

INVESTING FOR A SAFE CLIMATE?

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Climate change is now widely recognised as a source of financial risk for institutional investors like superannuation funds, which may manifest as reduced asset values and investment returns. Investors are also facing increasing pressure to play a constructive role in society's response to climate change by aligning portfolios to the 2015 Paris Agreement on Climate Change. This article presents an empirical study of current and emerging climate-related investment practices in Australia, underpinned by an analysis of the legal, regulatory and theoretical frameworks in which investment decision-making takes place. While the study confirms that approaches to climate risk assessment and management are rapidly evolving, it also suggests that integrating climate considerations into investment decision-making and adopting responsible investment practices to manage climate-related risks is not encouraged by existing legal frameworks and dominant, mainstream approaches to investment. There remain considerable legal and practical barriers to aligning investment decision-making with the Paris Agreement.

I INTRODUCTION

The *Paris Agreement on Climate Change* ('Paris Agreement' or 'Paris')¹ sets forth a pathway for reducing greenhouse gas ('GHG') emissions and transitioning energy systems to avoid dangerous climate change, with the central goal of holding global average temperature rise to 'well below 2°C' above pre-industrial temperatures, and pursuing efforts to limit temperature rises to no more than 1.5°C;² and the associated objective to achieve net-zero emissions in the second half of the

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1 United Nations Framework Convention on Climate Change, *Report of the Conference of the Parties on Its Twenty-First Session, Held in Paris from 30 November to 13 December 2015*, UNFCCC Dec 1/CP.21, UN Doc FCCC/CP/2015/10/Add.1 (29 January 2016) annex ('Paris Agreement').

2 Ibid art 2.1(a).

century.³ Since its conclusion in 2015, considerable attention has focused on the role that private actors – such as companies, financiers and investors – can and should play, in meeting the *Paris* goals.⁴ This attention is partly attributable to the slow and contested governmental responses to climate change, particularly in nations like Australia where it remains a highly partisan and divisive policy issue,⁵ and current national climate law and policy is widely assessed to be non-aligned to *Paris* goals.⁶ It is also linked to growing recognition of the financial implications of climate change for business and investors and the potential for the private sector to drive clean energy transition.

For the private sector, climate change is now widely recognised as a source of material financial risk,⁷ which can result in lower revenue, reduced asset value or

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- 3 Article 4.1 of the *Paris Agreement* (n 1) provides that
to achieve the long-term temperature goal set out in Article 2, Parties aim to reach global peaking of greenhouse gas emissions as soon as possible ... and to undertake rapid reductions thereafter ... so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century.
- 4 See, eg, Christian Grossman, 'We Have an Agreement in Paris: So, What's Next for the Private Sector?', *International Finance Group* (Web Page) <https://www.ifc.org/wps/wcm/connect/news_ext_content/ifc_external_corporate_site/news+and+events/news/we-have-agreement-paris-so-what-s-next-private-sector>; 'Private Sector: An Integral Part of Climate Action Post-Paris', *World Bank* (Web Page, 30 December 2015) <<https://www.worldbank.org/en/news/feature/2015/12/30/private-sector-an-integral-part-of-climate-action-post-paris>>; Global Reporting Initiative and Carbon Disclosure Project, *Engaging Business in the NDCs: Policy Recommendations on the Role of the Private Sector and Reporting* (Report, 6 June 2019); Climate Markets & Investment Association, *Outcomes from the Global NDC Conference: Building the Case for Private Sector Inclusion* (Report, 2019) <<https://globalnfdcconference.org/giz/wp-content/uploads/2019/12/NDCs-The-Private-Sector-Case-for-Inclusion.pdf>>.
- 5 See, eg, Anne Kallies, 'The Australian Energy Transition as a Federalism Challenge: (Un)cooperative Energy Federalism?' (2021) 10(2) *Transnational Environmental Law* 211; Thad Kousser and Bruce Tranter, 'The Influence of Political Leaders on Climate Change Attitudes' (2018) 50 *Global Environmental Change* 100. See also Hari M Osofsky and Jacqueline Peel, 'Energy Partisanship' (2016) 65(3) *Emory Law Journal* 695.
- 6 Australia's commitments under the *Paris Agreement*, including the target of reducing emissions by 26–8% below 2005 levels by 2030, and its lack of comprehensive policies such as an emissions trading scheme, carbon price or direct regulatory initiatives to drive emissions reduction, has been assessed as low and unambitious, compared to other Western jurisdictions: see, eg, 'Australia', *Climate Action Tracker* (Web Page, 22 September 2020) <<https://climateactiontracker.org/countries/australia/>>. See also 'Australia', *Climate Change Performance Index* (Web Page, 2021) <<https://ccpi.org/country/aus/>>, which ranks Australia's performance as 'very low', in the bottom 10 of the 64 countries ranked. See generally United Nations Environment Programme, *Emissions Gap Report 2020: Executive Summary* (Report, 2020). It is however notable that all state and territory governments have adopted *Paris*-aligned long-term emissions reduction targets, either in law or in policy: see, eg, *Climate Change Act 2017* (Vic) s 6.
- 7 See, eg, Guy Debelle, 'Climate Change and the Economy' (Speech, Centre for Policy Development, 12 March 2019) <<https://www.rba.gov.au/speeches/2019/sp-dg-2019-03-12.html>>; John Price, 'Climate Change' (Speech, Centre for Policy Development, 18 June 2018) <<https://asic.gov.au/about-asic/news-centre/speeches/climate-change/>>; Geoff Summerhayes, 'Australia's New Horizon: Climate Change Challenges and Prudential Risk' (Speech, Insurance Council of Australia Annual Forum, 17 February 2017) <<https://www.apra.gov.au/news-and-publications/australias-new-horizon-climate-change-challenges-and-prudential-risk>>; Geoff Summerhayes, 'The Weight of Money: A Business Case for Climate Risk Resilience' (Speech, Centre for Policy Development, 29 November 2017) <<https://www.apra.gov.au/news-and-publications/weight-of-money-a-business-case-for-climate-risk-resilience>>.

stranded assets.⁸ Risks arise both from the physical impacts of climate change (eg damage to assets and disruption to operations or supply chains as a result of extreme events) and the transition to a low-carbon economy (eg new regulatory requirements to reduce GHG emissions, changing energy technologies and markets).⁹ Such risks are directly relevant for operating companies, especially in highly exposed sectors such as energy, materials and agriculture. They are also relevant for institutional investors, such as superannuation funds and fund managers, which pool capital and invest in these companies on behalf of clients and beneficiaries, and may thereby be exposed to reduced asset values and investment returns.¹⁰

Framing climate change as a financial risk enlivens legal obligations under corporate law and financial regulation frameworks to disclose and manage these risks.¹¹ Climate risk disclosure and management practices are being increasingly scrutinised by corporate and financial regulators around the world,¹² although the role of regulators in neoliberal economies is not to seek to control the market mechanism that prices risk in its assessment of asset prices, but instead to facilitate its operation by mandating periodic risk disclosures as part of a financial reporting regime.¹³ While Australian regulators are yet to take legal enforcement action, there has been a recent increase in strategic litigation brought by private actors,¹⁴ including actions which target investors on their climate risk disclosure and management practice.¹⁵

Alongside these trends, businesses and investors are also increasingly cast as critical actors in society's response to climate change. For example, there has been

8 Task Force on Climate-Related Financial Disclosures, *Recommendations of the Task Force on Climate-Related Financial Disclosures* (Final Report, 15 June 2017) 7 ff ('*Final Report*').

9 Ibid 5–6.

10 Ibid. See especially ibid 6 ff.

11 Sarah Barker, 'Directors' Personal Liability for Corporate Inaction on Climate Change' (2015) 67(1) *Governance Directions* 21; Sarah Barker et al, 'Climate Change and the Fiduciary Duties of Pension Fund Trustees: Lessons from Australian Law' (2016) 6(3) *Journal of Sustainable Finance and Investment* 211; Jacqueline Peel et al, 'Governing the Energy Transition: The Role of Corporate Law Tools' (2019) 36(5) *Environmental and Planning Law Journal* 459.

12 For example, in an Australian context, in August 2019, the Australian Securities and Investments Commission ('ASIC') updated regulatory guidance on the disclosure of climate-related risks and opportunities: Australian Securities and Investments Commission, 'ASIC Updates Guidance on Climate Change Related Disclosure' (Media Release 19-208MR, 12 August 2019) <<https://asic.gov.au/about-asic/news-centre/find-a-media-release/2019-releases/19-208mr-asic-updates-guidance-on-climate-change-related-disclosure/>> ('ASIC Updates Guidance'). In a United Kingdom ('UK') context, in February 2020, the Financial Reporting Council announced a major review of how companies and auditors assess and report on the impact of climate change: Financial Reporting Council, 'FRC Assesses Company and Auditor Responses to Climate Change' (Media Release, 20 February 2020) <[https://www.frc.org.uk/news/february-2020-\(1\)/frc-assesses-company-and-auditor-responses-to-clim](https://www.frc.org.uk/news/february-2020-(1)/frc-assesses-company-and-auditor-responses-to-clim)>.

13 Brett Christophers, 'Climate Change and Financial Instability: Risk Disclosure and the Problematics of Neoliberal Governance' (2017) 107(5) *Annals of the American Association of Geographers* 1108, 1118.

14 Enforcement activity is led by private parties such as investors concerned to protect the value of their investments and by public interest litigants seeking to drive shifts in corporate decision-making towards emissions reduction and clean energy transition: see generally Javier Solana, 'Climate Litigation in Financial Markets: A Typology' (2020) 9(1) *Transnational Environmental Law* 103.

15 Jonathan Steffanoni, 'REST Case to Set Climate Risk Precedent' (4 Dec 2019) *Investment Magazine* <<https://www.investmentmagazine.com.au/2019/12/rest-case-to-set-climate-risk-precedent-2/>>. The REST case is discussed further in Part III(A).

considerable work done to quantify the ‘climate finance’ needs to achieve the goals of the *Paris Agreement*,¹⁶ with a recent report from the Intergovernmental Panel on Climate Change (‘IPCC’) finding that USD2.4 trillion in clean energy investment is needed every year between 2016 and 2035, to keep global temperatures from exceeding the safe temperature goals.¹⁷ Given the limitations of public resources, there is an increasing emphasis on private climate finance.¹⁸ Institutional investors, in particular, are in a unique position to mobilise capital to respond to climate change. If climate considerations are integral to investor decision-making on portfolio construction and capital allocation, as well as stewardship activities, such as engagement and voting shares, these actors can potentially play a significant role in aligning capital and resources to the clean energy transition.

This dual appreciation of climate-related financial risks and the potential contribution to be made by the private sector is central to sustainable finance agendas which are emerging in different markets around the world,¹⁹ including Australia.²⁰ These build on the theory and practice of *responsible investment*.²¹ The aim is to integrate environmental, social and governance (‘ESG’) considerations into financial decision-making as a strategy to manage associated risks, as well as to align decision-making with societal goals such as those expressed through the *Paris Agreement*.

16 ‘Introduction to Climate Finance’, *United Nations Framework Convention on Climate Change* (Web Page, 2021) <<https://unfccc.int/topics/climate-finance/the-big-picture/introduction-to-climate-finance>>. Article 9 of the *Paris Agreement* provides that developed countries are to provide financial resources to assist developing country parties with adaptation and mitigation, and that they should take the lead in mobilising climate finance from a wide variety of sources, instruments and channels. Article 2.1(c) mandates developed country parties to make financial flows consistent with ‘low greenhouse gas emissions and climate-resilient development’: *Paris Agreement* (n 1) art 2.1(c).

17 Intergovernmental Panel on Climate Change, *Summary for Policy Makers* (Special Report, 6 October 2018) D.5.3. See also discussion of energy sector investments required to achieve the low-carbon transition in Mark Carney, ‘A New Horizon’ (Speech, European Commission Conference, 21 March 2019) <<https://www.bankofengland.co.uk/-/media/boe/files/speech/2019/a-new-horizon-speech-by-mark-carney.pdf?la=en&hash=F63F8064E0408F038CABB1F29C58FB1A0CD0FE25>>.

18 See, eg, ‘Research Collaborative on Tracking Private Climate Finance’, *Organisation for Economic Cooperation and Development* (Web Page, 2021) <<https://www.oecd.org/env/researchcollaborative/>>.

19 International initiatives include: the Network for Greening the Financial System (‘NGFS’) (a group of central banks and supervisors from around the world sharing best practices and contributing to the development of environmental and climate risk management in the financial sector and the mobilisation of mainstream finance to support the transition to a sustainable economy); the European Commission Sustainable Finance initiative as part of the European Green Deal; the Asia Sustainable Finance Initiative; and the Canadian Expert Panel on Sustainable Finance. For further information, see: ‘Origin and Purpose’, *Network of Central Banks and Supervisors for Greening the Financial System* (Web Page, 2021) <<https://www.ngfs.net/en>>; ‘Sustainable Finance’, *European Commission* (Web Page) <https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance_en>; ‘About ASFI’, *Asia Sustainable Finance Initiative* (Web Page, 2021) <<https://www.asfi.asia>>; ‘Expert Panel on Sustainable Finance’, *Government of Canada* (Web Page, 14 June 2019) <<https://www.canada.ca/en/environment-climate-change/services/climate-change/expert-panel-sustainable-finance.html>>.

20 ‘Australian Sustainable Finance Initiative’, *Australian Sustainable Finance Initiative* (Web Page) <<https://www.sustainablefinance.org.au>> (‘Australian Sustainable Finance Initiative’).

21 Responsible investment gained global recognition and momentum in the early 2000s with the launch of the United Nations Global Compact in 2004, and the Principles for Responsible Investment (‘UNPRI’) in 2006: see United Nations Principles for Responsible Investment, ‘Principles for Responsible Investment’ (Brochure, 2021).

While there is an emerging body of legal and regulatory literature addressing climate change and the private sector from different perspectives,²² there has been little explicit focus on the role of institutional investors,²³ nor empirical work to test assumptions about how these actors can address climate change through investment practices.²⁴ This article aims to fill that gap by analysing how institutional investors in Australia are interpreting their legal obligations regarding climate risks and how they are responding to pressure to align portfolios to *Paris* goals. It contributes a timely, empirical perspective which illuminates the potential mismatch between much of the sustainable finance and responsible investment rhetoric, the legal and regulatory frameworks governing investor decision-making, and observed practice. A further contribution is the development of an interdisciplinary, analytical framework to evaluate climate-related investment practices and their potential trajectories. This framework draws on selected finance and corporate governance literature²⁵ to characterise the three main phases of investor decision-making around an investment in equities (initial investment, ownership actions such as engagement and voting shares, and divestment) and the relevance of climate change to these decisions. Importantly, the framework moves beyond a narrow focus on engagement and divestment strategies (which characterises much

22 For example, this includes consideration of private climate governance (eg, Jonathan M Gilligan and Michael P Vandenbergh, 'A Framework for Assessing the Impact of Private Climate Governance' (2020) 60 *Energy Research and Social Science* 1, 1 ff); consideration of drivers within corporate law and financial regulation frameworks and associated law reform potential (eg, Hari M Osofsky et al, 'Energy Re-investment' (2019) 94(2) *Indiana Law Journal* 595; Beate Sjøfjell, 'Redefining the Corporation for a Sustainable New Economy' (2018) 45(1) *Journal of Law and Society* 29); and consideration of strategic climate litigation targeting the private sector (eg, Geetanjali Ganguly, Joana Setzer and Veerle Heyvaert, 'If at First You Don't Succeed: Suing Corporations for Climate Change' (2018) 38(4) *Oxford Journal of Legal Studies* 841; Lisa Benjamin, 'The Road to *Paris* Runs Through Delaware: Climate Litigation and Directors' Duties' (2020) 2 *Utah Law Review* 313.

23 A notable exception being Barker et al (n 11).

24 Our study uses available public disclosures via various disclosure avenues, including annual UNPRI reviews where superannuation funds show what they do, rather than 'telling' via the other methodologies. Many empirical studies in this area consist of survey or interview studies, with recent examples including a series of focus-group based studies undertaken by the CFA Institute and UNPRI (such as CFA Institute and Principles of Responsible Investment, *ESG Integration in Asia Pacific: Markets, Practices, and Data* (Report, 2019)); the 2019 University of Technology Sydney study on sustainable finance (Melissa Edwards et al, *Unlocking Australia's Sustainable Finance Potential* (Report, University of Technology Sydney, 2019)); Philipp Krueger, Zacharias Sautner and Laura T Starks, 'The Importance of Climate Change Risks for Institutional Investors' (Finance Working Paper No 610/2019, Swiss Finance Institute, November 2019); Andreas GF Hoepfner et al, 'ESG Shareholder Engagement and Downside Risk' (Finance Working Paper No 671/2020, European Corporate Governance Institute, April 2020) <<http://ssrn.com/abstract=2874252>>; Amir Amel-Zadeh and George Serafeim, 'Why and How Investors Use ESG Information: Evidence from a Global Survey' (2018) 74(3) *Financial Analysts Journal* 87; Brett Christophers, 'Environmental Beta or How Institutional Investors Think about Climate Change and Fossil Fuel Risk' (2019) 109(3) *Annals of the American Association of Geographers* 754.

25 The finance literature tends to fall into two approaches – theoretical studies (with no testing on actual market data) and empirical studies to test these theories. We have returned to some of the classics of portfolio theory for the theoretical studies and to the empirical studies as they relate to environmental, social and governance ('ESG') considerations and climate change.

of the grey literature in this area),²⁶ and instead takes a holistic approach to relevant investment practices which also explicitly considers the allocation of capital.

Against this background, Part II develops the three-phase analytical framework for exploring investment decision-making on climate change. Part III maps the legal and regulatory context for investment decision-making, considering the formal legal framework, as well as emerging voluntary best practice standards. Using the architecture of Parts II and III, Part IV presents the empirical study of investor decision-making on climate change in the Australian regulatory context. This study draws on publicly available data (current to June 2019) on portfolio holdings, investment strategy, risk management and stewardship activities to gain insights on investment practice across the three phases. It focuses on 10 of the largest Australian superannuation funds, comparing practices in the default MySuper²⁷ option, where most superannuation moneys are invested, with those adopted in green-labelled options.

