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**Consultation Paper: “Climate-related financial disclosure”**

We write in response to your consultation at <https://treasury.gov.au/consultation/c2022-314397> concerning the design and implementation of the Australian Government’s commitment to standardised, internationally-aligned requirements for disclosure of climate-related financial risks and opportunities in Australia.

We are Australian accounting academics, resident in Australia, researching sustainability and climate change accounting and reporting, as well as how it is impacted by digital technology advancements. The signatories of this submission are members of the Social and Environmental Sustainability in Organisations (SESIO) Research Group of Swinburne University of Technology, Australia. The third-named signatory is also affiliated with Durham University Business School. SESIO’s aim is to produce knowledge that empowers organisations to effectively avoid unethical, socially and/or environmentally exploitive business practices, and to inform policymakers to promote sustainable business practices. The SESIO research group connects academic researchers, industry researchers, and practitioners from the business, government and civil society sectors, in Australia and internationally.

The Consultation Paper addresses issues that are of great significance to the society and environment and, therefore, to the stakeholders of the SESIO research group. Our responses to the questions provided below highlight our concerns regarding the proposal to align Australian climate-related disclosure standards with the standards of the International Sustainability Standards Board (ISSB) when they become available for jurisdictional adoption. In addition, our response highlights research findings and proposes recommendations relating to the data and technology capability needed and currently available to support climate reporting through the adoption of key digital technologies and digital sustainability reporting. We draw on our recent (unpublished) research on the use of digital technologies for sustainability reporting to furnish this response.

We provide our responses to the selected consultation questions below:

**Question 4: Should Australia seek to align our climate reporting requirements with the global baseline envisaged by the International Sustainability Boards?**

- 4.1 Are there particular considerations that should apply in the Australian context regarding the ISSB implementation of disclosures relating to: governance, strategy, risk management and/or metrics and targets?**
- 4.2 Are the climate disclosure standards being issued by the ISSB the most appropriate for entities in Australia, or should alternative standards be considered?**

We strongly urge that climate reporting requirements in Australia should not be limited to the global baseline envisaged by the ISSB for three reasons. First, the audience for climate change-related information of organisations extends beyond financial capital providers. A broad range of stakeholders

are interested in this information, and the climate related performance of companies impacts society at large. Second, prior research shows that even investors disagree with the statement that sustainability reporting should account only for financially material sustainability issues (see Jørgensen et al. 2022). This is because value creation for providers of finance is dependent on the long-term value organisations create for society (Adams et al., 2020). Third, there is significant growth in socially responsible investing, and that type of investing requires information about a company's impact on the environment and on society, in addition to the impacts of the environment and society on that company. As per the Global Sustainable Investment Alliance's 2020 report, sustainable investments reached \$35.3 trillion globally, which is equivalent to 36% of total assets under management across the regions covered in the report.

We suggest the use of the European Sustainability Reporting Standard (ESRS E1 - Climate Change), which is to be issued by the European Financial Reporting Advisory Group (EFRAG) - but is currently in draft form. European Sustainability Reporting Standard have been developed with input from Global Reporting Initiative (GRI) Standards and they recommend GRI's approach. These standards are designed to provide a consistent and comparable set of disclosures on climate-related matters, enabling investors and other stakeholders to assess companies' performance and progress in addressing climate-related risks. The ambit of the current exposure draft Climate-related Disclosure Standard, issued by the ISSB, is information about organisations' exposures to climate-related risks and opportunities. In contrast, the European Sustainability Reporting Standard E1 also requires organisations to provide information about how they are affecting climate change, their adverse effect mitigation efforts, and how they can prevent, mitigate, or remediate actual or potential negative impacts they create. Thus, the European Sustainability Reporting Standard E1 provides coverage of information relevant for investors concerned with enterprise value, as well as for stakeholders concerned with organisational impacts on the planet. In this regard, it is similar in to GRI Standards. Although not perfect, due to its alignment with the GRI Standards the European Sustainability Reporting Standards come close to adopting a concept of materiality based on accountability to financial and non-financial capitals that affect and are affected by organisations. Similar to the ISSB disclosure requirements, the European Sustainability Reporting Standard E1 also covers governance, strategy, risk management, and metrics and targets.

