LOW-HANGING FRUIT?

The Introduction of Mandatory Climate-related Financial Disclosures in New Zealand

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Abstract

This paper looks at the introduction of mandatory climate-related financial disclosures in New Zealand. The proposed climate-related financial disclosures regime is based on the Task Force for Climate-related Risk framework. This framework is considered to be best practice internationally, a way for directors in New Zealand to discharge their newly widened statutory duties. The practical and normative limitations of the framework are considered, focusing on the ability to achieve the dual aims of the disclosure regime as being both a way of resolving the information asymmetry for investors regarding climate risk and as a mechanism to change corporate behaviour. Ultimately this paper finds that while the disclosure regime is a much needed step in the right direction, it does not go far enough.

Key Words

Climate change, Task Force on Climate-related Financial Disclosures (TCFD), mandatory climate-related financial disclosures, directors' duties

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I Introduction

The last five years have seen a wave of growing consumer activism and societal pressure for companies to take decisive action to combat climate change. In 2018, Prime Minister Ardern succinctly summarised the 'new normal' for companies: established corporations had to adapt their business models "if they want millennials on board", deliver on good social and environmental performance and engage in sustainable practices or else their future growth could be at risk. This 'new normal' saw climate change embedded into corporate consciousness, translating the ecological threat of climate change into a 'material financial risk'. In January 2020, Larry Fink, Chief Executive Officer and Chairman of BlackRock, wrote in his influential annual letter that climate change had become a "defining factor" in a company's long-term prospects. He said that climate change had become a risk to economic growth, foreseeing a "fundamental reshaping of finance." 5

On 15 September 2020, Climate Change Minister James Shaw announced that New Zealand would be the first country in the world to introduce mandatory climate-related financial disclosures for listed companies and the public sector. The proposed disclosure regime aims to promote corporate sustainability in two ways. First, by providing comparable, timely and decision-useful information about the risks and opportunities arising from climate change. And second, instigating a framework that will focus

¹ Jacinda Ardern, Speech to the Chinese Business Summit, Auckland, 12 May 2018.

² Ben Caldecott, Director of the Sustainable Finance program, University of Oxford "Company Directors' Duties and Climate Risk Governance" (Opening Keynote at the International Legal Symposium on Climate Change Risk and Corporate Governance, University of Melbourne, 29 August 2016).

³ BlackRock is the world's largest asset manager, with \$7.4 trillion in assets under management.

⁴ Larry Fink "A Fundamental Reshaping of Finance" (letter to CEOs, 14 January 2020).

⁵ Above n 4.

⁶ Hon James Shaw "New Zealand First in The World To Require Climate Risk Reporting" (press release, 15 September 2020).

⁷ Cabinet Paper "Release of discussion document on climate-related financial disclosures" (December 2019) at 1.

reporting entities on the impacts that their activities have on climate change, thereby acting as a mechanism for change.⁸

This paper is organized as follows. *Part II* of this paper details why the disclosure regime is necessary, giving an overview of the current environmental regulatory scheme and New Zealand's steps towards becoming a 'low-emissions economy'. ⁹ This lays out the backdrop for the introduction of climate-related disclosure in New Zealand. One key policy tool used to combat climate change has been the Emissions Trading Scheme, ¹⁰ which highlights the difficulties in attempts to regulate corporate behaviour. The trade-off between economy and environment is an ongoing pressure faced by law-makers, which is likely to have some impact on the shape of the disclosure regime that will be eventually passed by Parliament. As the ETS illustrates, when concessions are made to companies and the economy, it weakens the effectiveness of any policy attempt to combat climate change. This may explain any inherent weaknesses of the disclosure regime, or foreshadow that it may not act as the "powerful mechanism to focus reporting entities on the impacts of climate change". ¹¹ as envisioned by law-makers.

Part III contemplates climate change as a material financial threat facing directors. The realisation of this threat led to the influential 'Hutley opinion' in Australia, ¹² and adapted for the New Zealand context by the Aotearoa Circle. ¹³ These papers resulted in a new interpretation of statutory directors' duties under the Companies Act 1993 (the Companies Act), ¹⁴ finding that directors would be in breach of their duties if they failed to consider climate-related risks. ¹⁵ Directors could be liable for lawsuits for failing to discharge their

⁸ Ministry for the Environment & Ministry of Business, Innovation & Employment Climate-related financial disclosures – Understanding your business risks and opportunities related to climate change: Discussion document (October 2019) at 5.

⁹ Productivity Commission Low Emissions Economy (9 August 2018).

¹⁰ Ministry for the Environment "About the New Zealand Emissions Trading Scheme" (18 December 2019).

¹¹ Above n 8 at 5.

¹² Noel Hutley and Sebastian Hartford-Davis "Climate Change and Directors' Duties" (Memorandum of Opinion, 7 October 2016 and Supplementary Memorandum of Opinion, 26 March 2019).

¹³ The Aotearoa Circle Sustainable Finance Forum: Legal Opinion 2019 (2019).

¹⁴ At 14.

¹⁵ At 14.

duties, against a backdrop of increasing climate change litigation. The recent decision of *Smith v Fonterra* demonstrates this, though it suggests a reluctance of the courts to intervene with the policy mechanisms designed by Parliament...¹⁶

Part IV illustrates that climate reporting has become more significant as a concrete way for directors to show that they are discharging their newly expanded duties. While it is recommended under the NZX Code that companies disclose climate-related information, there has been a significant lack of guidance in the preparation of that information. The lack of a consistent and comparable climate reporting framework led to the establishment of the Task Force on Climate-related Financial Disclosures (the TCFD). The TCFD was tasked with developing a voluntary, consistent climate-related financial risk disclosure framework for use by companies in providing information to investors, lenders, insurers and other stakeholders. The recommendations of the TCFD, released in 2017, form the basis of the proposed disclosure regime in New Zealand.

Despite the recommendations of the TCFD being lauded worldwide as the new best standard of practice, there has been little substantive academic research published on what is a potentially transformative model of corporate reporting. ²⁰ Part V and VI elaborate on this concern; as it appears that it has been accepted without question that the TCFD framework allows directors to discharge their climate-related duties. ²¹ Therefore, Part V and VI assess the aims of the disclosure regime, against the practical and normative barriers that will limit its success and its implications for future climate policy.

¹⁶ Smith v Fonterra Co-operative Group Limited [2020] NZHC 419 at [98].

¹⁷ Brendan O'Dwyer and Jeffrey Unerman "Shifting the focus of sustainability accounting from impacts to risks and dependencies: researching the transformative potential of TCFD reporting" (2020) 33 Accounting, Auditing and Accountability Journal 1113 at 1117.

¹⁸ Above n 8 at 13.

¹⁹ Task Force on Climate-Related Financial Disclosures *Recommendations of the Task Force on Climate-related Financial Disclosures* (June 2017).

²⁰ Above n 17 at 1134.

²¹ Centre for Policy Development "Business Roundtable on Climate and Sustainability Event November 2019" (9 December 2019).

Several practical deficiencies with the TCFD are identified in *Part V*: the materiality assessment which leaves directors with discretion to decide which 'material' climate-related risks are reported on; the inadequate use of scenario analysis symptomatic of a severe gap in capability, data and tools needed to prepare disclosures, and ongoing usefulness, or lack thereof, of qualitative information for investor and corporate decision-making. These limitations have all posed significant barriers for the global implementation of the recommendations of the TCFD. Indeed, they were raised in a recent discussion panel 'Have we reached peak TCFD?' held between business and finance leaders held during London Climate Action Week, where the answer was a resounding no.²²

Part VI then considers the wider normative implications of climate-related disclosures in New Zealand. It considers whether the disclosure regime will be a "powerful mechanism" to draw corporate attention to impact of their activities, as intended by law-makers. Two conceptual issues become obvious; the inability of a framework fundamentally designed for commercial use to meet the information needs of a wider set of stakeholders, and the fundamental incompatibility of a 'business case approach' to deliver a mechanism to change corporate behaviour as intended.²³

While mandatory disclosure has been described as 'low-hanging fruit' for policy-makers, ²⁴ the significance of the regime should not be underestimated, as it will set the tone for future policy and regulation. Ultimately, this paper suggests that the proposed disclosure regime obfuscates from real and tangible corporate sustainability.

II The current regulatory environment for companies

²² Doug Johnston, Edward Dean, Mardi McBrien, Martina Macpherson, Rodney Irwin, Andrew Ratcliffe "Have we reached peak TCFD?" (Climate Disclosure Standards Board, Zoom panel discussion as part of London Climate Action Week, 1 July 2020).

²³ Jane Andrew and Max Baker "Corporate Social Responsibility Reporting: The Last 40 Years and a Path to Sharing Future Insights" (2020) 56 Abacus 1 at 52.

²⁴ David Hall and Sam Lindsay *Climate Finance Landscape for Aotearoa New Zealand: A Preliminary Survey* (Report prepared for the Ministry for the Environment, 2017) at 52.

Climate change is an ecological and economic emergency. The Intergovernmental Panel on Climate Change (IPCC) 2018 Special Report on Global Warming disclosed that carbon emissions need to be cut by 45% in the next 11 years limit global warming to within 1.5°C. The IPCC stated that achieving this involves a wide range of mitigation efforts, including disinvestment in high greenhouse gas emitting products, processes and activities, and increased investment in energy efficiency and clean energy sources. New Zealand accounts for a fraction of the world's greenhouse gas emissions, at 0.17% per capita in 2014. Thowever, on a per capita basis, New Zealand emits 18 tonnes of greenhouse gases per-person; the fifth highest emitter in the OECD.

In order to reduce greenhouse gas emissions, New Zealand has entered three major international commitments: the UN Framework Convention on Climate Change, ²⁹ the Kyoto Protocol, ³⁰ and the Paris Agreement. ³¹ Under the Kyoto Protocol, New Zealand agreed to maintain its annual average emissions over the 2008 – 2012 period by at least 5% below its 1990 emissions. ³² The 2015 Paris Agreement aimed to strengthen this commitment, by holding the increase in the global average temperature to well below preindustrial levels and aiming to limit the temperature increase to 1.5°C above pre-industrial levels. ³³ Simon Upton, Parliamentary Commissioner for the Environment, noted that the Paris Agreement "changed the nature of the debate", ³⁴ by acknowledging that economies needed to urgently wean themselves from a reliance on fossil fuels. The Paris Agreement

²⁵ Wendy McGuinness, Eleanor Merton, Isabella Smith, Reuben Brady *The Climate Reporting Emergency: A New Zealand case study* (The McGuinness Institute, Discussion Paper 2019/01, October 2019) at 5.

²⁶Above n 8 at 8.

²⁷ Above n 25 at 10.

²⁸ Above n 25 at 10.

²⁹ United Nations Framework Convention on Climate Change, 1771 UNTS 107 (opened for signature 4 June 1992, entered into force 21 March 1994).

³⁰ Kyoto Protocol to the United Nations Framework Convention on Climate Change, 2303 UNTS 148 (opened for signature 16 March 1998, entered into force 16 February 2005).

³¹ Conference of the Parties, Adoption of the Paris Agreement, FCCC/CP/2015/L9/Rev1 Draft decision CP21(2015).

³² Above n 30.

³³ Above n 31.

³⁴ Simon Upton, Parliamentary Commissioner for the Environment *Farms, forests and fossil fuels: The next great landscape transformation?* (March 2019) at 5.

moved away from the top-down allocation of national emissions quotas seen under the Kyoto Protocol, and let nations to set their own nationally determined contributions (NDCs).³⁵ New Zealand's first Nationally Determined Contribution under the Paris Agreement is to reduce emissions by 30 per cent below 2005 levels, by 2030.³⁶

To meet its international commitments, the government has implemented a number of climate change related measures to limit greenhouse gas. It enacted the following: ³⁷

- (a) The Climate Change Response Act 2002, which provides the legal framework for New Zealand to meet its international emission reduction obligations;
- (b) The Climate Change Response (Emissions Trading) Amendment Act 2008, which put in place the emissions trading scheme as New Zealand's primary mechanism for reducing greenhouse gas emissions;
- (c) The Climate Change Response (Moderated Emissions Trading) Amendment Act 2009, which delayed the commencement of the emissions trading scheme and introduced transitional measures;
- (d) The Climate Change Response (Emissions Trading and Other Matters) Amendment Act 2012, which extended the transitional measures;

The Climate Change Response (Removal of Transitional Measures) Amendment Act 2016, which removed the transitional measures;

The Climate Change Response (Zero-Carbon) Amendment Act 2019, which amended the Climate Change Reform Act, introduced a domestic greenhouse gas emissions reduction target of net zero emissions by 2050 (excluding biogenic methane), and put in place a framework for New Zealand to contribute to the Paris Agreement effort to limit global average temperature increases.

While the Climate Change Response Act 2002 provides a framework to reduce greenhouse gas emissions, the Emissions Trading Scheme (ETS) has been New Zealand's primary

³⁵ Above n 34 at 5.

³⁶ Ministry for the Environment "About the Paris Agreement" (6 July 2018) Ministry for the Environment.

³⁷ The author has borrowed the framing of this from Justice Wylie in *Smith v Fonterra Co-operative Group Limited*, above n 16, at [34].

policy response to reducing greenhouse gas emissions.³⁸ As amended in 2019, it seeks to contribute to the efforts of the Paris Agreement.³⁹ The Act requires:⁴⁰

- (a) the net accounting of emissions of greenhouse gases in a calendar year, other than biogenic methane, to be zero by the calendar year beginning on 1 January 2050, and for each subsequent calendar year; and
- (b) emissions of biogenic methane in a calendar year to be 10 per cent less than 2017 emissions by the calendar year beginning on 1 January 2030, and to be 24 to 47 per cent less than 2017 emissions by the calendar year beginning on 1 January 2050, and for each subsequent calendar year.

All participant companies to the ETS are either liable for the emissions they produce from their activities, or receive entitlements for their 'removal' obligations. ⁴¹ At the end of each obligation period, companies with liabilities are obliged to surrender sufficient units for the amount of emissions produced or repay \$25 for each unit they were liable to surrender. ⁴² Companies with entitlements are eligible to claim one 'New Zealand Unit' for each tonne of carbon removed. ⁴³ In addition, companies are required to monitor and report their relevant emissions or removals annually. ⁴⁴ Aside from the duties prescribed by the ETS, there are no other positive legal obligations on New Zealand companies to disclose information in relation to climate change. ⁴⁵

³⁸ Climate Change Response (Zero Carbon) Amendment Bill (136-3), (explanatory note) at 6; Climate Change Response (Emissions Trading Reform) Amendment Bill (186-1), (explanatory note) at 1.

