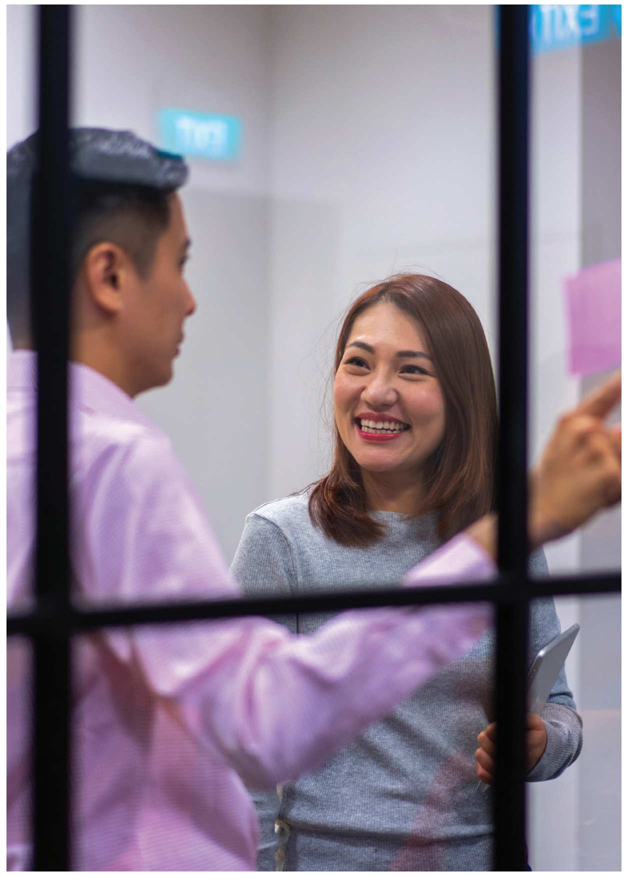
Sustainability Policy Implementation
- Change management
- Macroeconomic analysis
- Project execution and control
- Stakeholder management
- Strategy implementation

Sustainability Risk Management
- Business acumen
- Regulatory risk assessment
- Risk advisory
- Risk management

Critical Core Skills

Sustainability Business Partner Skills
- Communication
- Collaboration
- Influence
- Problem solving
- Sense making
- Transdisciplinary thinking

CHAPTER 5:
OUR RECOMMENDATIONS FOR KEY CHALLENGES



CHALLENGE:
Measurement of Carbon Emissions is Challenging

The measurement of carbon emissions is a challenge. Companies may be confused about what data to measure and how to go about doing it. Compounding the issue is the complexity of measuring carbon emissions outside of one's organisation. This particularly affects the measurement of Scope 3 emissions.

As sustainability is relatively new to many companies, data availability is a challenge. The myriad of sustainability issues and lack of a global baseline of sustainability standards pose additional hurdles because companies struggle to identify the different types of data that should be acquired. Even if the data are available somewhere, companies may not be aware of their existence; nor can they determine if the data are reliable. Additionally, for the sustainability data that are located outside the company, it is difficult to acquire relevant, consistent and reliable information.

Many companies admit that the bulk of the data is mined manually. In this case, they can tap on their ERM system as it is already in place and tracking all the financial information, to automate the data collection process.

RECOMMENDATIONS:

As the demand for ESG services grows, accountancy and finance professionals face challenges as well as opportunities to add value with their knowledge and skill sets. It is increasingly important for accountants to be familiar with non-financial reporting frameworks, impact metrics (especially for Scope 3 emissions), and regulations and beyond as the sustainability space continues to evolve. With their ability to measure sustainability impacts, they will play a bigger role in steering their company's sustainability goals, setting targets and advising on the steps needed to get there.

Companies which are collecting their data manually can consider automating the process without incurring high costs. By reconfiguring their existing ERM software, tedious manual work can be automated to achieve greater accuracy and efficiency, potentially saving many manhours.

