

28 October 2022

ISCA Technical Bulletin

### **Technical Bulletin 1:**

Addressing Climate-Related Risks in Financial Statements and Audits of such Financial Statements









#### **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 globally recognised professional accountancy body, bringing value to our members, the profession and wider community. 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.

For more information, visit www.isca.org.sg.

#### **About ISCA's Professional Standards Division**

As the national accountancy body, ISCA is committed to supporting our members in their careers. ISCA's Professional Standards Division provides technical support to members in the areas of audit and assurance, financial reporting, sustainability and climate change, ethics, and specialised industries such as capital markets, banking and finance and insurance. The Division also communicates insights and views to our members and the wider accountancy community. Through our technical committees that comprise representatives from various stakeholders in the corporate reporting eco-system, we hear issues from the ground and conceive initiatives to promote best practices and consistency to uphold technical excellence.

#### **About ISCA's AASC-FRC ESG Working Group**

ISCA's Auditing & Assurance Standards Committee (AASC) and Financial Reporting Committee (FRC) have formed the AASC-FRC ESG Working Group to address implications arising from ESG considerations in financial statements and the audits of financial statements in Singapore.

The AASC-FRC ESG WG is co-chaired by both Chairs of the AASC and FRC and comes under the purview of both committees.

#### **About ISCA's Auditing and Assurance Standards Committee**

ISCA's Auditing and Assurance Standards Committee (AASC) comprises practitioner members with significant experience in the field of auditing and assurance, and public members from regulatory bodies, academia and the business sector.

AASC's terms of reference include the development of high-quality auditing and assurance standards; monitoring policy and implementation issues relating to the development of auditing and assurance standards internationally and in Singapore and giving consideration to the need for guidance; and raising public awareness and understanding of the standard setting process and the standards.

The terms of reference are executed through AASC with the support of three Sub-Committees, namely the Core Sub-Committee, the AGS 1 Sub-Committee and the Data Analytics Sub-Committee.

#### **About ISCA's Financial Reporting Committee**

ISCA's Financial Reporting Committee (FRC) comprises representatives from legal and accounting firms, corporate, regulators and academia in the financial reporting eco-system.

FRC's terms of reference include monitoring policy and implementation issues relating to the development of accounting standards internationally and in Singapore, and to identify, understand and address accounting issues faced by professional accountants in Singapore, and provide support through the issuance of guidances.

The terms of reference are executed through FRC with the support of two Sub-Committees, namely the Core Sub-Committee and the Valuation Sub-Committee.

#### Note:

- The fact patterns and examples presented in this Technical Bulletin are illustrative in nature.
- References made to publicly available information are accurate as at the date of issuance of this Technical Bulletin.
- This Technical Bulletin seeks to address some of the implications of climate-related risks on general purpose financial statements and the auditing of such financial statements. It does not address matters relating to sustainability reports or assurance over sustainability reports that are issued separately from general purpose financial statements.
- This Technical Bulletin is applicable to entities with financial statements:
  - prepared in accordance with Singapore Financial Reporting Standards (International) (SFRS(I)s) or Financial Reporting Standards (FRSs) issued by Singapore Accounting Standards Council, and/or
  - audited in accordance with Singapore Standards on Auditing (SSAs) issued by ISCA

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#### 1. Overview

#### (A) Background and Objective

Climate change is one of the major global challenges of our times. The list of pledges towards net zero<sup>1</sup> emissions by governments and corporates continues to grow. Investors and banks are increasingly integrating ESG considerations in their investment and lending decisions. Global alliances such as the Climate Action 100+, a group of approximately 700 investors managing US \$68 trillion of assets, are engaging companies on improving climate change-related governance, cutting carbon emissions and strengthening climate-related financial disclosures.

A Singapore study<sup>2</sup> of financial institutions (including banks, asset managers and insurers) in 2021 also highlighted a similar trend, with 86% of respondents stating that they consider ESG data in making investment decisions while 93% stated that they actively examine ESG risks in their investment decision making.

The Singapore Green Plan 2030³ was released in February 2021 to help chart the country's journey towards a more sustainable future over the next decade, strengthening the country's commitment to the global climate agenda and positioning Singapore to achieve net zero emissions. It was also announced in Budget 2022 that Singapore will strive to achieve net zero emissions by or around mid-century.

Climate-related risks can have a material impact on an entity's business model, cash flows, financial position and financial performance. Many entities are likely to be impacted by climate-related risks. The financial statements are a key source of information for stakeholders to understand the financial impact of climate-related risks on an entity. The information may assist in assessment of how an entity is managing the risks and the impact on the entity.

Although current accounting standards do not refer explicitly to climate-related risks or climate-related matters, in 2019 and 2020, the International Accounting Standards Board (IASB) published an article<sup>4</sup> and educational material<sup>5</sup> to highlight that material climate-related matters should be considered in the application of the IFRS.

Notwithstanding this, a study<sup>6</sup> by Carbon Tracker in 2021 found that:

 there was little evidence that companies incorporate material climate-related matters into their financial statements and most climate-related assumptions and estimates were disclosed:

https://carbontracker.org/reports/flying-blind-the-glaring-absence-of-climate-risks-in-financial-reporting/

<sup>&</sup>lt;sup>1</sup> 'Net zero' is defined as "cutting greenhouse gas emissions to as close to zero as possible, with any remaining emissions re-absorbed from the atmosphere, by oceans and forests for instance." [Source: <a href="https://www.un.org/en/climatechange/net-zero-coalition">https://www.un.org/en/climatechange/net-zero-coalition</a>]

<sup>&</sup>lt;sup>2</sup> Study by SGX, KPMG and CGS-NUS https://bschool.nus.edu.sg/cgs/wp-content/uploads/sites/7/2021/04/CGS-KPMG-SGX-Perspectives-of-Financial-Institutions-on-Sustainability-Reporting-2021.pdf

<sup>&</sup>lt;sup>3</sup> The Singapore Green Plan 2030: <a href="https://www.greenplan.gov.sg/infographics">https://www.greenplan.gov.sg/infographics</a>

<sup>&</sup>lt;sup>4</sup> IASB article – IFRS Standards and climate-related disclosures (published November 2019) https://cdn.ifrs.org/content/dam/ifrs/news/2019/november/in-brief-climate-change-nick-anderson.pdf?la=en

<sup>&</sup>lt;sup>5</sup> IASB Educational Material – Effects of climate-related matters on financial statements (published November 2020) <a href="https://www.ifrs.org/content/dam/ifrs/supporting-implementation/documents/effects-of-climate-related-matters-on-financial-statements.pdf">https://www.ifrs.org/content/dam/ifrs/supporting-implementation/documents/effects-of-climate-related-matters-on-financial-statements.pdf</a>

<sup>&</sup>lt;sup>6</sup> Carbon Tracker Initiative – Flying Blind: The glaring absence of climate risks in financial reporting (published September 2021)

- most companies did not tell a consistent story of climate-related risks across their reporting;
- there was little evidence that auditors consider the effects of material climate-related financial risks or companies' announced climate strategies; and
- even with considerable observable inconsistencies across company reporting ('other information' and financial statements), auditors rarely comment on any differences.

This Technical Bulletin seeks to raise awareness on the need to consider the impact of climaterelated risks on an entity's business and operating environment, and their potential implications on the entity's financial statements.

#### (B) Scope

This Technical Bulletin highlights climate-related risk considerations in financial reporting and audits of financial statements through an illustrative example of a Singapore entity in the transportation industry under Section 2 of the Bulletin.

Appendix 1 includes a list of other financial reporting and audit considerations arising from climate-related risks.

Matters relating to sustainability reporting and assurance over sustainability reporting are not within the scope of this Technical Bulletin.

#### (C) General Considerations

#### What are climate-related risks?

Climate-related risks<sup>7</sup> refer to the potential negative impacts of climate change on an entity. This includes:

- i) physical risks from climate change physical risks emanating from climate change can be event-driven (acute) such as increased severity of extreme weather events (for example, cyclones, droughts, floods and fires). They can also relate to longer-term shifts (chronic) in precipitation and temperature and increased variability in weather patterns (which could result in, for example, sea-level rise).
- ii) transition risks associated with the transition to a lower-carbon economy the most common of which relate to policy and legal actions, changes in technology, market responses and reputational considerations.

#### Which entities may be most affected?

While climate change may have the potential to impact all entities, certain entities or industries may be more susceptible to climate-related risks due to their location, nature of their operations / business models or regulations. For instance, the TCFD<sup>5</sup> and SGX<sup>8</sup> have identified the following industries as those which are most affected by climate change and the transition to a lower-carbon economy:

<sup>&</sup>lt;sup>7</sup> Recommendations of the Task Force on Climate-related Financial Disclosures (Glossary and Abbreviations) https://assets.bbhub.io/company/sites/60/2021/10/FINAL-2017-TCFD-Report.pdf

<sup>&</sup>lt;sup>8</sup> https://www.sgx.com/regulation/sustainability-reporting

- (a) Financial industry;
- (b) Agriculture, food and forest products industry;
- (c) Energy industry:
- (d) Materials and buildings industry; and
- (e) Transportation industry.

As a starting point, management should assess the likelihood and consequences of climate-related risks on the entity, which would in turn affect the entity's response and may translate into impact to financial reporting, including disclosures (where material). A consideration when assessing what information about climate-related risks and matters to disclose in the entity's financial statements is whether the information is material. Under SFRS(I) standards, information is material if omitting, misstating or obscuring it could reasonably be expected to influence the decisions that primary users of financial statements make on the basis of those financial statements.

#### What are management's responsibilities?

Management is responsible for preparing the financial statements of the entity in accordance with the applicable financial reporting framework. When applying the financial reporting standards, management should consider whether and how climate-related matters may have a material effect on the financial statements, including the adequacy of disclosures. When applying judgements and making estimates relating to climate-related matters in the financial statements, management should ensure that such judgements and estimates reasonable and are supportable.

Management should consider the financial impact of the entity's climate-related commitments and plans. Management should ensure consistency between information communicated in the financial statements and information communicated to stakeholders outside the financial statements (e.g. press releases, management commentaries, sustainability reports).

#### What are the auditor's responsibilities?

The auditor is responsible to plan and perform the audit to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement in order to report on whether the financial statements are prepared, in all material respects, in accordance with the applicable financial reporting framework.

When applying the auditing standards, the auditor should obtain an understanding of how climate change may impact the entity, consider whether these impacts could be material to the entity, assess how they affect his risk assessment (i.e. whether they give rise to a risk of material misstatement to the entity's financial statements) and develop appropriate audit procedures to address those assessed risks of material misstatement. The auditor also reads other information presented in the annual report (e.g. Sustainability report summary) and consider whether there is material inconsistency between the other information and the financial statements and the auditor's knowledge obtained in the audit.

### 2. Climate-related Risks - Illustrative Example

#### **Background:**

ESG Group Limited (the Group) provides logistics services for the transportation of goods in Singapore. The Group uses internal combustion engine (ICE) vehicles for its transportation business.

As part of the Singapore Green Plan 2030<sup>9</sup> released in February 2021, the government has introduced various green initiatives and measures such as requiring all new car registrations to be of cleaner-energy models from 2030; and at least 80% of buildings (by Gross Floor Area) to be green<sup>10</sup> by 2030.