³⁹ The Climate Change Response (Zero Carbon) Amendment Act 2019.

⁴⁰ Again, the writer borrows the framing of this from Justice Wylie in *Smith v Fonterra Co-operative Group Limited*, above n 16, at [39].

⁴¹ Jin Fong Chua "Corporate Liability and Risk in Respect of Climate Change" (2016) 20 New Zealand Environmental Law Journal 167 at 171.

⁴² CCRA, s 178.

⁴³ CCRA, s 64.

⁴⁴ CCRA, s 62.

⁴⁵ Above n 41 at 177.

Unfortunately, the ETS has failed to reduce greenhouse gas emissions in New Zealand. ⁴⁶ There are a number of reasons for this. First, the ETS does not constitute a 'cap-and-trade' system, as it does not include a cap on the maximum number of carbon units traded. Therefore, it does not cap the total amount of emissions under the scheme. ⁴⁷ Companies can also purchase international units, meaning that they can meet their obligations without actually reducing their emissions. ⁴⁸

Second, despite the intention for the ETS to encompass all sectors and all gases, ⁴⁹ emissions from the agricultural industry were not caught by the purchase and surrender obligations. While accounting for 48% of all greenhouse gas emissions in New Zealand, companies within that sector are only required to comply with the reporting obligations of the NZ ETS. ⁵⁰ The refusal to include key sectors of the New Zealand economy undermined the ETS, as the participants only made up a small portion of all New Zealand businesses. ⁵¹

Third, ETS participants are only obliged to disclose emissions relating to the scheme. This may not actually cover their own corporate emissions. For example, a company in the liquid fossil sector would only be required to disclose the volume of fuel it produces or imports, but would not be required to report on the emissions produced from the transport of the fuel. ⁵² And finally, the ETS does not require participants to provide any specific information in relation to its levels of emissions, or whether it has participated in emission reduction or migration activities. ⁵³

⁴⁶ Mark Bracey "New Zealand's Emissions Trading Scheme: An in-depth Examination of the Legislative History" (2017) 21 New Zealand Environmental Law Journal 133 at 134.

⁴⁷ Wendy McGuinness, Eleanor Merton, Isabella Smith, Reuben Brady, above n 25 at 27.

⁴⁸ Above n 25 at 27.

⁴⁹ Above n 46 at 138.

⁵⁰ Above n 25 at 27.

⁵¹ Jin Fong Chua at 177.

⁵² Above n 41 at 178.

⁵³ Above n 41 at 177.

The cumulative effect of these weaknesses is that the ETS shows an incomplete picture of a company's emissions. This means that the scheme's ability to incentivise companies to shift their everyday operations to more sustainable practices is severely limited. ⁵⁴ While Parliament had intended for the scheme to enable New Zealand to meet its commitments under the Kyoto Protocol, the actual enacted provisions of the legislation meant that it inherently could not. ⁵⁵ For completeness, it should be noted that major reform to the ETS was passed in June 2020. ⁵⁶ These reforms were intended to increase the cost of emissions-intensive goods and services to drive behavioural change towards a lower emissions economy. ⁵⁷ However, while these reforms will have some impact on carbon pricing, agricultural methane is still excluded from the scope of the ETS. ⁵⁸ Thus, whether these reforms will have any impact on reducing emissions remains to be seen.

The ETS is illustrative of the difficulties of regulating and promoting corporate sustainability in New Zealand. This is due to the underlying trade-off between the environment and the economy, which plagues all policy decisions in relation to climate change. In reflecting on ETS, Simon Upton commented that it became a "creature of politics". ⁵⁹ When trying to implement the ETS, Parliament had buckled under the pressure of forcing behavioural change upon companies, and traded the environment for the economy. As Geoffrey Palmer commented, the scheme is illustrative of "the characteristic weaknesses of the New Zealand law-making system". ⁶⁰ The trade-off is an ongoing weakness for New Zealand's climate policy, given the reliance of the economy on the agricultural sector. As Judith Collins, National Party Leader, recently commented in an election debate, her party's policy to combat climate change was to "support farmers". ⁶¹

⁵⁴ Above n 25 at 27.

⁵⁵ Above n 46 at 138.

⁵⁶ Climate Change Response (Emission Trading Reform) Amendment Act 2020.

⁵⁷ Daniel Kalderimis and Nicola Swan *Managing climate risk in New Zealand: A tool kit for directors* (The Aotearoa Circle and Chapman Tripp, July 2020) at 4.

⁵⁸ Marc Daalder "Cap finally added to NZ's cap-and-trade scheme" *Newsroom* (New Zealand, 2 June 2020).

⁵⁹ Simon Upton at 5.

⁶⁰ Above n 25 at 27.

⁶¹ Jane Patterson "Second leaders' debate: Jacinda Ardern more assertive, but Judith Collins' one-liners won the night" *Radio New Zealand* (New Zealand, 1 October 2020).

Collins also raised caution against climate policy in a later debate, given the significance of agriculture to the economy after tourism had been decimated by Covid-19.62 Indeed, the dividing lines between economy and environment seem to have been made more clear by Covid-19. An optimistic view of the Covid-19 crisis would be that it presents an opportunity to help transition to a low-emissions economy, with an increased pressure on the government to align stimulus packages with a climate change response. ⁶³ It could be a chance to push towards greater green policy, as with coronavirus-related stimulus offering hope as the climate's 'last chance saloon'. 64 However, the 2020 Budget suggests that the trade has already been made. 65 The Budget proposed spending \$1.2 billion was invested in rail and replacing the Interislander ferries, \$56 million into improved insulation for 9,000 homes while leaving 591,000 homes under-insulated, \$100 million into forestry and the ETS, \$34 million into international research to reduce agricultural emissions and \$30 million in replacing coal boilers in public institutions. 66 In comparison, the Government spent \$5.3 billion on roads in January alone, \$400 million on a bailout of the tourism industry, and \$1 billion on the Air New Zealand bailout. 67 The word 'climate' was used just four times in the entire Budget document, and not at all in Prime Minister Jacinda Ardern's speech to Parliament. 68 This shows that while the effort behind a mandatory disclosure regime is commendable, it may be merely a drop in the pond.

III The widening of director's duties to encompass climate-related risk

It has become apparent that companies need to increase their leadership on the fight against climate change. Larry Finks's letter *A Fundamental Reshaping of Finance* was

⁶² Jane Patterson "Third leaders' debate: Ardern and Collins steelier and more combative" *Radio New Zealand* (New Zealand, 7 October 2020).

⁶³ Above n 57 at 4.

⁶⁴ Marc Daalder "Covid-19 stimulus is climate's 'Last Chance Saloon'" *Newsroom* (New Zealand, 7 April 2020).

⁶⁵ Marc Daalder "Trading coronavirus for the climate crisis" *Newsroom* (New Zealand, 15 May 2020).

⁶⁶ Above n 65.

⁶⁷ Above n 65.

⁶⁸ Above n 65.

symptomatic of wider societal awareness on the impact that corporations have on the environment. ⁶⁹ Fink threatened companies to start thinking seriously about climate risk, warning that he would be take aggressive action against directors who were not making sufficient disclosures of climate-related risk. ⁷⁰ Following that letter, a plethora of corporate giants began releasing significant climate policies. Jeff Bezos, CEO of Amazon and the world's richest man, announced a \$USD10 billion fund to address climate change. ⁷¹ Delta and Microsoft announced similar policies, with Delta announcing it would be the first carbon neutral airline, and Microsoft announcing that they were going beyond that to become carbon negative by 2030. ⁷² Clearly, in the face of considerable consumer activism and growing shareholder interest, the economic implications of climate change are finally being recognised. Climate change is being rebranded from an ecological threat to humanity, to a 'material financial risk' for companies. ⁷³

This is not to say that climate change does not pose a significant to corporations. Climate change poses huge problems for financial stability; it poses a significant risk to the tangible assets and supply chains of businesses, and can diminish the value of a company's assets, which are traditionally used as security for loans. The Insurers are likely to face large and unanticipated pay-outs due to climate change-related property damage and business losses, with businesses and households potentially losing access to insurance altogether. For example, increases in adverse weather events such as severe storms, droughts and bush or forest fires are likely to lead to major increases in insurance claims for destroyed properties, along with uninsured losses for business owners. In addition to the physical and financial costs, companies that have a significant impact on the environment face reputational

⁶⁹ Larry Fink, above n 4.

⁷⁰ Above n 4.

⁷¹ Michael Barbaro "Can Corporations Stop Climate Change" The Daily, New York Times (online ed, New York, 24 Feburary 2020).

⁷² Above n 71.

⁷³ Ben Caldecott, Director of the Sustainable Finance program, University of Oxford "Company Directors' Duties and Climate Risk Governance" (Opening Keynote at the International Legal Symposium on Climate Change Risk and Corporate Governance, University of Melbourne, 29 August 2016).

⁷⁴ Brendan O'Dwyer and Jeffrey Unerman, above n 17 at 1116.

⁷⁵ Above n 17 at 1116.

⁷⁶ Above n 17 at 1116.

damage from activist consumers, legal liability for their activities, and changes to regulation that could further decrease the value of assets.⁷⁷

The economic component of climate risk was echoed in New Zealand in the 2020 Ministry for the Environment *Climate Change Risk Assessment*, which listed the risk to the financial system from instability due to extreme weather events and ongoing gradual changes as one of the top most significant risks facing the country. New Zealand's primary industries are heavily dependent on the environment, which means that New Zealand's economy is particularly exposed to climate change. In light of this, New Zealand's commitment under the Paris Agreement included making "finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient economies."

The recognition of climate change risk as a material financial risk has had onflowing impacts on the interpretation of statutory directors' duties. In 2016, Hutley and Hartford-Davis considered climate risk in the context of s 180(1) of the Australian Corporations Act 2001 ("the Hutley opinion"). Section 180(1) requires directors to exercise their powers and discharge their duties with the degree of care and diligence that would be exercised by a reasonable director in the relevant circumstances. They concluded that company directors should consider the impact of climate change risks on their businesses, where the risk is relevant to the interests of the company. They found that it was likely that directors who failed to consider climate change risks could be liable for breaching their director's duties of care and diligence. Sa

⁷⁷ Narelle Hooper "Change in the Weather" *MAICD* (May, 2019) at 45.

⁷⁸ Ministry for the Environment National Climate Change Risk Assessment for Aotearoa New Zealand: Main report – Arotakenga Tūraru mō te Huringa Āhuarangi o Āotearoa: Pūrongo whakatōpū (August 2020).

⁷⁹ Mark Bracey, above n 46 at 134.

⁸⁰ Cabinet Paper Paris Agreement on Climate Change: Approval to Begin the Parlimaetary Treaty Examination Process (October 2016) at 8.3.

⁸¹ Noel Hutley and Sebastian Hartford-Davis "Climate Change and Directors' Duties" (Memorandum of Opinion, 7 October 2016).

⁸² Ministry for the Environment & Ministry of Business, Innovation & Employment, above n 8 at 27.

⁸³ Above n 8 at 27

Hutley and Hartford-Davis published a supplementary opinion in 2019, which outlined five material developments since the October 2016 opinion. ⁸⁴ These developments included significant changes in financial reporting frameworks (including the Task Force on Climate-related Financial Disclosures (TCFD) recommendations, increased investor and public pressure to disclose and mitigate climate risk, developments in scientific knowledge, and increased litigation risk. ⁸⁵ They concluded: ⁸⁶

The developments [since October 2016] suggest that we are now observers of a profound and accelerating shift in the way that Australian regulators, firms and the public perceive climate risk... In our opinion, these matters elevate the standard of care that will be expected of a reasonable director. Company directors who consider climate change risks actively, disclose them properly and respond appropriately will reduce exposure to liability...

They continue: 87

It is increasingly obvious that climate change is and will inevitably affect the economy, and it is increasingly difficult in our view for directors of companies of scale to pretend that climate change will not intersect with the interests of their [companies]. In turn, that means that the exposure of individual directors to 'climate change litigation' is increasing.

The Hutley opinion was adapted for the New Zealand context by the Aotearoa Circle, a partnership of public and private sector leaders unified and committed to the pursuit of sustainable prosperity for New Zealand. 88 The Aotearoa Circle commissioned law firm Chapman Tripp to prepare a legal opinion on the status of directors' duties in New Zealand (the Aotearoa Circle opinion), which confirmed the relevance of the Hutley opinion. The opinion found that the statutory director's duties under the Companies Act includes a requirement to consider climate-related matters. 89 It was reasoned that the identification of

⁸⁴ Noel Hutley and Sebastian Hartford-Davis "Climate Change and Directors' Duties" (Supplementary Memorandum of Opinion, 26 March 2019).

⁸⁵ Above n 8 at 29.

⁸⁶ Above n 84 at 2.

⁸⁷ Above n 84 at 9.

⁸⁸ The Aotearoa Circle Sustainable Finance Forum: Interim Report 2019 (2019) at 2.

⁸⁹ The Aotearoa Circle, above n 13.

climate-related risk fell within the scope of section 137, ⁹⁰ which requires directors to exercise their duties with care, diligence and skill. ⁹¹ This has been accepted as the new norm, with the New Zealand Law Society commenting that to say otherwise would be "now difficult to argue". ⁹² The Aotearoa Circle suggests that at a minimum, directors in New Zealand must: ⁹³

- (a) identify climate risks;
- (b) periodically assess the nature and extent of risks, including seeking and critically evaluating advice on risks;
- (c) decide how to take action to address climate risks, taking into account the likelihood of the risk occurring and the possible resulting harm.

As a material financial risk, directors are accountable under section 137 to take account of the financial consequences of climate-related risk. Section 131, ⁹⁴ the duty for directors to act in good faith and in the best interests of the company, may also be relevant where a director fails to take climate change into account when it demonstrably presents a material financial risk. ⁹⁵ If a company has public disclosure obligations, directors also need to ensure that they are disclosing material financial risk due to climate change as they would disclose any other material business risk. ⁹⁶ That applies regardless of whatever model of corporate governance was subscribed to, and the 'business judgement rule' will not shield directors where the legal risk stems from inadequate information or lack of inquiry. ⁹⁷

⁹⁰ Companies Act 1993, s 137.

⁹¹ Above n 13 at 15.

⁹² Submission from the New Zealand Law Society in response to the Ministry for the Environment *Discussion Document (Climate-related Financial Disclosures: Understanding Your Business Risks and Opportunities Related to Climate Change)* published October 2019 (17 December 2019) at 2.

