



MORE LIGHT, LESS HEAT: A FRAMEWORK FOR PENSION FUND ACTION ON CLIMATE CHANGE

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CONTENTS

Introduction	5
Recommendations	7
Section 1 climate change –the story so far	8
Section 2 the economic impact of climate change	12
Section 3 pension funds and climate change – a framework for action	16
Conclusions and next steps	26

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“A system-wide repricing of assets happening quite suddenly [due to climate change] could trigger the next financial crisis.”

Paul Fisher, the former Deputy Head of the Bank of England’s Prudential Regulation Authority

“If no action is taken to limit warming to 2°C, a conservative portfolio with a 40 per cent weighting to equities (typical of a pension fund) could suffer permanent losses of more than 25 per cent within five years after the shock is experienced.”

University of Cambridge Institute for Sustainable Leadership

“When investing in equities over the long-term, trustees should consider, in discussion with their advisers and investment managers, how to assess risks. This includes risks to a company’s long-term sustainability.”

The Law Commission

“If the risks associated with climate change are financially material to a particular investment decision then it is clear, we think beyond reasonable argument that the law permits and requires trustees to take those risks into account when making investment decisions.”

QC opinion for ClientEarth

INTRODUCTION – THE PLSA GUIDANCE ON CLIMATE CHANGE

The climate is changing as a result of human activity – and this will have profound consequences for pension funds’ investments. As such, governance bodies must take steps to prepare for the economic ramifications of climate change.¹

A recent study by the London School of Economics suggests that an expected \$2.5 trillion of global financial assets (around 1.8% of the total) are at risk from global temperature increases of over 2.5°C, though this could rise as high as \$24 trillion.² Even when taking into account the cost of measures to mitigate climate change, the value of financial assets would be \$315 billion higher under a 2°C increase in global temperatures than under a 2.5°C rise.

¹ In this paper we use the term ‘governance body’ to refer to the trustee boards of trust-based schemes, the independent governance committees of contract-based schemes and the pensions committees in the local government sector, all of which will be affected by climate change

² London School of Economics, ‘*Climate value at risk of global financial assets*’ (2016) via <http://www.lse.ac.uk/GranthamInstitute/publication/climate-value-at-risk-of-global-financial-assets/>

A study for Schroders predicted that limiting increases to 2°C would reduce global GDP by 2% by 2100, while a 4°C increase will reduce GDP by 10% and the worst-case scenario of a 6°C increase in global warming would reduce global GDP by 50% over the same timeframe.³

Based on their analysis of a variety of determinants of future climate change, the same study estimates that we are currently on course for a rise of 4.1°C.

Many economists – including Paul Fisher, the former Deputy Head of the Bank of England’s Prudential Regulation Authority – have suggested that the failure of asset prices to account for the impact of climate change and the policies necessary to combat it represents a threat to financial stability:

“A system-wide repricing of assets happening quite suddenly [due to climate change] could trigger the next financial crisis.”⁴

This has major implications for pension funds’ investments and ultimately their ability to provide incomes in retirement for their members. The Pensions Regulator (TPR) has already said that it expects pension funds to incorporate environmental, social and governance (ESG) considerations, including climate change, into their investment strategy. As its Director for Regulatory Policy put it in 2016:

“With regards to ESG our guidance is clear that we expect trustees to take ESG issues into account when assessing portfolios over the long term... I would urge any trustee or asset manager out there who still thinks these things don’t matter to wake up and smell the coffee. We need to guard against complacency here.”⁵

Due to the significant material and systemic risk implications of climate change, governance bodies have a fiduciary responsibility to safeguard the value of investment portfolios on behalf of their beneficiaries.

This guide is designed to help those governance bodies understand the importance of integrating climate change considerations into their investment practices. It identifies a programme of action largely applicable by pension funds of all type and size that they can implement to safeguard their assets and improve the resilience of their portfolios.



³ Schroders, *Climate Change: calibrating the thermometer* (2017) via http://www.schroders.com/globalassets/global-assets/english/pdf/co0140-climatedashboard_section.pdf

⁴ Bloomberg, *Climate Change May Trigger Next Financial Crisis, Fisher Says* (2016) via <https://www.bloomberg.com/news/articles/2016-10-24/climate-change-may-trigger-next-financial-crisis-fisher-says>

⁵ Professional Pensions, *TPR: Trustees must wake up and smell the coffee on ESG* (2016) via <https://www.professionalpensions.com/professional-pensions/news/2470190/tpr-trustees-must-wake-up-and-smell-the-coffee-on-esg>

RECOMMENDATIONS

A FRAMEWORK FOR PENSION FUND ACTION ON CLIMATE CHANGE

GOVERNANCE

- ▶ Governance body members should undertake training to familiarise themselves with the economic impacts of climate change, the impact it will have on investment portfolios and how investors are responding.
- ▶ Governance bodies should set out how they believe climate change relates to their investment strategy in their Statement of Investment Principles and state how they are mitigating climate change-related risk.
- ▶ The work programme that pension funds set for their investment advisers should include time allocated to assessing climate-related risk and opportunity, and incorporating these considerations into the investment strategy.
- ▶ Time should be allocated to reviewing climate-related risk and opportunity at governance body meetings on at least an annual basis.