The public data and qualitative disclosures relied on for this study may not cover the full range of investor activity on climate change. While qualitative disclosures could be viewed as susceptible to multiple interpretations and thus less robust than quantitative disclosures, it is still possible to draw conclusions and inferences from the data collected.²⁸ Investor approaches to climate risk assessment and management are rapidly evolving. However, this study suggests that integrating climate considerations into investment decision-making is not encouraged by existing legal frameworks and dominant, mainstream approaches to investment. Observed practice illustrates that Australian institutional investors are interpreting their legal obligations regarding climate risks and responding to external regulatory pressures to align portfolios to *Paris* goals in different ways. Drawing on these findings, Part V concludes by engaging with the emerging sustainable finance agenda internationally, and in Australia, as a source of potential law reform which may help to realise more far-reaching change in the allocation of capital and the stewardship activities of investors to better manage climate risks and to align practices with the *Paris Agreement*.

II INVESTMENT DECISION-MAKING – A FRAMEWORK FOR ANALYSIS

To inform the empirical study of climate-related investor practice in Australia, this section frames investment decision-making in three broad phases: initial investment, ongoing actions linked with ownership, and divestment. For each phase,

26 We define ‘grey literature’ as literature that is typically self-published by a government body, industry association, research think tank or academic studies, as opposed to literature that is published by a commercial or academic publisher. Examples we cite include studies by the United Nations Environment Finance Initiative, UNPRI, the Responsible Investment Association of Australasia, and the Australian Council of Superannuation Investors.

27 MySuper is the default superannuation product that a member will be enrolled in if they do not otherwise select an alternative fund option. For more details see discussion in Part IV(A).

28 Further detail on data collection is provided in Part IV(A).

we outline common practices and underlying theories and consider the way in which climate change is relevant to decision-making, focusing particularly on equity assets. The result is a framework, used in Part IV, to structure the empirical study.

A Phase One: The Initial Investment

Phase One involves the decision to establish a portfolio, make the initial investment in an asset, combine assets with a mixture of asset classes (eg equities, property, infrastructure, debt etc), as well as decisions around the timeframes over which assets are held. Relevant to these decisions are theories which govern the spread of risk across portfolios, modelling techniques to value assets and predict likely returns.²⁹

One of the foundational decisions is defining a set of investment objectives. Following modern portfolio theory ('MPT')³⁰ investment objectives are generally defined as expected returns, with reference to the level of risk the investor is willing to accept in the portfolio (risk appetite). The investor should seek to ensure non-correlation of risk as between individual assets to the greatest extent possible. In this way, a shock to the system (eg an extreme weather event, or a regulatory change requiring energy companies to use renewables) does not have the same impact on all assets and therefore avoids significant portfolio devaluation.

Related to MPT is the capital asset pricing model ('CAPM')³¹ which provides a means of determining expected returns, based on the premise that there is a direct relationship between returns and the level of *systematic risk* (risk that is spread across the market and is non-diversifiable). CAPM also calculates how much risk the investment adds to the portfolio and correlation between risks. Taken together, MPT and CAPM emphasise both the individual risk and the systemic risk that impact expected returns on equities. Estimation risk is however a significant issue:³² MPT assumes that future returns from the portfolio will be normally distributed.³³ Yet, given the unreliability of future estimates, what is efficient or optimal now may not be so in a year, let alone over the longer time frames envisaged by a

29 While not discussed in detail here, lifecycle portfolio allocation theory, which aims to model the optimal portfolio over an investor's lifecycle of earnings and investment, is used by funds to model portfolios for different age-to-retirement scenarios in terms of risk tolerance. For the pre-mix superannuation portfolios selected for our empirical study, these considerations are less pertinent. See Paul A Samuelson, 'Lifetime Portfolio Selection by Dynamic Stochastic Programming' (1969) 51(3) *Review of Economics and Statistics* 239; Robert C Merton, 'Lifetime Portfolio Selection under Uncertainty: The Continuous-Time Case' (1969) 51(3) *Review of Economics and Statistics* 247; James Poterba et al, 'Lifecycle Asset Allocation Strategies and the Distribution of 401(k) Retirement Wealth' (Working Paper No 11974, National Bureau of Economic Research, 2006) 2, 5.

30 See Harry Markowitz, 'Portfolio Selection' (1952) 7(1) *Journal of Finance* 77.

31 See William F Sharpe, 'Capital Asset Prices: A Theory of Market Equilibrium under Conditions of Risk' (1964) 19(3) *Journal of Finance* 425.

32 Victor DeMiguel et al, 'A Generalized Approach to Portfolio Optimization: Improving Performance by Constraining Portfolio Norms' (2009) 55(5) *Management Science* 798, 799; Richard C Green and Burton Hollifield, 'When Will Mean-Variance Efficient Portfolios Be Well Diversified?' (1992) 47(5) *Journal of Finance* 1785.

33 Mehdi Beyhaghi and James P Hawley, 'Modern Portfolio Theory and Risk Management: Assumptions and Unintended Consequences' (2013) 3(1) *Journal of Sustainable Finance and Investment* 17, 21, 22 ff.

superannuation fund member, or the period over which the true impacts of climate change risk may emerge. There is also the issue of how benchmarking and the rise of index funds influence individual equity prices away from their fundamental or ‘true’ values. Given this, Beyhaghi and Hawley argue that a market index may no longer be representative of the market and can lead to issues of mispricing assets and risk in the portfolio.³⁴

Factor investing approaches are useful to further understand how investors set investment objectives and select the portfolio. These are based on beliefs about the drivers of financial returns. Factor selection could be based on firm characteristics;³⁵ or simply statistical analysis of price movements.³⁶ An ESG factor investing approach for *equities* may employ investment screens to exclude or include assets on the basis of ESG performance, or ‘integration’ strategies where the ESG factors are combined with other factors, such as value, quality, low volatility, size, momentum, country and industry.³⁷ ESG integration is more complex than investment screening.³⁸ Inclusion of ESG analysis alongside traditional analysis also faces a significant barrier in that the perceived relationship between ESG and corporate financial performance is at best neutral in accordance with ‘neoclassical understandings’ of capital markets.³⁹ The value-relevance of various ESG attributes might not yet be fully appreciated: thus market prices are likely not incorporating this information.⁴⁰ Even if investors do accept that ESG integration does not invariably have negative performance consequences, questions about the business case for ESG remain amongst the prominent group of obstacles to adopting this style of investment.⁴¹

The use of investment screens on a positive basis (what to include) or a negative basis (what to exclude) can also lead to concentrated, more closely correlated investments.⁴² Negative screens have been typically associated with ethical factors such as alcohol, tobacco, pornography, gambling and weapons (commonly referred to as sin stocks), although they are increasingly used in a climate change context, even though there is evidence to suggest that such screens appear to constrain

34 Ibid 30.

35 Eugene F Fama and Kenneth R French, ‘Common Risk Factors in the Returns on Stock and Bonds’ (1993) 33(1) *Journal of Financial Economics* 3.

36 Stephen A Ross, ‘The Arbitrage Theory of Capital Asset Pricing’ (1976) 13(3) *Journal of Economic Theory* 341.

37 FTSE Russell, ‘Target Exposure: Investment Applications and Solutions’ (Research Paper, February 2020) 4–6, 10 ff.

38 CFA Institute and Principles of Responsible Investment (n 24) 6.

39 Gunnar Friede, Timo Busch and Alexander Bassen, ‘ESG and Financial Performance: Aggregated Evidence from More than 2000 Empirical Studies’ (2015) 5 *Journal of Sustainable Finance and Investment* 210, 225.

40 Cristiana Mănescu, ‘Stock Returns in Relation to Environmental, Social and Governance Performance: Mispricing or Compensation for Risk?’ (2011) 19(2) *Sustainable Development* 95, 111.

41 Gunnar Friede, ‘Why Don’t We See More Action? A Metasynthesis of the Investor Impediments to Integrate Environmental, Social, and Governance Factors’ (2019) 28(6) *Business Strategy and the Environment* 1260, 1261, 1268 ff.

42 SZ Abidin and C Gan, ‘Do Socially Responsible Investment Strategies Significantly Reduce Diversification Benefits?’ (Research Paper, 22nd International Congress on Modelling and Simulation, 3–8 December 2017) 777, 781 ff.

the risk-return optimisation of the portfolio.⁴³ Indeed, positive abnormal returns are reported for some sin stocks,⁴⁴ and exclusion can therefore negatively impact portfolio diversification and returns.⁴⁵ Some studies have however suggested that negative ESG screening has had a neutral impact on returns;⁴⁶ and a 2011 study of Australian socially responsible investment ('SRI') funds found some evidence that funds with more ESG screens achieved better risk-adjusted performance.⁴⁷

It is important to note the significant gaps in practice between investors working with a screening strategy or an integration strategy and aiming for an investment objective expressed as a financial return without any express environmental or social performance objectives, and those seeking to achieve a particular social or environmental impact through their investment (eg a climate aligned portfolio measured by GHG emissions or performance against a climate benchmark, which might be aligned to *Paris Agreement* goals). Yet both approaches could fall under the umbrella term 'responsible investment'. As defined by the United Nations Principles of Responsible Investment ('UNPRI'), responsible investment is 'a strategy and practice to incorporate environmental, social and governance (ESG) factors in investment decisions and active ownership'.⁴⁸ The UNPRI distinguishes responsible investment from *ethical investment* (using ethical criteria to select assets within investment portfolios),⁴⁹ *socially responsible investment* (the asset invested in is socially responsible or, if not, the investor can use its powers to influence corporate practices via Phase Two decisions); and *impact investment* (an investment in an asset to achieve a particular impact on a known environmental or social problem). This last style of investment relies upon a theory of change⁵⁰ to inform the initial investment (doing x will lead to change y, a desirable change) and influences the range of ongoing actions including monitoring and reporting of outcomes.

Others, such as the Responsible Investment Association Australasia ('RIAA'), blend these approaches, defining responsible investment as 'a process that takes into account environmental, social, governance (ESG) and ethical issues into the investment process of research, analysis, selection and monitoring of investments'.⁵¹ Leading global investment manager BlackRock uses the term *sustainable investment*

43 Luc Renneboog, Jenke Ter Horst and Chendi Zhang, 'Is Ethical Money Financially Smart? Nonfinancial Attributes and Money Flows of Socially Responsible Investment Funds' (2011) 20(4) *Journal of Financial Intermediation* 562, 586.

44 Harrison Hong and Marcin Kacperczyk, 'The Price of Sin: The Effects of Social Norms on Markets' (2009) 93(1) *Journal of Financial Economics* 15, 28.

45 Gunther Capelle-Blancard and Stéphanie Monjon, 'The Performance of Socially Responsible Funds: Does the Screening Process Matter?' (2014) 20(3) *European Financial Management* 494, 516.

46 Amel-Zadeh and Serafeim (n 24) 96.

47 Jacquelyn E Humphrey and Darren D Lee, 'Australian Socially Responsible Funds: Performance, Risk and Screening Intensity' (2011) 102(4) *Journal of Business Ethics* 519, 533.

48 United Nations Principles for Responsible Investment (n 21) 4.

49 Russell Sparkes and Christopher J Cowton, 'The Maturing of Socially Responsible Investment: A Review of the Developing Link with Corporate Social Responsibility' (2004) 52(1) *Journal of Business Ethics* 45, 46. Sparkes and Cowton note that church investors started this movement.

50 Edward T Jackson, 'Interrogating the Theory of Change: Evaluating Impact Investing Where It Matters Most' (2013) 3(2) *Journal of Sustainable Finance and Investment* 95, 100.

51 'RI Explained', *Responsible Investment Association of Australasia* (Web Page) <<https://web.archive.org/web/20201126091734/https://responsibleinvestment.org/what-is-ri/ri-explained/>> (emphasis added).

rather than responsible investment, and defines this without reference to ethics or impact, as combining ‘traditional investment approaches with environmental, social and governance (ESG) insights’,⁵² and including both investment styles which use negative and positive screens, and those which use ESG integration.⁵³ Investors readily make use of existing theories and models, notably MPT, CAPM and factor investment approaches, without any broader objectives such as *Paris* alignment, all the while labelling their approach ‘responsible investment’.

Similarly, the spectrum of approaches above could fall within emerging definitions of *sustainable finance*, which range from a narrow focus on integrating ESG factors into financial decisions, to a broader vision of ‘a financial system that is stable and tackles long-term education, economic, social, [and] environmental issues, including sustainable employment, retirement, financing, technological innovation, infrastructure construction and climate change mitigation’.⁵⁴ In going beyond ‘business as usual’ towards an approach that integrates ESG into business and investment decisions ‘for the lasting benefit of clients, stakeholders and society at large’,⁵⁵ this broad view encompasses aspects of a theory of change which is typically the hallmark of impact investment. There is no sustainable finance investment theory that can be used to model a portfolio.

B Phase Two: Ongoing Actions Linked with Ownership

Once an investor owns equity in a company, a second phase of decisions relating to ownership become relevant. These include the exercise of typical ownership rights attached to an asset (such as information and voting rights), as well as monitoring asset performance within the portfolio. The separation of ownership from control in listed companies with disperse shareholders⁵⁶ creates a moral hazard problem as managers, aware that shareholders are unable to effectively monitor them, develop and execute strategies to extract rents in preference to strategies that create shareholder value.⁵⁷ In this context, the different theories of responsible investment noted above encourage *active* ownership through monitoring, engagement and use of voting rights.

Monitoring by investors with long-term investment horizons has been found to improve a firm’s profitability, leading to lower levels of risk over time.⁵⁸ Methods include the use of company questionnaires, red-flagging of high ESG risks via

52 ‘What Is Sustainable Investing?’, *BlackRock* (Web Page, 2021) <<https://www.blackrock.com/ch/individual/en/themes/sustainable-investing>>.

53 ‘Sustainable Investment Solutions’, *BlackRock* (Web Page, 2021) <<https://www.blackrock.com/ch/individual/en/themes/sustainable-investing/sustainable-solutions>>.

54 EU High-Level Expert Group on Sustainable Finance, *Financing a Sustainable European Economy* (Interim Report, July 2017) 12 (emphasis omitted).

55 Edwards et al (n 24) 16.

56 Adolph A Berle and Gardiner C Means, *The Modern Corporation & Private Property* (Macmillan, 1933) 4 ff; Eugene F Fama and Michael C Jensen, ‘Separation of Ownership and Control’ (1983) 26(2) *Journal of Law and Economics* 301, 308 ff.

57 Bengt Holmström, ‘Moral Hazard and Observability’ (1979) 10(1) *Bell Journal of Economics* 74, 74; Clive Bull, ‘Implicit Contracts in the Absence of Enforcement and Risk Aversion’ (1983) 73(4) *American Economic Review* 658, 662 ff.

58 Jarrad Harford, Ambrus Kecskés and Sattar Mansi, ‘Do Long-Term Investors Improve Corporate Decision-Making’ (2018) 50 *Journal of Corporate Finance* 424, 447.

third-party reporting (lists, research notes, dashboards and databases) and watch lists.⁵⁹ Typically, this seeks to understand historic performance, but also expected future performance, as this will then factor back into asset and portfolio valuations.

Engagement activities are motivated by the need for further information due to gaps in the disclosures provided by an investee company, but may also seek to improve practices, not simply disclosures. Engagement can be undertaken privately, or collectively where investors combine their efforts in discussing matters of concern with company management and incorporate a public-facing element to these activities. Private, behind-the-scenes engagement is the preferred strategy for institutional investors,⁶⁰ yet collective engagements are emerging in several ESG contexts, including climate change.⁶¹ Evidence suggests these activities are often used by investors who incorporate information on the longer term into their investment approach.⁶² Engagements have been found to generate positive abnormal returns.⁶³ They lead to reduced downside risk, but the topic that motivates the engagement influences the size of this impact.⁶⁴ Successful engagements on environmental and social issues have been observed to correspond to improvements in operating performance, profitability, efficiency and governance.⁶⁵

Voting strategies can include voting on routine agenda items proposed by management (such as election of directors, adoption of the remuneration report, issues of securities or capital management resolutions), as well as shareholder proposals. Institutional investors typically only engage in public actions (such as voting) once private engagement has failed,⁶⁶ and the use of this strategy varies widely between jurisdictions. In the United States of America ('US'), where shareholder proposals (including on ESG matters) have a long history,⁶⁷ majority support has been rare.⁶⁸ While sponsor identity, the issue at the heart of the proposal, company prior performance and the timing appear to influence the

59 CFA Institute and Principles of Responsible Investment (n 24) 11.

60 Fabrizio Ferraro and Daniel Beunza, 'Creating Common Ground: A Communicative Action Model of Dialogue in Shareholder Engagement' (2018) 29(6) *Organization Science* 1187, 1205; Marco Becht et al, 'Returns to Shareholder Activism: Evidence from a Clinical Study of the Hermes UK Focus Fund' (2009) 22(8) *Review of Financial Studies* 3093, 3098; Alexander Dyck et al, 'Do Institutional Investors Drive Corporate Social Responsibility? International Evidence' (2019) 131(3) *Journal of Financial Economics* 693, 702; Joseph A McCahery, Zacharias Sautner and Laura Starks, 'Behind the Scenes: The Corporate Governance Preferences of Institutional Investors' (2016) 71(6) *Journal of Finance* 2905, 2911 ff.

61 Elroy Dimson, Oğuzhan Karakaş and Xi Li, 'Active Ownership' (2015) 28(12) *Review of Financial Studies* 3225, 3240–2. See also discussion of the engagement initiative *Climate Action 100+* in Part IV(B).

62 Krueger, Sautner and Starks (n 24) 26 ff.

63 Brad M Barber, 'Monitoring the Monitor: Evaluating CalPERS' Activism' (2007) 16(4) *Journal of Investing* 66, 67; Becht et al (n 60) 3097, 3115; Dimson, Karakaş and Li (n 61) 3253 ff.

64 Hoepner et al (n 24) 7.

65 Dimson, Karakaş and Li (n 61) 3261.

66 Krueger, Sautner and Starks (n 24) 26 ff.

67 Maria Goranova and Lori Verstegen Ryan, 'Shareholder Activism: A Multidisciplinary Review' (2014) 40(5) *Journal of Management* 1230, 1233.