⁹³ Above n 13 at 14.

⁹⁴ Companies Act 1993, s 131.

⁹⁵ Above n 13 at 20.

⁹⁶ Above n 13 at 4.

⁹⁷ Helen Winkelmann, Susan Glazebrook and Ellen France "Climate Change and the Law" (Prepared for the Asia Pacific Judicial Colloquium, Singapore, 28 May 2019) at 47.

Directors who fail to consider and manage climate risk are more vulnerable to personal liability for the breach of directors' duties. ⁹⁸ Staker, Garton and Baker argue that there is an increased litigation risk where directors failed to consider climate risk, where they did not adequately assess climate risk due to not obtaining expert advice, or where climate risk was ignored or inadequately managed due to poor oversight. ⁹⁹ Liability in the courts follows a marked uptake of climate litigation across the globe. In New Zealand, *Thomson v Minister for Climate Change Issues* first demonstrated the willingness of the High Court to adjudicate on climate change issues. ¹⁰⁰ Court decisions have delayed major infrastructure projects globally where climate considerations have been ignored. Kalderimis and Swan, writing for a "Tool Kit for Directors" on climate risk, noted that in the past two years, climate concerns raised in court had stopped a third runway at Heathrow Airport, a New South Wales open-cast coal mine, and a major Polish coal-fired power plant. ¹⁰¹

However, following *Smith v Fonterra Group*, the courts seem content to keep climate regulation within the government's sphere. ¹⁰² In that case, the plaintiff brought a case against eight high-profile New Zealand businesses, alleging that their carbon emissions constituted a public nuisance and that failing to address them constituted negligence or a breach of other duties. ¹⁰³ Wylie J seemed reluctant to overstep the role of the court, noting that if a claimed duty was to be recognised, emitters may be caught between their legislative obligations and decisions made by the courts. ¹⁰⁴ The duty alleged by Mr Smith was inconsistent with Parliament's regulation of emissions, a "comprehensive mechanism" designed to deal with climate change. ¹⁰⁵

⁹⁸ Alexia Staker, Alice Garton and Sarah Barker *Concerns misplaced: Will compliance with the TCFD recommendations really expose companies and directors to liability risk?* (Commonwealth Climate and Law Initiative, September 2017) at 13.

⁹⁹ Above n 98 at 13.

¹⁰⁰ Thomson v Minister for Climate Change Issues [2017] NZHC 733, [2018] 2 NZLR 160.

¹⁰¹ Daniel Kalderimis and Nicola Swan, above n 57 at 4.

¹⁰² Smith v Fonterra Co-operative Group, above n 16 at 98.

¹⁰³ Lloyd Kavanagh "The gathering storm – and how to prepare" *Institute of Directors* (New Zealand, 30 October 2019).

¹⁰⁴ Above n 16 at 98.

¹⁰⁵ Above n 16 at 98.

This is not to say that there is no value in private climate litigation. As our Supreme Court Justices themselves noted, private litigation may contribute to a necessary shift in thinking about emissions and responsibility for emissions, as well as potentially hindering larger emitting corporations... ¹⁰⁶ Further, even if the judiciary is reluctant to step in now, that will not necessarily be the case forever. Professor Kysar warned that if the government and legislatures fails to address the 'super wicked problem' of global warming, then the courts will reshape tort law to fill the vacuum... ¹⁰⁷ Salmon also noted that the courts are particularly well-placed to comprehend and process climate change issues:... ¹⁰⁸

As seen in the Treaty of Waitangi and human rights spheres, our courts are capable of heavy lifting on difficult issues... absent a meaningful legislative response to climate change, we can expect a significant role for the courts.

IV The necessity of the TCFD

Disclosure regulation is often described as "sunlight", and as the "best disinfectant" for behaviour that may otherwise be hidden and shielded. While the sentiment 'sunlight is the best disinfectant' may be inappropriate in the present Covid-19 era, its application to corporate reporting stands. However, the current reporting framework is not shining enough light on climate-related risk for companies.

A Current reporting requirements

Section 211 of the Companies Act prescribes the contents of the annual report. Under s 211, large companies and those with public accountability duties must make sufficient disclosures to enable users to understand the impact of relevant events and conditions on

¹⁰⁶ Helen Winkelmann, Susan Glazebrook and Ellen France, above n 97 at 17.

¹⁰⁷ Douglas Kysar "What Climate Change can do about Tort Law" (2011) 41 Environmental Law 1.

Davey Salmon, "Thoughts on Climate Change Litigation in New Zealand", 31 January 2019 (paper presented to Legal Research Foundation Conference to mark the retirement of the Chief Justice, Sian Elias).
 Louis Brandeis, 'Sunlight is said to be the best of disinfectants; electric light the most efficient policeman' in Other People's Money—and How Bankers Use It (Frederik A. Stokes Co, New York, 1914).
 Companies Act 1993, s 211.

the companies' financial position and performance... Further, all New Zealand Exchange ("NZX") main board listed entities must also report in accordance with the NZX Corporate Governance Code ("the NZX Code")... The NZX Code recommends that listed companies have a risk management framework, for reporting financial risks facing the company and how those risks will be managed... The Aotearoa Circle opinion noted that directors should disclose climate change-related events and conditions that impact financial performance within their risk management disclosures... This was supported by the Institute of Directors, who recommended that directors focus on meaningful disclosures on climate change risk for the benefit of stakeholders, including investors, consumers and regulators...

The External Reporting Board ("the XRB") is the authority for external reporting in New Zealand. The XRB adapts international accounting and assurance standards for use by New Zealand entities. ¹¹⁶ In March 2019, the XRB acknowledged that some 'extended' external reporting information ("EER") on a specific topic, "such as climate change", is relevant to users of the annual report, and should be included within it. ¹¹⁷ However, in determining whether to include EER information, the XRB said that "significant judgement" may be required. ¹¹⁸ The NZX Code does not illuminate this through any specific principles or concrete requirements for non-financial information. Likewise, while the NZX Corporate Governance Code 2019 encouraged issuers to disclose non-financial climate-related information in annual reports, but these disclosures were only recommended on a "comply

¹¹¹ The Aotearoa Circle, above n 13, at 21.

¹¹² New Zealand Stock Exchange NZX Corporate Governance Code (2019).

¹¹³ Above n 112 at 6.1.

¹¹⁴ Above n 13 at 21.

¹¹⁵ Felicity Caird, The Institute of Directors in New Zealand "Top five issues for directors in 2019" (17 December 2018).

¹¹⁶ Wendy McGuinness, Eleanor Merton, Isabella Smith, Reuben Brady, above n 25, at 13.

¹¹⁷ Above n 25, at 13.

¹¹⁸ Above n 25 at 13.

or explain" basis... ¹¹⁹ The NZX also published an ESG Guidance Note dated 1 January 2019, but the guidance offered was limited and not specific to climate-related disclosures... ¹²⁰

Corporate reporting on climate-related information is not a novel concept. Sustainability reporting can be traced back to 1940, where Theodore Kreps argued that the standard profit and loss accounting approach to measuring performance was inadequate. 121 Some organisations already voluntarily report on the impacts of climate change on their organisations, with some reporting frameworks (such as the Global Reporting Initiative and Integrated Reporting) being widely accepted and used by organisations wanting to report on their environmental and social impact. 122 However, these frameworks are not universal, and sustainability reporting does not focus on providing a broader range of mainstream investors or lenders with information about the risks to financial returns resulting from a company's dependence on the climate. 123 The Organisation for Economic Cooperation and Development ("OECD") and the Climate Disclosure Standards Board analysed corporate climate change reporting schemes in G20 countries in 2015. They found that while 15 countries had mandatory climate reporting schemes in place, most were limited in scope, requiring only a fraction of climate-information to be disclosed. 124 Further, there is no external verification for the non-financial climate-related information produced by companies. 125 The result is a considerable amount of 'noise' to be sifted through. Interested parties must contend with colourful websites, promotional material and

¹¹⁹ New Zealand Stock Exchange NZX Corporate Governance Code (2019).

¹²⁰ Submission from Lawyers for Climate Action New Zealand Incorporated in response to the Ministry for the Environment Discussion Document (*Climate-related Financial Disclosures: Understanding Your Business Risks and Opportunities Related to Climate Change*) published October 2019 (13 December 2019) at 6.

¹²¹ Glendanique G.E Minguel "The evolution of sustainability reporting: A case study of the airlines section" (University of Tilburg, Research Paper, August 2017) at 6.

¹²² Submission from Felicity Caird (General Manager, Governance Leadership Centre, Institute of Directors) in response to the Ministry for the Environment Discussion Document (*Climate-related Financial Disclosures: Understanding Your Business Risks and Opportunities Related to Climate Change*) published October 2019 at 3.

¹²³ Brendan O'Dwyer and Jeffrey Unerman, above n 17 at 1114.

¹²⁴ Ministry for the Environment & Ministry of Business, Innovation & Employment, above n 8, at 12.

¹²⁵ Beate Sjåfjell "Realising the Potential of the Board for Corporate Sustainability" in Beate Sjåfjell and Christopher M Brunder (eds) *The Cambridge Handbook of Corporate Law: Corporate Governance and Sustainability* (Cambridge University Press, UK, 2019) 696 at 699.

at best, well-intended initiatives that are insufficient to mitigate the unsustainability of 'business as usual'. 126

Ultimately, the contents of an annual report are decided at the discretion of the directors. ¹²⁷ Section 211 (1) of the Companies Act provides that the board can decide not to disclose information if it is harmful to the business. A legal opinion prepared by Fitzgerald Strategic Legal (the Fitzgerald Strategic legal opinion) found that neither ss 208. ¹²⁸ or 211 specifically require disclosure of climate risks. ¹²⁹ The opinion notes that without a specific statutory requirement or a court decision affirming the obligation exists, it is unlikely that companies will voluntarily move to greater risk disclosure in their annual reports. ¹³⁰ This finding can be confirmed by studies of current climate reporting by New Zealand companies, with research showing that only 38 of 133 NZX companies issued more than three pages of sustainability information. ¹³¹ A study conducted by the McGuiness Institute also found that 75% of the 2017 NZX-listed companies failed to report on carbon emissions in their 2016 annual reports. ¹³² The Fitzgerald Strategic legal opinion recommended that s 211 be changed to include more explicit requirements for annual reports to address proximate and imminent risks which would be reasonably likely to have a material adverse effect on the company's financial position or financial performance. ¹³³

¹²⁶ Above n 123 at 699.

¹²⁷ Wendy McGuinness, Eleanor Merton, Isabella Smith *Report 17 – ReportingNZ: Building a reporting framework fit for purpose* (The McGuinness Institute, 25 June 2020) at 112.

¹²⁸ Section 208 sets out the obligation to prepare an annual report within 5 months after the balance date, applying to; large companies, public entities, companies required to prepare financial statements under the Financial Markets Conduct Act 2013, every company with 10 or more shareholders if they had not opted out of compliance under s 207I, every company with fewer than 10 shareholders if they have opted into compliance under s 207K.

¹²⁹ Gerald Fitzgerald *Legal Opinion 2020/01 – Obligations on directors to report risk in New Zealand annual reports under the Companies Act 1993* (The McGuinness Institute, May 2020) at 4.19.

¹³⁰ Above n 127 at 4.

¹³¹ Proxima Towards Transparency Sustainability reporting practice in New Zealand (2018) at 24.

¹³² Wendy McGuinness, Eleanor Merton, Isabella Smith, above n 25, at 17.

¹³³ Above n 127 at 4.

Ultimately, the current guidance under the Companies Act and the statements released by the XRB and the NZX is insufficient for companies to make meaningful disclosures about their climate-related risk. Current reporting obligations do not include climate-related risk, meaning it is not at the forefront of companies' operations, risk management and investment behaviour. The NZX Code and XRB statements do not sufficiently address climate change risks in a way that ensures adequate disclosure or allows stakeholders, investors, suppliers, customers, employees, and the public to scrutinise businesses and make informed investment decisions. The companies of the current statements are considered investment decisions. The companies are companies and the public to scrutinise businesses and make informed investment decisions.

B The development of the TCFD

The Task Force on Climate-related Financial Disclosures (TCFD) was the outcome of the April 2015 G20 *Finance Ministers and Central Bank Governors Meeting*, where the Financial Stability Board was asked "to convene public and private-sector participants to review how the financial sector can take account of climate-related issues." ¹³⁶ The Financial Stability Board convened in September 2015, and the climate reporting problem discussed in *Part IV(A)* was raised. ¹³⁷ The climate reporting problem was seen as indicative of a wider problem. It was seen as a lack of consensus from the corporate community about the reality of climate-related risk. ¹³⁸ In response, the Financial Stability Board discussed a number of complex risks from climate change to the resilience of financial institutions. Risks were broadly categorised into physical, liability and transition risks. ¹³⁹ The meeting identified a key role for "appropriate disclosure" of corporate-level information in helping markets understand such climate change risks, and to ensure better-functioning markets. ¹⁴⁰ Corporate disclosure was identified as a way to help companies understand and adapt in a timely manner to the material climate risks and opportunities faced, which would reduce the likelihood of even more disruptive changes in the future. ¹⁴¹

¹³⁴ Lawyers for Climate Action New Zealand, above n 118, at 6.

¹³⁵ Above n 118 at 6.

¹³⁶ Brendan O'Dwyer and Jeffrey Unerman, above n 17, at 1117.

¹³⁷ Above n 17 at 1117.

¹³⁸ Above n 17 at 1117.

¹³⁹ Above n 17 at 1117.

¹⁴⁰ Above n 17 at 1117.

¹⁴¹ Above n 17 at 1117.

After the meeting, the Financial Stability Board established the TCFD, which was tasked with developing voluntary, consistent climate-related financial risk disclosures for use by companies in providing information to investors, lenders, insurers and other stakeholders. The rationale behind the TCFD is that clear, consistent and reliable disclosures in line with the TCFD recommendations will improve market participants' economic decision-making. When markets operate efficiently, they help deliver effective pricing and management of risks. A prerequisite for markets efficiently pricing risks in this context is the provision of high-quality, understandable and reliable information. Its

In June 2017, the TCFD released its final recommendations, which provide a framework for voluntary disclosures of climate-related financial risks for all corporate entities. ¹⁴⁶ The TCFD framework identifies two types of risk: transition and physical risk. Transition risks are the indirect impacts arising from regulation, investor and customer reactions, stranded assets and changing business models. ¹⁴⁷ Some examples of transition risks could be: policy risk due to evolving policy actions by governments and regulators; litigation risk from climate-related litigation; technology risk associated with the impact of climate-related technology improvements; market risk due to shifts in supply and demand in response to climate-related risks and opportunities; reputation risk due to changing customer and public perception about the impact of a company on the environment. ¹⁴⁸

Physical risk encompasses financial implications due to direct damage to assets, or indirect impacts to supply chain disruption. This can be caused by an event (e.g. increased severity of extreme weather events) or by long-term shifts in climate patterns. ¹⁴⁹ Physical risk also

¹⁴² Above n 8 at 13

¹⁴³ Alexia Staker, Alice Garton and Sarah Barker, above n 98, at 7.