While SGX-listed companies have been mandated to provide sustainability reports since 2016, there is no digital portal for users and stakeholders to access all the reports. Likewise, if companies are required to disclose emissions along their value chain, there should be a platform for them to obtain the emission data of their suppliers, and that data should already have been verified and ready for use.

CHALLENGE:
Keeping Up with Skills Needs in Sustainability

Sustainability was cast in the spotlight relatively recently. Many countries including Singapore are experiencing a sudden surge in demand for sustainability talent but the supply is insufficient. The broad nature of sustainability as a focus area makes it difficult to identify suitable candidates; this is because candidates must have skills that fit the unique and specific needs of the sector and company.

On a positive note, the government agencies have introduced several initiatives that help to raise awareness of sustainability issues. Professional bodies, Institutes of Higher Learning (IHLs) and training service providers are working hard to upskill and train employees to bridge the gap in knowledge and skill sets relating to sustainability. IHLs are also introducing sustainability modules into their curricula to build a more robust pipeline of accountancy and finance talents.

RECOMMENDATIONS:

The business and accountancy courses at the local IHLs offer few modules on sustainability and even fewer on sustainability reporting. In recent years, although IHLs have been incorporating different aspects of sustainability into their curricula, there is a need for specialised courses or modules to equip students with the right knowledge to meet the different industry needs. As the requirements in the sustainability space are still being refined, in time, the IHLs and training service providers will be able to design the appropriate curricula to fulfil the various demands.

In the meantime, short courses and on-the-job training are being used to plug the skill gaps. Larger companies, for example, have in-house programmes custom-designed for their employees. IHLs, government entities and professional bodies/industry organisations including ISCA have also rolled out a variety of courses and programmes on sustainability reporting and climate change. Enterprise Singapore launched the Enterprise Sustainability Programme in 2022 to help SMEs kickstart their ESG journey by partnering with NGOs and companies to conduct courses on sustainability issues at subsidised rates. That said, more can be done to build companies' sustainability capabilities and incentivise them to send their employees for upskilling.

CHALLENGE:
Lack of a Global Baseline of Sustainability Standards to Quantify Impact

For companies which are keen to explore sustainability, the lack of a global baseline of sustainability standards to quantify the impact on the environment in dollar terms may be a potential deal breaker. Some companies track a variety of information but do not have the ability or guidance to turn it into something meaningful.

Due to the lack of standards, greenwashing, especially by competitors, is a major challenge. Greenwashing by suppliers can bring about reputational damage to the company while competitors' greenwashing may erode the trust that others have in the sector or community. Companies which engage in greenwashing not only provide misleading information, they get to enjoy many climate incentives without putting in the required sustainability efforts.

RECOMMENDATIONS:

The global sustainability reporting landscape is set to change in the near future as reporting frameworks and the industry as a whole become more regulated. The ISSB is expected to issue a set of ESG disclosure standards by the end of 2022. SGX has already indicated that it will incorporate the ISSB standards into the listing rules as mandatory disclosure requirements for listed companies when the standards are issued. When the time comes, there may be a need for formal certification for sustainability reporting.