REPORTING

- ▶ Governance bodies should detail to their beneficiaries how climate change considerations are incorporated into their investment practices in their annual reports, using the Task Force on Climate-related Financial Disclosures (TCFD) framework for reporting as a guide to reporting.
- ▶ Governance bodies should seek advice from investment advisers on measurement of the past and future impact of their investments on climate change, and report on this to their beneficiaries.

INVESTMENT

- ▶ Governance bodies should quiz both current and prospective asset managers about their approach to climate change, and should consider the quality of their response when awarding mandates and monitoring performance.
- ▶ Governance bodies should proactively seek out low-carbon investment options where they deliver comparable investment returns that would enhance the diversity of their portfolio. This approach should be applied both to the selection of individual investments across all asset classes – for example green infrastructure projects, or companies with a business strategy aligned with climate change mitigation efforts – and to index selection.

ENGAGEMENT

- ▶ Governance bodies should review current and prospective asset managers' approach to engagement on climate-related risk and opportunity – including whether or not they can demonstrate a track record of successful engagements in this respect.
- ▶ Pension funds should also engage directly with investee companies where they invest directly in those companies, and set out clear expectations for asset managers in terms of climate-related engagement when they invest on their behalf.
- ▶ Pension funds should support collective engagement and join the relevant initiatives that facilitate this.
- ▶ Pension funds should put policies in place to ensure that at company AGMs their shares are voted in support of companies and directors that take an engaged, long-term approach to the governance, strategy and reporting of climate-related risk and opportunity, and against those that do not.

SECTION 1: **CLIMATE CHANGE – THE STORY SO FAR...**

This section looks at the science behind climate change and explains why urgent action is needed.

THE URGENCY OF THE CLIMATE CHALLENGE

Scientists overwhelmingly agree that the climate is changing, that this change is the result of greenhouse gas emissions from human activity, and that the impact on societies and economies across the globe will be devastating unless greenhouse gas emissions are significantly reduced.

The following charts show rises in human carbon emissions and atmospheric concentrations of greenhouse gases, and the corresponding increases in global land and sea temperatures to 2016, relative to the 1951-1981 average.

Figure 1: Anthropogenic carbon dioxide emissions⁶

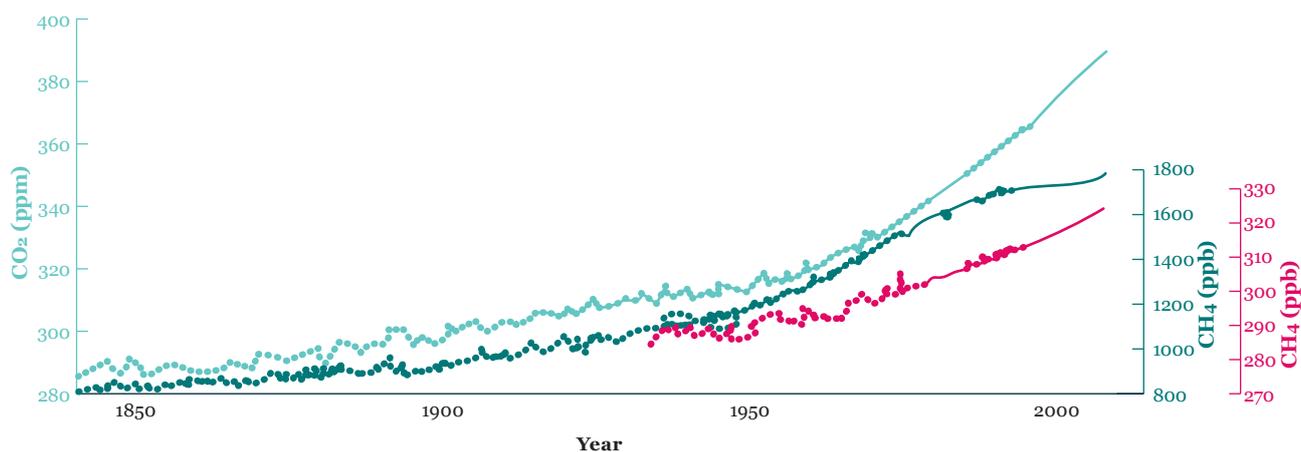
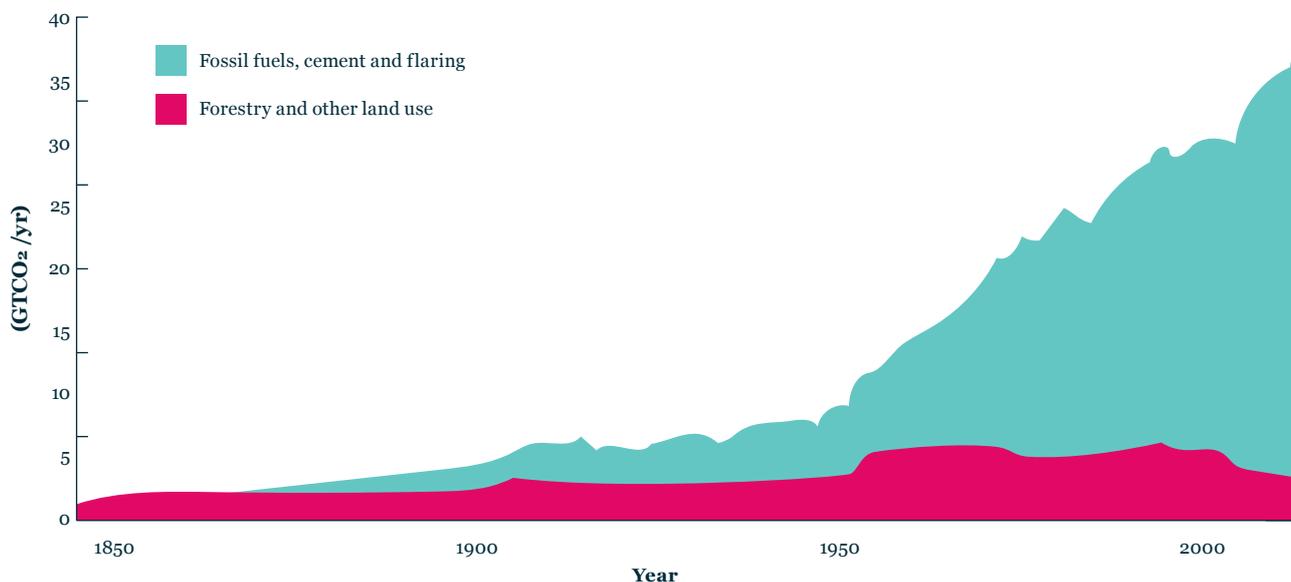