As a result of the government measures, the Group's Board of Directors approved the following business plan and budget in December 2021 in order to sustain a viable business model:

Business plan	Planned completion timing	Approved budget (\$'million)
Purchase new fleet of 150 electric vehicles	50% by 2026	18
Build ten electric charging stations	and 50% by	4
Convert all four existing vehicle maintenance plants to provide repair and maintenance services for electric vehicles through modifying and repurposing the machinery and equipment	2030	6
Train employees and hire engineers with relevant expertise in repairing and maintaining electric vehicles	2025	3
Terminate early two existing supplier contracts relating to outsourced repair and maintenance services for ICE vehicles	2030	1
Install solar panels and undergo energy efficiency retrofits to make its existing plants and office building green <sup>8</sup>	2028	13
Total		45

Based on the Group's assessment, there is a 70% probability that it can achieve its business plan by the stipulated timeline above, a 20% probability that completion might be delayed to 2031 and a 10% probability that the plan is not achieved (i.e. business-as-usual or BAU scenario) due to resource and capability constraint.

The Group might also lay off some employees and this would be redeliberated in future when the implementation of the above business plan is near completion.

To finance the Group's business plan, the Group entered into a sustainability-linked loan agreement with a bank in January 2022 to borrow \$20 million with a 10-year tenor and interest rate of 4% per annum. The interest rate will reduce by 1.5% per annum if the Group meets certain annual energy efficiency targets. There are loan covenants set out in the agreement which requires the Group to ensure that its gearing ratio does not exceed 1.0 at any time and must achieve at least a certain minimum annual energy efficiency level, failing which the loan would become immediately repayable.

<sup>&</sup>lt;sup>9</sup> The Singapore Green Plan 2030: <a href="https://www.greenplan.gov.sg/infographics">https://www.greenplan.gov.sg/infographics</a>

<sup>&</sup>lt;sup>10</sup> The criteria and scoring framework for green buildings is set out in the Building and Construction Authority's (BCA) Green Mark scheme. See details of the Singapore green building plans in: <a href="https://www1.bca.gov.sg/buildsg/sustainability/green-building-masterplans">https://www1.bca.gov.sg/buildsg/sustainability/green-building-masterplans</a>

In February 2022, the Singapore government announced that carbon taxes will be progressively raised from the \$5 per tonne of greenhouse gas emissions (tCO2e) as follows:

Year	Amount per tCO2e
2024 and 2025	\$25
2026 and 2027	\$45
By 2030	\$50 to \$80

The Group has assessed that there is a 50% probability that their suppliers might pass on the increasing costs of carbon taxes to the Group.

As of 30 June 2022 (financial year end), the Group's major classes of non-current assets are as follows:

Classes of non-current non-financial assets	Carrying value (\$'million)	Useful lives (Years)
Goodwill (from past acquisition of the transportation business)	15	Indefinite
Property, plant and equipment		
Office building and plants	45	40 to 50
ICE vehicles	8	10
<ul> <li>Machinery and equipment (for the repair and maintenance of ICE vehicles)</li> </ul>	7	10

In performing its impairment test for goodwill and property, plant and equipment\*, management prepared a value-in-use (VIU) analysis for its transportation business for the financial year ended 30 June 2022. Carrying values of the business and the property, plant and equipment were assessed to be lower than the VIUs.

\*Note: Property, plant and equipment have to be tested for impairment only if there is an indicator that the property, plant and equipment may be impaired. Entities are required to assess at the end of each reporting period whether there are any indicators that a property, plant and equipment may be impaired. Significant judgement may be required to determine whether there is an indicator of impairment as climate-related risks may impact the business / cash flows in the mid / long term but does not impact (current) cash flows over the useful lives of the property, plant and equipment.

What are the potential implications to ESG Group's financial statements for the year ended 30 June 2022 arising from the above climate transition risks?

#### Potential implications arising from climate transition risks:

The key climate-related risk considerations include but are not limited to the following:

- (1) Impairment of non-financial assets
- (a) Use of reasonable and supportable assumptions in the cash flow projections for estimating the VIU of non-financial assets

Over time, the impact of climate change may result in changes to an entity's cost base and adjustments to the forecast income expected to be generated from an asset.

The Group's cost base would increase as the Group would have to change to cleaner-energy vehicle models and greener buildings to sustain its business and adhere to the regulations. Examples of increase in cost base include:

- · purchasing a new fleet of electric vehicles,
- · building electric charging stations,
- modifying and repurposing the machinery and equipment,
- hiring engineers,
- training employees,
- installing solar panels, energy efficiency retrofits, and
- additional carbon taxes which might be passed on from suppliers.

In relation to projected cash inflows, the VIU method requires an entity to apply strict limits on when the benefits of restructuring, improvements or investments in an asset's enhanced performance can be considered\*. These benefits can only be reflected in a VIU calculation once an entity has committed to the restructuring. While the Group might potentially lay off some of its employees in future, this restructuring plan has not been committed. Hence, the related restructuring impacts should not be reflected in the VIU model.

\*Note: Judgement may be required in determining whether the cash outflows for the enhancement / improvement are considered to be maintenance or capital expenditure.

The sales forecasts might also change depending on the entity's ability to pass on the cost increases to its customers. This is a judgemental area and entities should be careful when factoring assumptions about premiums that they can command in their forecasts.

It may not always be appropriate for impairment models to assume positive growth rates at the rate of long-term inflation. In the business-as-usual (BAU) scenario where ESG Group is unable to shift to a viable business model, the growth rates should be flat or negative as a positive growth rate is not justified.

#### (b) Use of expected cash flow approach

The expected cash flow approach which considers probability-weighted multiple scenarios could be more effective in capturing the increased uncertainties arising from climate risk as compared to an approach which uses a single set of cash flows and a single discount rate.

The Group should factor in different probability-weighted scenarios to account for the impact to cash flows depending on the probability that it can complete its transition to the new business model. Accordingly, the Group has factored in a scenario of a 70% probability it achieves its business plan by the stipulated timeline, a scenario of a 20% probability that the completion of the business plan is delayed to 2031 and a 10% probability of a BAU scenario in its cash flow projections. If there are potential penalties or fines that would be imposed as a result of the Group not meeting the regulatory requirements by 2030, these cash outflows should also be incorporated into the specific scenario. The Group has also factored in a 50% probability that its suppliers would pass on the increasing costs of carbon taxes to it.

In estimating the VIU of a cash-generating unit (CGU) including goodwill, projections for the VIU generally cover a period of up to five years, unless a longer period can be justified. The final year of cash flow projections is generally used to extrapolate cash flows into the future when calculating the terminal value and would therefore need to represent a steady state in the development of the business. For some businesses, strategic actions around the climate transition might not be completed by the five-year forecast period, and the final year might not have reached steady state.

The Group assessed that it would be appropriate to use a longer cash flow forecast period up to 2031 to incorporate the impact arising from the expected climate transition timings. The final year of cash flow projections, upon reaching a steady state, is then used to calculate the terminal value. The Group should disclose the cash flow projection period (i.e. 9 years from 2023 to 2031) used in its VIU calculation and an explanation to justify using a period greater than five years.

#### (c) Discount rate

The same risks should not be double-counted in both the discount rate and cash flows. It should also be considered that the discount rate could increase if an entity has higher exposure to climate-related risks than its peers, because providers of finance may demand a higher return for riskier investments. In extreme cases, debt financing might even become a constraint for certain industries, and the mix of debt/equity as an input into Weighted Average Cost of Capital (WACC) could change.

#### (2) Impact on useful lives, residual values, and recoverability of assets

The Group assessed the impact to the useful lives and residual values of the ICE vehicles, machinery and equipment or components thereof arising from its transition to an electric vehicle business model. Given the Group's plan to phase out all ICE vehicles by 2030, the useful lives of the ICE vehicles were shortened from 10 years to 8 years. The Group also reevaluated the residual values of these assets.

In addition, vehicle spare parts used in the repair and maintenance of the ICE vehicles might become obsolete and need to be written down.

#### (3) Provision for onerous contracts

Given that the Group has planned to early terminate two outsourcing contracts in relation to the repair and maintenance of ICE vehicles, the Group have to recognise a provision for onerous contracts if the unavoidable costs of meeting the obligations under the contracts exceed the economic benefits expected to be received. The unavoidable costs under a contract reflect the least net cost of exiting from the contract, which is the lower of the cost of fulfilling it and any compensation or penalties arising from failure to fulfil it.

#### (4) Sustainability-linked loan

The Group should consider whether the green variability features in the loan gives rise to an embedded derivative and, if so, whether that embedded derivative should be accounted for separately from the loan.

Where the sustainability-linked measure is a non-financial variable specific to the borrower or the lender, no embedded derivative would exist as the green variability as a separate stand-alone instrument would not meet the definition of a derivative. The sustainability-linked loan is tagged to energy efficiency targets of the Group, which is a non-financial variable specific to the borrower. Accordingly, there is no embedded derivative as the green variability feature does not meet the definition of a derivative. The whole instrument is accounted for as a financial liability measured at amortised cost.

The terms of sustainability-linked loans might vary widely, which may affect the analysis, and judgement may be required in assessing the accounting for these instruments under SFRS(I) 9 (Financial Instruments).

The Group should also assess whether the loan covenants have been complied with and ensure there is appropriate disclosure on its loan covenants. In the event of non-compliance with loan covenants, the Group should assess the classification of the loan as current or non-current accordingly.

#### (5) Critical accounting estimates, judgements, and assumptions

SFRS(I) 1-1 (Presentation of Financial Statements) requires disclosures about critical accounting estimates, judgements, assumptions, and estimation uncertainty used in the preparation of financial statements. These may include:

- Reduction in useful lives of assets [See illustrative disclosure example below];
- Change in residual values of assets;
- Recoverable amounts of goodwill and property, plant and equipment including the use of multiple scenarios; and
- Recognition or measurement of provision for onerous contracts.

The sensitivity of carrying amounts to the methods, assumptions and estimates underlying their calculation (including the probabilities assigned to the scenarios) is required to be disclosed when it is necessary to help users of financial statements understand, subjective or complex judgements made by management concerning the future and other key sources of estimation uncertainty.

An illustrative disclosure example on critical accounting estimate and judgement relating to the change in useful lives of the ICE vehicles:

The Group continues to assess the potential impacts of climate change and the transition to a lower carbon economy. The Group's current climate change strategy mainly focuses on adjusting to a green business model by switching from using ICE vehicles to electric vehicles for its transportation business by 2030 to reduce emissions.

Due to the Group's climate strategy and business plan, the Group has assessed that the useful lives of the ICE vehicles would need to be shortened from 10 years to 8 years. This change in accounting estimate has been made prospectively and the net effect of the change in the current financial year was an increase in depreciation expense of \$0.25 million.

The estimation of the useful lives and residual values of the ICE vehicles involves significant judgement due to the uncertainties associated with climate transition risks. The initial cost of the ICE vehicles was \$10 million and the annual depreciation charge for the financial year ended 30 June 2022 was \$1 million. If the actual useful lives of these ICE vehicles are shorter than the management's estimate by 1 year on average, the Group's annual depreciation charge would increase by \$0.18 million.

# What are the considerations for the audit of ESG Group's financial statements for the year ended 30 June 2022 arising from climate transition risks?