68 Virginia Harper Ho, 'Risk-Related Activism: The Business Case for Monitoring Nonfinancial Risk' (2016) 41(3) *Journal of Corporation Law* 647, 690.

voting outcome,⁶⁹ sufficient votes in line with the shareholders' campaign may lead to change.⁷⁰ Moreover, withdrawn proposals can be indicative of effective engagement,⁷¹ as company management adjusts its policy and practices to avoid a vote going ahead on the proposal.⁷² Support for shareholder proposals on ESG issues at Australian listed companies is growing, although the requirement to firstly amend the company's constitution to allow for advisory proposals, then include separate proposals on environmental and social issues, appears to influence voting on these issues.⁷³

C Phase Three: Divestment

Divesting holdings in an investee company could occur because the portfolio is out of alignment with the model created by the investor. For example, the level of risk in the portfolio may be higher than the risk appetite statement and investment objectives, or the performance may be less than initially expected. The investor therefore needs to quickly bring the portfolio back into alignment. Divestment could also occur because of negative sentiment associated with an investee company, revising the investment thesis made in Phase One from positive to negative.

A different form of divestment is socially-motivated divestment from firms 'engaged in a reprehensible activity'.⁷⁴ Notable examples include the anti-apartheid divestment campaign,⁷⁵ divestment from tobacco,⁷⁶ and, more recently, the fossil fuel divestment movement.⁷⁷ With indirect impact via media engagement, these campaigns can generate public awareness of the issue, stigmatise target companies and influence government officials to regulate or scrutinise a particular area.⁷⁸ While divestment can therefore signal an investor's concern about climate change,

69 Stuart L Gillian and Laura T Starks, 'Corporate Governance Proposals and Shareholder Activism: The Role of Institutional Investors' (2000) 57(2) *Journal of Financial Economics* 275, 295.

70 Diane Del Guercio, Laura Seery and Tracie Woidtke, 'Do Boards Pay Attention When Institutional Investor Activists "Just Vote No"?' (2008) 90(1) *Journal of Financial Economics* 84, 89 ff.

71 Diane Del Guercio and Hai Tran, 'Institutional Investor Activism' in H Kent Baker and John R Nofsinger (eds), *Socially Responsible Finance and Investing: Financial Institutions, Corporations, Investors, and Activists* (John Wiley & Sons, 2012) 359, 372; Ho (n 68) 662.

72 John G Matsusaka and Oguzhan Ozbas, 'A Theory of Shareholder Approval and Proposal Rights' (2017) 33(2) *Journal of Law, Economics, and Organization* 377, 379.

73 Australian Council of Superannuation Investors, 'Shareholder Resolutions in Australia: Is There a Better Way?' (Research Paper, October 2017) 12 ff. See also, Stephen Bottomley, 'Rethinking the Law on Shareholder-Initiated Resolutions at Company General Meetings' (2019) 43(1) *Melbourne University Law Review* 93.

74 Atif Ansar, Ben Caldecott and James Tilbury, *Stranded Assets and the Fossil Fuel Divestment Campaign: What Does Divestment Mean for the Valuation of Fossil Fuel Assets?* (Report, October 2013) 21.

75 William H Kaempfer, James A Lehman and Anton D Lowenberg, 'Divestment, Investment Sanctions, and Disinvestment: An Evaluation of Anti-Apartheid Policy Instruments' (1987) 41(3) *International Organization* 457, 460 ff.

76 Nathaniel Wander and Ruth E Malone, 'Keeping Public Institutions Invested in Tobacco' (2007) 73(2) *Journal of Business Ethics* 161, 162 ff.

77 Julie Ayling and Neil Gunningham, 'Non-State Governance and Climate Policy: The Fossil Fuel Divestment Movement' (2017) 17(2) *Climate Policy* 131, 141.

78 Ansar, Caldecott and Tilbury (n 74) 17.

it also raises the potential for short-term risk as socially-motivated divestment may deviate from market risk and returns.⁷⁹

The threat of divestment presents another way for investors to discipline managers,⁸⁰ if it is likely to result in a decline in share price that will impact upon the firm managers' wealth.⁸¹ To be effective in motivating management to act, the threat must be credible. Questions about the liquidity of the company's stock⁸² may mean this threat is downplayed by management. A divestment could be partial: rather than divesting from all fossil fuel companies or companies heavily exposed to GHG emissions, the investor could choose to set a level of carbon intensity that is acceptable, and divest from any company falling outside this limit; or look for the potential of stranding at an individual project level within a company.⁸³ To be able to initiate such a strategy, the investor has to be able to drill down to information on carbon intensity at either the industry, company or individual project level.⁸⁴

D Climate Change Risk and *Paris* Alignment

Aside from impact investment strategies that orient around a theory of change, for all the investment approaches above, irrespective of the phase of decision-making and the theoretical frame used, climate change risks and opportunities need to be priced and then considered for their impact on asset price, risk, volatility and cash flow. The work of the Taskforce on Climate-Related Financial Disclosures ('TCFD') has been instrumental in identifying different types of climate risks (physical and transition) and articulating the way in which they can result in financial impact for different sectors and operating contexts.⁸⁵ Yet, measuring and pricing these risks remains challenging due to methodological issues. As the Bank for International Settlements recently observed:

Traditional backward-looking risk assessments and existing climate-economic models cannot anticipate accurately enough the form that climate-related risks will take. These include what we call 'green swan' risks:⁸⁶ potentially extremely financially disruptive events that could be behind the next systemic financial crisis ... The problem is that extrapolating historical trends can only lead to mispricing of climate-related risks, as these risks have barely started to materialise ... climate-

79 Remy Briand et al, 'Beyond Divestment: Using Low Carbon Indexes' (Research Insight, MSCI, March 2015) 3.

80 Anat R Admati and Paul Pfleiderer, 'The "Wall Street Walk" and Shareholder Activism: Exit as a Form of Voice' (2009) 22(7) *Review of Financial Studies* 2645, 2648; Sreedhar T Bharath, Sudarshan Jayaraman and Venky Nagar, 'Exit as Governance: An Empirical Analysis' (2013) 68(6) *Journal of Finance* 2515, 2544.

81 Alex Edmans, Vivian W Fang and Emanuel Zur, 'The Effect of Liquidity on Governance' (2013) 26(6) *Review of Financial Studies* 1443, 1444.

82 Alex Edmans, 'Blockholder Trading, Market Efficiency, and Managerial Myopia' (2009) 64(6) *Journal of Finance* 2481, 2485; Yiwei Dou et al, 'Blockholder Exit Threats and Financial Reporting Quality' (2018) 35(2) *Contemporary Accounting Research* 1004, 1023.

83 Richard Baron and David Fischer, 'Divestment and Stranded Assets in the Low-Carbon Transition' (Background Paper, 32nd OECD Round Table on Sustainable Development, 28 October 2015) 14.

84 Ibid 20.

85 *Final Report* (n 8).

86 Based on the concept of black swan events: Nassim Nicholas Taleb, *The Black Swan: The Impact of the Highly Improbable* (Random House, 2nd ed, 2010).

related risks typically fit fat-tailed distributions and concentrate precisely in the 1% not considered by VaR [Value-at-risk]. Finally, climate change is characterised by deep uncertainty ... As a result, the standard approach to modelling financial risk consisting in extrapolating historical values ... is no longer valid in a world that is fundamentally reshaped by climate change.⁸⁷

How an investor prices and manages risk may also depend upon whether climate change is viewed as a systemic risk,⁸⁸ spread across the market and non-diversifiable,⁸⁹ or whether it is more idiosyncratic in its impacts upon a firm, industry or region. As the TCFD makes clear, climate-related financial impacts will differ significantly between sectors and, within a sector, different businesses.⁹⁰ A different but nonetheless significant challenge is that evidence suggests individuals use heuristics and mental shortcuts to assess probabilities, such as inferences about the frequency of an event.⁹¹ As such, and particularly given that climate risk is one of many relevant risks considered in the investment process, it is also therefore likely that investment models currently oversimplify climate change risks.

Another complex, unsettled aspect of climate risk management for investors is the push to align portfolios to the temperature goals of the *Paris Agreement*.⁹² *Paris* alignment is a strong theme in emerging sustainable finance agendas, where it is framed as both a long-term risk management approach but also, more normatively, as something that investors *should* be doing to support society's response to climate change, which aligns more closely with an impact investing approach.⁹³ Yet methods to translate the long-term temperature goals of the *Paris Agreement* to the enterprise or portfolio scale and metrics to measure progress on alignment are still developing and face a number of challenges. These include the availability

87 Patrick Bolton et al, *The Green Swan: Central Banking and Financial Stability in the Age of Climate Change* (Bank for International Settlements, 2020) iii, 21.

88 Archarya et al provide a model of systemic risk for financial institutions. It highlights the challenges in identifying the appropriate proxy of risk *ex ante* to predict the *ex post* realised systemic risk. It deals specifically with systemic risks in the financial/banking system. The model relies on an estimate of the probability of a systemic event: Viral V Archarya et al, 'Measuring Systemic Risk' (2017) 30(1) *Review of Financial Studies* 2. See also Michael Barnett, William Brock and Lars Peter Hansen, 'Pricing Uncertainty Induced by Climate Change' (2020) 33(3) *Review of Financial Studies* 1024, which develops the social cost of carbon as a measurement by building a dynamic structural economic model that brings together decision theory under uncertainty, non-linear impulse response functions, and dynamic valuation via asset pricing.

89 This would impact on valuation via a capital asset pricing model ('CAPM') of Sharpe: see Sharpe (n 31).

90 United Nations Environment Programme Finance Initiative and Acclimatise, *Navigating a New Climate: Assessing Credit Risk and Opportunity in a Changing Climate* (Report, July 2018) 8.

91 Olivier Dessaint and Adrien Matray, 'Do Managers Overreact to Salient Risks?: Evidence from Hurricane Strikes' (2017) 126(1) *Journal of Financial Economics* 97, 97 ff. This empirical study showed that fund managers responded to hurricane events with reference to the local context where the risk is estimated. Even though the particular firm in which they were invested was not affected, they shifted from equities to cash holdings but, over time, perceived risk and the level of cash holdings returned to pre-hurricane levels.

92 International Investors Group on Climate Change, 'Paris Aligned Investment Initiative: Net Zero Investment Framework for Consultation' (Framework, August 2020) ('2020 Consultation'). See also Advisory Group on Finance for the UK's Climate Change Committee, *The Road to Net-Zero Finance* (Report, December 2020); James Rydge, 'Aligning Finance with the Paris Agreement: An Overview of Concepts, Approaches, Progress and Necessary Action' (Policy Insight, Grantham Research Institute on Climate Change and the Environment, Centre for Climate Change Economics and Policy, 11 December 2020).

93 See generally Jackson (n 50).

of granular sectoral and regional energy transition pathways to net zero, as well as the development and use of forward-looking metrics that measure a company's commitment to and preparedness for net zero, rather than historical emissions disclosures used currently.⁹⁴

The European-based Institutional Investors Group on Climate Change ('IIGCC') defines *Paris*-aligned investment as the implementation of an investment strategy that is consistent with the goal of global net zero emissions by 2050, with two key objectives: decarbonising investment portfolios consistent with *Paris*-aligned energy transition pathways, and increasing investment in climate solutions such as renewable energy.⁹⁵ Implementing such a strategy within an *equities* portfolio has significant implications for all three stages of investment decision-making described above. For example, in relation to Phase One, it may involve the introduction of *alignment* objectives and metrics alongside conventional investment objectives which focus on expected returns (eg targets addressing GHG emissions intensity and the proportion of funds allocated to climate solutions).⁹⁶ It could, for example, require setting positive screens to include renewable energy projects. In relation to Phase Two, engagement activities and voting practices emerge as critical activities, particularly to drive the transition of existing assets to net zero.⁹⁷ For Phase Three, the IIGCC does not recommend exclusion and divestment as a primary strategy for *Paris* alignment given the overarching aim to achieve emissions reductions in the real economy (not only within specific portfolios). It suggests that divestment may nonetheless play a role in addressing unacceptable financial risks (eg excluding particularly high emitting companies) or in decreasing exposure over time to companies whose primary activities are no longer considered permissible within a credible pathway to net zero (eg new fossil fuel developments and expansions).⁹⁸

III LEGAL AND REGULATORY CONTEXT

Superannuation fund investment decision-making takes place in a complex legal and regulatory context. To inform the empirical study, this discussion explores whether and how core legal duties and functions apply to climate change. These

94 See generally '2020 Consultation' (n 92); Rydge (n 92). On the last point, see also Task Force on Climate-Related Financial Disclosure, *Forward-Looking Financial Sector Metrics: Consultation* (Report, October 2020).

95 '2020 Consultation' (n 92) 10–11.

96 *Ibid* 27.

97 *Ibid* 28.

98 *Ibid* 29. See also Will Steffen, *Unburnable Coal: Why We Need to Leave Fossil Fuels in the Ground* (Report, Climate Council, 9 May 2015) 1, which sets out the implications of global carbon budgets to meet *Paris* goals, namely that most of the world's fossil fuel reserves must be left in the ground unburned to keep global temperature rise to no more than 2°C; to have a 50% chance of meeting the 2°C warming limit, at least 62% of the world's fossil fuel reserves must be left in the ground unburned; to have a 75% chance, at least 77% of the world's fossil fuels cannot be burned. Coal is the fossil fuel with the greatest proportion that cannot be used, and 88% of global reserves are un-burnable. For recent general analysis of the incompatibility of new fossil fuel developments with net zero emissions reduction scenarios see International Energy Agency, *Net Zero by 2050: A Roadmap for the Global Energy Sector* (Report, July 2021).

duties and functions relate to all three phases of investment decision-making. They constrain and inform the allocation of capital and portfolio composition (Phase One), as well as any divestment decisions (Phase Three) by providing relevant objectives and considerations to guide these decisions. They also inform the exercise of ownership rights by superfunds in their stewardship of investee companies (Phase Two). Given the empirical study is based solely on publicly-disclosed information, the discussion also notes relevant disclosure and reporting rules for financial products, as well voluntary reporting regimes, such as the UNPRI, both of which play a role in governing disclosure. Insofar as they draw attention internally to risk management issues and provide information for third parties to pressure investors on their approaches to these risks, disclosure rules and standards can also influence the approaches taken to climate change in investment practice.⁹⁹

A Legal Duties and Functions

Superannuation funds exist to accumulate assets to enable their beneficiaries (or members) to earn an income upon retirement. In Australia, these funds are constituted as trusts, administered by ‘corporate trustees’ with ‘trustee directors’.¹⁰⁰ The legal framework governing decision-making by superannuation trustees and their directors reflects this fiduciary relationship and overarching purpose.¹⁰¹ While in practice, much decision-making is delegated to third parties, such as fund managers whose activities are governed by contractual investment mandates, the legal duties discussed here attach to the corporate trustee and its directors and are directly enforceable against these parties.

Several core legal duties govern the investment process and provide legal constraints and considerations for investment decision-making. First, corporate trustees and their directors are legally required to exercise their powers in the best interests of the fund’s beneficiaries.¹⁰² Best interests are generally taken to mean best *financial* interests,¹⁰³ although this does not preclude the consideration of ESG factors where they might materially impact investment risk, strategy and performance.¹⁰⁴ Second, corporate trustees must maintain the fund solely for the purpose of providing benefits to members upon retirement.¹⁰⁵ Third, corporate trustees and their directors are legally bound to exercise due care, skill and

99 Osofsky et al (n 22) 621 ff.

100 Pamela Hanrahan, ‘Legal Framework Governing Aspects of the Australian Superannuation System’ (Background Paper 25, Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry, 26 July 2018) 4 ff.

101 Ibid 7–10. Hanrahan provides an overview of the complex legal framework governing the superannuation system, where private trust law is overlain with specific legislation.

102 *Superannuation Industry Supervision Act 1993* (Cth) ss 52(2)(c) (trustee), 52A(2)(c) (trustee directors) (‘*SIS Act*’).

103 *Cowan v Scargill* [1985] Ch 270, 287 (Megarry V-C). The superannuation context informs the interpretation of this duty: *Australian Prudential Regulatory Authority v Kelaher* (2019) 138 ACSR 459, 479 [49] (Jagot J).

104 Barker et al (n 11) 218. See also Parliamentary Joint Committee on Corporations and Financial Services, *Corporate Responsibility: Managing Risk and Creating Value* (Report, 21 June 2006) [5.16].

105 *SIS Act 1993* (Cth) s 62(1).

diligence in carrying out their duties and functions.¹⁰⁶ To satisfy this duty of care, trustee directors must obtain and critically analyse relevant information and use this information appropriately to make decisions in the best interests of beneficiaries.¹⁰⁷

The functions of superannuation trustees are specified in some detail via investment covenants in the governing legislation,¹⁰⁸ and via a range of prudential standards issued by the Australian Prudential Regulation Authority ('APRA').¹⁰⁹ These include an obligation to formulate, regularly review and give effect to an *investment strategy* (for the fund as a whole and for each investment option) having regard to a range of factors including the level of risk, likely return, diversification and availability of reliable information;¹¹⁰ and a requirement to develop and maintain a *risk management strategy* (including a risk appetite statement) to address risks that may have a material impact on operations.¹¹¹ There is also a requirement to have a comprehensive stress-testing program that, at a minimum, includes the performance of each investment option against prescribed scenarios covering a range of factors that can create extraordinary losses or make controlling risk in the management strategy difficult.¹¹²

APRA's current prudential standards and accompanying practice guides make only minimal explicit reference to ESG considerations and underplay their relevance to investment decision-making. For example, Prudential Practice Guide, 'SPG 530' states that a superannuation fund may take additional factors (such as ESG) into account in formulating an investment strategy where there is no conflict with the requirements to act in the best interests of beneficiaries, and notes that this may result in the offering of an 'ethical' investment option.¹¹³ APRA, however, cautions that such an offering must only be made on a well-reasoned basis and that licensees should be mindful of 'exposing the interests of beneficiaries to undue risk stemming from matters such as a lack of diversification, where investment in some

106 Ibid ss 52(2)(b) (trustee), 52A(2)(b) (trustee directors).

107 Noel Hutley and James Mack, 'Market Forces: Superfund Trustee Duties and Climate Change Risk' (Memorandum of Opinion, 15 June 2017) 6–7 [14].