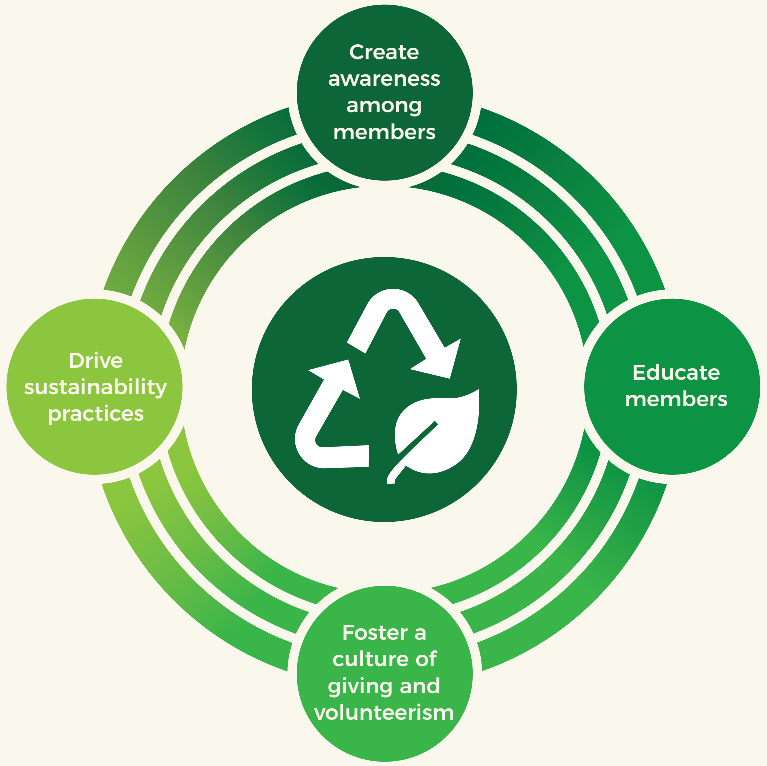
Case Study

ISCA's Sustainability Drive for Chartered Accountants

As a corporate citizen of Singapore as well as the national accountancy body, ISCA is doing our part to advance the sustainable development agenda. We adopted a sustainability strategy with three key pillars. First, we seek to engender corporate citizenship by promoting responsible stewardship of environmental and social resources. To this end, we advocate sustainability reporting for all businesses, and to encourage the adoption sustainability practices within the accountancy profession.

Second, we aim to build capability and raise awareness through technical guidance, research publications, training and events. ISCA has developed a repository of materials from standalone publications such as the ISCA Climate Disclosure Guide: Taking First Steps Towards Climate-related Disclosures and Fueling Sustainable Ecosystems – Insights from the Financial Services Sector to the constant stream of thought leadership articles published in the IS Chartered Accountant Journal. Continuing professional development courses in sustainability are now a regular feature alongside events and conferences with a focus in sustainability. The 2021 and 2022 editions of the Professional Accountants in Business Conference – part of the Institute's flagship Singapore Accountancy & Audit Convention Series – were also centred around sustainability. In the pipeline, ISCA would be rolling out sustainability-themed certification programmes including sustainability reporting and external assurance on sustainability reporting on recognised international standards and framework.

Third, ISCA collaborates with like-minded organisations to identify and address common needs and areas for the accountancy profession. In 2022, ISCA and SAC Capital jointly developed the Sustainability E-Training for Directors programme, which saw the participation of more than 300 directors from listed companies.



ISCA is taking steps in advocating sustainability by:

1. **Creating awareness among members by positioning sustainability as a strategic focus of ISCA to members and stakeholders;**
2. **Educating members by developing new training programmes catering to different members' needs and issuing relevant guidance and thought leadership publications;**
3. **Fostering a culture of giving and volunteerism among ISCA members and staff; and**
4. **Driving sustainability practices within ISCA inculcating a "sustainability mindset" within all business functions and operations.**

CHALLENGE:

Going Beyond Regulatory Compliance

As sustainability goals are long-term-oriented and achieving these goals can be costly, among the SMEs surveyed, almost all cited compliance as their main sustainability objective, rather than creating any real impact on sustainable development.

RECOMMENDATIONS:

The sustainable finance landscape is complex, fragmented and dynamic as it is still in its early stages. Because the focus is on establishing a common foundation for businesses, regulatory compliance for sustainability takes centre stage. However, it would be a mistake to adopt a wait-and-see approach. Going beyond regulatory compliance may soon become a necessity for businesses, especially for SMEs. In the foreseeable future, sustainability would make an impact on business models and corporate strategies with consumers, investors, regulators, and other stakeholders prioritising sustainability above profit-centric motivations.