The key audit considerations include but are not limited to the following:

#### (A) Risk assessment

Based on the information obtained from the understanding of ESG Group and its environment (see 'Background' above) and the potential financial statement implications arising from climate transition risks (see 'Potential implications arising from climate transition risks' above), the auditor identifies and assesses the risks of material misstatement (ROMM).

Climate-related risk may result in identification of new ROMM relating to provision for onerous contracts and the accounting for the sustainability-linked loan.

In respect of the existing accounting estimates (i.e. impairment of non-financial assets and useful lives and residual values of assets), the auditor should understand whether management has assessed the appropriateness of methods, assumptions and data as a result of the impact of the Singapore Green Plan 2030 to the Group's business model. This provides the basis for the identification and assessment of ROMM. For example, if management continues to prepare the VIU analysis as in the past without due consideration of the impact of the Singapore Green Plan 2030, this could result in an increase in the assessed inherent risk as it might not fully capture the different possible scenarios discussed in the section above.

The auditor also considers the degree to which accounting estimates are subject to estimation uncertainty, complexity and subjectivity when identifying and assessing the ROMM. The following examples might result in an increase in the assessed inherent risk for ROMM:

(1) Impairment of non-financial assets	<ul> <li>The uncertainties of the timing of completion of the business plan, discount rates and change in cost base as a result of pivoting to cleaner energy might result in a higher degree of subjectivity and estimation uncertainty.</li> <li>Potential change of approach in determining VIU to expected cash flow approach (which could require specialised skills or the use of external experts) might result in a higher degree of complexity.</li> <li>Potential change in sales forecast depends on the extent that the Group would be able to pass on the cost increases to its customers. This makes it more challenging to make accurate forecasts and might result in a higher degree of subjectivity and estimation uncertainty.</li> </ul>
(2) Useful lives and residual values of assets	The uncertainty of the timing of completion of the business plan could make it more challenging to estimate the useful lives of assets that would be phased out and this might result in a higher degree of subjectivity and estimation uncertainty.
(3) Provision for onerous contracts	The uncertainty in estimating the economic benefits and unavoidable costs in relation to the outsourcing contracts might affect the assessment of the existence of onerous contracts and the measurement of any required provision.
(4) Sustainability- linked loan	<ul> <li>The higher degree of complexity in accounting and judgement involved in assessing the terms for such loans might result in a higher risk of misstatement.</li> <li>Specific sustainability-linked targets might result in difficulty in assessing compliance with loan covenants, as compared to conventional loans.</li> </ul>
(5) Critical accounting estimates, judgements and assumptions	The risk of disclosures being inadequate might increase.

In the event that the actions plans are not successful, the auditor would have to consider how liquidity and going concern of the group would be affected.

#### (B) Responding to assessed ROMM

The auditor would need to develop appropriate audit responses to address those assessed ROMM. Possible responses to the assessed ROMM include but are not limited to the following:

(1) Impairment of non-financial assets	<ul> <li>Assess the appropriateness of the approach used in determining the VIU (single scenario vs expected cash flow approach).</li> <li>Assess the Group's intent and ability to carry out the approved business plan.</li> <li>Assess whether the cash flow projection is consistent with the approved business plan and budget and whether it has accounted for the shortened useful lives and the impacted residual values of ICE vehicles, machinery and equipment.</li> <li>Challenge the assumptions underlying the cash flow projection (e.g. revenue growth rate, forecasted future operating costs, budgeted EBITDA growth rate, probabilities of different scenarios).</li> <li>Assess whether the calculation of recoverable amount has incorporated the impact arising from different transition timings.</li> <li>Challenge the calculation of discount rate and consider whether it has incorporated the impact arising from exposure to climaterelated risks.</li> <li>Remain alert to indicators of possible management bias and fraud risk indicators given the increased degree of subjectivity in the selection of assumptions.</li> <li>Evaluate management's analyses (e.g. scenario analysis, stress tests, break-even analysis) as necessary. As part of the auditor's evaluation of management's assessment, the auditor may also perform independent stress-testing. Challenge the reliability of data used in the analyses, with consideration that using historical data alone may not be adequate and management's ability to project for longer periods.</li> <li>Where required, engage a specialist to support the audit.</li> </ul>
(2) Useful lives and residual values of assets	<ul> <li>Assess the reasonableness of reduced useful lives in relation to the expected completion of the business plan.</li> <li>Assess the relevance and reliability of the data used to support residual values, including whether it includes effects of regulatory changes.</li> <li>Remain alert to indicators of possible management bias and fraud risk indicators given the increased degree of subjectivity in the selection of assumptions.</li> </ul>
(3) Provision for onerous contracts	<ul> <li>Assess the reasonableness of estimates of economic benefits and unavoidable costs in relation to outsourcing contracts, including whether the inputs are supportable. For example, checking penalty clauses in outsourcing contracts or documentation of negotiations with the supplier concerning penalties.</li> </ul>

(4) Sustainability- linked loan	<ul> <li>Assess management's classification of such loans, paying attention to the sustainability-linked features.</li> <li>Understand management's process in measuring the sustainability-linked targets and how this is reported to the loan provider, and assess the compliance with loan covenants.</li> </ul>
(5) Critical accounting estimates, judgements and assumptions	<ul> <li>Assess the completeness and adequacy of disclosures, especially those concerning areas of high estimation uncertainty and significant judgment.</li> </ul>

### **Appendix: Accounting and Auditing Considerations**

#### **Accounting Considerations**

Requirements of Singapore Financial Reporting Standards (International) ("SFRS(I))") / Financial Reporting Standards ("FRS") **Potential Impact on Financial Statements** 

#### Impairment of non-financial assets:

SFRS(I) 1-36 Impairment of Assets / FRS 36 Impairment of Assets

#### Impairment Assessment

An entity shall assess at the end of each reporting period whether there is any indicator that an asset may be impaired. If any such indication exists, the entity shall estimate the recoverable amount of the asset. [SFRS(I) 1-36.9/FRS 36.9]

For goodwill and intangible assets with indefinite useful lives or not yet available for use, an annual impairment assessment is required, even if there are no indicators of impairment. [SFRS(I) 1-36.10/FRS 36.10]

In assessing whether there is any indication that an asset may be impaired, an entity shall consider, as a minimum, the indications as listed in SFRS(I) 1-36/FRS 36 paragraph 12.

Questions for management to consider



- Do the changes to the entity and its environment potentially affect the entity's business models?
- How are potential changes in customer demand preferences, such as the desire for more sustainable products, expected to impact the demand for the company's current product portfolio? Have such demand considerations been factored into the underlying assumptions in the company's asset valuation models?
- Have the company's estimated future cash flows properly considered the risks related to transitioning to a low-carbon economy or risks associated with developing a new manufacturing process or lower-emission alternative products?
- Has the model been appropriately changed or adjusted on a timely basis for changes in market or other conditions? Arising from the rapid developments in

The impact of climate change could be considered as an indicator of impairment, being a significant change with adverse effects on entities in the technological, market, economic or legal environment in which they operate, if such change has already taken place or may take place in the future. In addition, notable decline in the demand or sale prices of products perceived to contribute to climate change could be another impairment indicator as this might suggest that the asset or cash-generating unit, such as a manufacturing facility, has declined in value more significantly than would be expected from the passage of time or normal use. Assets may become impaired in areas vulnerable to physical risk.

Regulatory actions taken by governments in various jurisdictions to combat climate change and commitments to net zero emissions by 2050 consistent with the Paris Agreement may affect stakeholders' perspectives on the way entities operate, leading to possible indicators of impairment.

Furthermore, entities operating in carbon intensive industries may face higher interest rates, or their investors may be expecting a higher rate of return in compensation of higher investment risk for these industries impacting climate change. This could be an indicator of impairment, as the discount rate used in the computation of assets' or CGUs' value-in-use may decrease recoverable amounts materially.

In the event of the presence of impairment indicators, impairment tests would have to be performed where the recoverable amounts of assets or CGUs are to be determined and compared with their carrying amounts.

#### **Potential Impact on Financial Statements**

#### Impairment of non-financial assets:

#### SFRS(I) 1-36 Impairment of Assets / FRS 36 Impairment of Assets

climate change, previously used models by management may no longer be appropriate.

#### Cash Flow Projections

Recoverable amount is defined as the higher of an asset's or cash-generating unit's fair value less costs of disposal and its value-in-use (VIU). [SFRS(I) 1-36.18/FRS 36.18]

The following elements shall be reflected in the calculation of an asset's VIU:

- (a) an estimate of the future cash flows the entity expects to derive from the asset;
- (b) expectations about possible variations in the amount or timing of those future cash flows;
- (c) the time value of money, represented by the current market risk-free rate of interest;
- (d) the price for bearing the uncertainty inherent in the asset; and
- (e) other factors, such as illiquidity, that market participants would reflect in pricing the future cash flows the entity expects to derive from the asset.

[SFRS(I) 1-36.30/FRS 36.30]

# a) Use of Reasonable and Supportable Assumptions

In measuring value-in-use, an entity shall base cash flow projections on reasonable and supportable assumptions that represent management's best estimate of the range of economic conditions that will exist over the remaining useful life of the asset, with greater weight given to external evidence. [SFRS(I) 1-36.33(a)/FRS 36.33(a)]

#### b) Forecast Period and Terminal Value

In VIU computations, cash flow projections based on most recent financial budgets/forecasts approved by management (excluding any estimated future cash inflows or outflows expected to arise from future restructurings or from improving or enhancing the asset's performance) shall cover a maximum period of five years, unless a longer period can be justified. [SFRS(I) 1-36.33(b)/FRS 36.33]

The more commonly used technique for the projection of cash flows is the discounted cash flow (DCF) method. When using DCF method, entities are required to consider the future cash flows and variation in both amounts and timings of these cash flows, taking into consideration management's best estimates of the economic conditions that will exist over the remaining life of the asset or CGU.

For example, entities would need to monitor and consider developments in climate-related laws and regulations, which could change rapidly and vary across different jurisdictions in their cash flow projections. This could be an area where significant management judgment is to be exercised given uncertainties about the possible impact of climate change.

#### Forecast Period

Generally, entities may extrapolate their longterm cash flow projections (i.e. those beyond five years) using short-term projections. Considering that climate change may impact cash flows in the short-term and long-term differently, management should consider extending the forecast period beyond five years or even for the entire useful life of the asset or CGU. Alternatively, the impact of climate change may be incorporated into the terminal value of the asset or CGU. This will require careful consideration and exercise of significant judgment by management in their estimation of the impact of climate change in their future cashflows or terminal value.

#### **Terminal Value**

Terminal value, being an indicator of the value of the asset or CGU beyond the forecast period, may likely be impacted by climate change-related effects. In the computation of terminal value, the final year of cash flow projections is usually used to extrapolate future cash flows beyond forecast period. Therefore, these cash flows would be expected to be sustainable or at

**Potential Impact on Financial Statements** 

Impairment of non-financial assets:

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In addition, an entity shall estimate cash flow projections beyond the period covered by the most recent budgets/forecasts by extrapolating the projections based on the budgets/forecasts using a steady or declining growth rate for subsequent years, unless an increasing rate can be justified. This growth rate shall not exceed the long-term average growth rate for the products, industries, or country or countries in which the entity operates, or for the market in which the asset is used, unless a higher rate can be justified. [SFRS(I) 1-36.33(c)/FRS 36.33(c)]

#### c) Inclusion of Capital Expenditures

Future cash inflows or outflows expected to arise from future restructuring or from improving or enhancing the asset's performance shall be excluded from cash flow projections for the computation of VIU of the asset [SFRS(I) 1-36.33(b)/FRS 36.33(b)]. In addition, future cash flows shall be estimated for the asset in its current condition [SFRS(I) 1-36.44/FRS 36.44].