**Question 7: What considerations should apply to materiality judgements when undertaking climate reporting, and what should be the reference point for materiality (for instance, should it align with ISSB guidance on materiality and is enterprise value a useful consideration)?**

The climate disclosure standards being issued by the International Sustainability Standards Board (ISSB) adopt a financial materiality perspective. In other words, as per the ISSB standards, only climate-related risks that have a material impact on the organisation's enterprise value will be reported as the global baseline. Although enterprise value is a potentially suitable concept for assessing materiality in relation to climate risk information, it is narrowly defined in the draft ISSB standards and narrowly conceptualised by commercial enterprises when applied for climate risk reporting. In a study conducted by two of the signatories of this response letter (published in Abhayawansa and Adams 2022) on climate risk reporting by the largest airlines, hotels, and cruise operators, it was found that climate-related risks reported by companies focus predominantly on risks of increased regulation rather than physical risks, indicating a short-term focus. Although eventuating in the long-term, it is the physical risks of climate change that have the most significant impacts on society, and on business performance and continuity. In a reporting regime underpinned by financial materiality, climate risks and impacts most significant to planetary sustainability and social justice get ignored. Therefore, it has been argued that financial materiality is incompatible with governments' commitment to the United Nations Sustainable Development Goals, and it is contrary to the going concern principle on which financial reporting is performed (see Adams and Mueller 2022).

The ISSB's concept of enterprise value holds some potential to be the defining concept of a new single materiality approach suitable for climate risk reporting to meet investor and societal needs if it is broadly defined. The paper entitled "*Swimming against the tide: Back to single materiality for sustainability reporting*" written by one of the signatories of this response letter (i.e., Abhayawansa, 2022) explains how this single materiality concept should be developed. The paper explains that the materiality concept to be adopted for reporting should "enable organisations to appreciate the interrelationships and dependencies between society, the life-supporting systems of the planet and the economic well-being of humans – the triple bottom line that sustainability reporting was originally invented to uphold." (p. 1376). In other words, the materiality concept to be adopted should "engender disclosures about the impact of and on the environment, society or organisations rather than whether any stakeholder considers the impacts relevant for their decisions" (p. 1377). Thus, upholding accountability to resource providers, society, and the environment for financial and nonfinancial capitals they bestow should be the reference point for materiality assessment of climate related disclosure, rather than decision usefulness for any individual stakeholder group. Such an accountability-based materiality approach could overcome the limitations of the narrow materiality approach of the ISSB that is deeply unpopular among accounting academics (Adams and Mueller, 2022), as well as the limitations of the double materiality concept. We refer The Treasury to consult the aforementioned research paper when developing a materiality principle to be incorporated in Australian climate risk reporting standards.

**Question 13: Are there any specific capability or data challenges in the Australian context that should be considered when implementing new requirements?**