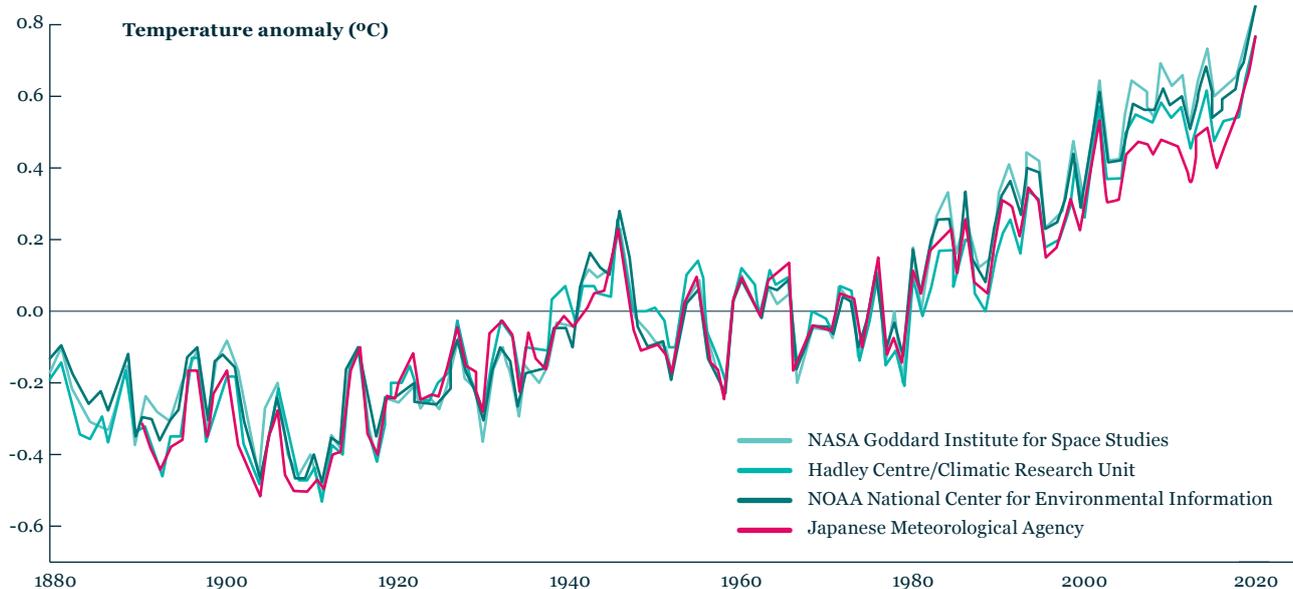
Figure 2: Atmospheric concentrations of greenhouse gases – carbon dioxide, methane and nitrous oxide⁷



6 UN Intergovernmental Panel on Climate Change, Climate Change 2014 Synthesis report for Policymakers via http://ipcc.ch/pdf/assessment-report/ar5/syr/AR5_SYR_FINAL_SPM.pdf

7 Ibid

Figure 3: Global temperatures relative to 1951-1980 average⁸



Temperature data from four international science institutions. All show rapid warming in the past few decades and that the last decade has been the warmest on record. Data sources: NASA's Goddard Institute for Space Studies, NOAA National Climatic Data Center, Met Office Hadley Centre/Climatic Research Unit and the Japanese Meteorological Agency.