# d) Use of Expected Cash Flow Approach for Multiple Scenarios

SFRS(I) 1-36/FRS 36 Appendix A compares the two approaches to computing present value, which may be used to estimate the value-in-use of an asset, depending on the Under the 'traditional' circumstances. approach, adjustments for (b)-(e)described in paragraph 30 are embedded in the discount rate. Under the 'expected cash flow' approach, (b), (d) and (e) will require adjustments to be made in arriving at riskadjusted expected cash flows. Whichever approach an entity adopts to reflect expectations about possible variations in the amount or timing of future cash flows, the result should be to reflect the expected present value of the future cash flows, ie the weighted average of all possible outcomes. [SFRS(I) 1-36.A2/FRS 36.A2]

Under the expected cash flow approach, an entity is required to use all expectations about

least appropriate for use with a steady or declining growth rate for the estimation of cash flows for subsequent years.

Entities would usually assume positive long-term growth rates at the rate of long-term inflation. However, this may not be the case for entities that are more susceptible to climate-related risks if they are not able to adapt their businesses. These entities may need to adjust their long-term growth rate downwards or even consider having negative growth rates. This would require significant judgement to be exercised by management in consideration of any external data for their estimation of the impact of climate-related changes on the long-term growth rate.

#### Inclusion of Capital Expenditures

Entities may consider some form restructuring or enhancements to be made to their assets where capital expenditure is likely to be required to meet their sustainability targets or reduce their carbon footprints. SFRS(I) 1-36/FRS 36 paragraphs 47 and 48 allow the inclusion of cash outflows arising from such restructuring or enhancements only when management has committed to restructuring or incurs cash outflows for the enhancement/improvements\* of the asset or CGU.

\*Judgement may be required in determining whether the cash outflows for the enhancement / improvement are considered to be maintenance or capital expenditure.

On the contrary, fair value is a market-based measurement using the assumptions that market participants would use when pricing the asset, assuming that they act in their economic best interest [SFRS(I) 13.2, 22/FRS 113.2, 22]. Therefore, if these capital expenditures are consistent with the market participant perspective, they may be considered in the computation of fair value less costs of disposal.

#### **Potential Impact on Financial Statements**

#### Impairment of non-financial assets:

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possible cash flows instead of the single most likely cash flow. Therefore, the expected cash flow approach differs from the traditional approach by focusing on direct analysis of the cash flows in question and on more explicit statements of the assumptions used in the measurement. It also allows use of present value techniques when the timing of cash flows is uncertain. The use of probabilities is an essential element of the expected cash flow approach.

[SFRS(I) 1-36.A7, A8/FRS 36.A7, A8]

#### **Expected Cash Flow Method**

When there are significant uncertainties and judgement is required for the estimation of future cash flows, entities might consider using the expected cashflow method. Considering how climate change-related effects may impact entities in varying ways, it may be more appropriate to adopt the expected cash flow approach, based on probability-weighted scenarios for the estimation of cash flow projections. Under this approach, entities may determine different values for each scenario in accordance with the assumptions made for that particular scenario. In addition, adjustments to discount rates could be made to address general uncertainties and risks that are not included in the cash flows. This approach might be more relevant to industries or entities that are more impacted by climate-related risks.

#### **Disclosures**

An entity shall disclose the following for an individual asset (including goodwill) or a cashgenerating unit, for which an impairment loss has been recognised or reversed during the period:

- (a) the events and circumstances that led to the recognition or reversal of the impairment loss.
- (b) the amount of the impairment loss recognised or reversed.
- (c) for an individual asset:
  - the nature of the asset; and
  - (ii) if the entity reports segment information in accordance with SFRS(I) 8 / FRS 108, the reportable segment to which the asset belongs.
- (d) for a cash-generating unit:
  - (i) a description of the cashgenerating unit (such as whether it is a product line, a plant, a business operation, a geographical area, or a reportable segment as defined in SFRS(I) 8 / FRS 108);
  - (ii) the amount of the impairment loss recognised or reversed by class of

If material, disclosure of the effects of climate change, plans to achieve climate-related targets have been incorporated into cash flows projections in the computation of the recoverable amounts of the assets or CGUs would be required.

**Potential Impact on Financial Statements** 

Impairment of non-financial assets:

SFRS(I) 1-36 Impairment of Assets / FRS 36 Impairment of Assets

- assets and, if the entity reports segment information in accordance with SFRS(I) 8 / FRS 108, by reportable segment; and
- (iii) if the aggregation of assets for identifying the cash-generating unit has changed since the previous estimate of the cashgenerating unit's recoverable amount (if any), a description of the current and former wav aggregating and assets the reasons for changing the way the cash-generating unit is identified.
- (e) the recoverable amount of the asset (cash-generating unit) and whether the recoverable amount of the asset (cashgenerating unit) is its fair value less costs of disposal or its value-in-use.
- (f) if the recoverable amount is fair value less costs of disposal, the entity shall disclose the following information:
  - (i) the level of the fair value hierarchy (see SFRS(I) 13 / FRS 113) within which the fair value measurement of the asset (cash-generating unit) is categorised in its entirety (without taking into account whether the 'costs of disposal' are observable);
  - (ii) for fair value measurements categorised within Level 2 and Level 3 of the fair value hierarchy, a description of the valuation technique(s) used to measure fair value less costs of disposal. If there has been a change in valuation technique, the entity shall disclose that change and the reason(s) for making it; and
  - (iii) for fair value measurements categorised within Level 2 and Level 3 of the fair value hierarchy. each key assumption on which management has based its determination of fair value less of disposal. Kev assumptions are those to which the asset's (cash-generating

**Potential Impact on Financial Statements** 

Impairment of non-financial assets:

#### SFRS(I) 1-36 Impairment of Assets / FRS 36 Impairment of Assets

unit's) recoverable amount is most sensitive. The entity shall also disclose the discount rate(s) used in the current measurement and previous measurement if fair value less costs of disposal is measured using a present value technique.

(g) if recoverable amount is value-in-use, the discount rate(s) used in the current estimate and previous estimate (if any) of value-in-use.

[SFRS(I) 1-36.130/FRS 36.130]

encouraged to disclose An entity is assumptions used to determine the recoverable amount of assets (cashgenerating units) during the period. However, paragraph 134 requires an entity to disclose information about the estimates used to measure the recoverable amount of a cashgenerating unit when goodwill or an intangible asset with an indefinite useful life is included in the carrying amount of that unit. [SFRS(I) 1-36.132/FRS 36.132]

#### **Potential Impact on Financial Statements**

#### **Provisions and Contingent Liabilities:**

SFRS(I) 1-37 Provisions, Contingent Liabilities and Contingent Assets / FRS 37 Provisions, Contingent Liabilities and Contingent Assets

A provision shall be recognised when:

- (a) an entity has a present obligation (legal or constructive) as a result of a past event;
- (b) it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation; and
- (c) a reliable estimate can be made of the amount of the obligation.

If these conditions are not met, no provision shall be recognised.

[SFRS(I) 1-37.14/FRS 37.14]

Instead, an entity may disclose contingent liability unless the possibility of an outflow of resources embodying economic benefits is remote. Contingent liabilities are not recognised as liabilities on the balance sheet, but disclosures would be required to be made in the financial statements.

[SFRS(I) 1-37.23, 86/FRS 37.23, 86]

#### Questions for management to consider



- Is the entity or those in its supply chain subjected to any form of climate-related laws and regulations? What are the potential implications from a financial reporting perspective?
- What current and future regulations may impact the entity (e.g., greenhouse gas emission regulations, potential increases in taxes on current products, future climatereporting obligations)? What is the expected timeline for when such regulations might take effect?
- What are the potential financial consequences of identified or suspected noncompliance with laws and regulations on the financial statements including, for example, the imposition of fines, penalties, damages, threat of expropriation of assets, enforced discontinuation of operations, and litigation?

Abandonment and Decommissioning Obligations

Climate change and related legislation may bring about changes in existing provisions for abandonment and decommissioning obligations or even new provisions required for retirement of carbon-intensive assets. The amounts and timings of the expected cash flows for abandoning and decommissioning such assets may be affected when there is new legislation enacted by the regulator on climate-related matters. This will require entities to review their provisions which may result in new provisions being made or existing provisions being revised.

#### **Potential Impact on Financial Statements**

#### **Provisions and Contingent Liabilities:**

SFRS(I) 1-37 Provisions, Contingent Liabilities and Contingent Assets / FRS 37 Provisions, Contingent Liabilities and Contingent Assets

#### **Onerous Contracts**

Provisions shall not be recognised for future operating losses [SFRS(I) 1-37.63/FRS 37.63]. However, a provision is required for the present obligation under an onerous contract [SFRS(I) 1-37.66/FRS 37.66].

An onerous contract is defined as a contract in which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received under it. The unavoidable costs under a contract reflect the least net cost of exiting from the contract, which is the lower of the cost of fulfilling it and any compensation or penalties arising from failure to fulfil it. [SFRS(I) 1-37.68/FRS 37.68]

Climate change-related effects may bring about increased costs due to the need to use more environmentally friendly materials in the manufacturing process. This may result in previously profitable contracts becoming loss making. If such contracts are determined to be onerous, provisions are based on the best estimate of the expenditure that the entity would rationally pay to settle the obligation at the end of the reporting period or to transfer it to a third party at that time.

#### Restructuring Obligations

A constructive obligation to restructure arises only when an entity:

- (a) has a detailed formal plan for the restructuring identifying at least:
  - (i) the business or part of a business concerned;
  - (ii) the principal locations affected;
  - (iii) the location, function, and approximate number of employees who will be compensated for terminating their services:
  - (iv) the expenditures that will be undertaken; and
  - (v) when the plan will be implemented; and
- (b) has raised a valid expectation in those affected that it will carry out the restructuring by starting to implement that plan or announcing its main features to those affected by it.

[SFRS(I) 1-37.72/FRS 37.72]

A restructuring provision shall include only the direct expenditures arising from the restructuring, which are those that are both:

- (a) necessarily entailed by the restructuring; and
- (b) not associated with the ongoing activities of the entity.

Entities may restructure their businesses or even close down certain operations due to climate-related effects. For example, if an entity decides to shut down its coal plant in order to meet certain ESG targets, the entity is required to at least announce the main features of its plan to those affected by the closure (e.g. the employees) including the specific plant with an estimated time of closure and the approximate number of employees being made redundant from the closure to recognise a restructuring provision. Having the approval of the restructuring plan by the entity's Board by itself may not suffice for the recognition of a provision.

A restructuring provision should only comprise direct costs arising from the restructuring, such as penalties or costs for the termination of employment contracts and other contracts, onerous contract provisions etc. Costs associated with the ongoing activities of the entity are not included in this provision.