¹⁴⁴ Above n 17 at 1117.

¹⁴⁵ Above n 17 at 1115.

¹⁴⁶ Above n 98 at 7.

¹⁴⁷ Lloyd Kavanagh, above n 103.

¹⁴⁸ Above n 8 at 13.

¹⁴⁹ Above n 8 at 13.

encompasses entity performance due to: changes in water availability; changes in food security; extreme temperature changes that impact the entity's premises, operations, supply chain, transport needs and employee safety. Physical risks are likely to directly impact many New Zealand businesses. Our agricultural, horticultural and fisheries sectors are likely to be impacted by more volatile weather or warmer seas. Tourism and businesses with coastal property and infrastructure investments will also be affected. These physical implications flow through to those with second-tier exposure, such as lenders and insurers, impacting the price or availability of finance and insurance.

The TCFD framework has garnered international acclaim and a strong following, with most considering the TCFD to be best practice for climate-related financial reporting. ¹⁵³ Australia, Canada, the United Kingdom, France, Japan and the European Union are all working towards implementing some form of the TCFD for corporate reporting. ¹⁵⁴ However, New Zealand is the first in the world to introduce a mandatory climate-related disclosure regime based on the TCFD. It was first recommended by the Productivity Commission in its *Low-emissions Economy* report. ¹⁵⁵ The Ministry for the Environment (MfE) and the Ministry of Business, Employment and Innovation (MBIE) released a discussion document entitled *Climate-related financial disclosures* in October 2019, with submissions open to interested parties. ¹⁵⁶ In the foreword to that document, Ministers James Shaw and Kris Faafoi noted that the introduction of climate-related disclosures in New Zealand has two objectives. ¹⁵⁷ First, to help New Zealand transition to a 'low-emissions economy' consistent with the spirit of the Paris Agreement. ¹⁵⁸ Second, to resolve the present information asymmetry between companies and investors and provide

¹⁵⁰ Above n 8 at 13.

¹⁵¹ Lloyd Kavanagh, above n 103.

¹⁵² Above n 103.

¹⁵³ Brendan O'Dwyer and Jeffrey Unerman, above n 17, at 1117.

¹⁵⁴ Above n 17 at 1115.

¹⁵⁵ Productivity Commission Low Emissions Economy (9 August 2018).

¹⁵⁶ Ministry for the Environment & Ministry of Business, Innovation & Employment, above n 8.

¹⁵⁷ Above n 8.

¹⁵⁸ Cabinet Paper, above n 7, at 3.

comparable, timely and decision-useful information about the risks and opportunities arising from climate change. 159

In their submission to the *Climate-related financial disclosures* discussion document, the Institute of Directors endorsed the TCFD framework for helping directors fulfil their legal obligations in relation to climate risk... ¹⁶⁰ As discussed, the duties in s 131 and s 137 both require directors to adequately assess and manage existing and emerging climate-related risks to the company. Prima facie, the TCFD recommendations provide a useful framework for discharging these duties... ¹⁶¹ This was affirmed by Kenneth Hayne QC, co-author of the seminal 'Hutley Opinion', at the Centre for Policy Development's Business Roundtable on Climate and Sustainability... ¹⁶² There, Hayne commented that the TCFD framework had emerged as a mechanism for directors in Australia to address – and be *seen* to address – climate-related duties and obligations.

The words of 'being seen' to discharge directors' duties are significant here. With the threat of climate litigation looming, the TCFD framework allows directors to be seen to be contemplating and assessing climate-related risk. Being seen to consider climate-related risk minimises the threat of climate litigation, and ensures that corporations do not face public or consumer criticism, nor loss of confidence from investors. However, appearances can be deceptive. The proposed disclosure regime may actually be a movement towards masked virtue signalling. He rather than as a "powerful mechanism" for real change as intended by law-makers. The following parts of this paper assess whether climate-related disclosures can and will actually work as a mechanism to regulate corporate behaviour, or merely a tool for directors to avoid climate litigation.

¹⁵⁹ Above n 7 at 1.

¹⁶⁰ Felicity Caird, above n 120, at 3.

¹⁶¹ Alexia Staker, Alice Garton and Sarah Barker, above n 98, at 12.

¹⁶² Centre for Policy Development, above n 21.

¹⁶³ Submission from Lawyers for Climate Action New Zealand Incorporated, above n 118, at 4.

¹⁶⁴ Susan Watson "Moving beyond Virtue Signalling: Corporate Sustainability for New Zealand" in Beate Sjåfjell and Christopher M Brunder (eds) The Cambridge Handbook of Corporate Law: Corporate Governance and Sustainability (Cambridge University Press, UK, 2019) 177 at 188.

¹⁶⁵ Ministry for the Environment & Ministry of Business, Innovation & Employment, above n 8, at 5.

V Practical limitations of the TCFD framework

The TCFD framework has been loudly lauded around the world as the new standard of best practice for the disclosure of climate-related information. Yet, as O'Dwyer and Unerman noted, "there has been little, if any, substantive academic accounting research published on this potentially transformative corporate reporting." This section addresses that concern.

A Materiality

The recommendations of the TCFD state that organisations should determine materiality for climate-related issues consistent with how they determine the materiality of other information included in their annual financial filings. ¹⁶⁷ In New Zealand, the definition of 'materiality' to be used is contained in the IASB Conceptual Framework for Financial Reporting, which states that: ¹⁶⁸

[I]nformation is material if omitting, misstating or obscuring it could reasonably be expected to influence decisions that the primary users of general purpose financial reports make on the basis of those reports.

The IASB definition still leaves directors with some discretion to determine what climate-related information fits within the scope of materiality. Fundamentally, materiality is a concept designed to guide the application of professional judgement for the purpose of determining acceptable levels of information disclosure in mainstream reports, thereby informing decision-making by the users of those reports. Ultimately, material information is anything that could cause decision-makers to adjust their investment portfolios. However, variations in what is considered 'material' are common due to

¹⁶⁶ Brendan O'Dwyer and Jeffrey Unerman, above n 17, at 1134.

¹⁶⁷ Task Force on Climate-Related Financial Disclosures, above n 19, at 3.

¹⁶⁸ IFRS "IASB clarified its definition of 'material'" (31 October 2018).

¹⁶⁹ Climate Disclosure Standards Board *Position paper: Materiality and climate-related financial disclosures* (Climate Disclosure Standards Board, 2018) at 3.

¹⁷⁰ Basic Inc v Levinson 485 US 224 [1988] at [47].

differences in audience, purpose and scope..¹⁷¹ Therefore, directors still have discretion in determining the materiality of the climate-related disclosures being made. This discretion is significant, for as Burke wrote, wherever there is meaning there is persuasion..¹⁷² This discretion means that corporate reporting and disclosures are not a neutral referential tool mirroring the social world, but an exercise where directors have the ability to construct their own social realities..¹⁷³ Further, it becomes more difficult to critique materiality when companies shield how they make materiality assessments. In a recent review in the United Kingdom, only 68 per cent of companies described the process they used to determine materiality of environmental and climate-related information for inclusion in mainstream reporting..¹⁷⁴

TCFD Special Advisor and former SEC Chairman Mary Schapiro explained that because companies already have obligations to disclose material risks, they have a foundation of the relevant skills to make materiality assessments and the appropriate disclosures...¹⁷⁵ However, climate-related risks present new challenges for directors. O'Dwyer and Unerman warned that the ambiguity of materiality would be amplified when transferred to a new domain. ¹⁷⁶, which seems the case with climate-related risk. The TCFD admitted that "the financial impacts of climate-related issues are not always clear" and that for many companies "identifying the issues, assessing the potential impacts and ensuring material issues are reflected in financial filings may be challenging." ¹⁷⁷ Part of the difficulty is that risk assessment for climate change is a different beast to a normal risk assessment, with

¹⁷¹ Above n 167 at 4.

¹⁷² Kenneth Burke A Rhetoric of Motives (Berkley University of California Press, California, 1969) at 172.

¹⁷³ Sylvia Jaworska "Change But no Climate Change: Discourses of Climate Change in Corporate Social Responsibility Reporting in the Oil Industry" (2018) 55 International Journal of Business Communication 194 at 195.

¹⁷⁴ Climate Disclosure Standards Board Falling short? Why environmental and climate-related disclosures under the EU Non-Financial Reporting Directive must improve (Climate Disclosure Standards Board, 2020) at 23.

¹⁷⁵ Robert Eccles and Michael Krzus "Implementing the Task Force on Climate-related Financial Disclosures Recommendations: An Assessment of Corporate Readiness" (2019) 71 Schmalenbach Business Review 287 at 289.

¹⁷⁶ Brendan O'Dwyer and Jeffrey Unerman, above n 17, at 1125.

¹⁷⁷ Climate Disclosure Standards Board, above n 167, at 3.

impacts that extend over much longer periods than one financial year...¹⁷⁸ Mark Carney referred to this dilemma as the 'tragedy of the horizon'. ¹⁷⁹, in that the physical risks to corporate viability manifest in the longer term, beyond the short-term horizons of mainstream reporting... ¹⁸⁰ The TCFD itself cautions companies from prematurely concluding that climate-related risks and opportunities are not material based on perceptions of the longer-term nature of climate-related risks... ¹⁸¹ Despite this, some academics are still concerned that in practice, climate-related risks will be assessed narrowly, only being deemed material if impacting a reasonable investor's decision on whether to purchase, hold, or sell shares would be influenced or changed if the information was omitted or misstated, or whether it would affect the share price... ¹⁸²

To reflect the greater complexity of climate-related information, climate-related reporting historically developed outside the mainstream reporting model. ¹⁸³ This included entire specialist research areas, such as research into carbon-asset stranding risks. ¹⁸⁴ Given this, there are likely to be significant discrepancies between how material issues are identified and disclosed in mainstream reports comparative to sustainability reports. The World Business Council for Sustainable Development found that only 29 per cent of the issues deemed material and disclosed in sustainability reports were also disclosed as mainstream risks. ¹⁸⁵ As it stands, there is no agreed process for incorporating sustainability reporting content and practices into the mainstream reporting model or applying the existing mainstream reporting infrastructure to the disclosure of material climate-related financial

¹⁷⁸ Above n 173 at 289.

¹⁷⁹ Mark Carney "Breaking the tragedy of the horizon – climate change and financial stability" (Speech given at Lloyd's of London, London, 29 September 2015).

¹⁸⁰ Jeffrey Unerman "Raising CFO awareness of urgent climate-related risks and opportunities" *Financial Director* (United Kingdom, 27 May 2019).

¹⁸¹ TCFD, above n 19, at 17.

¹⁸² Poonam Puri "Green but Not Green Enough: Sustainability in Canadian Corporate Governance" in Beate Sjåfjell and Christopher M Brunder (eds) The Cambridge Handbook of Corporate Law: Corporate Governance and Sustainability (Cambridge University Press, UK, 2019) 146 at 157.

¹⁸³ Climate Disclosure Standards Board, above n 167, at 10.

¹⁸⁴ Above n 167 at 10.

¹⁸⁵ World Business Council for Sustainable Development Sustainability and Enterprise Risk Management: the first step towards integration (WBCSD, 17 January 2017) at 11.

information...¹⁸⁶ By bringing climate-related disclosures into mainstream reporting, it raises the question of whether the information deemed 'material' for sustainability reporting purposes is, or is not, 'material' for the mainstream report...¹⁸⁷

Materiality has been the subject of recent climate litigation, most significantly in Australia. In *Abrahams v Commonwealth Bank of Australia*, ¹⁸⁸ a shareholder brought a claim against the company on the basis that material climate risk had not been adequately disclosed by the Commonwealth Bank of Australia (CBA) in their 2016 annual report. By excluding environmental information, the company was not giving a 'true and fair' ¹⁸⁹ view of their financial position, and the director's report was not sufficient to allow investors to make an "informed assessment" ¹⁹⁰ under the Corporations Act 2001. ¹⁹¹ The shareholders requested an injunction to prevent CBA from omitting climate risk in their future reports. Ultimately, the case was dropped after CBA included in their 2017 annual reports an acknowledgement that climate risk had a significant impact on their operations. ¹⁹²

A similar fact pattern presented itself in *Mark McVeigh v Retail Employees Superannuation*, with a pension fund member undertaking legal action against the Retail Employees Superannuation Trust (REST) on the basis that REST has failed to provide sufficient information about climate change risks and REST's plans to mitigate those risks. PEST pointed to publicly available information on its website, which states that it takes environmental risks seriously and that climate change is a relevant consideration in the context of fund investment and management. In the original form of the case, the

¹⁸⁶ Above n 167 at 10.

¹⁸⁷ Above n 167 at 11.

¹⁸⁸ Abrahams v Commonwealth Bank of Australia (2017) FCA VID879.

¹⁸⁹ Corporations Act 2001 (Australia), s 297.

¹⁹⁰ Corporations Act 2001 (Australia), s1017C.

¹⁹¹ Theodore Emmett Keenan Rose "Time is running out: The urgency of mandatory environmental disclosures in New Zealand Securities Market Law" (LLB (Hons) Dissertation, University of Otago, 2019) at 29

¹⁹² Above n 189 at 29.

¹⁹³ Mark McVeigh v Retail Employees Superannuation (2019) FCA 14.

¹⁹⁴ Above n 189 at 29.