As the UN Intergovernmental Panel on Climate Change (IPCC) puts it:

“Anthropogenic greenhouse gas emissions have increased since the pre-industrial era... Their effects, together with those of other anthropogenic drivers, have been detected throughout the climate system and are extremely likely to have been the dominant cause of the observed warming since the mid-20th century.”⁹

Figure 3 highlights the urgency of the issue – NASA notes that 16 of the 17 warmest years recorded since 1880 occurred since 2001 (the other was in 1998).¹⁰

Some of the risks deriving from projected temperature rises highlighted by the IPCC include:

- ▶ Widespread species extinction (with consequences for ecosystems)
- ▶ Food and water shortages
- ▶ Increased risk to coastal systems and low-lying areas from rising sea levels
- ▶ Increased health problems (resulting from factors such as increased heat or air pollution)
- ▶ Increased frequency of extreme weather events
- ▶ Increased displacement of people
- ▶ Reduced economic growth
- ▶ Indirect increase of violent conflict, owing to the above factors.¹¹

8 NASA, *Global Climate Change* via <https://climate.nasa.gov/scientific-consensus/>

9 UN Intergovernmental Panel on Climate Change, *Climate Change 2014 Synthesis report for Policymakers* via http://ipcc.ch/pdf/assessment-report/ar5/syr/AR5_SYR_FINAL_SPM.pdf

10 NASA, *Global Climate Change* via <https://climate.nasa.gov/vital-signs/global-temperature/>

11 UN Intergovernmental Panel on Climate Change, *Climate Change 2014 Synthesis report for Policymakers*

Though different communities face different types of vulnerability, findings from the early effects of climate change show that nobody will be immune to the consequences of unmitigated emissions. As the UN has stated:

“The striking feature of observed impacts is that they are occurring from the tropics to the poles, from small islands to large continents, and from the wealthiest countries to the poorest.”¹²

THE POLICY RESPONSE

The economic transition needed to mitigate these impacts will have a major impact on companies and the pension funds that buy their equity and debt.

New technologies will replace those that are incompatible with decarbonisation, while policies designed to reduce greenhouse gas emissions may make a number of companies' existing business models unviable.

All UN member states have committed to the 2016 Paris Agreement, binding them to keeping global temperature increases to below 2°C above pre-industrial levels, with the aim of limiting increases to 1.5°C.¹³ While the US's stated intention of withdrawing from the treaty has led to suggestions that its ambitions will never be fulfilled, a network of 9 states, 227 cities and counties and more than 1,600 businesses in the US have pledged to uphold commitments to the Paris deal.¹⁴ China is investing more than \$350 billion in renewable energy networks and introducing a national emissions 'cap and trade' scheme as a result of commitments made in Paris.¹⁵

Beneath this international agreement, other international, national and industry-led plans are being developed.

For example, the UK's 2008 Climate Change Act mandates an 80% reduction in the UK's greenhouse gas emissions by 2050.¹⁶

The EU's Renewable Energy Directive requires the EU to meet at least 20% of its energy needs from renewable energy sources, such as solar or wind power, by 2020.¹⁷

Together regulations such as these, and the penalties and incentives that they create, will have major economic and investment implications.



¹² UN, IPCC Report: 'Severe and pervasive' impacts of climate change will be felt everywhere (2014) via <http://www.un.org/climatechange/blog/2014/03/ipcc-report-severe-and-pervasive-impacts-of-climate-change-will-be-felt-everywhere/>

¹³ United Nations Framework Convention on Climate Change, *The Paris Agreement* (2016) via http://unfccc.int/paris_agreement/items/9485.php

¹⁴ New York Times, *U.S. Cities, States and Businesses Pledge to Measure Emissions* (2017) via <https://www.nytimes.com/2017/07/11/climate/cities-states-businesses-emissions-climate-pact.html>

¹⁵ Time, *It Didn't Take Long for China to Fill America's Shoes on Climate Change* (2017) via <http://time.com/4810846/china-energy-climate-change-paris-agreement/>

¹⁶ UK Government, *Climate Change Act 2008* via <https://www.legislation.gov.uk/ukpga/2008/27/contents>

¹⁷ European Commission, *Renewable Energy Directive 2009* via <https://ec.europa.eu/energy/en/topics/renewable-energy/renewable-energy-directive>

SECTION 2:

THE ECONOMIC IMPACT OF CLIMATE CHANGE

This section provides an overview of emerging and future investment challenges from climate change and the related policy response.

CLIMATE RISK

The effects on global GDP of the different climate change scenarios, as outlined in the Schroders report for example, are material to every company and market. This represents a threat to pension fund investment portfolios in their entirety.

However the decarbonisation of the global economy is particularly relevant to the huge range of companies and sectors whose current business models are predicated on significant greenhouse gas emissions. These companies are potentially subject to regulatory limits or financial penalties imposed on their activities, replacement by climate-friendly competitors, and non-conventional challenges such as reputational issues resulting from their impact on the climate.