Entities are required to review their restructuring provisions at the end of each reporting period to reflect changes in their best estimates of the outflows or discount rates.

**Potential Impact on Financial Statements** 

#### **Provisions and Contingent Liabilities:**

SFRS(I) 1-37 Provisions, Contingent Liabilities and Contingent Assets / FRS 37 Provisions, Contingent Liabilities and Contingent Assets

[SFRS(I) 1-37.80/FRS 37.80]

Provisions shall be reviewed at the end of each reporting period and adjusted to reflect the current best estimate. If it is no longer probable that an outflow of resources embodying economic benefits will be required to settle the obligation, the provision shall be reversed. [SFRS(I) 1-37.59/FRS 37.59]

Entities may make pub

#### Constructive Obligations

It is only those obligations arising from past events existing independently of an entity's future actions (ie the future conduct of its business) that are recognised as provisions. [SFRS(I) 1-37.19/FRS 37.19]

Entities may make public commitments or statements which create constructive obligations such that new provisions are required or existing provisions should be revised. For example, early retirement of carbon-intensive assets pursuant the entity's public commitment to transit to cleaner energy alternatives may result the need to provide for decommissioning. Entities should note that such provisions can only be made for obligations arising from their past events which exist independently from their future actions.

#### New Legislation relating to climate change

The effect of possible new legislation is taken into consideration in measuring an existing obligation when sufficient objective evidence exists that the legislation is virtually certain to be enacted.

[SFRS(I) 1-37.50/FRS 37.50]

When there is new legislation or changes to the legislation due to climate change, entities are required to consider the effect of legislation (i.e. that is enacted or virtually certain to be enacted as drafted) on their existing obligations and the creation of new obligations. However, proposed legislation that is not enacted or not virtually certain to be enacted may not create a present obligation but may require disclosures in the financial statements.

#### Disclosures

An entity shall disclose the following for each class of provision:

- (a) a brief description of the nature of the obligation and the expected timing of any resulting outflows of economic benefits;
- (b) an indication of the uncertainties about the amount or timing of those outflows. Where necessary to provide adequate information, an entity shall disclose the major

Entities should provide adequate disclosures for users of financial statements to understand how climate change-related effects affected their obligations, new/revised provisions and contingent liabilities. Disclosures should be consistent with those reported elsewhere, for example, the sustainability report (where applicable).

**Potential Impact on Financial Statements** 

#### **Provisions and Contingent Liabilities:**

SFRS(I) 1-37 Provisions, Contingent Liabilities and Contingent Assets / FRS 37 Provisions, Contingent Liabilities and Contingent Assets

- assumptions made concerning future events, as addressed in paragraph 48; and
- (c) the amount of any expected reimbursement, stating the amount of any asset that has been recognised for that expected reimbursement.

[SFRS(I) 1-37.85/FRS 37.85]

An entity shall disclose information about the assumptions it makes about the future, and other major sources of estimation uncertainty at the end of the reporting period, that have a significant risk of resulting in a material adjustment to the carrying amounts of assets and liabilities within the next financial year. In respect of those assets and liabilities, the notes shall include details of:

- (a) their nature, and
- (b) their carrying amount as at the end of the reporting period.

[SFRS(I) 1-1.125/FRS 1.125]

Financial Potential Impact on Financial Statements

Disclosures about Assumptions & Estimates, Judgements and Going Concern Assessment:

SFRS(I) 1-1 Presentation of Financial Statements /

FRS 1 Presentation of Financial Statements

The objective of financial statements is to provide information about the financial position, financial performance and cash flows of an entity that is useful to a wide range of users in making economic decisions. This information will assist users of financial statements in predicting the entity's future cash flows and, in particular, their timing and certainty.

[SFRS(I) 1-1.9/FRS 1.9]

Material information is defined as the omission, misstatement or obscurement of such information could reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements, which provide financial information about a specific reporting entity.

[SFRS(I) 1-1.7/FRS 1.7]

The notes shall:

- (a) present information about the basis of preparation of the financial statements and the specific accounting policies used in accordance with paragraphs 117–124;
- (b) disclose the information required by SFRS(I)s that is not presented elsewhere in the financial statements; and
- (c) provide information that is not presented elsewhere in the financial statements, but is relevant to an understanding of any of them.

[SFRS(I) 1-1.112/FRS 1.112]

## Questions for management to consider

....

 Have material disclosures necessary for users of the financial statements to understand the financial position, financial performance or cash flows of the entity been omitted? Will the omission of such disclosures influence the economic decisions of users of the financial statements? Amid the push for sustainability, stakeholders increasingly seek to better understand the implications of climate-related risks as part of their economic decision-making. Management may need to consider this when determining materiality in the context of qualitative disclosures that are important to users of the financial statements.

Financial Potential Impact on Financial Statements

Disclosures about Assumptions & Estimates, Judgements and Going Concern Assessment:

SFRS(I) 1-1 Presentation of Financial Statements /

#### FRS 1 Presentation of Financial Statements

- Does management have the relevant skills or knowledge to understand the characteristics of the particular method or model to make accounting estimates, or the risks related to the accounting estimate, for example, risks related to the method or information technology used in making the accounting estimates?
- Is the subject matter that requires management estimate of a specialised nature? For example, an accounting estimate may involve measurement of mineral or hydrocarbon reserves in extractive industries or the evaluation of the likely outcome of applying complex contractual terms.
- Are disclosures adequate concerning Level 3 inputs such as changes in unobservable inputs including assumptions about climaterelated risk?

#### Assumptions & Estimates and Judgements

An entity shall disclose information about the assumptions it makes about the future, and other major sources of estimation uncertainty at the end of the reporting period, that have a significant risk of resulting in a material adjustment to the carrying amounts of assets and liabilities within the next financial year. In respect of those assets and liabilities, the notes shall include details of:

- (a) their nature, and
- (b) their carrying amount as at the end of the reporting period.

[SFRS(I) 1-1.125/FRS 1.125]

An entity presents the disclosures in paragraph 125 in a manner that helps users of financial statements to understand the judgements that management makes about the future and about other sources of estimation uncertainty. The nature and extent of the information provided vary according to the nature of the assumption and other circumstances. Examples of the types of disclosures an entity makes are:

(a) the nature of the assumption or other estimation uncertainty;

Climate change-related changes may affect assumptions used in estimates and require exercise of management judgement when considering the impact to financial statements.

In scenarios where there are uncertainties concerning climate-related change and its effects, entities are required to disclose the assumptions in their estimation of the carrying amount of assets and liabilities if there is a significant risk of material adjustment within the next financial year. Explanations may also be required for changes made to past assumptions. In addition, entities may consider disclosures of climate-related areas of judgment exercised in making these assumptions.

The assessment of the impact of climaterelated risks may involve the exercise of management judgments specifically on the uncertainties surrounding future technological developments or regulatory actions. This may require consideration of many scenarios involving different possible outcomes. Therefore, it may be appropriate to perform

Financial | Potential Impact on Financial Statements

Disclosures about Assumptions & Estimates, Judgements and Going Concern Assessment:

SFRS(I) 1-1 Presentation of Financial Statements /

#### FRS 1 Presentation of Financial Statements

- (b) the sensitivity of carrying amounts to the methods, assumptions and estimates underlying their calculation, including the reasons for the sensitivity;
- (c) the expected resolution of an uncertainty and the range of reasonably possible outcomes within the next financial year in respect of the carrying amounts of the assets and liabilities affected; and
- (d) an explanation of changes made to past assumptions concerning those assets and liabilities, if the uncertainty remains unresolved.

[SFRS(I) 1-1.129/FRS 1.129]

sensitivity analyses for these scenarios with explanations of these uncertainties.

The assumptions used in this assessment for financial reporting purposes should be consistent with those disclosed elsewhere or within other reports, such as sustainability reports or management discussion and analysis.

#### Going Concern Assessment

When preparing financial statements. management shall make an assessment of an entity's ability to continue as a going concern. An entity shall prepare financial statements on a going concern basis unless management either intends to liquidate the entity or to cease trading, or has no realistic alternative but to do so. When management is aware, in making its assessment, of material uncertainties related to events or conditions that may cast significant doubt upon the entity's ability to continue as a going concern, the entity shall disclose those uncertainties. When an entity does not prepare financial statements on a going concern basis, it shall disclose that fact, together with the basis on which it prepared the financial statements and the reason why the entity is not regarded as a going concern.

[SFRS(I) 1-1.25/FRS 1.25]

In assessing whether the going concern assumption is appropriate, management takes into account all available information about the future, which is at least, but is not limited to, twelve months from the end of the reporting period.

[SFRS(I) 1-1.26/FRS 1.26]

Climate-related risks may affect entities' going concern assessment, or in certain situations, the going concern assumption is no longer appropriate. especially when future profitability or financing ability may be affected adversely. Hence, material uncertainties related to climate change which cast significant doubt upon going concern are required to be considered and disclosed in the financial statements. In addition, entities are required to consider uncertainties beyond 12 months from the end of the reporting period which may affect their abilities to continue as going concern. Cash flow projections may need to be updated and re-assessed before authorising the financial statements for issuance.

#### For information:

#### Loans with Sustainability-linked Features (Sustainability-linked Loans)

Sustainability-linked loans are usually debt instruments with contractual cash flows (interest) that vary, depending on whether the borrower meets or fails to meet certain specified ESG targets or metrics (sustainability-linked features). For example, sustainability-linked features may relate to:

- compliance with carbon emissions targets or requirements;
- · energy efficiency metrics;
- energy consumption standards relating to the asset being financed; or
- a sustainability index.

For instance, an entity has a 10-year term loan with a contractual interest rate of 3% per annum. The terms of the loan contract are that the interest rate will be reduced to 2% per annum if the entity meets a target of reducing its carbon emissions by 1%. Conversely, the interest rate will increase to 4% per annum if the target is not met.

#### Requirements of Singapore Financial Reporting Standards (International) ("SFRS(I))")/Financial Reporting Standards ("FRS")

#### **Potential Impact on Financial Statements**

#### **Sustainability-linked Loans:**

#### SFRS(I) 9 Financial Instruments / FRS 109 Financial Instruments

#### Lender's Accounting

An entity shall classify a financial asset based on its contractual cash flow characteristics if the financial asset is held within a business model whose objective is to hold assets to collect contractual cash flows or within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets, unless paragraph 4.1.5 applies.

[SFRS(I) 9.4.1.1(b)/FRS 109.4.1.1(b)]

To do so, an entity is required to determine whether the asset's contractual cash flows are solely payments of principal and interest (SPPI) on the principal amount outstanding.

[SFRS(I) 9.4.1.2(b) and 4.1.2A(b)/FRS 109.4.1.2(b) and 4.1.2A(b)]

Contractual cash flows that are SPPI on the principal amount outstanding are consistent with a basic lending arrangement. In a basic lending arrangement, consideration for the time value of money and credit risk are typically the most significant elements of interest [SFRS(I) 9.B4.1.7A/FRS 109.B4.1.7A].

Lenders need to assess whether the sustainability-linked loans meet the SPPI test and thus, subject to the business model assessment, may be measured at amortised cost (AC) or fair value through other comprehensive income (FVOCI). If not, these loans would be measured at fair value through profit or loss (FVTPL).