108 *SIS Act 1993* (Cth) ss 52(6) (investment), 52(8) (risk), 52(9)–(12) (annual outcomes assessments), 52(12) (promoting the financial interests of beneficiaries), 52(13) (include investment strategy and investment return for MySuper).

109 Prudential standards are made under section 34C of the *SIS Act 1993* (Cth).

110 *SIS Act 1993* (Cth) s 52(6)(a); Australian Prudential Regulation Authority, *Superannuation (Prudential Standard) Determination No 8 of 2012: Prudential Standard SPS 530 Investment Governance* (1 July 2013) [17]–[21] (investment strategy), [22]–[23] (investment selection process), [24]–[26] (monitoring investments), [27]–[28] (reviewing the investment strategy) ('*Prudential Standard SPS 530 Investment Governance*').

111 *SIS Act 1993* (Cth) s 52(8); Australian Prudential Regulation Authority, *Superannuation (Prudential Standard) Determination No 2 of 2012: Prudential Standard SPS 220 Risk Management* (1 July 2013) has been recently replaced by Australian Prudential Regulation Authority, *Superannuation (Prudential Standard) Determination No 3 of 2019: Prudential Standard SPS 220 Risk Management* (1 January 2020) ('*Prudential Standard SPS 220 Risk Management*').

112 *Prudential Standard SPS 530 Investment Governance* (1 July 2013) [29]–[31].

113 Australian Prudential Regulation Authority, 'SPG 530' (Prudential Practice Guide, November 2013) 8 [34] ('SPG 530'). The Australian Prudential Regulation Authority ('APRA') has announced it will release a consultation package on this practice note in 2021 which will include a revised standard and guidance note: see Australian Prudential Regulation Authority, 'APRA's Policy Priorities' (Information Paper, 1 February 2021) 15 ('APRA's Policy Priorities').

industries are excluded or a positive weighting is placed on certain non-financial factors as a result of ESG considerations'.¹¹⁴ The recently updated *Prudential Standard SPS 220 Risk Management* requires an entity's risk management framework to cover all material risks – both financial and non-financial – but does not specifically refer to ESG matters as a source of material risk.¹¹⁵

Even if operational aspects of these investment functions are delegated to external fund managers, the corporate trustee and its directors must be able to demonstrate appropriate oversight.¹¹⁶ For example, when entering into an agreement with fund managers (whereby fund managers assume control over the moneys of the trustee), the trustees must ensure that the agreement enables the trustee to be provided with appropriate information as to the making of, and return on, the investments, so as to allow the trustee to assess the capability of the investment manager.¹¹⁷ Typically, the fund manager's approach to ESG (including integration in capital allocation decisions and stewardship) will also be specified in the agreement.

There has been much recent consideration of how these legal duties and functions relate to climate change.¹¹⁸ An influential legal opinion issued in 2017 by Noel Hutley and James Mack argues that climate risk can and should be considered by corporate trustees and trustee directors in the exercise of their duties and functions to the extent that those risks intersect with the financial interests of beneficiaries;¹¹⁹ and suggests that this may well lead to decisions resulting in the changed composition or diversification of an investment portfolio (corresponding to Phase One and Three of investment decision-making).¹²⁰ It may also involve developing particular approaches to investment stewardship (Phase Two).¹²¹ The weight of this legal opinion was recently strengthened with the out-of-court settlement of *Mark McVeigh v Retail Employees Superannuation Trust* ('REST') in November 2020.¹²² In this case, McVeigh alleged that REST's trustee directors failed to act with care, skill and diligence, and failed to act in his best interests, by not properly considering the risks posed by climate change to the fund's investments.¹²³ In a statement released after the settlement, REST recognised the

114 'SPG 530' (n 113) 8 [36].

115 See *Prudential Standard SPS 220 Risk Management* (1 January 2020) [10], [12]. Other sources of financial risk are however mentioned specifically.

116 See relevant standards made under section 34C(1) of the *SIS Act 1993* (Cth), eg, Australian Prudential Regulation Authority, *Superannuation Determination No 1 of 2016: Prudential Standard SPS 510 Governance* (1 July 2017); Australian Prudential Regulation Authority, *Superannuation Determination No 3 of 2012: Prudential Standard SPS 231 Outsourcing* (15 November 2012).

117 *SIS Act 1993* (Cth) s 102.

118 See, eg, Barker et al (n 11).

119 Hutley and Mack (n 107) 2 [3.1]. See also Summerhayes (n 7).

120 Hutley and Mack (n 107) 5 ff.

121 Barker et al (n 11) 227.

122 Retail Employees Superannuation Trust, 'Rest Reaches Settlement with Mark McVeigh' (Web Page, 2 November 2020) <<https://rest.com.au/why-rest/about-rest/news/rest-reaches-settlement-with-mark-mcveigh>>.

123 Mark McVeigh, 'Concise Statement', Submission in *Mark McVeigh v Retail Employees Superannuation Pty Ltd*, NSD1333/2018, 24 September 2018. McVeigh sought a declaration that climate risks must be considered by superannuation trustee directors in the management of investments for their beneficiaries and that REST was in breach of duty by failing to do so. The claim did not allege financial loss.

importance of identifying and managing material risks posed by climate change, and committed to a number of actions to implement best practice climate risk disclosure and management.¹²⁴

APRA has also increasingly underscored the relevance of climate change to the fiduciary duties of superfund trustees, cautioning against disregarding climate risks due to their long-term and uncertain nature.¹²⁵ In February 2020, APRA announced the development of new prudential practice guidelines to assist entities in complying with existing standards for risk management and investment governance, with a focus on best practice climate risk management.¹²⁶

B Mandatory Disclosure

Under the current disclosure regime, APRA collects and publishes comprehensive financial information from registered superannuation funds, including information on total assets under management (for the fund as a whole and for individual superannuation products), return targets, risk levels, allocations across different asset classes and returns.¹²⁷ Yet there are some notable gaps in ensuring accessible, public reporting of this information. For example, a requirement to publicly disclose portfolio assets including sufficient information to identify the value and the weighting or exposure of various assets allocated to particular investment options, first introduced in 2012, has not yet come into force.¹²⁸

124 REST committed to align its portfolio to net zero by 2050, report against the Taskforce on Climate-Related Financial Disclosures ('TCFD') framework (see further discussion below in Part III(C)), and advocate for investee companies to align to the *Paris Agreement*: Retail Employees Superannuation Trust, 'Statement from Rest' (Media Release, 2 November 2020) <<https://equitygenerationlawyers.com/wp/wp-content/uploads/2020/11/Statement-from-Rest-2-November-2020.pdf>>.

125 Australian Prudential Regulation Authority, 'Climate Change: Awareness to Action' (Information Paper, 20 March 2019) 7 ('Climate Change').

126 Letter from Geoff Summerhayes, Executive Board Member of Australian Prudential Regulation Authority, to all APRA-regulated entities, 24 February 2020 <<https://www.apra.gov.au/understanding-and-managing-financial-risks-of-climate-change>> ('Letter from Geoff Summerhayes'). See also 'APRA's Policy Priorities' (n 113) 15. In April 2021, a draft was released for consultation: Australian Prudential Regulation Authority, 'Draft CPG 229 Climate Change Financial Risks' (Prudential Practice Guide, April 2021) ('Draft CPG 229').

127 Obligations derive from both the financial sector prudential regulation regime administered by APRA, and the corporate disclosure (and financial services) regime administered by ASIC. Regarding financial reporting, see *SIS Act 1993* (Cth) pt 4 (accounts, audit and reporting obligations for superannuation entities); and the *Financial Sector (Collection of Data) Act 2001* (Cth), which authorises APRA to adopt reporting standards for the preparation of accounts and statements by financial sector entities, including superannuation funds. Specific consumer disclosure requirements are provided by the *Corporations Act 2001* (Cth): see, eg, *Corporations Act 2001* (Cth) pt 7.9, div 2, dealing with Product Disclosure Statements ('PDS').

128 *Corporations Act 2001* (Cth) s 1017BB. These requirements were introduced by the *Superannuation Legislation Amendment (Further MySuper and Transparency Measures) Act 2012* (Cth), but their operation has been consistently deferred by ASIC, with ASIC stating in 2019 that '[i]he continued deferral will facilitate the Government considering and settling its policy position ... including making regulations to prescribe the content and format of disclosure': Explanatory Statement, ASIC Corporations (Amendment) Instrument 2019/1056 [2]. In December 2020, ASIC announced a further deferral until 31 December 2021 on the grounds that 'the regulations supporting the requirements have not yet been made': Australian Securities and Investments Commission, 'ASIC Extends Relief from Portfolio Holdings Disclosure' (Media Release 20-315MR, 8 December 2020).

Superfunds are also legally required to report a range of financial and governance information to beneficiaries. Product Disclosure Statements ('PDS') must be provided by all entities that issue financial products.¹²⁹ Trustees must make a product dashboard publicly available for each investment product or option, including up-to-date information about the return target, the return, the level of investment risk, and a statement of fees and costs.¹³⁰ The PDS must also include statements advising whether the issuer takes ESG standards into account for the purposes of selecting, retaining or realising their investments, and if so, how and to what extent,¹³¹ thereby requiring at least basic public disclosure on ESG approaches.

Formal legal obligations to disclose ownership activities, such as monitoring, engagement and voting (Phase Two), and related outcomes are also minimal and do not require the provision of granular, timely information. Superannuation funds must merely ensure that a copy of proxy voting policies and a summary of when and how they have exercised their voting rights in relation to shares in listed companies is publicly available on their website.¹³² Relevant regulatory guidance directs that voting summaries should be published within 20 business days of the fund's end of financial year.¹³³

C Voluntary Standards

Voluntary, industry codes of practice and reporting frameworks also influence the treatment of climate considerations in investment decision-making and the extent to which this is disclosed.¹³⁴ The influence of these may differ according to whether they are best practice recommendations open to voluntary uptake, or whether they are more closely governed and monitored by lead institutions and involve some type of membership or accreditation process. Compared to mandatory disclosures discussed above, the voluntary initiatives discussed here explicitly recognise ESG issues as financial risks. They also increasingly seek to align investor decision-making with broader social goals such as the *Paris Agreement*.

For example, best practice standards for climate risk disclosure have been developed by the TCFD.¹³⁵ One of the core recommendations is that businesses and investors use scenario analysis to determine the potential financial impacts and opportunities associated with different energy transition scenarios and position

129 *Corporations Act 2001* (Cth) s 1012B.

130 *Ibid* s 1017BA.

131 *Ibid* s 1013DA; *Corporations Regulations 2001* (Cth) regs 7.9.14C(b), (d).

132 *SIS Act 1993* (Cth) s 29QB(1)(b); *Superannuation Industry (Supervision) Regulations 1994* (Cth) regs 2.38(2)(n), (o); Australia Securities and Investments Commission, *Keeping Superannuation Websites Up to Date* (Regulatory Guide 252, 16 June 2014) 4 RG 252.1 ('*Keeping Superannuation Websites Up to Date*').

133 *Keeping Superannuation Websites Up to Date* (n 132) 17.

134 Private regulatory and governance initiatives like these have developed extensively in recent decades and form an important part of the broader regulatory framework concerning climate change. See, eg, Michael P Vandenbergh, 'Private Environmental Governance' (2013) 99(1) *Cornell Law Review* 129; Cameron Holley, Neil Gunningham and Clifford Shearing, *The New Environmental Governance* (Earthscan, 2012).

135 *Final Report* (n 8).

their strategy accordingly.¹³⁶ These scenarios should reflect different emissions reduction pathways and associated legal and policy settings and market conditions, with the expectation that this includes *Paris*-compliant scenarios.¹³⁷ The TCFD also recommends disclosing metrics and targets used to assess and manage climate-related risks and opportunities.¹³⁸ In this way, the TCFD pushes companies and investors to move beyond a narrow, short-term focus on climate-related risks to their own operations or portfolios, and encourages an alignment of strategy with *Paris* goals, and the setting of targets to reflect this. While the TCFD recommendations are entirely voluntary in Australia, regulators, APRA and the Australian Securities and Investments Commission (‘ASIC’), have both referenced the TCFD as a best practice standard, and APRA’s proposed new risk management practice guidance endorses the TCFD model.¹³⁹

Another relevant voluntary framework is the UNPRI,¹⁴⁰ to which many Australian superfunds are signatories. Signing up to the UNPRI represents a public commitment to adopt responsible investment practices, however the only mandatory requirement, beyond paying the annual membership fee is to report on these practices against an industry standard framework.¹⁴¹ This sets out a range of indicators – some mandatory, some voluntary, some publicly disclosed¹⁴² – which address the breakdown of total assets under management into asset classes and the corresponding responsible investment activities. UNPRI reports are therefore a source of information on ESG integration and other responsible investment practices such as screening, which are relevant to Phases One and Three decision-making, as well as broader stewardship activities such as engagement (Phase Two). However, the level of detail and public availability of this reporting varies widely as not all reporting indicators are mandatory.

Voluntary industry codes of practice, overseen to some degree by industry organisations such as the Australian Council of Superannuation Investors

136 Ibid 25–32. See also Task Force on Climate-Related Financial Disclosures, ‘The Use of Scenario Analysis in Disclosure of Climate-Related Risks and Opportunities’ (Technical Supplement, June 2017).

137 *Final Report* (n 8).

138 Ibid 14 ff.

139 Australian Securities and Investments Commission (n 12); ‘Letter from Geoff Summerhayes’ (n 126); ‘Draft CPG 229’ (n 126). For an overview of current disclosure practice against TCFD standards for APRA-regulated entities, see ‘Climate Change’ (n 125). See also Market Forces, *Risky Business: The Majority of Australia’s Largest Super Funds Disclose No Consideration of Climate Risk* (Report, August 2017) <<https://www.marketforces.org.au/wp-content/uploads/2018/06/Market-Forces-Risky-Business-FINAL-1.pdf>>.

140 The six Principles for Responsible Investment are a voluntary and aspirational set of investment principles that offer a menu for incorporating ESG issues into investment decision-making: ‘What Are the Principles for Responsible Investment?’, *United Nations Principles for Responsible Investment* (Web Page) <<https://www.unpri.org/pri/what-are-the-principles-for-responsible-investment>>. Signatories include asset owners, asset managers and service providers.

141 For UNPRI signatories, the only mandatory requirement, beyond paying the annual membership fee, is to publicly report on responsible investment activity through the reporting framework. Signatories can be de-listed for failing to report: ‘Getting Started as a Signatory’, *United Nations Principles for Responsible Investment* (Web Page) <<https://www.unpri.org/signatory-resources/getting-started-as-a-signatory/3838.article>>.

142 United Nations Principles for Responsible Investment, ‘PRI Reporting Framework 2020: Organisational Overview’ (Overview, November 2019).

(‘ACSI’)¹⁴³ and the Financial Services Council (‘FSC’),¹⁴⁴ also address stewardship activities (Phase Two). For example, the Australian Asset Owner Stewardship Code (‘Code’), overseen by ACSI, provides that ‘asset owners should publicly disclose their policy for voting at company meetings and voting activity’, and recommends presentation of summary voting outcomes on the website or in the annual report, illustrating the number of ‘for’ and ‘against’ votes by resolution type.¹⁴⁵ There is no requirement that voting on individual proposals be disclosed. The Code also recommends the disclosure of a fund’s general approach to stewardship and reporting to members about stewardship activities.¹⁴⁶

IV EMPIRICAL STUDY

The three-phase framework of investor decision-making (Part II) and the legal and regulatory context (Part III) both suggest that superannuation funds will include climate risk among factors to be considered in investment decisions as these are likely to be financially material, and that they will employ responsible investment practices (such as ESG integration, positive and negative screening, plus stewardship activities such as monitoring, engagement and voting) to address these risks. This would be consistent with legal obligations and established investment practices.

Given broader regulatory trajectories, it could also be expected that leading investors will take steps to align their portfolios with *Paris* goals, for example, by setting targets for portfolio emissions reductions and investment in climate solutions and committing to no new fossil fuel financing.¹⁴⁷ Further, although ESG disclosure rules are not well developed, it is reasonable to assume that investors

143 ACSI was established in 2001 with the purpose of providing a strong, collective voice on ESG issues on behalf of its members (39 Australian and international asset owners and managers). ACSI released the Australian Asset Owner Stewardship Code in May 2018: see ‘Australian Asset Owner Stewardship Code’, *Australian Council of Superannuation Investors* (Web Page, 2020) <<https://acsi.org.au/members/australian-asset-owner-stewardship-code/>>. Signatories to the Code are required to disclose their approach and outcomes regarding key stewardship activities: voting, engagement, policy advocacy and the selection, appointment and monitoring of external asset managers or otherwise disclose why they have not adopted the code.

144 The Financial Services Council (‘FSC’) is the leading peak body for the financial services sector (whose members include many Australian retail super funds operated by large banks and insurers, as well as major fund managers). The FSC promotes best practice for the financial services industry by setting mandatory standards that are binding on all full members and providing accompanying guidance notes: see Financial Services Council, ‘Setting Standards for the Industry’ (Fact Sheet, May 2018) <<https://fsc.org.au/resources-category/media-releases/968-2018-0514-fsc-standards-fact-sheet-2018/file>>.

145 Australian Council of Superannuation Investors, ‘Australian Asset Owner Stewardship Code’ (May 2018) 9 [Principle 2] (‘Stewardship Code’). Similar standards are provided by the FSC, whose members are also directed to develop and implement a voting policy, disclose this policy and publish their proxy voting record in relation to Australian investments: Financial Services Council, ‘Voting Policy, Voting Record and Disclosure’ (FSC Standard No 13, 26 March 2013).

146 ‘Stewardship Code’ (n 145) 8 [Principle 1], 13 [Principle 6].

147 See Rydge (n 92) 1, which notes that ‘Paris alignment of finance will likely mean no new coal financing, but ... incumbents are still investing hundreds of billions per year in fossil fuel projects’.

will disclose enough information on these processes to assure members, regulators and other key stakeholders.

The empirical study was designed to explore current practice against these expectations. It reports on how investors approach climate change in practice in all three phases of investment decision-making. This observed practice illustrates that Australian institutional investors are interpreting their legal obligations regarding climate risks and responding to external regulatory pressures to align portfolios to *Paris* goals in quite different ways.