#### **13.1 How and by whom might any data gaps be addressed?**

The types of digital technologies (DTs) used for sustainability reporting, the extent to which these DTs are used, and how they are used collectively represent an important part of sustainability reporting capability for organisations. Digital technologies can be utilised by organisations to close data gaps relating to drivers and prospective or retrospective impacts of climate-related risks. For example, in combination with other DTs, artificial intelligence (AI) technology related tools such machine learning, artificial neural networks, and natural language processing tools enable forecasting of impacts on organisations, as well as of the organisation's impact on the environment and society under different climate scenarios. A case in point is IBM's Environmental Intelligence Suite, which is an AI driven solution, enables the integration of global weather data, geospatial data, and Internet of Things (IoT) data to help with prediction of climate risk events and impacts. Another case in point is Microsoft's Planetary Computer, which can be used to obtain satellite-based data such as forest coverage and carbon sequestration, crop yields, changes in glacial ice, harmful algal blooms, the health of penguin colonies, and much more. Companies can use data like this to report on climate risk, as well as risk of biodiversity loss. Another example is the use of IoT and blockchain technologies to resolve data collection, validation, and integration challenges relating to emissions reporting. As organisations require emissions data from different stakeholders within their supply chain, who often use differing methodologies for calculating emissions, collecting and aggregating this emissions data can be problematic. Used together, IoT and blockchain technologies can overcome these problems by enabling the automatic capture and transmission of this data, as well as by ensuring the validity and integrity of the data - leading to efficiency and effectiveness in reporting activities.

In our recent (2023) cross sectional survey of global sustainability reporting stakeholders, we investigated the types of digital technologies (DTs) organisations are currently using or not using for sustainability reporting, and the frequency with which they use or don't use these DTs over time. Although there are scale and sophistication of use issues, this is nevertheless a proxy indicator of organisations' digital technology capability, insofar as it relates to sustainability reporting and management. More specifically, we took a country in which more organisations never use or rarely use

key DTs critical to sustainability reporting or digital reporting as being DT capability challenged. Thus, we propose the following findings relating to the sustainability reporting DT capability of the Australian context should be considered when implementing new requirements that may be significantly mediated or moderated by DT use:

#### Use of established DTs in the Australian context

- Of the Australian organisations studied, close to 50% undertaking or supporting sustainability reporting have never used or rarely use key established DTs that are critical to current and growing sustainability reporting requirements. An established DT is a DT that has mainstream adoption and or is no longer widely viewed as novel, uncertain, and ambiguous – as emerging technologies are often widely seen. We considered key established DTs for sustainability reporting to include business intelligence/ data analytics/ data science/ data visualisation tools, data management and big data tools, cloud computing, network and connectivity technologies (e.g., cellular networks, satellite systems, low power wide area networks), and markup languages. This percentage of never or rare users in Australia is about the same as the average percentage in countries with the highest prevalence of sustainability reporting organisations.
- However, about 68% of Australian organisations undertaking or supporting sustainability reporting in our study have never used or seldom use Markup Languages (such as XBRL), which are critical for digital reporting. This percentage of never or rare users in Australia is twice as high as the average percentage for countries with the highest prevalence of sustainability reporting organisations that were in our sample. This suggests a potential capability challenge for implementing digital reporting requirements in Australia.

#### Use of key emerging DTs in the Australian context

- Over 70% of Australian organisations undertaking or supporting sustainability reporting, and that participated in our survey, have never used or rarely use key emerging DTs that are critical to sustainability reporting (e.g., see earlier provided examples relating to artificial intelligence, the IoT, and blockchain use cases in sustainability reporting). An emerging DT is a DT that is still in the early phases of development, that is novel, uncertain, and ambiguous. However, these tend to be growing rapidly in use and potential impact. We considered key emerging DTs for sustainability reporting to include the IoT and Internet of Everything, artificial intelligence and cognitive computing, blockchain and other distributed ledgers, robotics and drones, and video content analytics / computer vision. This percentage of never or rare users for Australia is about 10% higher than the average for countries with the highest prevalence of sustainability reporting organisations.
- Among Australian organisations undertaking or supporting sustainability reporting, and that were in our sample, the percentage of never or rare users of IoT technologies is 14% higher than the average for countries with the highest prevalence of sustainability reporting organisations. This is concerning as IoT technologies can enable the automatic collection, transmission, and analysis of a wide range of sustainability data.