The following are some considerations for the assessment of whether a sustainabilitylinked loan is SPPI compliant:

#### Purpose or intended use of the sustainability-linked loan

If a sustainability-linked loan is to finance an asset where the cash flows from the asset is affected by the sustainability-linked features, this loan may be SPPI compliant as the ability to repay the loan is affected by the cash flows from the asset and the value of this collateral will be affected by these sustainability-linked features as well. The adjustment in this case represents consideration for changes in credit risk of the loan.

#### Type of business

A sustainability-linked loan may be SPPI compliant if the borrower's business or operations is more exposed to climate

Potential Impact on Financial Statements

**Sustainability-linked Loans:** 

SFRS(I) 9 Financial Instruments / FRS 109 Financial Instruments

Questions for management to consider

 Are there any financial instruments that have climate-related features which could involve special financial reporting considerations? change-related risks as the ability of the borrower to meet ESG targets will likely have a more favourable impact on business prospects of the borrower and consequently the credit risk of the borrower and the loan credit risk rating.

 Reflective of the changes in probability of default or loss given default

If the potential change in interest rates for a sustainability-linked loan reflect changes in the probability of default or loss given default, the loan may be SPPI compliant.

Timing and amount of interest rate changes

The potential interest rate changes may reflect the changes in credit risk, and thus be consistent with SPPI. However, if there is leverage, this may not be SPPI compliant.

De minimis or non-genuine clauses

SFRS(I) 9 paragraph B4.1.18 (FRS 109 paragraph B4.1.18) states that a contractual cash flow characteristic does not affect the classification of the financial asset if it could have only a de minimis effect on the contractual cash flows of the financial asset. An entity is required to consider the possible effect of the contractual cash flow characteristic in each reporting period and cumulatively over the life of the financial instrument. A cash flow characteristic is not genuine if it affects the instrument's contractual cash flows only on the occurrence of an event that is extremely rare, highly abnormal and very unlikely to occur. Hence, the lender is required to consider if the impact of the changes in interest rates of the sustainability-linked loan due to these sustainability-linked features is de minimus or non-genuine.

Potential Impact on Financial Statements

**Sustainability-linked Loans:** 

SFRS(I) 9 Financial Instruments / FRS 109 Financial Instruments

Borrower's Accounting

#### a) Embedded Derivatives

An embedded derivative is a component of a hybrid contract that also includes a nonderivative host - with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative. An embedded derivative causes some or all of the cash flows that otherwise would be required by the contract to be modified according to a specified interest rate, financial instrument price, commodity price, foreign exchange rate, index of prices or rates, credit rating or credit index, or other variable, provided in the case of a nonfinancial variable that the variable is not specific to a party to the contract. A derivative that is attached to a financial instrument but is contractually transferable independently of that instrument, or has a different counterparty, is not an embedded derivative, but a separate financial instrument.

[SFRS(I) 9.4.3.1/FRS 109.4.3.1]

SFRS(I) 9 Appendix A defines a derivative as a financial instrument or other contract with all three of the following characteristics:

- (a) its value changes in response to the change in a specified interest rate, financial instrument price, commodity price, foreign exchange rate, index of prices or rates, credit rating or credit index, or other variable, provided in the case of a non-financial variable that the variable is not specific to a party to the contract (sometimes called the 'underlying').
- (b) it requires no initial net investment or an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar response to changes in market factors.
- (c) it is settled at a future date.

If a hybrid contract contains a host that is not an asset within the scope of this Standard, an embedded derivative shall be separated from the host and accounted for as a derivative under this Standard if, and only if:

#### a) Embedded Derivatives

Sustainability-linked loans may be hybrid contracts i.e. embedded derivative(s) within a host debt instrument. Borrowers need to assess if the sustainability-linked features of sustainability-linked loans meet the definition of a derivative.

To meet the definition of a derivative, the value of the sustainability-linked features must vary in response to an underlying that is not a non-financial variable that is specific to a party to the contract. For example, if the sustainability-linked feature relates to the borrower's specific carbon emissions or compliance with emissions standard, the underlying is a non-financial variable that is specific to the borrower and hence, is likely not a derivative. On the other hand, if the sustainability-linked feature refers to a carbon credit index that is a financial variable not specific to the borrower, this may meet the definition of a derivative if the other characteristics of the derivative exist as well.

If there is an embedded derivative, the borrower needs to consider it should be accounted for separately under SFRS(I) 9 paragraph 4.3.3 (FRS 109 paragraph 4.3.3). If the underlying is not specific to the borrower, the economic characteristics and risks of the feature would not be expected to be closely related to the economic characteristics and risk of the host contract. Therefore, the embedded derivative would be accounted for separately if all other conditions under paragraph 4.3.3 are met.

#### b) Changes in Contractual Cash Flows

If the sustainability-related feature is not a derivative, it is not accounted for separately. However, if the loan is measured at amortised cost expected cash flows need to be determined. When changes in the expected cash flows reflect market interest rates movements, application of paragraph B5.4.5 would often have no significant effect

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- (a) the economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the host (see paragraphs B4.3.5 and B4.3.8);
- (b) a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and
- (c) the hybrid contract is not measured at fair value with changes in fair value recognised in profit or loss (ie a derivative that is embedded in a financial liability at fair value through profit or loss is not separated).

[SFRS(I) 9.4.3.3/FRS 109.4.3.3]

#### b) Changes in Contractual Cash Flows

For floating-rate financial assets and floating-rate financial liabilities, periodic re-estimation of cash flows to reflect the movements in the market rates of interest alters the effective interest rate.

[SFRS(I) 9.B5.4.5/FRS 109.B5.4.5]

If an entity revises its estimates of payments or receipts (excluding modifications in accordance with paragraph 5.4.3 and changes in estimates of expected credit losses), it shall adjust the gross carrying amount of the financial asset or amortised cost of a financial liability (or group of financial instruments) to reflect actual and revised estimated contractual cash flows. The entity recalculates the gross carrying amount of the financial asset or amortised cost of the financial liability as the present value of the estimated future contractual cash flows that are discounted at the financial instrument's original effective interest rate (or credit-adjusted effective interest rate for purchased or originated creditimpaired financial assets) or, when applicable, the revised effective interest rate calculated in accordance with paragraph 6.5.10. adjustment is recognised in profit or loss as income or expense.

[SFRS(I) 9.B5.4.6/FRS 109.B5.4.6]

#### Expected Credit Losses (ECL)

An entity shall measure expected credit losses of a financial instrument in a way that reflects:

on the carrying amount of the sustainabilitylinked loan and any changes in interest rates would be recognised as and when they occur.

Where the changes in cashflows arising from the sustainability-linked feature does not reflect market interest rate movements, the borrower will need to recalculate the gross carrying amount as the present value of the estimated future contractual cash flows that are discounted at the financial instrument's original effective interest Any rate. recognised adjustment should be immediately in profit or loss.

Climate-related risks may affect lenders' exposure to credit losses for their financial assets. Assumptions used in estimations of ECL may need to be reviewed. Borrowers may be impacted by both physical and

**Potential Impact on Financial Statements** 

#### Sustainability-linked Loans:

#### SFRS(I) 9 Financial Instruments / FRS 109 Financial Instruments

- (a) an unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes;
- (b) the time value of money; and
- (c) reasonable and supportable information that is available without undue cost or effort at the reporting date about past events, current conditions and forecasts of future economic conditions.

[SFRS(I) 9.5.5.17/FRS 109.9.5.5.17]

SFRS(I) 9/FRS 109 paragraph B5.5.17 provides a list of possible information relevant in assessing changes in credit risk.

Historical information is an important anchor or base from which to measure expected credit losses. However, an entity shall adjust historical data, such as credit loss experience, on the basis of current observable data to reflect the effects of the current conditions and its forecasts of future conditions that did not affect the period on which the historical data is based, and to remove the effects of the conditions in the historical period that are not relevant to the future contractual cash flows.

[SFRS(I) 9.B5.5.52/FRS 109.B5.5.52]

transition risks arising from climate change, affecting their creditworthiness. In addition, collateral may decrease in value or become unavailable.

Some accounting considerations when assessing the impact of climate-related risks on the estimations of ECL:

a) Reasonable and Supportable Information

Climate change, being a global event with wide reaching implications, introduces many uncertainties and hence requires significant management judgment in the assessment of the impact. With the current attention given to climate change and focus on net zero emissions, this has created readily available sources of information and analyses on the potential impact of climate change (such as Intergovernmental Panel on Climate Change assessment reports). Hence, it may be possible for climate-related risks to be incorporated considered and estimating ECL by lenders with continuous monitoring. However, one area to note is likely the time horizon of the financial asset when considering the "reasonableness and supportable" information, in particular for financial assets with long tenor.

b) Collective or Individual Assessment Basis

SFRS(I) 9 paragraph B5.5.1 states that in order to meet the objective of recognising lifetime expected credit losses for significant increases in credit risk since initial recognition, it may be necessary to perform the assessment of significant increases in credit risk on a collective basis by considering information that is indicative of significant increases in credit risk on, for example, a group or sub-group of financial instruments. This is to ensure that an entity meets the objective of recognising lifetime expected credit losses when there are significant increases in credit risk, even if evidence of such significant increases in

Potential Impact on Financial Statements

#### **Sustainability-linked Loans:**

#### SFRS(I) 9 Financial Instruments / FRS 109 Financial Instruments

credit risk at the individual instrument level is not yet available.

When the impact of climate risk is not determinable for a specific sector or for individual borrowers, lenders may consider performing a collective assessment to ensure that the risk is appropriately included in their ECL estimation, for example, with overlays or adjustments to ECL models. In addition, lenders may need to review their groupings of assets for the possibility of further disaggregation, in consideration of differing climate-related risks and impact.

c) Multiple economic scenarios (MES):

Even if climate-related risks impacts are not considered likely, but they are still possible, they should be considered under the ECL model.

An entity might need to consider:

- whether climate change and related impacts are appropriately included in scenarios used for ECL; and
- whether more scenarios are needed.

#### **Disclosures**

SFRS(I) 7 Financial Instruments: Disclosures/FRS 107 Financial Instruments: Disclosures paragraph 1(b) requires entities to provide disclosures in their financial statements that enable users to evaluate the nature and extent of risks arising from financial instruments to which the entity is exposed during the period and at the end of the reporting period, and how the entity manages those risks.

The credit risk disclosures made in accordance with SFRS(I) 7/ FRS107 paragraphs 35F–35N shall enable users of financial statements to understand the effect of credit risk on the amount, timing and uncertainty of future cash flows. To achieve this objective, credit risk disclosures shall provide:

Entities may need to reconsider their risk disclosures in terms of risk concentrations and level of detail disclosed for respective types of risks impacted by climate change. The extent of disclosures will be dependent on the entities' exposures to risks arising from financial instruments affected by climate change. For example, if an entity has investments in sectors significantly impacted by climate change, enhanced disclosures on the market risk for these investments may be appropriate. Another aspect for consideration may be in terms of liquidity risk where climate change may result in a reduction or restriction in the access to funding for carbon-intensive sectors or entities.