A Methodology

The study used a sample of the top 10 Australian superannuation funds by assets under management in the default superannuation option (MySuper),¹⁴⁸ in which most superannuation moneys are invested (based on APRA data as at June 2019).¹⁴⁹ This sample size was appropriate to the study's purpose: to explore a new and emerging field of practice through in-depth desktop research, rather than achieve full coverage of the field. While focusing on the largest, most well-resourced funds may not give an accurate picture of the full range of industry practices, nor necessarily a representation of best practice,¹⁵⁰ it does indicate general practice trends for a significant portion of the market.¹⁵¹

The inquiry focused specifically on two pre-mixed superannuation products¹⁵² offered by the sample funds: the default MySuper option which typically contains a broad mix of assets, managed under a 'balanced' investment strategy,¹⁵³ with no explicit emphasis on responsible investment; and, where offered, the socially responsible (or green-labelled) option for which responsible investment practices are more explicit in the investment strategy. This allowed a comparison of approaches to climate change in two differently framed products.

148 MySuper was introduced as part of the Commonwealth government's Stronger Super Reform package in 2011 and 2012 to provide a simple, cost-effective default superannuation project: see Hanrahan (n 100) 11 ff. As a result, the superannuation contributions of any employee who has not made a choice of fund will be directed to a fund that offers a MySuper product.

149 Australian Prudential Regulation Authority, 'Annual MySuper Statistics' (Statistics, 30 June 2019) Table 1, SRF 533.0, Item 2.2 ('Annual MySuper Statistics'). The sample includes a mix of profit-to-member industry funds, retail funds (operated by large, shareholder-owned banks and insurance companies), as well as public sector funds, which all offer a range of superannuation products with varying risk/return ratios and different asset mixes.

150 For example, smaller superannuation funds such as Local Government Super not within the sample are recognised as industry leaders in addressing climate and other ESG risks.

151 The value of assets under management in the MySuper options offered by the 10 sampled superannuation funds amounts to 63.72% of the total assets under management held in MySuper options in Australia: see 'Annual MySuper Statistics' (n 149) Table 1, SRF 533.0, Item 2.2.

152 Panha Heng, Scott J Niblock and Jennifer L Harrison, 'Retirement Policy: A Review of the Role, Characteristics, and Contribution of the Australian Superannuation System' (2015) 29(2) *Asian-Pacific Economic Literature* 1, 7, which states '[p]re-mixed options are designed and managed by the fund provider to achieve a diversified blend of investment choices to satisfy a range of retirement preferences'.

153 A balanced investment strategy seeks a balance between capital preservation and growth and is generally used by investors with a moderate risk tolerance. It sits in the middle of the risk/return spectrum: more conservative investors would opt for capital preservation strategies, whereas more aggressive investors would opt for growth strategies.

Finally, while the above superannuation products typically contain a mix of asset classes, our study focused on Australian and international equities. Some aspects of investor decision-making, such as stewardship activities (Phase Two), differ considerably between asset classes such as equities and property/infrastructure due to differing ownership arrangements and therefore differing potential to influence management direction.¹⁵⁴ Our focus was on developing a detailed account of relevant decision-making for one particular asset class with well-established stewardship pathways (through share ownership), rather than comparing across different asset classes with different constraints.

The final sample is represented in Table 1 below, noting the pre-mixed products analysed.¹⁵⁵

The study was designed to gather evidence of current approaches to climate change for the three phases of investment decision-making. It used publicly available financial data and additional fund disclosures, as available at December 2019.¹⁵⁶ This included data on portfolio holdings, investment strategy, risk management and stewardship activities sourced from the websites and relevant reports of each superannuation fund, as well as financial data routinely collected and published by APRA.¹⁵⁷ Materials produced by relevant industry associations and civil society groups were also used, particularly to chart stewardship activities, and this was complemented by targeted analysis of media statements. Given rapid developments in the field, several funds have changed their approaches and positions on climate change, since the period of the study. Some of the most significant changes have been noted where relevant to the discussion.

154 See discussion of Phase Two of investment decision-making above in Part II.

155 Some superannuation funds do not offer a green-labelled product. Further in some cases, funds offer a range of different green-labelled products, however just one of these products was selected for the purposes of analysis and comparison with the MySuper balanced product. For example, in addition to their *Sustainable Balanced* option, UniSuper also offers *Sustainable High Growth* and *Global Environmental Opportunities* options and notes that they offer in total seven options that are fossil fuel free: UniSuper, *Climate Risk and Our Investments* (Report, November 2019) 6 <<https://web.archive.org/web/20200701225046/https://www.unisuper.com.au/~ /media/files/forms%20and%20downloads/investment%20documents/climate-risk-and-our-investments.pdf>>. Since the study period, some funds have introduced a new green-labelled product (eg, REST).

156 For Phase One, data was collected on the stated investment strategy, risk/return parameters and approach to asset selection for each superannuation product. Data was also collected on the magnitude of funds invested in each product, within selected asset classes in each product, and the spread between different industry sectors. Note was taken of top holdings within selected asset classes. This financial data was used to understand current exposure to climate risks and explore differences in portfolio composition between balanced MySuper and green options that could be attributed to the use of responsible investment practices. For Phase Two, data was collected on stated approach to stewardship and involvement in climate-focused stewardship activities. For Phase Three, data was collected on stated approaches to divestment in fund documents and media statements.

157 Where financial data was used (eg to explore portfolio composition and top holdings), all efforts were made to use data current as at June 2019. However, in some instances, supplementary data was also sourced from annual reports and fund websites, which, in some cases, used different time periods for reporting. While most policies or documents referenced are 2019 versions, this was not always possible. Where documents from other timeframes were used, this may affect the accuracy of any financial data referenced in terms of assets under management. Any deviations from this approach are noted in the footnotes.

Table 1 Top 10 Funds by Assets under Management in MySuper Investment Product¹⁵⁸

Super Fund Name	Product Name	MySuper Assets \$million	MySuper Percentage of total portfolio	Green-Labelled Product	Green-Labelled Product Assets \$million	Green-Labelled Product Percentage of total portfolio
Australian-Super	Balanced (MySuper)	\$119,404	69.26%	Socially Aware	\$2,014	1.17%
Cbus	Growth (Cbus MySuper)	\$44,867	84.39%	N/App	N/App	N/App
First State Super ¹⁵⁹	First State Super MySuper Lifecycle	\$63,849	61.91%	Diversified Socially Responsible Investment	Data not publicly available	Data not publicly available
HESTA	Core Pool	\$40,202	74.70%	Eco Pool	\$862* ¹⁶⁰	1.60%
Hostplus	Balanced (MySuper)	\$33,840	73.50%	Socially Responsible Investment Balanced	N/Av	N/Av
MLC	MySuper	\$25,830	31.49%** ¹⁶¹	N/App	N/App	N/App
QSuper	QSuper Lifetime	\$44,034	38.19%	QSuper Socially Responsible	N/Av	Data not publicly available
REST	REST Super	\$48,961	84.19%	N/App	N/App	N/App
Sunsuper	Sunsuper for Life	\$41,611	57.33%	Socially Conscious Balanced	\$109	0.15%
UniSuper	Balanced (MySuper)	\$20,902	25.11%	Sustainable Balanced (Super)	\$2,900*** ¹⁶²	3.48%

158 For MySuper Assets, see Australian Prudential Regulation Authority, 'Annual Fund-Level Superannuation Statistics' (Statistics, June 2019) Table 1, SRF 320.0, Item 11. For MySuper percentage of total portfolio (unless otherwise indicated), see 'Annual MySuper Statistics' (n 149) Table 1, SRF 533.0, Item 2.2. For green-labelled products (unless otherwise indicated), see Superannuation Fund websites.

159 Since the period of the study, First State Super has rebranded as Aware Super.

160 As at 5 June 2019: Rainmaker Information, 'Australians among the Most Active ESG Investors Globally' (Media Release, 5 June 2019) <<https://www.rainmaker.com.au/media-release/australians-among-the-most-active-esg-investors>>.

161 As MLC is a Registrable Superannuation Entity of Nulis Nominees (Australia) Limited and not a separate Super Fund Trustee, percentage data was not available from APRA. Therefore, this percentage was calculated based on data from MLC about total holdings: see MLC, *Annual Report for the Period Starting 1 July 2018 and Ending 30 June 2019: MLC Super Fund* (Report, 2019) 15.

162 As at 31st October 2019.

This approach to data collection has implications for the conclusions that can be drawn from the study. Public data and qualitative disclosures may not cover the full range of investor activity on climate change and indeed, given the undeveloped nature of disclosure rules, this may even be expected. Nonetheless, it is possible to draw inferences on actual decision-making practices from the available disclosures, when combined with APRA data and the industry literature noted above. Indeed, the fact that some funds disclose their practices and outcomes in detail casts a shadow on those funds that do not, suggesting that an absence of disclosure may represent undeveloped practice. Given the nature of our sample (Australia's largest superannuation funds), observed differences cannot simply be attributed to resources and capacity.

B Findings

1 Varied and Poor Disclosure Practice

The empirical study illustrated that disclosure by superannuation funds is highly variable, ranging from detailed, timely and informative, to non-existent. Variation in form, location and quality of disclosure was observed not only between sampled funds, but also between the MySuper and the green-labelled options offered by the same fund. Some of the observed disclosure gaps related to basic, factual, financial information, such as top holdings and assets under management within different investment products. This information is not reported in detail by APRA and was not routinely reported by superannuation funds. Where it was reported, funds took different approaches, reporting either the number of holdings in different asset classes, the magnitude of funds invested, the proportion of funds invested, or a list of assets held, with further variation between MySuper and green-labelled products. Similarly, disclosure of fund voting and other stewardship activities was not standardised and ranged from detailed and timely to the provision of high-level summaries and case study information, often disclosed well after the end of the relevant financial reporting period.

These gaps in disclosure were taken into account in drawing conclusions from the data collected. However, they also reflect the fragmented and undeveloped regulatory framework for disclosure discussed in Part III and the resulting lack of transparency within the Australian superannuation system.

2 Phase One – How Do Climate Considerations Influence Portfolio Composition and Asset Allocation?

The empirical study suggested that this was the most varied and, for some funds, underdeveloped, phase of decision-making. While sampled funds are clearly employing responsible investment practices to manage climate risks, approaches varied considerably and were often applied narrowly within green options which account for a very small proportion of total moneys invested.

The MySuper and green-labelled products surveyed adopted broadly similar timeframes and risk/return ratios,¹⁶³ with a strong emphasis on diversification across

163 For example, Sunsuper, MySuper and green options both have a return target of CPI plus 3.5% and have a Standard Risk Measure Risk Label of 5; QSuper has a return target of CPI plus 2.0% to 4.5% for

asset classes and between growth and stable assets as a risk management strategy. While investments were spread across asset classes, the largest allocations for both MySuper and green options were typically to Australian and international equities.¹⁶⁴ Seven of the sampled funds offer a green option grounded in an investment strategy employing aspects of responsible investment.¹⁶⁵ However, there was typically very low uptake of green products by members, ranging from 3.5% of total investments (within pre-mixed options) for UniSuper to 0.15% for Sunsuper (Table 1 above).¹⁶⁶

All sample funds make general reference to ESG issues as a source of investment risk, also acknowledging the importance of good ESG performance as an indicator of long-term asset value.¹⁶⁷ Discussion of climate-related risks was particularly prominent, although we found widely divergent approaches in both the framing and emphasis placed on these risks and the extent and quality of information provided on risk management. Some funds provided very little detail on their approach,¹⁶⁸ despite legal obligations to include this information within the PDS.¹⁶⁹

While most funds in the sample reported the allocation of resources to assess their exposure to climate risks, at the time of the study, the approaches to climate risk assessment and the scope at which they were applied varied considerably.¹⁷⁰

MySuper (Risk Labels 1–5) and CPI plus 3.5% for its green option (Risk Label 6); and Hostplus has a return target of CPI plus 3.0% to 4% for MySuper (Risk Label 5) and CPI plus 3.5% for its green option (Risk Label 6).

- 164 For all investment products considered in the sample, the total investment in equities (both Australian and International) was close to 50% or greater. For example, AustralianSuper allocates 56% of MySuper and green option assets to equities (range of 10–45% for Australian and 10–45% for international); UniSuper allocates 60% of MySuper (range of 18–58% for Australian, and 2–42% for international) and 70% of Green Option (range of 25.5–65.5% for Australian, and 4.5–44.5% for international) assets to equity; REST allocates 40% of assets to equities (range of 10–45% each for Australian/international); and HESTA allocates 49% of MySuper (range of 17–37% for Australian, and 16–36% for international) and 64% of Green Option (range of 24–47% for Australian, and 17–41% for international) asset to equities.
- 165 Since the period of the study, REST has also introduced a green-labelled product. The Sustainable Growth option was introduced in March 2021, as a diversified investment option with enhanced ESG characteristics: Retail Employees Superannuation Trust, ‘Investment Guide’ (Product Disclosure Statement, 29 March 2021) 31 <https://cdn.rest.com.au/rest_web/media/documents/tools-advice/resources/pds/investing-made-simple-guide.pdf?_ga=2.32942518.926267246.1622505270-161454173.1622505270&_gac=1.91215336.1622505270.Cj0KcQjwktKFBhCkARIsAJeDT0je-kVJXqQ7g2rm1JfHkd8v0tvx8o19C89CI7ka0HmXd8snjytZIFiaApCtEALw_wcB>.
- 166 This figure relates to the total assets where members can choose their investment product in line with our study, which specifically covers pre-mixed portfolio options available to investors. It does not include Defined Benefit options which are offered by some funds such as UniSuper and which involve no further choice of investment options.
- 167 See, eg, First State Super, ‘Responsible Investment: Environmental, Social & Corporate Governance Policy’ (Policy Document, July 2019) 3 <<https://web.archive.org/web/20200331001206/https://firststatesuper.com.au/content/dam/ftc/digital/pdfs/about/policies/RI-ESG-policy.pdf>> (‘Responsible Investment’). This document states that ‘[t]he Trustee believes that identifying and managing ESG factors helps in finding new opportunities, steering capital towards more attractive areas, and managing long-term investment risks. As a result, it is expected that returns will be higher, and downside risks lower, over the long term’. See also UniSuper (n 155) 4.
- 168 For example, at the time of study, MLC, REST and QSuper provided very little public information on their approach to climate change.
- 169 See above n 131.
- 170 Sample funds reported undertaking a range of different climate risk assessments including: carbon intensity assessment, climate risk modelling focusing on both physical risks and stranded asset exposure, and scenario planning. Much of this assessment to date has focused on Australian and international equity portfolios.

Funds were not publicly reporting the results of these assessments in a standardised and accessible way.¹⁷¹

The sample funds reported their use of a range of responsible investment strategies to manage ESG and climate-related risks. The most widely applied across the whole portfolio (not just green options) was *ESG integration*, whereby ESG risks are framed as one of many different investment risks that are factored into asset valuation and allocation decisions. Statements made by funds regarding these practices highlight the important differences between an ESG integration strategy and more visible, clear cut strategies such as screening and exclusion.¹⁷² For example, AustralianSuper stated: ‘Rather than excluding particular investments on the basis of [climate] factors, we weigh the risks and returns for each investment and determine the appropriate exposure’;¹⁷³ and HESTA noted: ‘They [HESTA’s investment managers] may still choose to invest in a company where there are ESG risks if they believe the risks are reflected in the price’.¹⁷⁴

Negative screening is another practice widely in use but applied quite variably and most commonly within green options only. While most sample funds apply some version of negative screening for tobacco and/or controversial weapons across their whole portfolio,¹⁷⁵ at the time of the study only HESTA applied a portfolio-wide climate-based screen focused on limiting *new* investment in thermal coal.¹⁷⁶ Climate-related screening was more common within the green options (Table 2).¹⁷⁷ Existing climate screens typically target the most carbon-intensive fossil fuels and set a threshold for exclusion based on the proportion of a company’s revenue derived

171 There is some indication that practice is changing. In late 2019, UniSuper released a comprehensive assessment of the climate risk exposure of its portfolio and the risk management strategies employed to address these risks: UniSuper (n 155) 7 ff. AustralianSuper released a similar report in May 2020: AustralianSuper, *Climate Change Report: Managing the Transition to a Low Carbon Economy* (Report, May 2020) (‘Climate Change Report’) <<https://www.australiansuper.com/investments/how-we-invest/climate-change>>.

172 See discussion above in Part II(A).

173 AustralianSuper, ‘Active Owner Program in Practice: Climate Change’ (Fact Sheet, September 2017) 1 (‘Active Owner Program in Practice’).

174 HESTA, ‘Investment Choices’ (Product Disclosure Statement, 1 April 2020) 22 (‘Investment Choices’).

175 At the time of study, funds with whole of portfolio screens for tobacco and/or controversial weapons included AustralianSuper (tobacco only), Cbus, First State Super, Hesta, QSuper, REST, Sunsuper (also excludes companies with child/slave labour practices) and UniSuper (tobacco only). Hostplus applied a similar screen in the green option only. Within the green options, these screens were generally broader in scope and excluded companies deriving a proportion of their revenue from activities such as nuclear power, alcohol, gambling, pornography, inhumane animal testing, logging of old growth forests. AustralianSuper also excluded companies with single sex boards within their green option.

176 ‘Investment Choices’ (n 174) 22. Subsequently, First State Super (renamed as Aware Super) announced a portfolio wide exclusion of direct investments in companies that generate 10% or more of their revenues from mining thermal coal to be implemented from October 2020: Aware Super, ‘Responsible Investment: Environmental, Social and Corporate Governance Policy’ (Policy Document, October 2020) 9; ‘Responsible Investment Exclusions’, *Aware Super* (Web Page, 2021) <<https://aware.com.au/member/investments-and-performance/our-approach-responsible-ownership/responsible-investment-exclusions>>.

177 Since the time of the study, there have been some revisions to these exclusions. Some funds have broadened the exclusion significantly. For example, Hostplus recently advised that the SRI Balanced option will now exclude all companies that mine, produce or generate energy from fossil fuels, as well as those that receive revenue from servicing the sector: Hostplus, ‘Hostplus Refreshes Its Socially Responsible Investment Balanced Option’ (Media Release, 15 February 2021) <<https://hostplus.com.au/news/hostplus-refreshes-its-socially>>.

from these assets or activities. Investment is generally permitted in associated assets such as lenders, service providers and downstream companies which process, sell or use fossil fuels. While thresholds vary between funds, these screens are generally quite narrowly framed with implications for the types of fossil-fuel related activities and companies that can still form part of the portfolio (see also Table 6).