The Bank of England (BoE) notes that securities comprising nearly a third of global equity and fixed income assets fall into one of two tiers:

- ▶ Securities of firms that may be impacted directly by regulatory limits on their ability to produce or use fossil fuels ('Tier 1' – these include coal, oil and gas extraction companies, and conventional utilities).
- ▶ Securities of firms that are energy-intensive, which might be affected indirectly via an increase in energy costs ('Tier 2' – these include chemicals, forestry and paper, metals and mining, construction and industrial production).¹⁸

This warning is particularly pertinent to the UK, where a significant number of mining and oil and gas companies are listed. A 2015 report noted that resource extraction companies alone account for 20-25% of the FTSE 100 index. If these companies' business models are threatened by the decarbonisation of the economy, this also represents a threat to the UK pension funds that invest in the index.¹⁹

It should also be noted that the direct impacts of climate change extend far beyond the more obvious sectors highlighted above. For example:

- ▶ The BoE also observes that insurance companies (and presumably banks, asset managers and other financial services firms) with investments in these assets will also need to consider the effect of climate change on their business models.²⁰
- ▶ Similarly, a report from Moody's credit rating agency suggests that car manufacturers represent an increased credit risk as a result of the decarbonisation of the economy.²¹
- ▶ The food industry produces large amounts of carbon emissions and presents a threat to forestry, which absorbs carbon. Legal and General Investment Management's 'Climate impact pledge' prioritises food retailers and producers as one of six sectors (alongside oil and gas, metals and mining, electric utilities, carmakers, and banking and insurance) that will need to reduce their emissions if the Paris Agreement targets are to be met.²²
- ▶ A report for the Royal Institute of Chartered Surveyors notes that the buildings sector accounts for roughly 30% of greenhouse gas emissions and therefore investments in property will be significantly affected by efforts to reduce those emissions.²³

¹⁸ Bank of England, *The impact of climate change on the UK insurance sector A Climate Change Adaptation Report by the Prudential Regulation Authority* (2016) via <http://www.bankofengland.co.uk/pru/Documents/supervision/activities/pradefra0915.pdf>

¹⁹ Bright Blue, *Green and responsible conservatism: Embedding sustainability and long-termism within the UK economy* (2015) via <https://www.brookings.edu/blog/planetpolicy/2015/12/09/the-global-economic-costs-from-climate-change-may-be-worse-than-expected/>

²⁰ Bank of England, *The impact of climate change on the UK insurance sector A Climate Change Adaptation Report by the Prudential Regulation Authority* (2016)

²¹ Moody's, *Auto sector faces rising credit risk due to carbon transition* (2016) via https://www.moody's.com/research/Moodys-Auto-sector-faces-rising-credit-risks-due-to-carbon--PR_354984?utm_source=Climate+News+Network&utm_campaign=a42b47c708-Car_industry_threat10_12_2016&utm_medium=email&utm_term=0_1198ea8936-a42b47c708-38766353

²² Legal and General Investment Management, *ESG Spotlight: Time to act on climate change* (2016) via <http://update.lgim.com/futurefund>

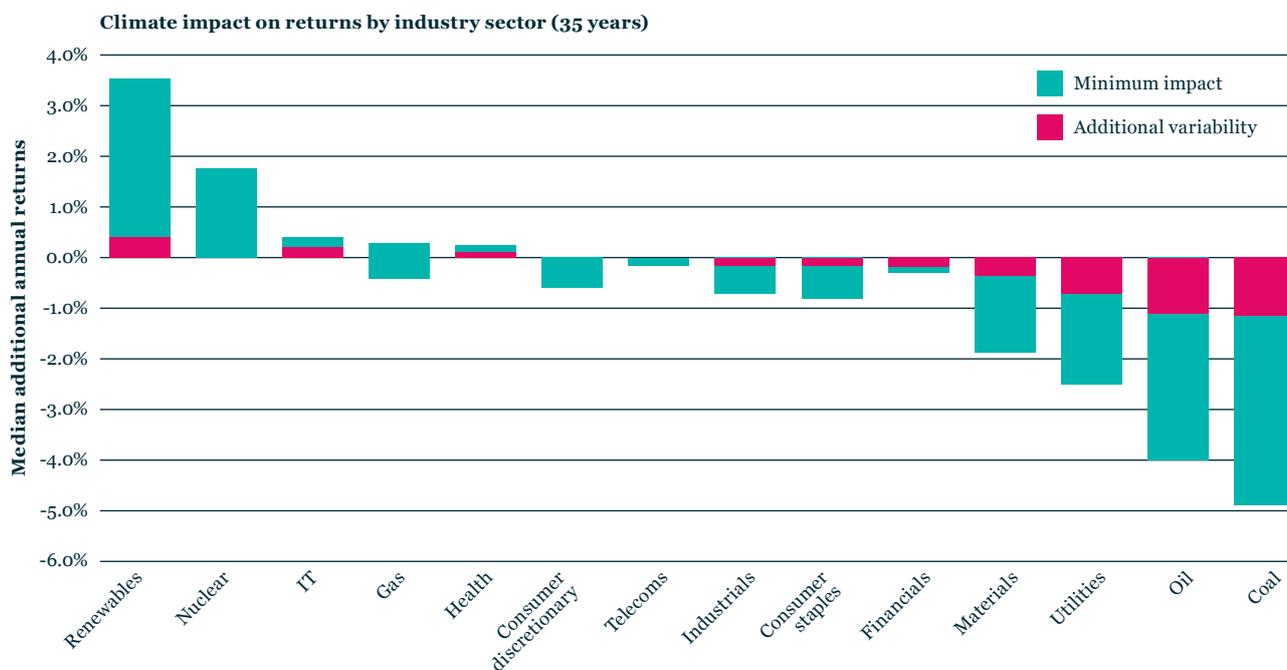
²³ PRI, *Sustainable real estate investment – implementing the Paris agreement: an action framework* (2016) via <http://www.unepfi.org/publications/investment-publications/property-publications/sustainable-real-estate-investment-2/>

CLIMATE OPPORTUNITY

Conversely, there will be opportunities for companies involved with the development of renewable technologies and other products and services that enable lower emissions and more sustainable resource use.