SMEs must begin their sustainability transition to tap upon a wealth of sustainability opportunities. Larger companies are becoming increasingly concerned about the sustainability impact of their value and supply chain. This has cascading effects on SMEs. For instance, SMEs working with larger companies would be considered as part of the larger companies' scope 3 carbon emissions. In these situations, it would not be sufficient for the SMEs to be compliant with carbon emission regulations, but rather, the best performers in decarbonisation would have a business advantage.

Accountancy and finance professionals would play a central role in this transition. With additional sustainability skills and knowledge, they would be key to interpreting new data streams and translating sustainability metrics into the financial bottom line.

CHAPTER 6:
CONCLUSION

KEY TAKEAWAYS

- Accountancy and finance professionals are emerging champions of sustainability in organisations
- Equipping accountancy and finance professionals with additional sustainability skills is crucial for spearheading the sustainability transition in companies
- Accountancy and finance professionals will be tasked with sustainability reporting and disclosures, as well as the identification of sustainability risks and opportunities

Accountancy and finance professionals are emerging as the champions in driving sustainability initiatives in organisations. This is indicated by emerging roles such as the Chief Finance & Sustainability Officer, and the prevalence of CFOs performing sustainability roles. Accountancy professionals, with their know-how in measuring and translating sustainability-related metrics into financial impacts, are key to contributing to the overall strategy for business optimisation.

Sustainability is increasingly integrated into the corporate agenda, therefore, it is critical for accountants to be well equipped with sustainability knowledge and skills. Their value-add can be tremendous – they can spearhead their company's sustainability framework from design to implementation, given their comprehensive knowledge of the ins and outs of their organisations. Upon integration, they can continue to provide value by advising on the relevant and credible information on the impact of sustainability initiatives, to business leaders, investors, and the public to support evidence-based decisions.

This effort will also enable Singapore companies and the accountancy profession to develop a competitive advantage in the area of sustainability; and forward Singapore's vision to be a leading and trusted professional services hub, especially for emissions and carbon accounting.

In the near future, accountancy and finance professionals are expected to play crucial roles in two domains in the sustainability space.

First, accountancy and finance professionals will increasingly be tasked to ensure regulatory compliance in the area of sustainability reporting and disclosure. As mentioned earlier, various jurisdictions, including Singapore, have moved towards mandatory sustainability reporting and disclosure, particularly climate-related disclosures. The most recent Exposure Draft of IFRS S2: Climate-Related Disclosures, proposes that "an entity shall disclose information that enables users of general purpose financial reporting to understand the effects of significant climate-related risks and opportunities on its financial position, financial performance and cash flows for the reporting period, and the anticipated effects over the short, medium and long term – including how climate-related risks and opportunities are included in the entity's financial planning". The climate reporting and risk management involve a lot of number crunching and scenario analysis, which translates the impact of climate-related risk and opportunities into dollar amounts. Accountancy and finance professionals have the quantitative skill sets to handle the translation. Sustainability has been and will be eventually integrated into every corporation's business strategy.

Second, accountancy and finance professionals will be tasked to help identify sustainability risks and opportunities and provide relevant and reliable information to top executives in designing corporate strategies, to exploit sustainability opportunities and manage sustainability risks. The evaluation of financial impacts is an essential input to the design and implementation of corporate sustainability and risk management planning. Moreover, the financial impacts of sustainability initiatives are an important part of corporate communications with various stakeholders, helping companies move from an "activity-oriented" method of sustainability to an "outcome-oriented" one.

However, there are also challenges for accountancy and finance professionals as they assume the two roles mentioned above. For example, the required sustainability data, such as energy savings and workplace safety, do not reside in the finance department. Thus, the finance department will need to coordinate with the other business units to drive sustainable development together. In addition, the link between the sustainability metrics and financial metrics often is not obvious. Financial professionals need to garner additional knowledge in the sustainability space to effectively analyse and translate the climate-related risks and opportunities into financial metrics. The challenges will require effective change management with organisational shifts and upskilling for accountancy and finance professionals.