#### Australian organisations' perceived benefits of using DTs for sustainability reporting

- A greater percentage of Australian organisation undertaking or supporting sustainability reporting, and that participated in our survey, perceive or observe the benefits of using DTs for sustainability reporting than the average percentage for organisation in countries with the highest prevalence of sustainability reporting organisations. The typically perceived or observed benefits include collection of new data that was not available before, improved

information quality/quantity, improved integration of internal and external information, improved reporting efficiency and effectiveness, and faster flow of information into organisation decision making.

- In the Australian context, improved sustainability reporting productivity, faster flow of information into organisation decision making, and improved quality/quantity of information were the most cited benefits of using DTs for sustainability reporting. In contrast, being able to collect new data that was not available before, improving the quality/ quantity of information collected, and greater efficiency of reporting activities were the most cited benefits among countries with the highest prevalence of sustainability reporting organisations.

#### Australian organisations' perceived barriers to using DTs for sustainability reporting

- Australian organisations undertaking or supporting sustainability reporting, and who participated in our survey, cited some important technology related challenges to using DTs for sustainability reporting that may require some form of government support or further maturing of the technology environment. These included concerns about data security and privacy risks, concerns about their data governance capability, challenges in integrating newer and more advanced DT products with their legacy systems, and a lack of appropriate workforce technology skills. A significantly greater percentage of Australian organisations cited these issues than the percentage for countries with the highest prevalence of sustainability reporting organisations.

#### Purposes for which DTs are used by Australian organisations

- About 75% more Australian organisations covered in our study have trialled the use of DTs for internal sustainability measurement, reporting or management requirements, than for mandatory sustainability reporting requirements.
- This skew towards internal reporting requirements is even more pronounced among countries with the highest prevalence of sustainability reporting organizations – where more than twice as many organisations use DTs for internal reporting of sustainability performance than for complying with mandatory sustainability reporting requirements.

Note: Countries with the highest prevalence of sustainability reporting organisations were identified from: The KPMG Survey of Sustainability Reporting 2020. (Retrieved from <https://assets.kpmg.com/content/dam/kpmg/xx/pdf/2020/11/the-time-has-come.pdf>)

These varied study findings suggest that when implementing new requirements that may be significantly mediated or moderated by DT use (such as the requirement for mandatory digital reporting or for reporting particular types of information in particular timeframes), consideration should be given to the gap between the DTs organisations are currently using or not using, to the potential support organisations may need to expand their use of particular DTs, and to the potential role the government can play in overcoming organisations' perceived barriers to the use of DTs.

#### **Question 18: Should digital reporting be mandated for sustainability risk reporting? What are the barriers and costs for implementing digital reporting?**

Sustainability risks extend beyond climate-related risks. They include risks associated with all environmental and social impacts that have a bearing on sustainable development. Businesses face many barriers relating to capturing, measuring and reporting sustainability risks, which affect their

ultimate reporting in a digital format. Below, we discuss these barriers, categorised as data related, technology adoption related, systems related, human related, and organisation related barriers.

#### Data-related barriers

Businesses are dependent on their down-stream and up-stream partners (i.e., supplies and customers) for the data needed to measure various types of sustainability risks, including climate risks (i.e., Scope 3 emissions). Our research shows that businesses face significant challenges in obtaining data from their supply chain partners and ensuring the veracity and integrity of that data. Cybersecurity risks that arise when businesses create portals for their supply-chain partners to directly input sustainability data for reporting purposes are also a concern. It is imperative to have direct, but secure and integrable, data input throughout the supply chains for large business with a myriad of suppliers so as to enable digital reporting.

#### Technology adoption barriers

Many Australian organisations have never or rarely used key established and emerging technologies that are or may soon be at the heart of digital reporting (e.g., XBRL, cloud computing, IoT, blockchain, low earth orbit satellite technologies may capture, transform, integrate, and transmit data for digital reporting). This lack of exposure or use of these DTs may result in push back on digital reporting requirements. However, the data seems to suggest that unless mandated, most Australian sustainability reporting organisations are unlikely to adopt these DTs for sustainability reporting – despite the significant potential benefits. Adequate investment in adoption education and support may diffuse potential pushback.