Figure 4 shows the Mercer investment consultancy’s findings on how selected sectors will be affected by different climate change scenarios.²⁴

Figure 4: Climate impacts by sector



The Local Authority Pension Fund Forum (LAPFF) notes that investment opportunities relating to the decarbonisation of the economy are more commonly found outside the equity markets, perhaps because of the high concentration of greenhouse gas emitters and users in those markets.

“We consider that currently there are limited climate related investment opportunities in the public markets with more opportunities existing in the private markets across private equity, private debt, infrastructure and real assets. This has asset allocation implications due to the illiquidity and complexity of some of these asset classes.”²⁵

Pension funds that are properly attuned to the economic impacts of climate change and related policy measures will be able to exploit these measures and generate better returns for their members. However, the PLSA annual survey suggests that a minority of pension funds currently invest in these alternative asset classes, and that they form a far smaller proportion of total investments.²⁶

²⁴ Mercer, *Trillion Dollar Transformation: A guide to climate change investment risk management for US public defined benefit plan trustees* (2016) via <https://www.mercer.com/content/dam/mercer/attachments/private/nurture-cycle/gl-2016-responsible-investments-a-guide-to-climate-change-investment-risk-management-for-us-public-defined-benefit-plan-trustees-mercer.pdf>

²⁵ Local Authority Pension Fund Forum, *Climate Change Investment Policy Framework* (2017), via http://www.lapfforum.org/wp-content/uploads/2017/11/Climate_Change_Investment_Policy_Framework.pdf

²⁶ For example, only 21% of DB schemes responding to the survey invest in infrastructure and 29% in private equity compared to 67% in UK public equities. Equities form 28% of respondents total DB assets – private equity forms 5% and infrastructure 2% – see PLSA, *PLSA Annual Survey* (2016)

CLIMATE CHANGE TIMEFRAMES

Much of the research on climate change rightly highlights the major long-term economic impact of climate change. However, this should not be misunderstood to indicate that it is not an immediate priority for pension funds. Research from the Cambridge Institute for Sustainable Leadership (CISL) modelling the near-term impacts on investment portfolios of a climate-related 'market shock':

"If no action is taken to limit warming to 2°C, a conservative portfolio with a 40% weighting to equities (typical of a pension fund) could suffer permanent losses of more than 25% within five years after the shock is experienced."²⁷

The gravity of the threat of climate change, and the potential immediacy highlighted by the CISL, make it urgent for pension funds to incorporate climate considerations into their investment and governance practices.



²⁷ University of Cambridge Institute for Sustainable Leadership, *Unhedgeable risk: How climate change sentiment impacts investment* (2015) via <https://www.cisl.cam.ac.uk/publications/publication-pdfs/unhedgeable-risk.pdf>

SECTION 3:

PENSION FUNDS AND CLIMATE CHANGE – A FRAMEWORK FOR ACTION

This section identifies measures that pension funds should implement in order to ensure that their investments continue to generate the desired returns in a decarbonising economy.

Pension funds already have a number of obligations in relation to ESG issues, including risks related to climate change (see box 1).

BOX 1: REGULATORY EXPECTATIONS OF PENSION FUNDS ON CLIMATE CHANGE

All types of pension fund need to take account of material ESG issues in their investment decisions – this is made clear in the DB and DC investment guidance documents issued by TPR and the accompanying guidance to the Local Government Pension Scheme (LGPS) Investment Regulations.^{28, 29, 30}

Given the inevitable impact that climate change and the policies intended to combat it will have on the UK and global economy, this means that pension funds need to demonstrate how they have incorporated climate-related factors into their investment practices.

These guidelines draw on the 2014 Law Commission statement on fiduciary duty. The Commission summarised pension funds' legal duties in relation to ESG investments as follows:

“When investing in equities over the long-term, trustees should consider, in discussion with their advisers and investment managers, how to assess risks. This includes risks to a company’s long-term sustainability.”³¹

Given the significant impact that climate change will have on business models and practices across a wide range of industries, this again implies a responsibility for pension fund governance bodies to incorporate climate change into their investment strategy, and to demonstrate how they have done so. As a QC Opinion sought by ClientEarth concluded:

“If the risks associated with climate change are financially material to a particular investment decision then it is clear, we think beyond reasonable argument that the law permits and requires trustees to take those risks into account when making investment decisions.”³²

A further Law Commission report on pension funds and social investment recommended that this implied and inferred requirement to consider financially material ESG issues such as climate change in investment decisions should be extended to contract-based as well as trust-based pension schemes, and should also be made clearer by explicitly stating that governance bodies must consider these issues. The Government is expecting to respond and outline its next steps in late 2017.³³