¹⁹⁵ Above n 191 at 5.

issue was whether s 107C. 196 of the Corporations Act 2001 required REST to disclose more information to the applicant than it already had. 197 Under this, it was presumed that the applicant would want to know whether REST was investing in environmentally unsustainable businesses. McVeigh alleged that REST should have complied with the TCFD recommendations on disclosure and risk assessment. This included conducting a thorough scenario analysis. 198 on how REST would operate under different climate trajectories. Justice Perram predicted that the response would be that REST did not have to disclose information that was not germane to the financial performance of the fund. ¹⁹⁹ This essentially echoes the idea that companies would only have to disclose risk that they considered material to their financial performance, which narrows the scope of what climate-related disclosures are made. McVeigh subsequently amended his case to allege that REST breached its duties as a trustee by not having a more developed climate change policy than it had indicated. 200 The case is to be heard on the November 2 2020, 201 with the result likely to shed some light on how whether materiality is likely to be given a new interpretation for climate-related risk, and influence how companies broadly think about how they address climate change risks. ²⁰²

¹⁹⁶ Section 107C (2) states that the issuer must give the concerned person information that they reasonably require for the purposes of (a) understanding any benefit entitlements that the concerned person may have, has or used to have under the superannuation product; or (b) understanding the main features of: (i) the relevant sub-plan; or (ii) if there is no relevant sub-plan—the superannuation entity; or (c) **making an informed judgment about the management and financial condition of: (i) the superannuation entity; and (ii) the relevant sub-plan (if any);** or (d) making an informed judgment about the investment performance of: (i) the relevant sub-plan; or (ii) if there is no relevant sub-plan—the superannuation entity; or (e) understanding the particular investments of: (i) the superannuation entity; and (ii) the relevant sub-plan (if any). [*Emphasis added*].

¹⁹⁷ Above n 191 at 6.

¹⁹⁸ This concept will be discussed in more depth in the next section.

¹⁹⁹ Above n 191 at 6.

²⁰⁰ Above n 191 at 7.

²⁰¹ Justice Perram, Order of the Federal Court of Australia, 5 June 2020 at 10.

²⁰² Nassim Khadem "Mark McVeigh is taking on REST super on climate change and has the world watching" *ABC News* (18 January 2020).

B Inadequate disclosures and the 'skills gap' for directors

A strength of the TCFD framework is that it allows companies to communicate more information to users. In theory, companies can articulate how climate science, public policy and the evolution of technology are all likely to impact on their activities. However, there is a stark difference between what theoretically can be communicated, and what is actually produced in practice. The Climate Disclosure Standards Board produced a report in May 2020, Falling short? Why environmental and climate-related disclosures under the EU Non-Financial Reporting Directive must improve (the Falling Short report), noting that reporting under the TCFD framework still fails to offer investors a clear understanding of companies' development, performance, position and impact, due to lacking the necessary quality, comparability and coherence. ²⁰⁴ This means that investors remain unable to fully integrate environmental and climate-related considerations into their decision-making. ²⁰⁵

Inadequate disclosures are the result of a lack of 'board-readiness'. This refers to significant gaps in capability, data and tools that companies need to make quality disclosures...²⁰⁶ This concern was highlighted in response to the *Climate-related financial disclosures* discussion document, that many companies have not yet begun to take into account climate-related risks, and would have to build their capability and access to reliable data prior to making disclosures...²⁰⁷ The significance of this should not be understated. While corporate governance should include effective climate governance, directors must grapple with scientific, macro-economic and policy uncertainties across broad time scales and beyond board terms...²⁰⁸ Directors will have to overcome severe practical difficulties such as the limited knowledge of climate-related issues, the propensity for shorter-term risks to

²⁰³ Tim Nelson "ESG, climate change risk and disclosure" (2018) 70 Governance Directions 705 at 706.

²⁰⁴ Climate Disclosure Standards Board, above n 172, at 1.

²⁰⁵ Above n 172 at 1.

²⁰⁶ Letter from Sam Woods (Deputy Governor for Prudential Regulation and CEO of the Prudential Regulation Authority) to Chief Executive Officers regarding the thematic feedback from the Prudential Regulation Authority review of firms' management of climate-related financial risk (1 July 2020).

²⁰⁷ Ministry for the Environment & Ministry of Business, Innovation & Employment Climate-related financial disclosures – Understanding your business risks and opportunities related to climate change: Summary of submissions (March 2020) at 17.

²⁰⁸ World Economic Forum White Paper "How to Set Up Effective Climate Governance on Corporate Boards: Guiding principles and questions" (17 January 2019).

dominate over longer-term risks, and the difficulty in accurately assessing the impact of risks. ²⁰⁹

This skills gap may result in directors being unable to discharge their climate-related duties in a meaningful way. ²¹⁰ In the United Kingdom, the *Falling Short* report noted that the gap in skills, knowledge and tools resulted in disclosures that were "light touch in nature", providing only high-level or cursory references to the climate and environment, and that did not fully articulate the strategic integration of those matters into business models. ²¹¹ While 90 per cent of companies did disclose at least one principal risk relating to climate change, only 54 per cent considered both transition and physical risks as outlined in the TCFD recommendations...²¹² Impact descriptions were often generic, without providing entity or context-specific information or quantification. Business risks were not framed from a business risk perspective as required by the TCFD, ²¹³ and while the general impact of the business on the environment or climate change was discussed, it was done without sufficient reference to, for example, liability through fines, increased regulations, or reputation damage. 214 Further, it was not clearly articulated how environmental and climate-risks integrated into wider business processes, meaning investors could not discern how risks were used to inform companies' decision-making. 215 The report concluded that standalone disclosures of immaterial risks were potentially misleading and did not support improved investor decision-making. 216

One key area of concern is scenario analysis. Under the recommendations of the TCFD, scenario analysis requires companies to analyse their business case in a 2°C world and

²⁰⁹ Submission from Russell McVeagh in response to the Ministry for the Environment Discussion Document (Climate-related Financial Disclosures: Understanding Your Business Risks and Opportunities Related to Climate Change) published October 2019 (13 December 2019).

²¹⁰ Above n 207.

²¹¹ Climate Disclosure Standards Board, above n 172, at 8.

²¹² Above n 172 at 14.

²¹³ Above n 172 at 14.

²¹⁴ Above n 172 at 14.

²¹⁵ Above n 172 at 15.

²¹⁶ Above n 172 at 15.

economy, and the resulting impact that would have on their company's business, strategy and financial planning. These scenarios are not intended to provide a prediction, projection or an average forecast of the state of global warming that will be achieved in the future, but are a powerful narrative to help corporations anticipate and prepare for possible changes they might encounter. Thus, the TCFD framework allows companies to demonstrate that they are addressing the risks and opportunities associated with climate change, showing how resilient their strategy and operations are in different scenarios of future global warming. The TCFD explains that in order to achieve that, each of the scenarios modelled by a corporation need to be "plausible", "distinctive and ... differentiated", "internally consistent", "relevant" and "challenging of conventional wisdom and simplistic assumptions about the future". 221

International reviews of TCFD implementation consistently show that firms are struggling with scenario analysis. A 2019 EY review identified that while some organisations referred to scenario analysis in their disclosures, they did not fully engage with it. ²²² Likewise, the TCFD's 2018 and 2019 surveys of large company reporting of climate-related financial risks found very low levels of disclosures about the resilience of corporate strategy in different global warming scenarios. ²²³ The 2019 survey found that scenario analysis was the lowest complied-with recommendation of the TCFD, having increased from 6 per cent in 2018 to 9 per cent in 2019. ²²⁴ This was also found in the Climate Disclosure Standards Board's survey, with only 14 per cent of companies in the United Kingdom disclosing their

²¹⁷ Carina Ohm, Liza Jensen, Rune Jørgensen Climate Risk Disclosure Barometer 2020 (EY, 2019) at 10.

²¹⁸ Brendan O'Dwyer and Jeffrey Unerman, above n 17, at 1120.

²¹⁹ Tim Nelson "ESG, climate change risk and disclosure" (2018) 70 Governance Directions 705 at 709.

²²⁰ Above n 17 at 1120.

²²¹ Brendan O'Dwyer and Jeffrey Unerman, above n 17, citing Task Force on Climate-Related Financial Disclosures *Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures* (June 2017).

²²² Matthew Nelson *How climate change disclosures reveal business risks and opportunities* (EY, 9 January 2019).

²²³ Task Force on Climate-Related Financial Disclosures 2018 Status Report (2018) at 15 and Task Force on Climate-Related Financial Disclosures 2019 Status Report (2019) at 12.

²²⁴ Above n 221.

scenario analysis. ²²⁵ These omissions meant that the quality of strategic disclosures was greatly weakened.

Scenario analysis requires a brand new skill-set involving future states that will occur once, out of a range of possibilities. 226 Thus understanding and developing skills in climatebased scenario analysis has been an area where corporations are facing major challenges.²²⁷, in developing new abilities in a type of planning that is not based on the forecasting of averages. ²²⁸ Attempts have been made to assist directors in equipping themselves to undertake scenario analysis. In the United Kingdom, for example, the Climate Disclosure Standards Board has run workshops and webinars to train directors to improve their climate reporting practices in line with the TCFD recommendations, including addressing scenario analysis. 229 The World Business Council for Sustainable Development has also convened a number of sector-specific TCFD preparer forums to develop insight and capacity. 230 The TCFD itself runs a knowledge hub of tutorials and online guidance. ²³¹ Despite this guidance, preparation of scenario analysis remains low, highlighting the complexity of the skills needed to prepare adequate disclosures. It may be that adequate disclosures will be out of reach for the average board. Developing the knowledge and understanding to undertake meaningful scenario analysis is likely to require interdisciplinary teams, including university-based academics who can provide ready access to relevant insights from environmental science research. ²³² Sector-wide efforts may be needed to commission scientific research to fill identifiable gaps. 233

²²⁵ Climate Disclosure Standards Board, above n 172, at 22.

²²⁶ Brendan O'Dwyer and Jeffrey Unerman, above n 17, at 1121.

²²⁷ Above n 17 at 1115.

²²⁸ Above n 17 at 1121.

²²⁹ Above n 17 at 1122.

²³⁰ World Business Council for Sustainable Development "Task Force on Climate-related Financial Disclosure (TCFD) Preparer Forums" (2019).

²³¹ Task Force on Climate-Related Financial Disclosures "TCFD Knowledge Hub".

²³² Brendan O'Dwyer and Jeffrey Unerman, above n 17, at 1123.

²³³ Above n 17 at 1123.

In the strictest terms of the new interpretation of s 137, the skills-gap should not be enough to justify inadequate disclosures. Under the strict analysis, companies should be undertaking the rigorous skills-upgrade needed for meaningful disclosures. However, there is a grey area for what happens to companies who fail to do so. No information on enforcement mechanisms was disclosed in the Climate-related financial disclosures discussion document. In theory, climate litigation should act as a deterrent for inadequate climate-related disclosures. If a company fails to disclose sufficient information, then they risk law suits for breaching their directors' duties. However, Smith v Fonterra showed that the courts are reluctant to step into the regulatory role of the government. 234 With this as precedent, there is an omnipresent risk that it will be sufficient for directors' to be seen to be discharging their duties. A company may not have the sufficient capabilities, tools, or knowledge to be making sufficient disclosures that will have any impact on the decisionmaking of users of their financial statements, nor attempting to up-skill to make meaningful disclosures. The climate-related disclosures published may be mere cookie-cutting, a tickboxing exercise with no tangible outcome. The usefulness of disclosures would not matter, as firms would have no further responsibilities for quality, and no authority enforcing a standard of disclosures.

A useful comparison could be to the Modern Slavery Statement, adopted in the United Kingdom. The Modern Slavery Act 2015 included a ground-breaking requirement for large businesses to report annually on the steps taken to prevent modern slavery in their operations and global supply chains. ²³⁵ Critics of the Modern Slavery Statement found the rules around disclosure to be too permissive, requiring disclosure of due diligence but not actually requiring due diligence. ²³⁶ Further, most statements said little about the practical steps taken to tackle modern slavery, and a 'suspicious uniformity' between statements was noted, suggested companies used the same advisor or template. ²³⁷ Widespread non-

²³⁴ Smith v Fonterra Co-operative Group Limited, above n 16, at [98].

²³⁵ Gov.UK "UK government modern slavery statement" (26 March 2020).

²³⁶ Andrew Johnston "Market-Led Sustainability through Information Disclosure: the UK Approach" in Beate Sjåfjell and Christopher M Brunder (eds) *The Cambridge Handbook of Corporate Law: Corporate Governance and Sustainability* (Cambridge University Press, UK, 2019) 204 at 216.

²³⁷ Above n 234 at 216.

compliance and a lack of enforcement of the Modern Slavery Statement have also been observed. Chiu noted that despite having a social orientation, there is limited room for civil society to act upon it. ²³⁸ The Modern Slavery Statement could thus offer a grim prediction for the future of mandatory climate-related disclosures in New Zealand. *Smith v Fonterra* could severely limit a private citizen's right to challenge companies who have published inadequate disclosures.

C The usefulness of qualitative information

The intention of the TCFD framework is to provide disclosures that allow capital market participants to have information to inform allocation decisions. ²³⁹ Given this, it seems logical that these participants will demand disclosures that reflect actual firm performance and activities. ²⁴⁰ However, the TCFD framework produces purely qualitative assessments of risk which may mean that users do not have all the information needed to make informed decisions. In addition, given the commercial context that dominates sustainability reporting, the 'business case' for disclosures is of critical importance. ²⁴¹ The business case concept was coined to describe the corporate position towards sustainability; environmental impacts are internalised in corporate decision-making, but only to the extent that it will have a positive impact on long-term financial performance. ²⁴² This has also been described as a 'weak sustainability approach', where the depletion of ecological and social capital can be justified if sufficiently offset by improvements to economic or other capital. ²⁴³

²³⁸ Iris H.-Y. Chiu "Disclosure Regulation and Sustainability" in Beate Sjåfjell and Christopher M Brunder (eds) *The Cambridge Handbook of Corporate Law: Corporate Governance and Sustainability* (Cambridge University Press, UK, 2019) 521 at 528.

²³⁹ Jane Andrew and Max Baker, above n 24, at 53.

²⁴⁰ Above n 24 at 53.

²⁴¹ Above n 24 at 53.

²⁴² Beate Sjåfjell and Christopher M Bruner "Corporations and Sustainability" in Beate Sjåfjell and Christopher M Brunder (eds) *The Cambridge Handbook of Corporate Law: Corporate Governance and Sustainability* (Cambridge University Press, UK, 2019) 4 at 4.

²⁴³ Poonam Puri, above n 180, at 146.