Table 2 Use of Climate-Related Investment Screens¹⁷⁸

Super Fund	Climate Related Screen	Portfolio Coverage	Threshold Type	Threshold	Scope
Australian-Super	Yes	Green option	Ownership of fossil fuel reserves	N/App	Companies directly owning <ul style="list-style-type: none"> Coal, oil, gas and/or uranium reserves Indirect exposure permitted
CBUS	No	N/App	N/App	N/App	N/App
First State Super ^{*179}	Yes	Green option	Market capitalisation	>20%	Companies involved in: <ul style="list-style-type: none"> Mining thermal coal Exploration/development of oil sands Brown-coal (or lignite) coal-fired power generation Transportation of oil from oil sand Conversion of coal to liquid fuels/ feedstock

178 Funds disclose information on their climate-related screens in a number of different places including PDS, responsible investment policy documents, investment guides and on their website. This table drew on a range of sources for each individual superfund. For example, for AustralianSuper this information was sourced from: AustralianSuper, 'ESG and Stewardship Policy' (Policy Document, May 2018) 3 <<https://www.australiansuper.com/-/media/australian-super/files/investments/how-we-invest/esg-management/20790-australiansuper-esg-and-stewardship-policy-0518-web.pdf>>; 'Frequently Asked Questions', *AustralianSuper* (Web Page, 2021) <<https://www.australiansuper.com/investments/how-we-invest/faqs>>.

179 In addition to the Climate-Related Screens listed here, First State Super subsequently reported that it screens '[c]ompanies substantively involved in unconventional coal seam gas extraction (fracking)' and '[c]ompanies found to have been complicit in excessive or unauthorised emissions of carbon dioxide (CO₂) and other greenhouse gases' from its green option portfolio: First State Super, 'Member Booklet Supplement: Investments' (Product Disclosure Statement Supplement, 1 December 2019) 14. Threshold types and levels were not disclosed.

			Revenue derived from fossil fuel related activities	>20%	Companies involved in: <ul style="list-style-type: none"> • Exploration, development, production, and sale of fossil fuels, including thermal/coking coal, oil, and natural gas • Transmission/transport of fossil fuels for export or non-household use
HESTA	Yes	Whole portfolio including MySuper option	Revenue derived from fossil fuel related activities	>15%	New investments in: <ul style="list-style-type: none"> • Unlisted companies involved in exploration, new or expanded production, or transportation of thermal coal • Newly listed companies involved in exploration, or new or expanded production, of thermal coal • Or provision of direct funding to any listed companies for any of these activities
			Green option	Involvement in fossil fuel related activities	N/App
			Revenue derived from fossil fuel related activities	>15%	Companies involved in: <ul style="list-style-type: none"> • Generating electricity from fossil fuels • Transportation, distribution, or retail of conventional/ unconventional oil and gas • Supplying equipment or services for the exploration/production of conventional/ unconventional oil and gas activities

Hostplus	Yes	Green option	Revenue derived from fossil fuel related activities	≥10%	Companies involved in: <ul style="list-style-type: none"> • Mining thermal coal or oil sands • Brown-coal (or lignite) coal-fired power generation • Conversion of coal to liquid fuels/ feedstock
MLC	No	N/App	N/App	N/App	N/App
QSuper	Yes	Green option	Revenue derived from fossil fuel related activities	>10%	Companies involved in: <ul style="list-style-type: none"> • Mining thermal coal • Exploration/ development of oil sands • Brown-coal (or lignite) coal-fired power generation • Transportation of oil from oil sand • Conversion of coal to liquid fuels/ feedstock.
REST	No	N/App	N/App	N/App	N/App
Sunsuper	Yes	Green option	Revenue derived from fossil fuel related activities	>5%	Companies involved in: <ul style="list-style-type: none"> • Exploration/mining of thermal coal or oil sands
UniSuper	Yes	Green Option	Revenue derived from fossil fuel related activities	N/Av	Companies with material exposure ¹⁸⁰ to fossil fuel exploration and production, from the following Global Industry Classification Standard ('GICS') sectors: <ul style="list-style-type: none"> • Coal miners • Energy • Oil and gas explorers • Diversified metals and miners. • Utilities (unless they are largely involved in renewable energy and derive <30% of power generation from natural gas only (excluding coal generation)

180 UniSuper did not disclose what constituted material exposure.

Positive Screening and *Impact Investment* specifically targeted to climate-related outcomes were less visible in our survey of the two pre-mixed options selected for analysis, with only a few examples such as HESTA's international passive low carbon shares strategy that invests specifically in international equities with a relatively smaller carbon footprint.¹⁸¹ Other funds such as UniSuper do provide investment options of this nature through alternative investment products such as their Global Environmental Opportunities Fund.¹⁸²

3 Phase Two – How Do Funds Approach Core Stewardship Activities Such as Engagement, Monitoring and Voting Shares in Relation to Climate Considerations?

The sample funds place considerable emphasis on Phase Two activities to manage climate-related risks. Indeed, given the high level of outsourcing of fund management and asset selection (Phase One),¹⁸³ these activities take on a critical role as the main activities to shape climate risk management in investee companies. This is particularly the case where the superannuation fund has an individual mandate with an external manager providing for voting decisions to be made by the fund itself. Yet the study also illustrated significant gaps between stewardship rhetoric and observed practice, particularly in relation to voting shares.

The sampled funds typically frame engagement and active ownership as core strategies to manage ESG risks, with other more 'activist' stewardship activities like voting against the election of company directors, voting against management on shareholder proposals, or indeed divesting of shares, framed as last resort options.¹⁸⁴ Yet, disclosure of engagement activities was quite variable. Where there was disclosure this was focused on activities undertaken, rather than outcomes, making it hard to judge impact.¹⁸⁵ Some funds disclose key themes for engagement, and climate change was very prominent, with a particular focus on engaging

181 HESTA, *Driving Meaningful Change* (Annual Report, 15 October 2018) 55.

182 UniSuper (n 155).

183 For Sunsuper, Hostplus, Cbus, and REST, over 70% of funds were managed externally at the time of the study. Trends towards internalising management are noted for other funds in the sample, with UniSuper having relatively low levels of external management. While some level of external management arrangements is in place for most equity investments held by the funds in the sample, it is important to note that disclosure of external fund managers, assets under management and the managers associated with different asset classes is highly variable. AustralianSuper provided quite detailed disclosures on these aspects, whereas other funds provided very little information, merely listing fund managers and associated asset classes.

184 For example, AustralianSuper states: 'Our view is that there are more appropriate actions to manage investment risks than simply divestment. Divestment is a last resort and we consider active management will provide better long-term outcomes for members and the broader economy and environment': *AustralianSuper* (n 178).

185 There was generally good disclosure on governance of engagement activities such as outsourcing to various engagement service providers in Australia and internationally. For example, for international engagement activities Cbus and HESTA utilised the services of Hermes EOS, covering approximately 70% of Cbus' international portfolio, and First State Super, UniSuper, Hostplus and QSuper use CGI Glass Lewis. Nearly all the funds in our sample used ACSI for domestic engagement.

with companies around best practice disclosure standards.¹⁸⁶ Yet, considering the magnitude of both Australian and international equity assets held by superannuation funds, it is important to question the capacity of funds to engage with all, or even a significant proportion of, assets under management. As such, there will likely be gaps in coverage and strategic targeting of resources.

Reflecting the limits of any one individual investor's equity holding in any one company, as well as the common interest of investors in using engagement to address climate risks, several investor engagement coalitions have recently emerged. One of the most prominent is Climate Action 100+, which is now backed by 575 investors with nearly USD54 trillion in assets under management. This initiative is delivering a five-year engagement program with important GHG emitters and other companies highly exposed to climate risk that have significant opportunities to drive the clean energy transition.¹⁸⁷ Participating investors are paired with one or two companies and are calling on companies to improve climate governance, reduce emissions across the value chain (consistent with *Paris* goals), and strengthen climate-related financial disclosures by implementing TCFD recommendations.

Six of the sampled funds were active in Climate Action 100+, with some, such as AustralianSuper, UniSuper, Cbus and HESTA, assuming leading roles (Table 3 below). While the initiative is still in the early stages, the first progress report released in late 2019 noted some early public commitments made by targeted companies in response to the engagements, including by Australian companies involved in engagements with the sample funds.¹⁸⁸

186 For example, UniSuper noted that their priority areas of engagement in 2019 were energy storage, emissions reduction, climate resilience, energy efficiency, renewable energy, scenario analysis, water and waste management and remediation: see UniSuper (n 155) 5. Similarly, First State Super stated in its ESG Policy that '[w]here practicable and over time', First State Super seeks to use engagement to encourage improvements in company disclosure 'of material climate change impacts through initiatives such as the Carbon Disclosure Project, Task Force on Climate-Related Financial Disclosures and other relevant activities': 'Responsible Investment' (n 167) 5.

187 For an overview, see 'Global Investors Driving Business Transition', *Climate Action 100+* (Web Page, 2021) <<http://www.climateaction100.org>>.

188 *Climate Action 100+, 2019 Progress Report* (Report, 2019) 7. Examples include Glencore (the world's largest exporter of thermal coal) agreeing to cap coal production to current levels of about 145 million tonnes/year; Rio Tinto exiting from mining coal, publishing a TCFD report and committing to an asset by asset review to set emissions reduction targets. Other examples are noted in Table 3.

Table 3 Climate-Related Engagement Activities¹⁸⁹

Super Fund	Climate Risk Engagement Activities	Active in climate-engagement coalitions (eg Climate Action 100+)
Australian-Super	<ul style="list-style-type: none"> Led engagement with Rio and Qantas as part of Climate Action 100+ BHP on <i>Paris</i> climate targets and related issues Met with Rio Tinto's management and board to advocate for improved climate risk-related governance practice 	Climate Action 100+ Investor Group on Climate Change Asia Investor Group on Climate Change Institutional Investors Group on Climate Change
Cbus	<ul style="list-style-type: none"> BHP and Rio Tinto on issues associated with climate resolutions in 2019 	Climate Action 100+ Investor Group on Climate Change
First State Super	<ul style="list-style-type: none"> Led engagement with Origin, Santos, and AGL, as part of Climate Action 100+ Origin about disclosure from 2015–19, reportedly leading to increased disclosure, and more robust emissions targets, incentives, and climate scenario analysis, aligned with the <i>Paris Agreement</i> 	Climate Action 100+ Investor Group on Climate Change
HESTA	<ul style="list-style-type: none"> Led engagement with South 32 as part of Climate Action 100+ Woodside and Santos on linking executive remuneration with emissions reduction BP on carbon emissions, reportedly contributing to BP's decision to become carbon neutral by 2050 	Climate Action 100+ Investor Group on Climate Change
Hostplus	Not disclosed	No
MLC	Not disclosed	No
QSuper	Not disclosed	Climate Action 100+ Investor Group on Climate Change
REST	Not disclosed	No
Sunsuper	Not disclosed	No
UniSuper	Leads engagement with an undisclosed company as part of Climate Action 100+	Climate Action 100+ Investor Group on Climate Change

189 Information on funds' climate-related engagement activities is sourced from the responsible investment statements and reports produced by superfunds, reports produced by investor coalitions and industry organisations, as well as media sources. For example, for Cbus, this information was sourced from Cbus, 'Built on Trust' (Responsible Investment Supplement, 2019) 12, 15 <<https://www.cbussuper.com.au/content/dam/cbus/files/governance/reporting/Responsible-Investment-Supplement.pdf>>; Climate Action 100+ (n 188) 82; Responsible Investment Association Australasia, *Responsible Investment Super Study* (Report, 2019); Charlotte Grieve, "Divestment Is Simplistic": Cbus Backs 23 Coal Producers', *Brisbane Times* (online, 10 February 2020) <<https://www.brisbanetimes.com.au/business/banking-and-finance/divestment-is-simplistic-cbus-backs-23-coal-producers-20200210-p53z8k.html>> ('Divestment Is Simplistic').

The study also explored the share voting practices of sample funds for climate-related shareholder proposals brought to companies within their equity portfolios.¹⁹⁰ Shareholder proposals have emerged in recent years in Australia as a new tool to escalate engagement activities on climate change.¹⁹¹ These proposals typically request better climate risk disclosure, more transparency around climate lobbying activities, and alignment of business strategy with *Paris* goals.¹⁹²

Public disclosure of voting activity by superannuation funds was poor and highly variable, with most funds disclosing voting information in aggregated, summary form as currently recommended by applicable best practice standards,¹⁹³ with insufficient information provided to easily decipher voting on individual proposals.¹⁹⁴

Drawing on a range of data sources including a recent study by the Australasian Centre for Corporate Responsibility ('ACCR'),¹⁹⁵ we reviewed voting by the sample funds on climate-related proposals brought to Australian companies since 2017 (Table 4 below). This illustrated generally low levels of support for climate resolutions, but did suggest a diverse and changing practice.¹⁹⁶ Some funds, such as Cbus, have altered their practice considerably since 2017, and are increasingly voting in favour of climate proposals.¹⁹⁷ However, for others, there were quite considerable discrepancies between high level statements in support of active ownership on ESG matters and actual voting behaviour. For example, UniSuper and AustralianSuper voted against all, or the majority of, such proposals brought

190 Our analysis focused solely on resolutions addressing climate change directly. It is however important to note that voting practices on more general corporate governance and operational matters (eg board appointments, executive remuneration) are increasingly seen as an avenue by which to influence a company's approach to climate change. See, eg, the new proxy voting guidelines released by Institutional Shareholder Services (the largest global proxy advisory firm) in March 2020: Institutional Shareholder Services, 'International Climate Proxy Voting Guidelines: 2020 Climate Policy Recommendations' (Proxy Voting Guidelines, 9 March 2020).

191 Peel et al (2019) (n 11) 469–73; Peel et al, *Corporate Energy Transition: Legal Tools for Shifting Companies Towards Clean Energy Practices* (Report, University of Melbourne, 2020), 31 ('*Corporate Energy Transition*').

192 Peel et al, *Corporate Energy Transition* (n 191) 32–7. See also Table 4 below.

193 See discussion of disclosure rules and best practices standards in Parts III(B) and (C).

194 Australasian Centre for Corporate Responsibility, *Vote Like You Mean It: A Study of the Proxy Voting Records of Australia's Largest Super Funds in 2018* (Report, May 2019) 13, 15 ff, 35 ('*Vote Like You Mean It*').

195 The Australasian Centre for Corporate Responsibility ('ACCR') is a not-for-profit association that promotes responsible investment through undertaking and publishing research to evaluate and improve the performance of Australian listed companies on ESG issues. The ACCR have a small portfolio of shares that are held for the purpose of engaging with listed companies, including through the filing of shareholder proposals.

196 This review focused on substantive climate change resolutions only. In Australia, these resolutions are typically lodged together with a special resolution requesting a constitutional change to allow shareholders to bring advisory resolutions because of restrictive rules relating to non-binding advisory resolutions: see Peel et al (n 11) 470; Australian Council of Superannuation Investors (n 73). Voting records on these constitutional change resolutions are not included in Table 4, but, generally, such resolutions receive only a very small majority of the vote. Even though these resolutions fail to receive the required 75% majority to pass, most companies will allow a vote on the substantive climate resolution, even though such advisory resolutions would be considered non-permissible. It is these voting records that are reflected in Table 5.

197 See also '*Vote Like You Mean It*' (n 194) 25 ff, which notes that Cbus, AustralianSuper and Hostplus are among the funds to have increased their support for climate-related shareholder proposals (brought to both international and Australian companies) between 2017 and 2018.

to Australian companies between 2017 and 2019 (see Table 4).¹⁹⁸ It is difficult to rationalise these practices, especially considering that the proposals thus far have all addressed matters such as climate risk disclosure and transparency regarding climate lobbying activities, which would appear to be in line with the stated engagement focus for these funds. It is possible that funds are reluctant to vote against management in situations where there are active engagements in place; or that funds are reluctant to use shareholder proposals more generally, particularly given legal complexities in Australia which necessitate a constitutional change resolution to allow for advisory proposals.¹⁹⁹

Another relevant consideration is the reliance on proxy advice providers²⁰⁰ to inform voting decisions. While these advisers will determine voting recommendations on the basis of their own policy principles, those of client funds, and information gathered through targeted engagement, it is common for proxy advisers to recommend voting against proposals on the basis that they are ‘novel, directive, onerous or ambiguous,’ even where they otherwise accord with voting policies.²⁰¹ Large proxy advisers are only beginning to announce more consistent and far-reaching voting policies to address climate risk, not only in relation to substantive climate change proposals, but also recommending broader use of voting against management on operational and corporate governance resolutions as a mechanism to respond to a company’s climate change performance.²⁰² As these new voting policies consolidate, voting practice among Australian superannuation funds is expected to change.

198 See also Charlotte Grieve, ‘Super Giants Funnel Billions into Fossil Fuels, Vote Down Climate Push’, *The Sydney Morning Herald* (online, 13 February 2020) <<https://www.smh.com.au/business/banking-and-finance/super-giants-funnel-billions-into-fossil-fuels-vote-down-climate-push-20200211-p53zt1.html>> (‘Vote Down Climate Push’).

199 There is some indication that practice may be changing. In 2020, resolutions brought to two major Australian oil and gas companies (Woodside Petroleum and Santos) requesting that the companies commit to *Paris*-aligned emissions reduction targets and disclose *Paris*-aligned business strategies, were supported by 50% and 43% (respectively) of shareholders, including some of the superfunds in this sample: Nick Toscano, ‘Climate Revolt Rocks Santos as Shareholder Fire Up Emissions Push’ *The Sydney Morning Herald* (online, 3 April 2020) <<https://www.smh.com.au/business/companies/climate-revolt-rocks-santos-as-shareholders-fire-up-emissions-push-20200403-p54gt2.html>>; Nick Toscano, ‘“Breakthrough Moment”: Woodside Investors Revolt on Climate Change’, *The Sydney Morning Herald* (online, 30 April 2020) <<https://www.smh.com.au/business/companies/breakthrough-moment-woodside-investors-revolt-on-climate-change-20200429-p54oe8.html>>.