The role of sustainability is one that is constantly evolving. There is urgency for organisations to pay close attention to the dynamism characterising this megatrend if they want to carve out a role for themselves in the area of sustainable finance. While sustainability is more than finance, the role of sustainable finance will potentially be one that requires full-time focus and attention.

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- Mr Zhang Andi, PhD Candidate in Accounting, School of Accountancy

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- Ms Callista Ng, Director, People Advisory Services

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ABOUT

About the Institute of Singapore Chartered Accountants

The Institute of Singapore Chartered Accountants (ISCA) is the national accountancy body of Singapore. ISCA's vision is to be a world-class accountancy body of trusted professionals, contributing towards an innovative and sustainable economy. There are over 33,000 ISCA members making their stride in businesses across industries in Singapore and around the world.

Established in 1963, ISCA is an advocate of the interests of the profession. Complementing its Global Mindset with Asian Insights, ISCA leverages its regional expertise, knowledge, and networks with diverse stakeholders to contribute towards the advancement of the accountancy profession.

ISCA is the Designated Entity to confer the Chartered Accountant of Singapore – CA (Singapore) – designation.

ISCA is a member of Chartered Accountants Worldwide, a global family that brings together the members of leading institutes to create a community of over 1.8 million Chartered Accountants and students in more than 190 countries.

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About Singapore Management University

Established in 2000, Singapore Management University (SMU) is recognised for its disciplinary and multi-disciplinary research that address issues of global relevance, impacting business, government, and society. Its distinctive education, incorporating innovative experiential learning, aims to nurture global citizens, entrepreneurs and change agents. With more than 12,000 students, SMU offers a wide range of bachelors, masters and PhD degree programmes in the disciplinary areas associated with six of its eight schools - Accountancy, Business, Economics, Computing, Law and Social Sciences. Its seventh school, the SMU College of Integrative Studies, offers a bachelor's degree programme in deep, integrative interdisciplinary education. The College of Graduate Research Studies, SMU's eighth school, enhances integration and interdisciplinarity across the various SMU postgraduate research programmes that will enable our students to gain a holistic learning experience and well-grounded approach to their research. SMU also offers a growing number of executive development and continuing education programmes. Through its city campus, SMU focuses on making meaningful impact on Singapore and beyond through its partnerships with industry, policy makers and academic institutions. For more information about SMU, please click here.

About Singapore Management University – School of Accountancy

Established in 2001 as the second school in SMU, the School of Accountancy (SoA) offers the distinctive programmes: Bachelor of Accountancy, Master of Professional Accounting, Master of Science in Accounting (Data & Analytics), SMU-Tsinghua Master of Science in CFO Leadership, SMU-Zhejiang Doctor of Business Administration (Accounting and Finance), and PhD in Accounting. SoA pursues excellence by offering academic programmes that are responding to the needs of accounting and finance professionals. SoA continues to receive international recognition for its research strength. In 2022, SoA is ranked first in the world for Archival Research (All Topics and Financial Accounting) and Citation Rankings in the BYU accounting research rankings. The achievement is a strong testament to the commitment of SMU faculty towards developing high quality accounting research and placing SoA as a global leader among accounting schools in renowned universities. For more information about SoA, please click here.

About Singapore Accountancy Commission

The Singapore Accountancy Commission (SAC) spearheads the development of the Singapore accountancy sector with the vision of developing Singapore into a leading global accountancy hub. SAC is working to achieve this by deepening the skills of the accountancy talent pool; developing the industry to capture growth opportunities; and creating a hub and exchange by building Singapore into a centre for thought leadership. SAC is a statutory body under the Ministry of Finance. For more information, please click here.

INSTITUTE OF SINGAPORE CHARTERED ACCOUNTANTS

ISCA House
60 CECIL ST, SINGAPORE 049709
6749 8060

isca.org.sg