In order to make this assessment, quantitative information is needed. Mayer suggests that there is a need for two measures of profit: financial profit, and sustainable profit. 244 The determination of financial and sustainable profit would be a simple, low-cost exercise for the management of a company to work out what its profit would be if its business was sustainable. ²⁴⁵ Financial profit would be the starting point for reporting that, at a minimum, the company is financially viable. ²⁴⁶ Before it is able to take any action on climate change. it needs to be solvent and able to meet its financial obligations over time as they fall due. 247 Once financial viability is ascertained, sustainable profit can be calculated. This would take into account the costs of negative externalities, ²⁴⁸ and determine whether a business is currently operating in a sustainable way, and if it is trending towards sustainability over time. ²⁴⁹ With these two measures calculated, a company can attempt to converge between financial profit and sustainable profit. One way to do so would be through responding to the transition risks in the TCFD framework, thereby decreasing financial profit. 250 A second way would be through changes in operations, such as switching to cleaner energy sources or reducing externalities, without a detrimental impact on financial performance. 251 Importantly, it would actually matter whether a company was acting in a sustainable way, as the emphasis would be on having the information to inform future decision-making. The purpose of the TCFD framework is to help users understand business risk and allocating capital appropriately, 252 which would be aided in forecasting profitability both for 'business-as-usual', and for sustainability.

²⁴⁴ Colin Mayer and Richard Barker "How Should a 'Sustainable Corporation' Account for Natural Capital" (2017) 15 Saïd Business School at 5.

²⁴⁵ Above n 242 at 8.

²⁴⁶ Above n 242 at 3.

²⁴⁷ Above n 242 at 3.

²⁴⁸ Above n 242 at 6.

²⁴⁹ Above n 242 at 5.

²⁵⁰ Mayer gives the examples of changes in the market through shifts in public opinion and consumer behaviour, environmental costs being passed on from suppliers, changes in regulation or in taxation – all of which fall within the scope of 'transition risks'.

²⁵¹ Above n 242 at 7.

²⁵² Task Force on Climate Related Financial Disclosures, above n 19.

That said, the concern remains that the translation of climate-related risk into the financial statements will not be a useful exercise. Climate reporting is by nature wider than pure financial reporting. As discussed, the entire concept of 'sustainability reporting' was constructed because environmental information did not fit neatly within mainstream reporting. ²⁵³ One particular issue with the determination of 'sustainable profit' within the matrix of mainstream reporting is that it implicitly assumes that the financial value of a business can be maximized using natural resources without setting ecological limits.²⁵⁴ This point was also raised by Dr Klumpes, who noted that the focus on financial information may not be the right way to understand climate-related risk. 255 The existing accounting model is fundamentally about reporting on wealth created through consumption. 256 Climate-related risk, on the other hand, is fundamentally about the consumption of existing resources that may not be available in the future. 257 Therefore, focusing on financial information may not contribute to a wider discussion about climate change. Non-financial reporting is often a key part of external reporting for companies, in recognition of the fact that both financial and non-financial information is useful for those interested in the affairs of the company. ²⁵⁸ Climate change encompasses non-financial information, with the effects of an organisation often being far more significant than the financial effects. ²⁵⁹ There may be significant climate-related risks that cannot be easily quantifiable in financial terms, such as reputational risk. 260

Clearly, there are robust arguments on either side for the inclusion of quantitative information in the TCFD framework. Qualitative information and assessments of risk are

²⁵³ Climate Disclosure Standards Board, above n 167, at 10.

²⁵⁴ Beate Sjåfjell and Christopher M Bruner, above n 240, at 4.

²⁵⁵ Institute and Faculty of Actuaries *Climate risk reporting practices by UK insurance firms and pension schemes* (Institute and Faculty of Actuaries, Sessional Research Event, London, United Kingdom, 17 June 2019) at 13.

²⁵⁶ Above n 253 at 13.

²⁵⁷ Above n 253 at 13.

²⁵⁸ Submission from Bruce Gilkison (Climate for Change Ltd) in response to the Ministry for the Environment Discussion Document (Climate-related Financial Disclosures: Understanding Your Business Risks and Opportunities Related to Climate Change) published October 2019.

²⁵⁹ Above n 42.

²⁶⁰ Above n 42.

important to explain how companies will be impacted by climate change. However, without a translation of that qualitative risk assessment into quantitative information, the business case for sustainability – under the proposition that firms will only address social and environmental issues if it is in their financial interest to do so.²⁶¹ – is incomplete.

VI Conceptual limitations of mandatory climate-related disclosures

The introduction of a climate disclosures regime appears to be New Zealand's way of meeting the growing pressure for companies to address climate change, discussed in *Part III* of this paper. Climate Change Minister James Shaw said that the Government is focused on creating a high-level framework for climate action, and once that work programme is complete, that it means to add in 'complementary measures' at the industry level. As with the ETS, if the climate disclosures regime is to be a key part of that framework, it necessitates a regime robust enough to ensure *genuine* corporate sustainability. The significance of the regime should not be underestimated, as it will set the tone for future policy and regulation for corporate sustainability. This tone could be either for 'genuine' corporate sustainability, or a 'weak' sustainability approach where the business-as-normal mind-set can thrive.

'Genuine' corporate sustainability is a state when business and finance on aggregate create value in a manner that is environmentally sustainable in that it ensures the long-term stability and resilience of the ecosystems that support human life, and economically sustainable in that it satisfies the economic needs necessary for stable and resilient societies. ²⁶³ In contrast, a 'weak' sustainability approach is where the depletion of ecological and social capital can be justified if sufficiently offset by improvements to economic or other capital. ²⁶⁴ This is also described as the 'business case for sustainability', coined to describe the common corporate position towards sustainability: that

²⁶¹ Jane Andrew and Max Baker, above n 24, at 53.

²⁶² Marc Daalder, above n 58.

²⁶³ Susan Watson, above n 162, at 188.

²⁶⁴ Poonam Puri, above n 180, at 146.

environmental impacts are internalised in corporate decision-making, but only to the extent that it will have a positive impact on long-term financial performance. ²⁶⁵

If the climate-related disclosures regime follows the weaker 'business case for sustainability' approach, it will mean that a key pillar in Shaw's framework for climate action is severely weakened. This could mean that that corporate sustainability becomes merely a 'woke' synonym for corporate longevity where virtue signalling masks the reality that nothing has really changed. ²⁶⁶ Given that context, a normative assessment of the proposed regime is necessary to question how it will operate as a vehicle of corporate transparency and accountability. ²⁶⁷

The criticism of 'corporate greenwash' plagued past attempts at corporate reporting on sustainability. In 1979, Ullman criticised CSR reporting, as a way firms could protect themselves from the costly demands of stakeholders. ²⁶⁸ This thesis was adopted by a significant body of research, with the view that the costly demands of stakeholders motivated companies to *manage* stakeholder views through reporting, rather than proactively change behaviour. ²⁶⁹ A related theory later developed to suggest that CSR reporting was driven by the need to establish and maintain social and political legitimacy. ²⁷⁰ A more recent line of criticism has been that CSR reporting can produce a discourse that can act as a façade, and as part of a growing trend towards 'organised hypocrisy'. ²⁷¹ To this end, Pollach wrote in 2016 that CSR and environmental reports gave companies "ample opportunities for reality construction". ²⁷² This research has meant that corporate reporting on the environment is viewed with suspicion, often not without reason. A 2016 survey suggested that New Zealand companies were not fully committed to social

²⁶⁵ Beate Sjåfjell and Christopher M Bruner, above n 240, at 4.

²⁶⁶ Above n 261 at 188.

²⁶⁷ Jane Andrew and Max Baker, above n 24, at 41.

²⁶⁸ Jane Andrew and Max Baker, above n 24, at 49.

²⁶⁹ Above n 24 at 49.

²⁷⁰ Above n 24 at 50.

²⁷¹ Above n 24 at 50.

²⁷² Irene Pollach "Issue cycles in corporate sustainability reporting: A longitudinal study" (2016) Environmental Communication 247 at 248.

and environmental reporting and that reporting was used to create the impression of being concerned about sustainability to increase legitimacy with stakeholders and broader society. The main concern is that the climate-related disclosure regime may run into the same issues as its predecessors, becoming a new hybrid of greenwash and allowing for corporate responses to be symbolic without any substantial changes to business practices. The predecessors are thinking of the business model.

Part of the popularity of the TCFD framework is that it positions itself apart from traditional CSR and sustainability reporting. By marketing itself as distinct and unique, it implies that the significant body of greenwash criticism does not apply to it. It is a truism that the TCFD is unique, given it is the first framework to cater to the traditional users of financial reporting (investors, lenders, insurance underwriters) for the purpose of assessing and pricing climate-related risks and opportunities. ²⁷⁶ Thus, the TCFD framework assesses the impact of climate change on the business and presents that as a financial risk for shareholders and investors.

However, this also means that the TCFD framework fundamentally cannot help in discharging any wider 'social licence' that a company has, simply because it is not designed to provide that information. The 'social licence' refers to the ethical or moral obligations imposed on a company by stakeholders, not derived from a legal contract but a social contract between a company and its wider stakeholders. The social contract grants a company a social licence to operate within society but imposes ethical, moral and accountability obligations. As the quote from Prime Minister Ardern provided in *Part I* hinted at, the 'new normal' entails stakeholders expecting companies to discharge their social licence, or else they will be left behind. This is unsurprising, given the surrounding

²⁷³ Stevie Dobbs and Chris van Staden "Motivations for Corporate Social and Environmental Reporting: New Zealand Evidence" (2016) 7 Sustainability Accounting, Management and Policy Journal 449 at 453.

²⁷⁴ Sylvia Jaworska, above n 171, 196.

²⁷⁵ Above n 171 at 198.

²⁷⁶ Wendy McGuinness, Eleanor Merton, Isabella Smith, Reuben Brady, above n 25, at 73.

²⁷⁷ Above n 25 at 4.

²⁷⁸ Above n 25 at 4.

context of heightened awareness as discussed in *Part III* of this paper. Companies are operating in a society of intensified consumer activism, where business reputation is critical and social capital is dominant. As one submission to the *Climate-related financial disclosures* discussion document commented: ²⁷⁹

The 'problem' is broader than just the lack of information in financial markets. Businesses and other organisations also need to earn and continue to justify a social 'licence to operate'. Their objectives, it has now been widely recognised in NZ and overseas, must be wider than just return on shareholder investment.

The social licence concept reminds us that there will be a wider stakeholder group interested in the climate-related disclosures that companies make. However, by nature, the TCFD framework does not discharge the social licence because it is not designed to provide information to stakeholders. Stakeholders would be interested in a broader set of information about the activities of a company, such as; how the company impacts on human, social, natural and financial or physical capital, the impact on the wider community, emissions and their resulting strategy for the transition to a low-carbon economy, ²⁸⁰ all of which the TCFD does not report on. Further, it is likely that the public, consumers and wider stakeholders want to know about a broader question than what the TCFD can answer: the company's impact on climate change, rather than the impact of climate change on the company. This distinction is often labelled as 'double materiality'. 281 The company's impact on climate change is a much harder question for companies to answer, raising questions about how a company's behaviour fits within New Zealand's commitments under the Paris Agreement, and what they are doing to transition to the low-emissions economy. The implication of the 'double materiality' gap is normative: it describes what a company *ought* to do if it is to be sustainable, rather than what it is required to do according to law. 282 It is also an absolute concept: 283 if a company

²⁷⁹ Brian Gilkison, above n 256.

²⁸⁰ Wendy McGuinness, Eleanor Merton, Isabella Smith, above n 125, at 96.

²⁸¹ Above n 25 at 88.

²⁸² Colin Mayer and Richard Barker, above n 242, at 7.

²⁸³ Julian Marshall and Michael Toffel "Framing the elusive concept of sustainability: a sustainability hierarchy" (2005) 39 Environmental Science and Technology 673 at 675.

degrades natural capital, then it is not sustainable, regardless of whether they have the highest environmental standards in the industry or the best disclosures in the country.

This fracture in information needs is significant when considering the implications of introducing a mandatory disclosure regime in New Zealand. A reasonable response to the regime would be for companies to use it as their primary form of sustainability reporting. This seems a reasonable response, given that the TCFD was created in response to the climate reporting problem, and markets itself as the framework to end all other frameworks. Thus, companies would not produce any other CSR or sustainability reports. Ultimately, stakeholders would be worse off in terms of corporate transparency and accountability, with less information about the impacts of a company on climate change, than ever before.

In the foreword to the Discussion Document, Kris Faafoi and James Shaw state that "disclosures are a powerful mechanism to focus reporting entities on the impacts of climate change on their own activities." ²⁸⁴ It follows from this that it is intended for the proposed disclosure regime to be an aide to change corporate behaviour, towards genuine sustainability. However, the TCFD framework inherently follows a 'business case for sustainability' approach. By nature, climate-related disclosure regimes adhere to a weak sustainability approach because of their narrow mandate to ensure the efficiency of capital markets, protect investors, and maintain confidence in the capital markets. ²⁸⁵ This follows in the footsteps of climate reporting, given sustainability reporting was narrowed to calculations of the net positive impact that it might have on a company's long-term financial performance. ²⁸⁶ Climate-related disclosure share the same aims of sustainability reporting, in that it is intended to bring the realities of corporate production processes and associated impacts to the attention of users, who would hopefully favour 'good' companies

²⁸⁴ Ministry for the Environment & Ministry of Business, Innovation & Employment, above n 8, at 5.

²⁸⁵ Poonam Puri, above n 180, at 157.

²⁸⁶ Above n 180 at 146.

over 'bad' ones. ²⁸⁷ A disclosure regime does not regulate corporate production process, nor can it actually trigger any actual changes in behaviour for the company itself.

Of course, some companies will see disclosures as a way to transition towards the lowemissions economy and take meaningful action to discharge their obligations both under their social licence, and their directors' duties. Yet, other companies may see it as mere compliance requirements.²⁸⁸ and a way to deflect ultimate responsibility. The only certainty in predicting how a disclosure regime may impact corporate behaviour is that responses will be uneven.²⁸⁹

However, the essence of the TCFD reflects a corporate 'win-win' rhetoric, in that disclosure is good for the climate and that it is better business. ²⁹⁰ But as Jaworska warns, "this win-win disclosure is just another form of ideological dominance, which primarily serves the economic interests of businesses." ²⁹¹ The disclosure regime remains merely a reflection of the need for investors to assess climate considerations as a distinctive basket of investment risks, without regard for the broader significance and impact of corporate production practices that really at issue. ²⁹² Given this, disclosure-only obligations are too open-ended for companies to change their behaviour, ²⁹³ as companies do not become sustainable by making unsubstantiated claims that it will be different in the future. ²⁹⁴

Climate-related disclosures are the first positive duty imposed on New Zealand companies and are hoped to help directors discharge their climate-related duties. They are considered a pivotal part of New Zealand's transition toward a low-emissions economy, when past

²⁸⁷ Beate Sjåfjell and Christopher M Bruner "Corporate Law, Corporate Governance and the Pursuit of Sustainability" in Beate Sjåfjell and Christopher M Brunder (eds) *The Cambridge Handbook of Corporate Law: Corporate Governance and Sustainability* (Cambridge University Press, UK, 2019) 50 at 718.