200 Global proxy advisory firms include CGI Glass Lewis and ISS. In Australia, proxy advice is also provided by ACSI and Ownership Matters.

201 ‘Vote Like You Mean It’ (n 194) 7.

202 See, eg, Institutional Shareholder Services (n 190).

Table 4 Voting on Climate-Related Resolutions to Australian Companies, 2017–19²⁰³

Company	Date	Resolution Topic ²⁰⁴	Item #	Australian Super	Cbus	First State Super	HESTA	Hostplus	MLC	QSuper	REST	Sunsuper	UniSuper
Santos	04/05/17	Climate risk	5(b)	X	X	X	✓	X	X	N/Av	X	X	X
Oilsearch	19/05/17	Climate risk	7	X	N/Av	N/Av	✓	X	X	N/Av	X	X	X
Origin	18/10/17	Climate risk	7(b)	✓	X	✓	✓	X	X	N/Av	X	X	X
Origin	18/10/17	Transition planning	7(d)	X	X	X	X	X	X	N/Av	X	X	X
Origin	18/10/17	Short lived climate pollutants strategy	7(e)	X	X	X	X	X	X	N/Av	X	X	X
Downer	02/11/17	Climate risk	5	X	X	X	X	N/Av	N/Av	N/Av	X (Mix)	X	X
BHP	16/11/17	Climate related lobbying	23	X	X	✓	✓	X	X	N/Av	X	X	X
CBA	16/11/17	Alignment with Paris targets	5	X	X	X	X	X	X	N/Av	X	X	X
Rio Tinto	02/05/18	Climate related lobbying	20	X (Mix)	✓	Mix	✓	✓	X	N/Av	X	✓	X
QBE	03/05/18	Climate risk	5(b)	N/Av	✓	X	✓	✓	X	N/Av	X	X	N/Av
Santos	03/05/18	Climate risk	6(b)	X	X	X	✓	X	X	N/Av	X	X	X
Origin	17/10/18	Climate risk	9(b)	X	X	Abs	✓	X	X	N/Av	X	X	X
Origin	17/10/18	Transition planning	9(c)	✓	X	Abs	X	X	X	N/Av	X	✓	X
Origin	17/10/18	Climate related lobbying	9(d)	✓	✓	✓	✓	✓	X	N/Av	X	✓	X

203 Code to abbreviations in table: ✓ – Vote in Favour; X – Vote Against; Abs – Abstention; Mix – Mixed Shareholder position (eg where shares are held and managed via different fund managers who vote differently on a proposal); N/App – Not Applicable; N/Av – Not Available (this is often due to a Super Funds failure to disclose their position on the resolution); NYP – Not Yet Published (it is expected the fund will disclose their position on the resolution based on previous disclosure practices).

204 All resolutions involve company disclosure of measurement, targets, strategy, and/or activities.

Whitehaven	25/10/18	Climate risk	8	✓	✓	✓	✓	✓	✓	✗	N/Av	✗	✓	✗
Whitehaven	25/10/18	Alignment with <i>Paris</i> targets	9	✗	✗	✗	✗	✗	✗	✗	N/Av	✗	✗	✗
Wagner's Holding Company	01/11/18	Climate risk	5	✗	N/Av	✗	N/Av	N/Av	✗	✗	N/Av	N/Av	✓	✗
Rio Tinto	09/05/19	Transition planning	19	✗	✗	✗	✗	✗	✗	✗	N/Av	✗	N/Av	✗
QBE	09/05/19	Alignment with <i>Paris</i> targets	7(b)	✗	✗	✗	✗	✗	✗	✗	N/Av	✗	N/Av	✗
AGL	19/09/19	Transition planning	5(b)	✗	✗	N/Av	✓	✗	✗	✗	N/Av	NYP	✗	✗ (Mix)
Suncorp	26/09/19	Alignment with <i>Paris</i> targets	9b	✗	✗	✗	✗	✗	✗	✗	N/Av	NYP	✗	✗
Origin	16/10/19	Transition planning	9(b)	✗	✗	✗	✓	✗	✗	✗	N/Av	NYP	✗	✗
Origin	16/10/19	Alignment with <i>Paris</i> targets	9(e)	✗	✗	✗	✓	✗	✗	✗	N/Av	NYP	✗	✗
IAG	25/10/19	Alignment with <i>Paris</i> targets	7(b)	✗	✗	✗	✗	✗	✗	✗	N/Av	NYP	✗	✗
BHP	07/11/19	Climate related lobbying	22	✗	✓	✓	✗	✓	✗	✗	N/Av	NYP	✓	✗ (Mix)
Westpac	12/12/19	Transition planning	6(b)	✗	✗	✗	✓	✗	✗	✗	N/Av	NYP	✗	✗
ANZ	17/12/19	Transition planning	7	✗	✗	✗	✓	✗	✗	✗	N/Av	NYP	✗	✗
ANZ	17/12/19	Climate related lobbying	8	✗	✗	✗	✓	✗	✗	✗	N/Av	NYP	✗	✗
NAB	18/12/19	Transition planning	6(b)	✗	✗	✗	✓	✗	Abs	✗	N/Av	NYP	✗	✗
NAB	18/12/19	Climate related lobbying	7	✗	✗	✗	✓	✗	Abs	✗	N/Av	NYP	✗	✗

4 Phase Three – How Do Funds Approach Divestment Decisions in a Climate Change Context?

Consistent with the emphasis placed on active ownership and engagement strategies noted above, the sample funds generally took a strong position against using divestment as a climate risk management tool beyond the narrowly targeted negative screening used in green options (Table 5 below). This was generally justified on grounds that divestment will merely shift ownership of assets away from asset owners who are committed to climate action, and is unlikely to result in absolute emissions reductions in the real economy.²⁰⁵

Justifications for avoiding divestment however also referenced risk/return considerations with funds unwilling to sell out of carbon-intensive sectors at the expense of returns, as well as related interpretations of fiduciary duty obligations to act in the best (financial) interests of beneficiaries. For example, the CIO of Hostplus has stated: ‘We are not allowed, and nor do I want to make investments purely because it’s good for the planet ... Unless you can show me how much the demand for coal will disappear in the next five years ... divestment of a coal company doesn’t make sense’.²⁰⁶ Another common justification was that it is difficult to maintain an Australian equities portfolio without investing in mining and energy companies, given the nature of the Australian Stock Exchange (‘ASX’), and that many existing fossil fuel investments are held as part of passive index funds which track the ASX.²⁰⁷

These arguments are being increasingly scrutinised and challenged. First, the ability of funds to influence company strategy through engagement is often overplayed, and, in any case, hard to measure given the lack of transparency about outcomes of engagement. Second, while funds may be unwilling to divest out of the Australian resource sector at the expense of compromised returns, there is increasing evidence that sustainable funds can be built from Australian equities without fossil fuels, with a focus on technology, health and property stocks.²⁰⁸ In any event, many of the sampled funds are under increasing pressure from members

205 For example, HESTA’s Chief Investment Officer has stated ‘[w]e believe that if all we do is simply sell these companies, it is very unlikely to change their behaviour and drive long-term climate action’: Grieve, ‘Vote Down Climate Push’ (n 198). See also Grieve, ‘Divestment Is Simplistic’ (n 189), in which Cbus Chief Investment Officer is quoted as saying ‘[t]he aim must be to transition to a climate resilient global economy that is less reliant on fossil fuels. The way you get there is through companies reducing their emissions, rather than investors simply reducing their exposure’ and UniSuper, ‘Engagement Versus Divestment: Why It’s Not Always as Simple as It Sounds When Tackling Climate Change’ (Web Page, 17 November 2020) <<https://www.unisuper.com.au/en/news-and-insights/engagement-versus-divestment-when-tackling-climate-change>>.

206 Elizabeth Fry, ‘Hostplus Says Coal Divestment Makes No Sense’ (28 February 2020) *Investment Magazine* <<https://www.investmentmagazine.com.au/2020/02/hostplus-says-coal-divestment-makes-no-sense/>>.

207 See Grieve, ‘Divestment Is Simplistic’ (n 189).

208 See, eg, discussion of passive investment products screened for fossil fuels outperforming products tied to traditional benchmarks in Charlotte Grieve, ‘How the Global Fossil Fuel Divestment Push Is Testing Australia’s Resolve’, *The Sydney Morning Herald* (online, 7 March 2020) <<https://www.smh.com.au/business/banking-and-finance/how-the-global-fossil-fuel-divestment-push-is-testing-australia-s-resolve-20200305-p5475t.html>>.

to divest or better justify their approach,²⁰⁹ and the position taken by funds on fossil fuel divestment is highly dynamic.²¹⁰

Table 5 Approach to Divestment²¹¹

Super Fund	Position on Divestment (General)	Position on Climate-Related Divestment
Australian-Super	<ul style="list-style-type: none"> • Prefers engagement • Exception: Tobacco 	<ul style="list-style-type: none"> • No support for divestment • Prefers engagement and ESG integration
Cbus	<ul style="list-style-type: none"> • Prefers engagement • Exception: Investment has negative impacts on reputational or long-term return objectives; or contravenes international treaties or conventions; or where influence through engagement not possible 	<ul style="list-style-type: none"> • No support for divestment • Prefers engagement • Wants option to invest in diversified companies with low-level exposure to fossil fuels
First State Super	<ul style="list-style-type: none"> • Prefers engagement and ESG integration • Exception: Investment has negative impacts on reputational or long-term return objectives; or contravenes international treaties or conventions; or where influence through engagement not possible 	<ul style="list-style-type: none"> • No support for divestment • Exception: need to reduce excessive asset-specific climate-related risk
HESTA	<ul style="list-style-type: none"> • Prefers engagement • Exception: Investment unsuitable given HESTA's reputational, returns, policy, and/or strategic objectives and standards 	<ul style="list-style-type: none"> • No support for divestment • Prefers engagement and ESG integration • Exception: need to reduce excessive asset-specific climate-related risk (such as where assets are likely to become stranded)

209 For example, following the devastating bushfires of summer 2019/2020, members of UniSuper have mounted a campaign to pressure their super fund to divest of fossil fuels: Joanna Mather, 'UniSuper Targeted in Divestment Campaign', *Australian Financial Review* (online, 13 January 2020) <<https://www.afr.com/companies/financial-services/unisuper-targeted-in-divestment-campaign-20200112-p53qr9>>.

210 For example, in June 2020, HESTA announced a new climate policy that commits to net zero emissions across the entire portfolio by 2050, and involves divestment of holdings in thermal coal companies: see Charlotte Grieve, 'Super Giant HESTA Divests Coal, Commits to "Net Zero" Investments by 2050', *The Sydney Morning Herald* (online, 25 June 2020) <<https://www.smh.com.au/business/banking-and-finance/super-giant-hesta-divests-coal-commits-to-net-zero-investments-by-2050-20200625-p5562o.html>>. Cbus released a Climate Change Roadmap in September 2020, with similar net zero commitments which also foreshadows divestment of assets that are not able to transition to net zero: Cbus, 'Cbus Sets Strong 2030 Target in Revamped Climate Road Map' (Media Release, 22 September 2020) <<https://www.cbussuper.com.au/about-us/news/media-release/cbus-sets-strong-2030-target-in-revamped-climate-road-map>>.

211 Funds disclose information on their approach to divestment in a number of places including: responsible investment policy documents/position statements, superannuation FAQs (available on superannuation fund websites), and responsible investment reports. For example, for UniSuper, this information was sourced from: 'Frequently Asked Questions: Investments', *UniSuper* (Web Page, 29 November 2017) <<https://web.archive.org/web/20200702012737/https://www.unisuper.com.au/investments/investments-faqs>>; 'Investment Market Update November 2014', *UniSuper* (Web Page, 10 November 2014) <<https://web.archive.org/web/20200328132838/https://www.unisuper.com.au/news/2014/11/10/investment-market-update-november-2014>>.

Hostplus	<ul style="list-style-type: none"> • Prefers engagement • Divestment potentially limits capacity to maximise returns • Exceptions on ESG grounds in exceptional circumstances 	<ul style="list-style-type: none"> • No support for divestment • Exception: ESG grounds in exceptional circumstances
MLC	<ul style="list-style-type: none"> • No stated position 	<ul style="list-style-type: none"> • No stated position
QSuper	<ul style="list-style-type: none"> • Prefers engagement • Exception: on ESG grounds 	<ul style="list-style-type: none"> • No stated position
REST	<ul style="list-style-type: none"> • Prefers engagement • Exception: on ESG grounds 	<ul style="list-style-type: none"> • Prefers engagement
Sunsuper	<ul style="list-style-type: none"> • Prefers engagement • Divestment potentially limits capacity to maximise returns • Exception: As a last resort, such as to avoid criminal offences 	<ul style="list-style-type: none"> • No stated position
UniSuper	<ul style="list-style-type: none"> • Prefers ESG integration • Divestment potentially limits capacity to maximise returns 	<ul style="list-style-type: none"> • No support for divestment

5 Is There Evidence that the Above Approaches Will Help Align Capital and Resources to the Paris Agreement?

Data collection on portfolio composition, as well as the findings reported above on the three investment phases, suggest that, at the time of the study, the sampled funds were taking only small steps towards aligning portfolios to *Paris* goals and that *Paris* alignment represents a considerable shift from current practice.

Generally, Australian superannuation funds have high levels of investment in sectors and industries highly exposed to climate risks (eg companies within the fossil fuel supply chain or high emitters) through investments in Australian equities. This reflects the high representation of these industries on the ASX.²¹² Given poor disclosure practices, it was difficult to obtain consistent, comprehensive data on assets under management for all sampled funds. Nonetheless, our broad survey of the spread of investments across sectors and industries, as well as top holdings in Australian equities in the MySuper products confirmed this general pattern. This differed from the spread of investments in international equities where the communications services, financials and consumer discretionary sectors were more dominant.²¹³

212 Chris Barrett and Anna Skarbek, *Climate Risk and the Financial System: Lessons for Australia from International Experience* (Report, 17 April 2019) 2, 12–16; Market Forces (n 139) 2.

213 Our study collected data (where available) on the top equity holdings of each super fund, and then explored how these holdings were spread across standardised sector and industry categories using the Global Industry Classification Standard ('GICS'). This gave us general information on the extent of investment in potentially high risk sectors such as *Energy* (exploration and production; refining and marketing; and storage and transportation of oil, gas, coal and consumable fuels), *Materials* (manufacturing of chemicals, construction materials, glass, paper, forest products and related packaging

Beyond these general observations, a closer look at Australian equity holdings also revealed that the sampled funds hold shares in particularly high-risk companies.²¹⁴ Building on a 2019 study by Market Forces,²¹⁵ Table 6 illustrates that, at the time of the study, Australian companies which were actively pursuing new fossil fuel projects featured prominently in the equity holdings of the sampled funds, including in some cases being listed within the top 10 or top 20 holdings. Further, these companies also featured in the green-labelled option for some funds. Given the quite narrowly defined climate screens in place in many green options (Table 2), this is to be expected.²¹⁶

With such considerable existing investment in highly exposed sectors, setting targets and devising strategies to align portfolios with *Paris* and reporting on performance against these targets becomes increasingly important. In the time period of our study, we found no evidence of superannuation funds setting targets within equities portfolios for emissions reduction or low-carbon investment to reflect *Paris* goals.²¹⁷ However, in the subsequent months, many of the sample funds have made public, high level commitments to align portfolios to a long-term net zero target²¹⁸ and some have announced targets for clean energy investment.²¹⁹ The robustness of these commitments appears to vary considerably between sample

products, and metals, minerals and mining companies, including producers of steel) and *Utilities* (electric, gas and water utilities, as well as independent power producers and energy traders and companies that engage in generation and distribution of electricity using renewable sources). While reporting such information at the sector and industry level can mask considerable detail and variation in climate-risk exposure at a sub-industry and company scale (eg renewable energy companies may be included in both the energy and utilities sectors), it does give a broad indication of levels of exposure.

- 214 While Table 6 focuses on Australian equities, recent media coverage has highlighted significant shareholdings in international companies also expanding fossil fuels. See discussion in Grieve, ‘Divestment Is Simplistic’ (n 189).
- 215 Market Forces, *Out of Time, Out of Line* (Report, March 2019) (‘2019 Report’). This report has subsequently been updated: Market Forces, *Out of Time, Out of Line: The 23 Australian Companies Undermining Climate Action* (Report, Feb 2021).
- 216 In March 2020, it was also revealed that AustralianSuper’s socially aware option has at least \$39 million invested in more than 20 global coal, gas and oil projects: Charlotte Grieve, ‘“Ethical” Super Funds Invest in Coal, Oil, Gas’, *The Sydney Morning Herald* (online, 3 March 2020) <<https://www.smh.com.au/business/banking-and-finance/ethical-super-funds-invest-in-coal-oil-gas-20200228-p545ja.html>>.
- 217 In 2018, Cbus did however announce a net-zero emissions target by 2030 for property and infrastructure portfolios, to be achieved through activities such as energy efficiency, offsets and green power purchase contracts: Ben Potter, ‘CBUS Aims for Net Zero Carbon in Property as \$45trn Investors Tighten Screws’, *Australian Financial Review* (online, 13 September 2018) <<https://www.afr.com/politics/cbus-aims-for-net-zero-carbon-in-property-as-45trn-investors-tighten-screws-20180913-h15clp>>; ‘Built on Trust’ (n 189) 6. No similar targets were committed for equity assets.
- 218 These include Hesta, Cbus, UniSuper, AustralianSuper, First State Super (Aware Super), QSuper, Sunsuper and REST. REST committed to ‘implement a long-term objective to achieve a net zero carbon footprint for the fund by 2050’ as part of the settlement of the McVeigh case: see ‘Statement from Rest’ (n 124). For an overview of these commitments, see Climate Works Australia, *Net Zero Momentum Tracker: Superannuation Sector* (Report, September 2020).
- 219 For example, AustralianSuper has set a target of \$1 billion invested in renewable energy projects by the end of 2022: ‘Climate Change Report’ (n 171); AustralianSuper, *Net Zero 2050: Tracking Our Transition to a Net Zero 2050 Portfolio* (Report, November 2020) 3 (‘Net Zero 2050’).

funds, as demonstrated by the level of detail provided on investment strategies to achieve targets.²²⁰

Table 6 Investments in High Climate Risk Sectors²²¹

Company (Sorted by Size)	GICS Sector [^]	GICS Industry [^]	Australian Super	Cbus	First State Super	HESTA	Hostplus	MLC*	QSuper*	REST	Sunsuper*	UniSuper
Woodside Petroleum Ltd	Energy	Oil, gas and consumable fuels	Top 20	Top 20	Top 20	Top 20	Top 20	✓	N/Av	Top 20	Top 10 (whole portfolio and green)	Top 20
Santos Ltd	Energy	Oil, gas and consumable fuels	✓	✓	✓	✓	Top 20	✓	N/Av	✓	✓	✓
Origin Energy Ltd	Utilities	Multi-utilities	Top 20	Top 20	✓	Top 20	Top 20	✓	N/Av	Top 20	✓	✓
South 32 Ltd	Materials	Metals and mining	✓	✓	✓	✓	✓	✓	N/Av	✓	✓	✓
APA Group	Utilities	Gas utilities	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AGL Energy Ltd	Utilities	Multi-utilities	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

220 For example, detailed information is provided by AustralianSuper and UniSuper: see 'Net Zero 2050' (n 220) and 'Climate Risk and Our Investments', *UniSuper* (Web Page, 2021) <<https://www.unisuper.com.au/investments/how-we-invest/responsible-and-sustainable-investing/climate-risk-and-our-investments>>. Funds such as Cbus, First State Super (Aware Super), QSuper and SunSuper have less developed policies at this point in time.