Entities may be required to disclose significant judgments made by management

Potential Impact on Financial Statements

#### **Sustainability-linked Loans:**

#### SFRS(I) 9 Financial Instruments / FRS 109 Financial Instruments

- (a) information about an entity's credit risk management practices and how they relate to the recognition and measurement of expected credit losses, including the methods, assumptions and information used to measure expected credit losses;
- (b) quantitative and qualitative information that allows users of financial statements to evaluate the amounts in the financial statements arising from expected credit losses, including changes in the amount of expected credit losses and the reasons for those changes; and
- (c) information about an entity's credit risk exposure (ie the credit risk inherent in an entity's financial assets and commitments to extend credit) including significant credit risk concentrations.

[SFRS(I) 9.B5.5.52/FRS109.B5.5.52]

and sources of estimation uncertainties in their assessment of the impact of climate-related risks on ECL. In addition, where applicable, entities should ensure consistency between the information as disclosed in the financial statements and those disclosed elsewhere in the annual report or other reports such as sustainability reports.

#### **Auditing Considerations**

# Requirements of Singapore Standard on Auditing ("SSA")

### Potential Impact on Audits of Financial Statements

Risk assessment and response to assessed risk

SSA 315 (Revised 2021), Identifying and Assessing the Risks of Material Misstatement

The objective of the auditor is to <u>identify and</u> <u>assess the risks of material misstatement</u> (ROMM), whether due to fraud or error, at the financial statement and assertion levels thereby <u>providing a basis for designing and implementing responses to the assessed</u> ROMM. [SSA 315.11]

The auditor is required to perform risk assessment procedures to obtain an understanding of specific aspects of the entity and its environment, including:

- The entity's business model (including its objectives, strategies and business risks that may result in ROMM); and
- Industry, regulatory and other external factors [SSA 315.19]

Thereafter, the auditor shall identify the ROMM and determine if they exist at:

- (a) The financial statement level: or
- (b) The assertion level for classes of transactions, account balances and disclosures.

[SSA 315.28 - 37]

In applying SSA 315 (Revised 2021), the auditor should consider the implications of climate-related risks when obtaining an understanding of the entity and its environment, including but not limited to:

Industry factors. Relevant industry factors include conditions such as the competitive environment, supplier and customer relationships, and technological developments. [SSA 315.A68].

For example, advancements in climate technologies may lead to improved energy efficiency and changes in the expectations or preferences of investors or customers, which could give rise to increased risk of obsolescence or potential going concern issues for entities that do not keep up with such advancements.

 Regulatory factors. Relevant regulatory factors include the regulatory environment, which encompasses, among other matters, the applicable financial reporting framework and the legal and political environment and any changes thereto. [SSA 315.A70]

For example, under the Singapore Green Plan 2030, ICE vehicles will be gradually phased out with new registrations of diesel cars and taxis to cease from 2025 and new vehicles registered from 2030 will be cleaner-energy models.

This may, amongst others, affect entities within the supply chain of ICE vehicles, including manufacturing, maintenance or supplies of materials and those with business models which involve significant ownership of ICE vehicles.

Another area that could affect the auditor's risk assessment is the impact of an entity's decarbonisation plans on the

Requirements of Singapore Standard on Auditing ("SSA")	Potential Impact on Audits of Financial Statements
Additing ( SOA )	financial statements, considering the increase in carbon tax in Singapore, which will increase progressively, from \$5/tonne in 2022 to \$25/tonne in 2024 and 2025 and \$45/tonne in 2026 and 2027, with a view to reach \$50-\$80/tonne by 2030.
	Other external factors. This may include the general economic conditions, interest rates and availability of financing, and inflation or currency revaluation. [SSA 315.A73]
	For instance, the growing traction for responsible investing may lead to increased requirements / expectations by lenders or investors (e.g. new covenants to demonstrate achievement of sustainability targets or for the entity to achieve inclusion on certain climate indexes).
	The entity's business model. Consider how climate-related risks affect the entity's business model that may result in ROMM.
	For example, the auditor might assess the provision for warranty claims as higher risk for an automobile distributor that recently switched to selling electric cars but has no track record of selling this type of cars, due to higher estimation uncertainty.
	When obtaining an understanding of the entity and its environment, the auditor should perform inquiries with relevant personnel and inspect relevant documents (such as board and management meeting minutes and company announcements), which are some sources of information.
	If climate-related risks affect significant classes of transactions, the auditor can perform a walkthrough to understand management's process for identifying and assessing climate-related risks and their impact on the financial statements. The auditor needs to consider whether management's disclosure of climate-related

Requirements of Singapore Standard on Auditing ("SSA")	Potential Impact on Audits of Financial Statements
	risks in financial statements is consistent with that in its sustainability reporting.
	When identifying and assessing ROMM, the auditor should take note that climate-related risks can affect one or more relevant assertions.
SSA 320, Materiality in Planning and Performing an Audit Conforming Amendments to Other SSAs  In the context of an audit, misstatements, including omissions, are considered to be material if they, individually or in the aggregate, could reasonably be expected to influence the economic decisions of	With the growing attention on climate-related risks amongst investors as part of their economic decision-making, the auditor may need to consider this when determining materiality in the context of qualitative disclosures that are important to users of the financial statements.
users taken on the basis of the financial statements. [SSA 320.2]  The auditor's determination of materiality is a matter of professional judgment and is affected by the auditor's perception of the financial information needs of users of the financial statements. [SSA 320.9]	The determination of whether misstatement or omission of disclosures relating to climate-related risks could be material may depend on the nature of the entity. In general, users of financial statements of entities that are in industries that are more affected by climate-related risks (such as those industries highlighted under Section 1(C) General Considerations) would be expected to view climate-related disclosures as important information.
	With reference to the illustrative example under Section 2, given that ESG Group Limited is significantly impacted by climate-related risks, the users of the financial statements of the group would view the climate-related disclosures, especially those surrounding critical accounting estimates, judgment and assumptions, to be important. As such, the omission of such disclosures could be considered to be a material misstatement.
SSA 330, The Auditor's Responses to Assessed Risks  The objective of the auditor is to obtain sufficient appropriate audit evidence regarding the assessed ROMM, through designing and implementing appropriate responses to those risks. [SSA 330.3]	The auditor should consider the types of audit procedures that are most appropriate and responsive to the identified ROMM arising from climate-related risks.  The following are examples of responses to an assessed ROMM arising from climate-related risks:
The auditor is required to design and perform further audit procedures whose nature, timing, and extent are based on and are responsive to the	

assessed ROMM at the assertion level [SSA 330.6].

In addition, SSA 330 requires the auditor to conclude whether sufficient appropriate audit evidence has been obtained. [SSA 330.25 – 27]

### Potential Impact on Audits of Financial Statements

Impairment of non-financial assets

[Refer to page 14 for the accounting considerations under SFRS(I) 1-36 / FRS 36.]

Where indicators of impairment have been identified, the auditor should:

- Perform procedures on the valuation of the related assets to assess if the adjustments to residual value, useful life and depreciation expense of the related assets are appropriate.
- Consider whether the assumptions used in cash flow forecasting, such as discount and growth rates, are still reasonable and supportable having considered the impact of climate-related risks. Where deemed appropriate, the auditor should challenge management's key assumptions and estimates.

#### Adequacy of disclosures

[Refer to page 24 for disclosure considerations in relation to assumptions, estimates, judgments and going concern under SFRS(I) 1/ FRS 1.]

The auditor should assess the adequacy of disclosures, especially where there are significant climate-related events affecting the entity.

Refer to the section on SSA 540 (Revised) for considerations when auditing accounting estimates and related disclosures.

Provisions and contingent liabilities

[Refer to page 20 for the accounting considerations under SFRS(I) 1-37 / FRS 37.]

For heavily regulated industries (such as the oil and gas industry), there could be increased risk of non-compliance with laws and regulations, which could result in a potential risk that provisions are understated or that contingent liability disclosures are

#### Requirements of Singapore Standard on Potential Impact on Audits of Financial **Auditing ("SSA") Statements** omitted. The auditor may consider the need to perform procedures such as: holding discussions with the entity's inhouse legal counsel regarding climaterelated risks obtaining confirmation from the entity's external lawyers reviewing the minutes of directors' / shareholders' meetings for discussions of such matters. Financial instruments with sustainabilitylinked features [Refer to page 27 for accounting considerations under SFRS(I) 9 / FRS 109.1 Where the entity has financial instruments with sustainability-linked features, the auditor should pay attention to the classification of financial instruments. and assessment of compliance with climaterelated covenants and targets. When information used as audit evidence has been prepared using the work of an expert engaged by management, the auditor should evaluate the audit evidence in accordance with SSA 500.8. SSA 250 (Revised), Consideration of Laws and Audit engagement teams should consider Regulations in an Audit of Financial climate-related regulations relevant to the Statements entity. This can be complex for audits involving entities with extensive operations The auditor is required to: overseas or groups with active operating entities in overseas jurisdictions. sufficient appropriate (a) **Obtain** evidence regarding compliance with the The auditor should obtain an understanding provisions of those laws and regulations that of management's approach and processes in are generally recognised to have a direct identifying non-compliance with climateeffect on the determination of material related laws and regulations. amounts and disclosures in the financial statements such as tax laws and regulations Some of the regulations may result in [SSA 250.6(a) and 7]; and onerous contracts, restructuring provisions and environmental or decommissioning (b) Undertaking specified audit procedures to help obligations or climate-related legal claims or identify non-compliance with those laws and suits.

regulations that do not have a direct effect on the determination of the amounts and

disclosures in the financial statements, but compliance with which may be fundamental to the operating aspects of the business, to an entity's ability to continue its business, or to avoid material penalties (e.g., compliance with environmental regulations). [SSA 250.6(b) and 7]

# Potential Impact on Audits of Financial Statements

For entities operating in Singapore, this includes (but is not limited to) the <u>laws</u> administered by the <u>National Environment Agency</u>.

For a group audit involving overseas entities, the group engagement partner should ensure that the laws and regulations applicable to overseas jurisdictions are appropriately considered as required by SSA 250 and component auditors have obtained sufficient appropriate audit evidence in this regard.

# SSA 450, Evaluation of Misstatements Identified During the Audit

The auditor is required to determine whether the uncorrected misstatements identified during the audit are material, individually or in aggregate. [SSA 450.11].

Paragraph A21 details the circumstances that may affect the evaluation of uncorrected misstatements as material, even if they are lower than materiality for the financial statements as a whole. [SSA 450.A21]

Examples of how climate-related risks may affect the evaluation of misstatements include inadequate or omission of qualitative disclosures on critical accounting estimates, assumptions and judgments pertaining to climate-related risks (for e.g. estimation uncertainty of carrying amounts of assets or liabilities that are impacted by climate-related events such as extreme weather conditions) or non-compliance with climate-related laws and regulations which could influence the economic decisions of users of financial statements.