²⁸⁸ Iris H.-Y. Chiu, above n 236, at 534.

²⁸⁹ Above n 236 at 534.

²⁹⁰ Sylvia Jaworska, above n 171, at 198.

²⁹¹ Above n 171 at 198.

²⁹² Beate Sjåfjell and Christopher M Bruner, above n 285, at 718.

²⁹³ Iris H.-Y. Chiu, above n 236, at 535.

²⁹⁴ Colin Mayer and Richard Barker, above n 242, at 5.

attempts to regulate corporate behaviour through the ETS have failed. Clearly, a climate-related disclosure regime is needed in New Zealand. Inadequate climate-related risk disclosure is likely to lead to market mispricing of risks, resulting in inefficient capital allocations and little pressure on corporate executives to actively identify and manage those risks. ²⁹⁵ But as prefaced, in order to be line with the spirit of the Paris Agreement and to surmount the 'super-wicked' problem that climate change presents, ²⁹⁶ a strong approach is needed. Policy-makers should not stop at disclosure, nor should directors rely entirely on climate-related disclosures as an exercise to fully discharge their duties. ²⁹⁷ Disclosures are another step towards the mediocrity of the business case approach, content with incremental improvements. ²⁹⁸ and misappropriated as a rhetorical diversion that gives false assurances about business-as-usual. ²⁹⁹ Instead, what is needed are corporate legal and governance structures promoting practices that contribute to, and do not undermine, New Zealand's potential to achieve the overarching goal of a low-emissions economy. ³⁰⁰

VII Conclusion

The introduction of mandatory climate-related financial disclosures sees New Zealand finally plucking the 'low-hanging fruit' to add to the policy framework to tackle climate change. ³⁰¹ In New Zealand, the proposed disclosure regime, based on the recommendations of the TCFD, has two aims; to resolve the present information asymmetry between companies and investors and provide comparable, timely and decision-useful information about the risks and opportunities arising from climate change; ³⁰² and to act as a mechanism to focus reporting entities on the impacts of climate

²⁹⁵ Brendan O'Dwyer and Jeffrey Unerman, above n 17, at 1116.

²⁹⁶ Douglas Kysar "What Climate Change can do about Tort Law" (2011) 41 Environmental Law 1.

²⁹⁷ Daniel Kalderimis and Nicola Swan, above n 57, at 15.

²⁹⁸ Above n 285 at 720.

²⁹⁹ Above n 242 at 8.

³⁰⁰ Beate Sjåfjell and Christopher M Bruner, above n 240, at 4.

³⁰¹ David Hall and Sam Lindsay, above n 22, at 52.

³⁰² Cabinet Paper, above n 7, at 1.

change on their own activities. ³⁰³ This paper attempted to assess how achievable those aims are.

Part II of this paper detailed the movement towards the proposed disclosure regime. An analysis of the environmental regulatory framework and the Emissions Trading Scheme, as the past primary policy tool to regulate corporate sustainability, illustrates the significance of the disclosures regime as the first time positive duties have been imposed on companies to act. This change in policy was explained in Part III, by the growing pressure on companies to take decisive action on climate change by consumers and stakeholders alike. The recent Hutley opinions and its New Zealand counterpart in the Aotearoa Circle legal opinion made clear that directors are now expected to take into account climate-related risks in their decision-making, as part of their statutory duties. Failure to do so can result in climate litigation, with a marked uptake in the number of cases going to the courts internationally. However, given the reluctance of the courts to intervene in Parliament's climate change policy as seen in Smith v Fonterra, 304 it may be sufficient for directors to be seen to be discharging their duties rather than any fundamental shift towards sustainability in their operations or strategy.

Part IV of the paper detailed the climate reporting problem that necessitated a new approach. While NZX listed entities are required to report material non-financial information in their annual reports, including environmental, economic and social sustainability facts and practices, there are no specific principles or guidelines for companies to follow. The result was a plethora of potential frameworks for sustainability reporting, creating an incoherent and inconsistent body of reporting. In response to this, the G20 Financial Stability Board established the TCFD, which was tasked with developing a voluntary, consistent climate-related financial risk disclosure framework for use by companies in providing information to investors, lenders, insurers and other stakeholders. To fact the paper attributed the appeal of the TCFD regime to the

Ministry for the Environment & Ministry of Business, Innovation & Employment, above n 8, at 5.

³⁰⁴ Smith v Fonterra, above n 16, at 98.

³⁰⁵ Lawyers for Climate Action New Zealand, above n 118.

³⁰⁶ Ministry for the Environment & Ministry of Business, Innovation & Employment, above n 8 at 13.

cookie-cutting exercise it offers directors, as a straight forward way to be seen to be discharging their newly widened duties. 307

Part V and VI of the paper assessed the practical and normative limitations of the TCFD, ultimately finding that directors and policy-makers alike should not be stopping at merely disclosing climate risk. Part V focused on the practical limitations of the TCFD framework, as observed in numerous international reviews. The framework still leaves considerable discretion with directors to decide on the 'materiality' of climate-related risks they wish to disclose, with no updated definition or guidance for the complexity of climate risk. The complexity of climate risk also requires directors to up-skill in order to comply with the recommendations of the TCFD. This is apparent with scenario analysis, which requires companies to disclose their business case in different trajectories in a 2°C world and economy. Few companies have been able to attempt this analysis as they do not have the capabilities, data or tools to do so. 308 Further, the ongoing usefulness of disclosures have been questioned, given they only provide qualitative information without a translation into quantitative information, meaning it does not allow investors to properly price out climate risk.

Part VI tested the TCFD framework through a normative analysis, assessing its ability deliver *genuine* corporate sustainability. Unfortunately, the fallacy of the disclosure regime seems to be the conceptual limitations of working within a 'business case for sustainability' model. From this normative analysis, users of the disclosures should be sensitized to the strategic use of reporting as a way of placating wider stakeholder groups. ³⁰⁹

The introduction of a climate-related disclosure regime is commendable in New Zealand. Yet, if New Zealand is to transition to the low-emissions economy, this will require a transition to genuine corporate sustainability. While disclosure regimes may be low-

³⁰⁷ Alexia Staker, Alice Garton and Sarah Barker, above n 98, at 12.

³⁰⁸ Brendan O'Dwyer and Jeffrey Unerman, above n 17, at 1121.

³⁰⁹ Jane Andrew and Max Baker, above n 24, at 52.

hanging fruit, ³¹⁰ but we should not be picking up fruit already rotten at the foot of the trunk. *We need to be aiming higher.*

Word count

The text of this paper (excluding table of contents, footnotes, and bibliography) comprises approximately 11800 words.

Bibliography

A Cases

1 New Zealand

Smith v Fonterra Co-operative Group Limited [2020] NZHC 419.

Thomson v Minister for Climate Change Issues [2017] NZHC 733, [2018] 2 NZLR 160.

2 Australia

Abrahams v Commonwealth Bank of Australia (2017) FCA VID879.

Mark McVeigh v Retail Employees Superannuation (2019) FCA 14.

3 Netherlands

Urgenda Foundation v Kingdom of the Netherlands (The Hague District Court, [2015] HAZA C/09/456689, 24 June 2015).

4 United Kingdom

R (on the application of People & Planet) v HM Treasury [2009] EWHC 3020 (Admin).

³¹⁰ David Hall and Sam Lindsay, above n 22 at 52.

5 United States

Basic Inc v Levinson 485 US 224 [1988].

Native Village of Kivalina v ExxonMobil 696 F 3d 849 (9th Cir 2012).

People of State of California v BP PLS (ND Cal, C-17-06011 WHA and C-17-06012 WHA, 25 June 2018).

City of New York v PB PLC (SDNY, 1:18-cv-00182, Complaint filed 9 January 2018).

B Legislation

Climate Change Response Act 2002

Climate Change Response (Emissions Trading) Amendment Act 2008

Climate Change Response (Emissions Trading and Other Matters) Amendment Act 2012

Climate Change Response (Emission Trading Reform) Amendment Act 2020

Climate Change Response (Moderated Emissions Trading) Amendment Act 2009

Climate Change Response (Removal of Transitional Measures) Amendment Act 2016

Climate Change Response (Zero Carbon) Amendment Act 2019

Companies Act 1993

Companies Act 2006 (Strategic Report and Directors' Report) Regulations 2013

Crown Entities Act 2004

Environmental Reporting Act 2015

Financial Markets Conduct Act 2013

Financial Reporting Act 2013

C Treaties

United Nations Framework Convention on Climate Change, 1771 UNTS 107 (opened for signature 4 June 1992, entered into force 21 March 1994).

Kyoto Protocol to the United Nations Framework Convention on Climate Change, 2303 UNTS 148 (opened for signature 16 March 1998, entered into force 16 February 2005).

Conference of the Parties, *Adoption of the Paris Agreement*, FCCC/CP/2015/L9/Rev1 Draft decision CP21(2015).

D Books and Chapters in Books

Andrew Beck "Duties of Directors" in *Morison's Company Law* (LexisAdvance, Wellington, 1995).

Andrew Johnston "Market-Led Sustainability through Information Disclosure: the UK Approach" in Beate Sjåfjell and Christopher M Brunder (eds) *The Cambridge Handbook of Corporate Law: Corporate Governance and Sustainability* (Cambridge University Press, UK, 2019) 204.

Beate Sjåfjell "Realising the Potential of the Board for Corporate Sustainability" in Beate Sjåfjell and Christopher M Brunder (eds) *The Cambridge Handbook of Corporate Law:*Corporate Governance and Sustainability (Cambridge University Press, UK, 2019) 696.

Beate Sjåfjell and Christopher M Bruner "Corporations and Sustainability" in Beate Sjåfjell and Christopher M Brunder (eds) *The Cambridge Handbook of Corporate Law: Corporate Governance and Sustainability* (Cambridge University Press, UK, 2019) 4.

Beate Sjåfjell and Christopher M Bruner "Corporate Law, Corporate Governance and the Pursuit of Sustainability" in Beate Sjåfjell and Christopher M Brunder (eds) *The Cambridge Handbook of Corporate Law: Corporate Governance and Sustainability* (Cambridge University Press, UK, 2019) 50.

Charlotte Villiers "Global Supply Chains and Sustainability: the Role of Disclosure and Due Diligence Regulation" in Beate Sjåfjell and Christopher M Brunder (eds) *The*

Cambridge Handbook of Corporate Law: Corporate Governance and Sustainability (Cambridge University Press, UK, 2019) 551.

Colin Mayer Firm Commitment: Why the Corporation is Failing Us and How to Restore Trust In It (London, 2013).

Colin Mayer *Prosperity: Better Business Makes the Greater Good* (Oxford University Press, Oxford, 2019).

Iris H.-Y. Chiu "Disclosure Regulation and Sustainability" in Beate Sjåfjell and Christopher M Brunder (eds) *The Cambridge Handbook of Corporate Law: Corporate Governance and Sustainability* (Cambridge University Press, UK, 2019) 521.

Kenneth Burke *A Rhetoric of Motives* (Berkley University of California Press, California, 1969).

Louis Brandeis, 'Sunlight is said to be the best of disinfectants; electric light the most efficient policeman' in *Other People's Money—and How Bankers Use It* (Frederik A. Stokes Co, New York, 1914).

Nardia Haigh Scenario Planning for Climate Change (Routledge, Oxford, 2019).

Poonam Puri "Green but Not Green Enough: Sustainability in Canadian Corporate Governance" in Beate Sjåfjell and Christopher M Brunder (eds) *The Cambridge Handbook of Corporate Law: Corporate Governance and Sustainability* (Cambridge University Press, UK, 2019) 146.

Susan Watson "Moving beyond Virtue Signalling: Corporate Sustainability for New Zealand" in Beate Sjåfjell and Christopher M Brunder (eds) *The Cambridge Handbook of Corporate Law: Corporate Governance and Sustainability* (Cambridge University Press, UK, 2019) 177.

Victoria Schnure Baumfield "The Australian Paradox: Conservative Corporate Law in a Progressive Culture" in Beate Sjåfjell and Christopher M Brunder (eds) *The Cambridge Handbook of Corporate Law: Corporate Governance and Sustainability* (Cambridge University Press, UK, 2019) 12.

E Journal Articles

Afsharipour, Afra "Redefining Corporate Purpose: An International Perspective." (2017) 40 SULR 465.

Brendan O'Dwyer and Jeffrey Unerman "Shifting the focus of sustainability accounting from impacts to risks and dependencies: researching the transformative potential of TCFD reporting" (2020) 33 Accounting, Auditing and Accountability Journal 1113.

Colin Mayer and Richard Barker "How Should a 'Sustainable Corporation' Account for Natural Capital" (2017) 15 Saïd Business School.

Douglas Kysar "What Climate Change can do about Tort Law" (2011) 41 Environmental Law 1.

Frederick Alexander "Saving Investors from Themselves: How Stockholder Primacy Harms Everyone" (2020) 43 SULR 300 at 307.

Irene Pollach "Issue cycles in corporate sustainability reporting: A longitudinal study" (2016) Environmental Communication 247.

Irene Pollach "Corporate Environmental Reporting and News Coverage of Environmental Issues: an Agenda-Setting Perspective" (2014) 23 Business Strategy and the Environment 349.

Jane Andrew and Max Baker "Corporate Social Responsibility Reporting: The Last 40 Years and a Path to Sharing Future Insights" (2020) 56 Abacus 1.

Jeffrey Unerman, Jan Bebbington and Brendan O'Dwyer "Corporate reporting and accounting for externalities" (2018) 48 Accounting and Business Research 497.

Jin Fong Chua "Corporate Liability and Risk in Respect of Climate Change" (2016) 20 New Zealand Environmental Law Journal 167.

Julian Marshall and Michael Toffel "Framing the elusive concept of sustainability: a sustainability hierarchy" (2005) 39 Environmental Science and Technology 673.

Karen Ho "In the Name of Shareholder Value: Origin Myths of Corporations and their Ongoing Implications" (2020) 43 SULR 605 at 609.

Lucian Bebchuck and Roberto Tallarita "The Illusory Promise of Stakeholder Governance" (2020) Cornell Law Review, forthcoming.

Marc Moore "A Necessary Social Evil: The Indispensability of the Shareholder Value Corporation" (2017) 40 SULR 427.

Mark Bracey "New Zealand's Emissions Trading Scheme: An in-depth Examination of the Legislative History" (2017) 21 New Zealand Environmental Law Journal 133.