221 Code to abbreviations:

* – Only top 10 equity holdings available for comparison/inclusion.

[^] – categorisation as according to Bloomberg, updated in line with 21 September 2018 changes to GICS structure

✓ – Shares held in portfolio. Given the MySuper option generally represents a significant portion of the whole portfolio, it may reasonably be assumed that these shares are held in MySuper.

N/Av – On available data, it is unknown if the fund holds these shares.

Due to a lack of consistent disclosure of equity holdings across the funds in our sample, this Table was compiled using different sources. Where available, we worked with the actual equity holdings at 30 June 2019 as reported by the funds (noting that funds take different approaches, either identifying each equity, the top 10 or top 20 holdings). Where this data was not available, we worked with proxy voting records from the fund itself. We reviewed voting records for the 2018 and 2019 calendar years for evidence of voting on resolutions at one or more of the 22 companies identified by Market Forces, *2019 Report* (n 215). It is not possible to know if the funds held the equities as at 30 June 2019 from this data, however we believe it is feasible to assume they have not divested their holdings.

Oil Search Ltd	Energy	Oil, gas and consumable fuels	✓	✓	✓	✓	✓	✓	N/Av	✓	✓	✓
Aurizon Holdings Ltd	Industrials	Road and rail	✓	✓	✓	✓	✓	✓	N/Av	Top 20	✓	✓
Caltex Australia Ltd	Energy	Oil, gas and consumable fuels	✓	✓	✓	✓	✓	✓	N/Av	✓	N/Av	✓
Worley Ltd	Energy	Oil and gas Equipment and Services	✓	✓	✓	✓	✓	✓	Top 20 in green	✓	✓	✓
Seven Group Holdings Ltd	Industrials	Trading companies and distributors	✓	✓	✓	✓	✓	✓	N/Av	✓	✓	✓
Beach Energy Ltd	Energy	Oil, gas and consumable fuels	✓	✓	✓	✓	✓	✓	N/Av	✓	✓	✓
Washington H Soul Pattinson and Company Ltd	Energy	Oil, gas and consumable fuels	✓	✓	✓	✓	✓	✓	N/Av	✓	✓	✓
Mineral Resources Ltd	Materials	Metals and mining	✓	✓	✓	✓	✓	✓	N/Av	✓	✓	✓
Whitehaven Coal Ltd	Energy	Oil, gas and consumable fuels	✓	✓	✓	✓	✓	✓	N/Av	✓	✓	✓
New Hope Corporation Ltd	Energy	Oil, gas and consumable fuels	✓	✓	✓	N/Av	✓	✓	N/Av	✓	✓	✓
Cooper Energy Ltd	Energy	Oil, gas and consumable fuels	✓	✓	✓	✓	✓	✓	N/Av	✓	✓	✓
Karoon Energy Ltd	Energy	Oil, gas and consumable fuels	N/Av	✓	✓	N/Av	✓	✓	N/Av	N/Av	✓	N/Av
Camarvon Petroleum Ltd	Energy	Oil, gas and consumable fuels	N/Av	✓	✓	✓	✓	✓	N/Av	N/Av	✓	✓

Senex Energy Ltd	Energy	Oil, gas and consumable fuels	N/Av	✓	✓	✓	✓	✓	N/Av	✓	✓	N/Av
FAR Ltd	Energy	Oil, gas and consumable fuels	N/Av	✓	✓	✓	N/Av	✓	N/Av	✓	N/Av	N/Av
New Century Resources Ltd	Materials	Metals and mining	N/Av	✓	✓	N/Av	N/Av	✓	N/Av	N/Av	✓	✓

Considering the strong opposition to divestment and the corresponding emphasis placed on engagement, the other main option to align equities portfolios to *Paris* is by pursuing such commitments from investee companies. Engagement platforms like Climate Action 100+ are seeking substantive commitments ‘to reduce GHG emissions across the value chain, consistent with the Paris Agreement goal’ from targeted companies.²²² Yet the initial progress report illustrates the significant gap between the targets currently set by these companies and the *Paris*-aligned transition.²²³ This underscores both the ambition of these collective engagement platforms and also the risks associated with relying on engagement alone.

V CONCLUSION

Approaches to integrating climate change into investment decision-making are clearly in a state of rapid development in Australia and internationally. Through the lens of the three-part analytical framework, this study captured the state of play in Australia at a point in time at which climate risk awareness and pressure on investors to play a constructive role in addressing climate change are both increasing. As such, it tells an unfinished story. Nonetheless, this study suggests that integrating climate considerations into investment decision-making is hindered by dominant, mainstream approaches to investment and not encouraged by existing legal frameworks. Further, the push to align portfolios to the *Paris Agreement* represents a considerable shift from current risk-based investment practices and legal obligations.

²²² 2019 Progress Report (n 188) 13.

²²³ See *ibid* 21. This report notes that 70% of targeted companies have set long-term quantitative targets for reducing GHG emissions, however only 9% have targets that align with *Paris*-compliant scenarios. A further 9% are aligned with emissions reduction pledges by governments under the *Paris Agreement*, however as previously noted, these are generally insufficiently ambitious to meet the overarching temperature goals, particularly in countries like Australia. A further 35% are not aligned with any of the above scenarios. The 2020 Progress Report (released after the time period of this study) finds that while many companies have now set *Paris*-aligned long-term emissions reduction targets, there are clear gaps in target coverage and associated capital expenditure, strategy and planning does not align well with long-term targets. See, Climate Action 100+, 2020 Progress Report (Report, 2020) 11–12.

The superannuation funds considered in this sample are increasingly allocating resources to assess their climate risk exposure. To varying degrees, they do employ responsible investment approaches to manage these risks. Of these, ESG integration is the most widely applied, yet within the context of a highly diversified portfolio this may only lead to a gradual reduction in exposure to the highest risk assets over time, with the continued holding of assets justified based on short to medium term returns. Climate-related negative screening is largely only employed in voluntary green options, suggesting that funds use these more visible, clear-cut techniques as a response to member pressure and values. Climate-focused positive screening and impact investing was not prevalent in the sample we considered. While collective engagement activities are expanding, with more and more emphasis on transparency and achieving substantive outcomes, participation remains variable and outcomes are hard to measure. To date, funds have also been hesitant in backing up their ESG stewardship rhetoric by voting in support of climate change resolutions. The flurry of *Paris*-aligned net zero targets announced by sample funds recently does, however, suggest that investment practice across the three phases is changing.

The finance theories and practices outlined in Part II are helpful in explaining some of these findings. The goal of *Paris* alignment presents a challenge to finance theories which do not work from a ‘theory of change’ perspective. They do not seek to model how the world should change to be better, in the process devising investment objectives and selecting a portfolio of investments based on working towards this desirable change. Instead these theories seek to maximise financial return from modelling of the world as it is, and as it could become, by identifying and pricing risk, while remaining aloof to the societal implications of those risks. An emphasis on diversification of risk across the portfolio can encourage a selective approach to environmental and social risks; tolerating the ‘bad’ if the risk can be priced and the asset price presents the opportunity to earn good returns because it is ‘cheap’, while remaining indifferent to the ‘good’ if that reduced level of risk results in assets being fully priced and ‘expensive’. Even initiatives such as the UNPRI, with its emphasis upon Phase Two (ownership actions), remain underdeveloped in regards to Phase One and Phase Three decision-making. Over time, as our collective understanding of how ESG risks²²⁴ impact upon usual financial variables at both the asset and portfolio levels increases, and as the financial implications of climate change become clearer, traditional risk-based finance theories could morph into something that can achieve the *Paris Agreement* goals, without espousing a theory of change. That stage has not yet been reached, and it may come too late to support timely, adequate action on climate change.

The findings of the empirical study can also be partly explained by a legal and regulatory framework that is relatively neutral on ESG and climate change. The core legal duties imposed on corporate trustees and their directors are framed without specific reference to these considerations, even though their interpretation, as an objective standard with reference to particular circumstances, could extend to climate change. Further, mandatory disclosure obligations focus largely on narrow aspects of financial performance. There is no settled and comprehensive disclosure

regime for reporting climate-risk exposure and climate performance, although voluntary best practice initiatives such as the TCFD and UNPRI are moving in this direction, and these are increasingly endorsed by Australian regulators who are updating regulatory guidance accordingly.²²⁵ This study underscored the resulting lack of transparency within the Australian superannuation system.

More broadly, there is a notable absence in Australia of a national agenda for delivering on the goals of the *Paris Agreement*, and, more specifically, for greening the financial system and aligning financial decision-making with its goals. In this respect, Australia lags behind European nations, which are embarking on a broad program of regulatory reform for sustainable finance as part of the European *Action Plan: Financing Sustainable Growth*²²⁶ and the *Green Deal* initiative.²²⁷ The seeds of such an agenda are present in the industry-led²²⁸ Australian Sustainable Finance Initiative (‘ASFI’) which released the Australian Sustainable Finance Roadmap in late 2020.²²⁹ The roadmap sets out a range of high level recommendations ‘to enable the financial services sector to contribute more systematically to the transition to a more resilient and sustainable economy, consistent with global goals such as ... the Paris Agreement’,²³⁰ as well as an action plan for implementation over different timeframes, to be supported and guided by the establishment of ASFI as a permanent body.²³¹

Many of the recommendations put forward in the Roadmap use disclosure as a way to address the legal and practical barriers to incorporating climate change considerations in investment decision-making outlined in this article.²³² The Roadmap also confirms the importance of setting targets and trajectories to align and facilitate the transition to net zero emissions by 2050.²³³ Yet as currently framed, there

225 ‘ASIC Updates Guidance’ (n 12); ‘Letter from Geoff Summerhayes’ (n 126); ‘Draft CPG 229’ (n 126) 18 [47].

226 European Commission, *Action Plan: Financing Sustainable Growth*, Doc No COM(2018) 97 final, 8 March 2018. One of the most significant actions recommended was to establish a sustainable taxonomy, formally achieved in *Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the Establishment of a Framework to Facilitate Sustainable Investment, and Amending Regulation (EU) 2019/2088* [2020] OJ L 198/13 (‘Taxonomy Regulation’).

227 European Commission, *The European Green Deal*, Doc No COM(2019) 640 final, 11 December 2019.

228 Investor Group on Climate Change et al, ‘Joint Statement in Support of a Sustainable Financial System for Australia and New Zealand’ (Statement, July 2018) <<https://www.unepfi.org/psi/wp-content/uploads/2018/07/Statement-for-a-Sustainable-Finance-Roadmap-July-2018.pdf>>.

229 Australian Sustainable Finance Initiative, *Australian Sustainable Finance Roadmap: A Plan for Aligning Australia’s Financial System with a Sustainable, Resilient and Prosperous Future for All Australians* (Report, November 2020) (‘Australian Sustainable Finance Roadmap’).

230 ‘Australian Sustainable Finance Initiative’ (n 20).

231 ‘Australian Sustainable Finance Roadmap’ (n 229) 12.

232 A discussion of the full suite of recommendations is beyond the scope of this article. Relevant recommendations addressing disclosure include Recommendation 28 (full portfolio disclosure); Recommendations 11, 12 and 13 (disclosure of climate-related risks and opportunities in line with TCFD guidelines); and Recommendation 27 (labelling and disclosure to clients on how ESG risks and opportunities are addressed within financial products): ‘Australian Sustainable Finance Roadmap’ (n 229) 13, 15.

233 Relevant recommendations addressing *Paris* alignment include Recommendations 31 and 33. Recommendation 5 also identifies the establishment of ‘interim science-based targets and trajectories that would support individual financial institutions to make net-zero-aligned decisions on lending, insurance and investment’ as a priority special project for ASFI: ‘Australian Sustainable Finance Roadmap’ (n 229) 12.

is relatively little detail provided on legal and regulatory reform opportunities.²³⁴ There is therefore considerable scope to map out a broad program of legal reform in Australia drawing on recent developments in the European Union and other comparable jurisdictions like the United Kingdom²³⁵ and, following the 2020 US presidential election, the US.²³⁶ These developments include reforms to fiduciary duties to clarify and emphasise the relevance of ESG factors in investment decision-making;²³⁷ reforms to disclosure obligations to require standardised reporting on how portfolio management, voting and engagement activities are contributing to meeting the goals of the *Paris Agreement*,²³⁸ as well as more comprehensive and targeted ESG disclosure to members,²³⁹ and articulation of categories of climate-

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- 234 Some recommendations do address some opportunities for legal and regulatory reform. For example, Recommendation 19 for regulators to embed sustainability into regulatory guidance and standards and Recommendation 15 for mandatory sustainability reporting and assurance: 'Australian Sustainable Finance Roadmap' (n 229) 14.
- 235 For a recent discussion of the state of play on sustainable finance in Australia as compared with the EU, see Edwards et al (n 24).
- 236 President Biden accepted the *Paris Agreement* as one of his first acts on taking office: Joe R Biden, 'Paris Climate Agreement' (Media Release, The White House, 20 January 2021) <<https://www.whitehouse.gov/briefing-room/statements-releases/2021/01/20/paris-climate-agreement/>>. He has subsequently embarked on a range of similar sustainable finance initiatives: Billy Nauman, 'US May Join Europe in Mandating Climate Risk Disclosures', *Financial Times* (online, 21 April 2021) <<https://www.ft.com/content/77a8292d-2e7f-43a1-9062-2e639c1e6b2a>>. In May 2021, President Biden issued an *Executive Order on Climate-Related Financial Risks* which envisages the potential introduction of new or revised regulatory standards and processes for climate-risk disclosure and management: *Executive Order on Climate-Related Financial Risks*, Executive Order No 14030, 86 Fed Reg 27967 (25 May 2021).
- 237 See, eg, the UK Law Commission statement that it is within trustees' duties to take account of material ESG factors: Law Commission (UK), *Pension Funds and Social Investment* (Final Report, Law Com No 374, 22 June 2017) 124–5 (Recommendations 1 to 5), with amendments made via the *Pension Protection Fund (Pensionable Service) and Occupational Pension Schemes (Investment and Disclosure) (Amendment and Modification) Regulations 2018* (UK) SI 2018/988 and *The Occupational Pension Schemes (Investment and Disclosure) (Amendment) Regulations 2019* (UK) SI 2019/982. Reforms have also been made to the UK Stewardship Code to account for climate change as a material issue for investors when making investment decisions and undertaking stewardship: Financial Reporting Council, 'The UK Stewardship Code 2020' (Code, 2020) 15 [Principle 7].
- 238 See, eg, the French *Loi n° 2015-992 du 17 août 2015 relative à la transition énergétique pour la croissance verte* [Law No 2015-992 of 17 August 2015 on Energy Transition for Green Growth] (France) JO, 18 August 2015, which sets emissions reduction targets as well as targets for reducing primary energy consumption of fossil fuels and for the uptake of renewables. Article 173 introduced requirements for institutional investors to set targets to assess their contribution to meeting international and French energy transition targets, and report on actions taken to achieve these targets, including divestment, changes made to investment strategy, engagement with issuers, and increases in investments made to thematic funds, securities, or assets which contribute to the energy transition: Julie Evain, Michel Cardona and Morgane Nicol, 'Article 173: Overview of Climate-Related Financial Disclosure after Two Years of Implementation' (Climate Brief No 59, Institute for Climate Economics, December 2018); World Wildlife Fund France, 'Article 173! Message Not Delivered!' (Summary of Report, 2018) 2; Novethic, *Shades of Reporting: Season II* (Report, 2018) 3, 15, 18.
- 239 On disclosure reforms at the European Union ('EU') level, see *Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on Sustainability-Related Disclosures in the Financial Sector* [2019] OJ L 317/1, plus the *Taxonomy Regulation* (n 226) art 3 (criteria for environmentally sustainable economic activities), art 5 (disclosures of investments contributing to environmental objectives), art 9 (environmental objectives).

friendly investment to guide the allocation of new capital.²⁴⁰ Reforms such as this may represent a significant departure from the principles-based legal framework currently in place in Australia with its emphasis on risk identification, disclosure and management. Yet more substantive intervention may be what is required to speed up and strengthen the nascent practices observed in this study and harness the power of investors to help society address climate change.

240 For example, the creation of EU Climate Transition Benchmarks and EU *Paris*-aligned Benchmarks under *Regulation (EU) 2019/2089 of the European Parliament and of the Council of 27 November 2019 Amending Regulation (EU) 2017/1011 as Regards EU Climate Transition Benchmarks, EU Paris-Aligned Benchmarks and Sustainability-Related Disclosures for Benchmarks* [2019] OJ L 317/17. Recommendation 5 in the Australian Sustainable Finance Roadmap identifies the development and implementation of a sustainable finance taxonomy in Australia as a special priority project: ‘Australian Sustainable Finance Roadmap’ (n 229) 12.