28 See TPR, *Regulatory Guidance: Investing to fund DB* (2017) via <http://www.thepensionsregulator.gov.uk/guidance/db-investment-two-strategy.aspx#s24048>

29 TPR, *Managing DC Benefits: Investment Governance* (2016) via <http://www.thepensionsregulator.gov.uk/trustees/investment-management-in-your-dc-scheme.aspx>

30 Department for Communities and Local Government (DCLG), *Local Government Pension Scheme: Guidance on preparing and maintaining and investment statement* (2017) via <http://lgpslibrary.org/assets/statgui/ew/201707ISS.pdf>

31 Law Commission, *Is it always about the money: Pension trustees' duties when setting an investment strategy* (2014) via https://s3-eu-west-2.amazonaws.com/lawcom-prod-storage-11j5xou24uy7q/uploads/2015/03/lc350_fiduciary_duties_guidance.pdf

32 ClientEarth, *The legal duties of pension fund trustees in relation to climate change* (2016) via <https://www.documents.clientearth.org/wp-content/uploads/library/2016-12-02-the-legal-duties-of-pension-fund-trustees-qc-opinion-ext-en.pdf>

33 Law Commission, *Pension Funds and Social Investment* (2017) via <https://s3-eu-west-2.amazonaws.com/lawcom-prod-storage-11j5xou24uy7q/uploads/2017/06/Final-report-Pension-funds-and-social-investment.pdf>

OVERARCHING GOVERNANCE

The starting point for pension funds seeking to comply with this guidance and navigate the transition to a low-carbon economy should be to ensure that they have the appropriate governance arrangements in place to manage the process.

This necessitates a familiarity with climate change issues at the scheme governance body level, and a stated framework setting out how climate change considerations are incorporated into the investment strategy. This may differ for different pension funds. However, governance bodies of all schemes should be clear that not incorporating climate change considerations into investment strategies is not a neutral position but an active choice in favour of a high-carbon portfolio –and of the attendant risks to their assets highlighted in this guidance.

Pension funds are also required to seek professional advice when formulating their investment strategy. Inevitably, pension fund governance bodies are not authoritative experts across every investment, regulatory and actuarial issue they need to deal with, so this advice is critical to how seriously they treat climate change. Therefore, governance bodies should require their investment advisers to provide analysis of the impact of climate change on their investment strategy, and set aside time at meetings to discuss this on at least an annual basis.

BOX 2: THE ENVIRONMENT AGENCY PENSION FUND CASE STUDY

The Environment Agency Pension Fund’s (EAPF) policy to address the impacts of climate change sets out its governance and reporting framework in relation to climate change. It sets out the objective of ensuring the fund’s investment portfolio and processes are compatible with keeping the global average temperature increase to below 2°C relative to pre-industrial levels.

The policy identifies the ways in which climate change creates risks and opportunities for investors, and includes specific targets for reducing the proportion of investments in fossil fuels and increasing the proportion in clean energy sources, within set timeframes. It commits the EAPF and the Brunel Pensions Partnership investment pooling vehicle of which it is a member to working with a range of named external partners to develop climate-related data, refine investment approaches and actively engage with investee companies in managing climate-related risk and opportunity.

The EAPF also commits to using the Task Force on Climate-related Financial Disclosures (TCFD) framework, both for its own reporting and that of its investee companies. It will provide regular updates on its progress via its newsletters, website and annual report.

The policy provides a set of demanding standards against which the fund’s future actions can be measured, giving reassurance to scheme members that their pension is being managed in a sensible, prudent, sustainable manner.

RECOMMENDATIONS:

- ▶ Governance body members should undertake training to familiarise themselves with the economic impacts of climate change, the impact it will have on investment portfolios and how investors are responding.
- ▶ Governance bodies should set out how they believe climate change relates to their investment strategy in their Statement of Investment Principles, and state how they are mitigating climate change-related risk.
- ▶ The work programme that pension funds set for their investment advisers should include time allocated to assessing climate-related risk and opportunity, and incorporating these considerations into the investment strategy.
- ▶ Time should be allocated to reviewing climate-related risk and opportunity at governance body meetings on at least an annual basis.

INVESTMENT

While many pension funds will delegate their investment decisions to an asset manager, they are still responsible for investment governance and oversight. Therefore governance bodies should seek to understand and influence their managers' approach to climate change. When assessing prospective and existing managers, schemes and their advisers should request climate-related information – for example, asking if they have analysed potential implications for their portfolios of different global temperature increase scenarios, or if they have engaged with companies over their carbon-reduction strategies.