Mary Canning, Brendan O'Dwyer and George Georgakopoulos "Processes of auditability in sustainability assurance – the case of materiality construction" (2019) 49 Accounting and Business Research 1.

Michael John Jones "Accounting for the environment: Towards a theoretical perspective for environmental accounting and reporting" (2010) 34 Account Forum 123.

Michael P Vandnbergh and Mark Cohen "Climate Change Governance: Boundaries and Leakage" (2010) 18 NYU Envt LJ 221.

Robert Eccles and Michael Krzus "Implementing the Task Force on Climate-related Financial Disclosures Recommendations: An Assessment of Corporate Readiness" (2019) 71 Schmalenbach Business Review 287

Sam Holt QC and Chris McGrath "Climate Change: Is the Common Law up to the Task?" (2018) 24 Auckland University Law Review 10.

Stephen Knight-Lenihan and Kate Scanlen "Climate-compatible Development in New Zealand" (2018) 14 Policy Quarterly 4.

Stevie Dobbs and Chris van Staden "Motivations for Corporate Social and Environmental Reporting: New Zealand Evidence" (2016) 7 Sustainability Accounting, Management and Policy Journal 449.

Tim Nelson "ESG, climate change and disclosure" (2018) Governance Directions 705.

Will Hutton, Colin Mayer & Philippe Schneider, "The Rights and Wrongs of Shareholder Rights" (2017) 40 Seattle UL Rev 375.

F Papers and Reports

Alexia Staker, Alice Garton and Sarah Barker *Concerns misplaced: Will compliance with the TCFD recommendations really expose companies and directors to liability risk?* (Commonwealth Climate and Law Initiative, September 2017).

Cabinet Paper Release of discussion document on climate-related financial disclosures (December 2019).

Cabinet Paper Paris Agreement on Climate Change: Approval to Begin the Parlimaetary Treaty Examination Process (October 2016).

Carina Ohm, Liza Jensen, Rune Jørgensen *Climate Risk Disclosure Barometer 2020* (EY, 2019).

Climate Disclosure Standards Board *Position paper: Materiality and climate-related financial disclosures* (Climate Disclosure Standards Board, 2018).

Climate Disclosure Standards Board *Falling short? Why environmental and climate-related disclosures under the EU Non-Financial Reporting Directive must improve* (Climate Disclosure Standards Board, 2020).

Daniel Kalderimis and Nicola Swan *Managing climate risk in New Zealand: A tool kit for directors* (The Aotearoa Circle and Chapman Tripp, July 2020).

David Hall and Sam Lindsay *Climate Finance Landscape for Aotearoa New Zealand: A Preliminary Survey* (Report prepared for the Ministry for the Environment, 2017).

Gerald Fitzgerald Legal Opinion 2020/01 – Obligations on directors to report risk in New Zealand annual reports under the Companies Act 1993 (The McGuinness Institute, May 2020).

Matthew Nelson *How are your climate change disclosures revealing the true risks and opportunities of your business?* (EY, Global Climate Risk Disclosure Barometer 2018, 9 January 2019).

Ministry for the Environment & Ministry of Business, Innovation & Employment Climate-related financial disclosures – Understanding your business risks and opportunities related to climate change: Discussion document (October 2019).

Ministry for the Environment & Ministry of Business, Innovation & Employment Climate-related financial disclosures – Understanding your business risks and opportunities related to climate change: Summary of submissions (March 2020).

Ministry for the Environment National Climate Change Risk Assessment for Aotearoa New Zealand: Main report – Arotakenga Tūraru mō te Huringa Āhuarangi o Āotearoa: Pūrongo whakatōpū (August 2020).

Noel Hutley and Sebastian Hartford-Davis *Climate Change and Directors' Duties* (Memorandum of Opinion, 7 October 2016).

Noel Hutley and Sebastian Hartford-Davis *Climate Change and Directors' Duties* (Supplementary Memorandum of Opinion, 26 March 2019).

Productivity Commission Low Emissions Economy (9 August 2018).

Reserve Bank Financial Stability Report (November 2019).

Reserve Bank Financial Stability Report (May 2020).

Simon Upton, Parliamentary Commissioner for the Environment *Farms, forests and fossil fuels: The next great landscape transformation?* (March 2019).

Task Force on Climate-Related Financial Disclosures *Recommendations of the Task* Force on Climate-related Financial Disclosures (June 2017).

Task Force on Climate-Related Financial Disclosures *Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures* (June 2017).

Task Force on Climate-Related Financial Disclosures 2018 Status Report (2018).

Task Force on Climate-Related Financial Disclosures 2019 Status Report (2019).

Task Force on Climate-Related Financial Disclosures *TCFD Good Practice Handbook* (2019).

The Aotearoa Circle Sustainable Finance Forum: Interim Report 2019 (2019).

The Aotearoa Circle Sustainable Finance Forum: Legal Opinion 2019 (2019).

Wendy McGuinness, Eleanor Merton, Isabella Smith, Reuben Brady *The Climate Reporting Emergency: A New Zealand case study* (The McGuinness Institute, Discussion Paper 2019/01, October 2019).

Wendy McGuinness, Eleanor Merton, Isabella Smith *Report 17 – ReportingNZ: Building a reporting framework fit for purpose* (The McGuinness Institute, 25 June 2020).

World Business Council for Sustainable Development Sustainability and Enterprise Risk Management: the first step towards integration (WBCSD, 17 January 2017).

World Economic Forum *How to Set Up Effective Climate Governance on Corporate Boards: Guiding principles and questions* (2019).

G PRESS RELEASES

Business Roundtable "Business Roundtable Redefines the Purpose of a Corporation to Promote 'An Economy That Serves All Americans" (press release, 19 August 2019).

Hon James Shaw "New Zealand First In The World To Require Climate Risk Reporting" (press release, 15 September 2020).

H SPEECHES

Ben Caldecott, Director of the Sustainable Finance program, University of Oxford "Company Directors' Duties and Climate Risk Governance" (Opening Keynote at the International Legal Symposium on Climate Change Risk and Corporate Governance, University of Melbourne, 29 August 2016).

Davey Salmon, "Thoughts on Climate Change Litigation in New Zealand", 31 January 2019 (paper presented to Legal Research Foundation Conference to mark the retirement of the Chief Justice, Sian Elias).

Doug Johnston, Edward Dean, Mardi McBrien, Martina Macpherson, Rodney Irwin, Andrew Ratcliffe "Have we reached peak TCFD?" (Climate Disclosure Standards Board, Zoom panel discussion as part of London Climate Action Week, 1 July 2020).

Institute and Faculty of Actuaries "Climate risk reporting practices by UK insurance firms and pension schemes" (Institute and Faculty of Actuaries, Sessional Research Event, London, United Kingdom, 17 June 2019).

Jacinda Ardern, Speech to the Chinese Business Summit (Auckland, 12 May 2018).

Jack Hodder QC "Climate Change Litigation: Who's Afraid of Creative Judges?" (Paper for presentation to the 'Climate Change Adaptation' session of the Local Government New Zealand Rural and Provincial Sector Meeting, Wellington, 7 March 2019).

Justice Helen Winkelmann, Justice Susan Glazebrook and Justice Ellen France "Climate Change and the Law" (Prepared for the Asia Pacific Judicial Colloquium, Singapore, 28 May 2019).

Mark Carney "Breaking the tragedy of the horizon – climate change and financial stability" (Speech given at Lloyd's of London, London, 29 September 2015).

I LETTERS AND EMAILS

Larry Fink "A Sense of Purpose" (letter to CEOs, 14 January 2018).

Larry Fink "A Fundamental Reshaping of Finance" (letter to CEOs, 14 January 2020).

Submission from Bruce Gilkison (Climate for Change Ltd) in response to the Ministry for the Environment Discussion Document (Climate-related Financial Disclosures: Understanding Your Business Risks and Opportunities Related to Climate Change) published October 2019.

Submission from Felicity Caird (General Manager, Governance Leadership Centre, Institute of Directors) in response to the Ministry for the Environment Discussion Document (Climate-related Financial Disclosures: Understanding Your Business Risks and Opportunities Related to Climate Change) published October 2019.

Submission from Lawyers for Climate Action New Zealand Incorporated in response to the Ministry for the Environment Discussion Document (Climate-related Financial Disclosures: Understanding Your Business Risks and Opportunities Related to Climate Change) published October 2019 (13 December 2019).

Submission from the New Zealand Law Society in response to the Ministry for the Environment Discussion Document (Climate-related Financial Disclosures: Understanding Your Business Risks and Opportunities Related to Climate Change) published October 2019 (17 December 2019).

Submission from Russell McVeagh in response to the Ministry for the Environment Discussion Document (Climate-related Financial Disclosures: Understanding Your Business Risks and Opportunities Related to Climate Change) published October 2019 (13 December 2019).

Letter from Sam Woods (Deputy Governor for Prudential Regulation and CEO of the Prudential Regulation Authority) to Chief Executive Officers regarding the thematic feedback from the Prudential Regulation Authority review of firms' management of climate-related financial risk (1 July 2020).

J DISSERTATIONS

Theodore Emmett Keenan Rose "Time is running out: The urgency of mandatory environmental disclosures in New Zealand Securities Market Law" (LLB (Hons) Dissertation, University of Otago, 2019).

Glendanique G.E Minguel "The evolution of sustainability reporting: A case study of the airlines section" (University of Tilburg, Research Paper, August 2017).

K NEWS AND ARTICLES

Abraham Lustgarten "How Climate Migration will Reshape America" *New York Times* (New York, 15 September 2020).

Amber-Leigh Woolf "Climate change brings trillions of dollars in risk to businesses" *Stuff* (New Zealand, 29 May 2020).

Institute of Directors New Zealand "Reporting climate impacts" *Boardroom Magazine* (New Zealand, 28 February 2020).

Jane Patterson "Second leaders' debate: Jacinda Ardern more assertive, but Judith Collins' one-liners won the night" *Radio New Zealand* (New Zealand, 1 October 2020).

Jane Patterson "Third leaders' debate: Ardern and Collins steelier and more combative" *Radio New Zealand* (New Zealand, 7 October 2020).

Jeffrey Unerman "Raising CFO awareness of urgent climate-related risks and opportunities" *Financial Director* (United Kingdom, 27 May 2019).

John Elkington "25 Years Ago I Termed the Phrase 'Triple Bottom Line'. Here's Why It's Time To Rethink It." *Harvard Business Review* (25 June 2018).

Lloyd Kavanagh "The gathering storm – and how to prepare" *Institute of Directors* (New Zealand, 30 October 2019).

Louise Tong "Dodging disaster with climate disclosure" *Stuff* (New Zealand, 9 June 2020).

Marc Daalder "Covid-19 stimulus is climate's 'Last Chance Saloon'" *Newsroom* (New Zealand, 7 April 2020).

Marc Daalder "Trading coronavirus for the climate crisis" *Newsroom* (New Zealand, 15 May 2020).

Marc Daalder "Cap finally added to NZ's cap-and-trade scheme" *Newsroom* (New Zealand, 2 June 2020).

Marc Daalder "Climate risk reporting set to ramp up" *Newsroom* (New Zealand, 3 June 2020).

Michael Barbaro "Can Corporations Stop Climate Change" *The Daily, New York Times* (online ed, New York, 24 Feburary 2020).

Narelle Hooper "Change in the Weather" *MAICD* (May, 2019).

Nassim Khadem "Mark McVeigh is taking on REST super on climate change and has the world watching" *ABC News* (18 January 2020).

Radio New Zealand "Mandatory climate-related financial disclosure proposed" *RNZ* (15 September 2020).

Steve Abel "A weak climate law based on a feeble consensus is no 'nuclear-free moment" *The Spinoff* (New Zealand, 12 November 2019).

L INTERNET MATERIALS

Chartered Accountants Australia and New Zealand "Climate change risk" (2019) https://www.charteredaccountantsanz.com/member-services/technical/business-issues/climate-change-risk.

Centre for Policy Development "Business Roundtable on Climate and Sustainability Event November 2019" (9 December 2019). < https://cpd.org.au/2019/12/climate-roundtable/>.

David James, Eureka Street "How climate change is remaking finance" (26 January 2020).

Environmental Justice Australia "The 23-year-old taking a \$50b super fund to court over climate change" (21 February 2019). < https://www.envirojustice.org.au/our-work/climate/rest-super-case/>.

Felicity Caird, The Institute of Directors in New Zealand "Top five issues for directors in 2019" (17 December 2018). https://www.iod.org.nz/About-us/News-and-articles/Post/20117/Top-five-issues-for-directors-in-2019.

IFRS "IASB clarified its definition of 'material'" (31 October 2018) < https://www.ifrs.org/news-and-events/2018/10/iasb-clarifies-its-definition-of-material/>.

Ministry for the Environment "About the Paris Agreement" (6 July 2018) < https://www.mfe.govt.nz/climate-change/why-climate-change-matters/global-response/paris-agreement>.

Ministry for the Environment "About the New Zealand Emissions Trading Scheme" (18 December 2019). < https://www.mfe.govt.nz/climate-change/new-zealand-emissions-trading-scheme/about-nz-ets>.

Ministry for the Environment "Overview of the New Zealand Emissions Trading Scheme reforms" (17 July 2020) < https://www.mfe.govt.nz/overview-reforming-new-zealand-emissions-trading-scheme>.

Task Force on Climate-Related Financial Disclosures "About the Task Force". < https://www.fsb-tcfd.org/about/>.

Task Force on Climate-Related Financial Disclosures "TCFD Knowledge Hub". < https://www.fsb-tcfd.org/tcfd-knowledge-hub/>.

World Business Council for Sustainable Development "Task Force on Climate-related Financial Disclosure (TCFD) Preparer Forums" (2019). https://www.wbcsd.org/Programs/Redefining-Value/External-Disclosure/TCFD.

Gov.UK "UK government modern slavery statement" (26 March 2020) < https://www.gov.uk/government/publications/uk-government-modern-slavery-statement>.

M Other Materials

Concise Statement, *Mark McVeigh v Retail Employees Superannuation Pty Ltd* CAN 001 987 739, NSW FCA, 24 July 2018.

Justice Perram, Order of the Federal Court of Australia re *Mark McVeigh v Retail Employees Superannuation*, 5 June 2020.

New Zealand Stock Exchange *Listing Rules* (1 January 2019).

New Zealand Stock Exchange NZX Corporate Governance Code (2017).

New Zealand Stock Exchange NZX Corporate Governance Code (2019).