#### System-related barriers

Our research identifies several limitations associated with existing systems or technology products (hardware and or software) available on the market for capturing, integrating, aggregating, managing, reporting, and visualising sustainability data. Some of these systems are jurisdiction specific or difficult to be adapted to suit unique/changing sustainability reporting requirements of different jurisdictions (i.e., they are rigid or inflexible). Thus, to the extent that Australian Sustainability Reporting Standards are different from internationally recognised standards, such as the Global Reporting Initiative (GRI) Standards or Recommendations of the Taskforce on Climate-Related Financial Disclosure, the existing systems are likely to be less useful. Moreover, adapting the systems to meet any subsequent changes in sustainability reporting requirements is likely to be excessively costly and, thus, would likely affect organisations' ability to comply with new reporting requirements if sustainability standards are revised or updated.

While global software companies are developing new solutions still, there are no widely used systems for comprehensively measuring, managing and reporting sustainability risks. Many of the large number of existing sustainability systems vendors, most of whom are start-ups whose continued existence is uncertain, tend provide software systems that are specific to few types of sustainability risks only.

For measuring and managing sustainability risks, organisations look towards integrating sustainability reporting within their existing Enterprise Resource Planning (ERP) systems. The difficulty of integrating into new systems due to the rigidity or inflexibility of legacy ERP systems is a practical barrier to enabling digital sustainability risk reporting. The existing ERP systems are designed to focus mostly on greenhouse gas emissions and the requirement to report on other sustainability performance or risk indicators could incur significant costs to organisations.

#### Human-related barriers

The main human-related barrier is employees' lacking competence, skills and knowledge relating to the use of digital solutions for sustainability data. Our recent research indicates that there is a significant skills shortage in the country relating to the use of digital technologies for sustainability reporting. In addition, because decision-makers in organisations also lack knowledge about the need for and benefits of having systems for capturing, measuring, managing and reporting sustainability risks and how to incorporate such systems within the organisation (and/or existing systems) the growth in the adoption of systems and technologies for sustainability data is slow.

Efficient and effective collection, assessment and measurement of sustainability risks-related data such as human rights violations or use of child labour in supply chains requires the use of emerging technologies, such as blockchain and artificial intelligence. Our research indicates that non-technical stakeholders distrust emerging technologies and systems that are less well known.

### Organisation-related barriers

The main organisation-related barrier we have identified from our recent research is the high cost of acquiring and implementing new sustainability reporting systems, especially in large organisations. Organisational decision-makers are struggling to justify the cost of these systems with reference to a clear explanation of benefits or a Return on Investment, because they tend to view sustainability from a cost minimisation perspective rather than as a lever of value creation. The current uncertain economic climate, low top management team understanding of the benefits of digital technologies and sustainability systems, difficulty in quantifying the impact of sustainability risks on companies' profitability, and seeming challenges for companies to integrate sustainability into the business strategy, are further impediments to organisations prioritising the adoption of key digital technologies and the acquisition of sustainability systems.

**Question 19: Which of the potential structures presented (or any other) would best improve the effectiveness and efficiency of the financial reporting system, including to support introduction of climate related risk reporting? Why?**

The Australian Accounting Standards Board is especially set up and designed to formulate accounting standards. Its members are expected to have "knowledge of, or experience in, business, accounting, law or government" and the current membership reflects this. However, a body entrusted with setting sustainability reporting standards that can influence the allocation of economic resources should have the expertise to understand the potential impacts of resource allocation decisions on the environment and society. Therefore, the development of sustainability reporting standards requires the body setting those standards to understand the science behind the environmental problems created by anthropogenic climate change and other human activities. This cannot be achieved through Potential Structure 1. While Potential Structures 2 and 3 are suitable, in order to eliminate administrative and resourcing inefficiencies of having two boards, we recommend Potential Structure 3.

### **Signatories**

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