#### **Audit Evidence**

### SSA 540, Auditing Accounting Estimates and Related Disclosures

The objective of the auditor is to obtain sufficient appropriate audit evidence about whether accounting estimates and related disclosures in the financial statements are reasonable in the context of the applicable financial reporting framework. [SSA 540.11]

#### <u>Risk Assessment Procedures and Related</u> Activities

The auditor is required to obtain the necessary to provide an appropriate basis for the identification and assessment of ROMM at the financial statement and assertion levels, which includes:

Regulatory factors relevant to the entity's accounting estimates,

Examples of estimates included in the financial statements that may be affected by climate-related risks include:

- valuation of property, plant and equipment or net realisable value of inventory after a climate-related event has occurred, for example destruction of production / storage facility in a flood
- valuation of intangible assets such as brand name after an entity suffers reputational damage due to a climaterelated incident, for example being exposed for dumping toxic waste into the ocean
- net realisable value of inventory when the entity is impacted by regulations or consumer sentiments that could reduce the demand of a product and thereby making the inventory obsolete, for

 How management identifies the relevant methods, assumptions or sources of data, and the need for changes in them that are appropriate in the context of the applicable financial reporting framework

[SSA 540.13]

#### <u>Identifying and Assessing the Risks of Material</u> Misstatement

In identifying and assessing the ROMM and in assessing inherent risk, the auditor is required to take the following into account:

- (a) The degree to which the accounting estimate is subject to estimation uncertainty; and
- (b) The degree to which the following are affected by complexity, subjectivity, or other inherent risk factors:
  - (i) The selection and application of the method, assumptions and data in making the accounting estimate; or
  - (ii) The selection of management's point estimate and related disclosures for inclusion in the financial statements.

[SSA 540.16]

### Responding to the Assessed Risks of Material Misstatement

When testing how management made the accounting estimate, the auditor's audit procedures must include procedures, designed and performed to obtain sufficient appropriate audit evidence regarding the risks of material misstatement relating to:

- (a) The selection and application of the methods, significant assumptions and the data used by management in making the accounting estimate; and
- (b) How management selected the point estimate and developed related disclosures about estimation uncertainty.

[SSA 540.22 - 29]

### Potential Impact on Audits of Financial Statements

example environmentally conscious customers boycotting products that emit greenhouse gases.

The auditor should consider whether adequate write-down has been made for obsolete or slow-moving inventories due to a decline in demand pursuant to such regulations or consumer sentiments.

Key estimates and assumptions used in the assessment of impairment that may be impacted by climate-related risks include, but are not limited to, asset capacity, useful lives, residual values, customer contract terms, forecasted operating costs and discount rates.

Other relevant climate-related risk considerations in auditing accounting estimates include:

# Risk Assessment Procedures and Related Activities

- Change in industry, regulatory or other external factors [refer to Section on SSA 315 (Revised 2021) above]. Such factors may affect the entity's cash flows and recoverable amounts of assets.
- Whether management has assessed the appropriateness of methods, assumptions and data used considering climate-related developments. For example, whether an entity which has properties in locations that are prone to severe weather conditions has taken into account climate-related risks in their valuation models.

# <u>Identifying and Assessing the Risks of Material Misstatement</u>

The degree to which the accounting estimate is subject to <u>estimation</u> <u>uncertainty</u> may increase in consideration of effects of climate change. For example, how the frequency of extreme droughts affects the harvests of agricultural producers or where floods could result in closure of operations.

Requirements of Singapore Standard on Auditing ("SSA")	Potential Impact on Audits of Financial Statements
	Climate-related risks could also affect the degree to which the accounting estimate is subject to <b>complexity</b> :
	<ul> <li>New financial / projection models may need to be developed to capture the effects of climate developments, which could require specialised skills or the use of external experts.</li> </ul>
	<ul> <li>It may be more complex to derive data on which the accounting estimate is based due to the need to incorporate data from outside of the traditional accounting system.</li> </ul>
	For example, the measurement of greenhouse gas emissions used to calculate carbon taxes may include data which is not recorded in the accounting system.
	<ul> <li>The degree to which the accounting estimate is subject to <u>subjectivity</u> due to:</li> </ul>
	<ul> <li>assumptions with long forecast period or unobservable data</li> </ul>
	<ul> <li>balances where it is difficult to make reliable forecasts about the future.</li> </ul>
	Responding to the Assessed Risks of Material Misstatement
	In testing how management made the accounting estimate or developing an auditor's point estimate or range, the auditor should consider:
	whether the data is relevant and reliable in the circumstances. For example, the auditor would need to consider the relevance and reliability of climate- related data, which may not be subject to the same internal controls as accounting data. For instance, the entity's process to

Requirements of Singapore Standard on Auditing ("SSA")	Potential Impact on Audits of Financial Statements
	derive its greenhouse gas emissions data may not be subject to the same internal controls as other accounting data and may require additional considerations in determining the reliability of such emissions data
	whether significant assumptions are appropriate in the circumstances and how changes in such assumptions affect the accounting estimates.
	<ul> <li>For example, when the estimated useful lives and residual values of assets are changed, there would be a corresponding change to the amount of depreciation or amortisation recognised in each period.</li> </ul>
	<ul> <li>Valuation reports may need to take into account the effects of climate change.</li> </ul>
SSA 620, Using the Work of an Auditor's Specialist  If expertise in a field other than accounting or auditing is necessary to obtain sufficient appropriate audit evidence, the auditor is required to determine whether to use the work of an auditor's expert. [SSA 620.7]	If the subject matter being audited involves subjective or complex judgements, or requires specialised knowledge, it may be necessary to engage an auditor's specialist, such as a climate-change specialist. Before engaging the specialist, the auditor should consider the expert's competence to the subject matter for which the expert's work will be used, including any areas of specialty within that expert's field.
	Support that climate-change specialists can provide includes reviewing and challenging management's key assumptions and disclosures, for example:
	testing the inputs in management's cash flow projections that involve climate scenarios and the resultant probabilities, estimated availability of technologically advanced climate solutions, and whether management's estimates are in line with the specialist's knowledge
	testing the reasonableness of management's provision for carbon taxes arising from green-house gases

#### Requirements of Singapore Standard on Potential Impact on Audits of Financial Auditing ("SSA") **Statements** emissions in accordance with the Carbon Pricing Act testing the reasonableness of management's provision for decommissioning a plant or rehabilitating environmental damage, and whether management's estimates are in line with specialist's knowledae of the requirements of the applicable laws and regulations. It is also critical for the auditor to evaluate the adequacy of the expert's work in accordance with SSA 620.12. If the auditor determines that the work of the auditor's expert is not adequate for the auditor's purpose, the auditor is required to perform additional procedures in accordance with SSA 620.13. SSA 570 (Revised), Going Concern Examples of climate-related risks that may cast significant doubt on an entity's ability to The auditor's responsibilities are to obtain continue as a going concern include: sufficient appropriate audit evidence regarding, and conclude on, the appropriateness of climate-related legal pending management's use of the going concern basis regulatory proceedings against the entity of accounting in the preparation of the financial that may, if successful, result in claims statements, and to conclude, based on the audit that the entity is unlikely to be able to evidence obtained. whether a material satisfy. uncertainty exists about the entity's ability to continue as a going concern. [SSA 570.6] changes in climate law, regulation or government policy expected to adversely affect the entity, such as being prohibited to operate in a major market due to inability to comply with newly enacted climate regulations, uninsured or underinsured climaterelated catastrophes when they occur. An entity may be at higher risk if it is operating in locations that susceptible extreme climate to conditions, taking into account mitigation actions, such as national plans to tackle such climate conditions. Where there are uncertainties arising from climate-related risks, the auditor may consider requesting management to perform a variety of analyses (e.g. scenario analysis, stress tests, break-even analysis) to aid the

Requirements of Singapore Standard on Auditing ("SSA")	Potential Impact on Audits of Financial Statements auditor's evaluation of management's	
	assessment.	
Communication with Those Charged with Governance and Auditor Reporting		
SSA 260 (Revised), Communication with Those Charged with Governance  The auditor is required to communicate with those charged with governance their views about significant qualitative aspects of the entity's accounting practices, including accounting policies, accounting estimates and financial statement disclosures.  [SSA 260.16(a)]	Examples of matters that the auditor may communicate to those charged with governance include:  • significant assumptions used in accounting estimates arising from climate-related risks, including the degree of subjectivity involved in developing those assumptions  • how climate-related factors affecting asset and liability carrying values, including the entity's bases for determining useful lives assigned to tangible and intangible assets  • potential effect on the financial statements of significant risks, exposures and uncertainties arising from pending climate-related litigation or non-	
	<ul> <li>compliance with climate laws and regulations, that are disclosed in the financial statements</li> <li>adequacy of financial statement disclosures arising from climate-related</li> </ul>	

# SSA 700 (Revised) Forming an Opinion and Reporting on Financial Statements

The auditor is required to form an opinion on whether the financial statements are prepared, in all material respects, in accordance with the applicable financial reporting framework.

[SSA 700.10]

In particular, the auditor should consider whether the financial statements provide adequate disclosures to enable the intended users to understand the effect of material transactions and events on the information conveyed in the financial statements [SSA 700.13(e)], among other requirements.

If the auditor is unable to conclude that the financial statements as a whole are not free from material

Adequate disclosures include all material information affecting the financial statements related to the impact of climate change. Examples of disclosures that would be important for the intended users of the financial statements include:

- significant assumptions used in the application of the entity's accounting policies to help users understand the nature and extent of volatility and estimation uncertainty involved in measuring the financial statement line items
- appropriateness and adequacy of disclosures relating to climate risks, including the relationship and impact of

misstatement based on the audit evidence obtained, the auditor should modify the opinion in the auditor's report.

[SSA 705.6]

# SSA 701, Communicating Key Audit Matters in the Independent Auditor's Report

The auditor is required to determine key audit matters to be communicated in the auditor's report (i.e., those matters that, in the auditor's professional judgement, were of most significance in the audit of the financial statements of the current period).

[SSA 701.9 - 10].

# Potential Impact on Audits of Financial Statements

the entity's climate strategy on financial statement line items.

The degree to which climate-related risks require the auditor's attention in performing the audit may result in determining such a matter to be a key audit matter. Examples of such matters may include:

- significant auditor judgement, for example over significant accounting estimates that are based on complex and subjective assumptions [Refer to section on SSA 540 (Revised).]
- specific events or transactions, such as changes to climate laws and regulations.

It is important for the auditor to also take into consideration the entity's publicly announced commitments / timelines towards the achievement of climate goals or targets (e.g. net zero emissions, carbon neutrality, etc).

For instance, the auditor may communicate that the auditor has challenged the key assumptions made in the management's projection of future taxable profits in assessing recoverability of the entity's deferred tax assets, taking into consideration the costs of the entity's commitment to net zero emissions by 2030.

# SSA 720 (Revised), The Auditor's Responsibilities Relating to Other Information

The auditor is required to read the other information, consider whether a material inconsistency exists between the other information and the financial statements, and to remain alert for indications that a material misstatement of fact exists. [SSA 720.14 - 15]

Examples of other information about climaterelated risks that the auditor might read and consider include:

- annual report which contains a discussion of the entity's short and longterm strategy for managing and responding to climate related risks
- sustainability report issued with the annual report and the auditor's report which discloses climate-related performance measures, such as carbon emissions attributable to activities that the entity is responsible for.

Requirements of Singapore Standard on Auditing ("SSA")	Potential Impact on Audits of Financial Statements
	When reading the other information, the auditor should look out for inconsistencies between the financial statements and the other information. For instance, whether the entity's future cash flows include consideration of the impact of the entity's 1.5°C scenario aligned to the Paris Agreement which the entity used in its climate reporting.

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