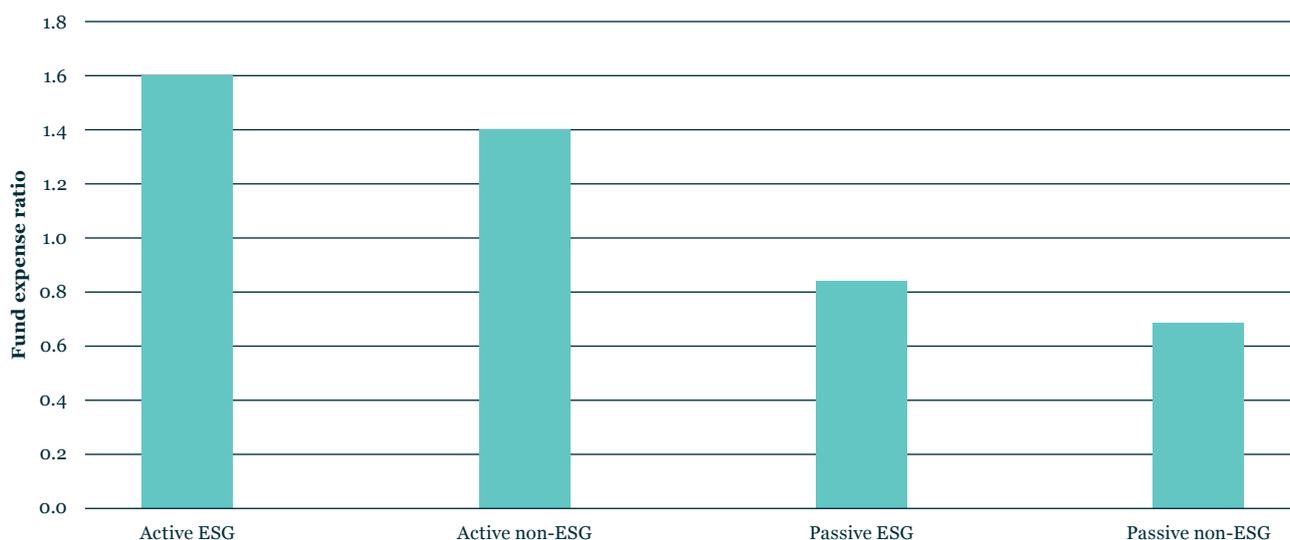
As the Local Authority Pension Fund Forum (LAPFF) policy framework notes, many investment opportunities resulting from climate change will be in alternative asset classes that may be unfamiliar to governance body members. Pension funds should seek to familiarise themselves with these asset classes, and seek advice from the relevant experts in order to take advantage of these opportunities.

The divestment movement, calling for schemes to exclude companies involved in the fossil fuel extraction process or energy-intensive industries from their portfolios, has generated a high profile in recent years. This approach represents one option for pension funds seeking to position themselves appropriately for the decarbonisation of the economy, especially for those with an 'active' investment strategy that allows them to identify particular assets on an individual basis.

Pension funds thinking about full or partial divestment should consider several areas: the opportunity cost of divesting from fossil fuel users and producers, the governance body's beliefs regarding the long-term viability of these industries, the plans that individual companies in these sectors have to change their business model, and whether engagement with these companies (as opposed to divestment) can achieve positive results. Ultimately, the governance body's fiduciary duty and the long-term, risk-adjusted returns, net of fees, delivered for members should be the central factor in decision-making.

For many pension funds, cost constraints will encourage passive investment via an index fund. While, as already noted, regular indexes (particularly in the UK) may contain a high proportion of fossil fuel or energy-intensive companies, indexes with a 'green tilt' are also available and becoming increasingly commonplace. Figure 5 shows that passive ESG funds can be close to cost-competitive with passive non-ESG while also removing exposure to the significant risks resulting from regulatory action, technological change or reputational damage related to climate change. As the opening section of this guidance demonstrates, these risks are significant and governance bodies should be wary of the value of ostensibly cheaper investment products that fail to account for them.

Figure 5: Expense ratio of UK-domiciled funds³⁴



³⁴ PLSA, ESG Risk in default funds: Analysis of the UK's pensions market (2016) via <https://www.plsa.co.uk/portals/0/Documents/0619-ESG-risk-in-default-funds-analysis-of-the-UKs-DC-pension-market-260417.pdf>

The composition of green indexes differs depending on the criteria of different index providers. Factors that governance bodies may wish to take into account or discuss with their advisers could include whether or not the index is dynamic (i.e. can its composition or weightings change in line with companies' approach to climate change), whether it is forward-looking or based on historical emissions, and whether it concentrates investments in particular sectors.

BOX 3: NEST CASE STUDY

NEST began its approach to integrating climate change considerations into its investment strategy by meeting with relevant experts including the UK government climate change committee, the IPCC and economists specialising in climate change. It was keen to understand the impacts of climate change on capital markets, and whether it was an issue it should be taking seriously. The answer was an emphatic 'yes.'

NEST invests passively in developed market equities. Its initial exploration found that – at the time, in 2013 – many low-carbon indexes were unsophisticated. Common issues included blanket exclusion of companies based on backwards-looking carbon data, or a simplistic focus on low-carbon emitters, meaning that constituent companies were concentrated in particular industries.

NEST worked with UBS to develop a bespoke index, providing lower exposure to companies whose business models are at risk in a low-carbon future, such as those with large coal reserves, and higher exposure to companies more likely to do well, such as manufacturers of green technology. The index also weights companies according to their emissions 'glide path' and commitments to decarbonisation. It contains a stewardship element, with NEST writing to underweight constituents to explain how investments can be increased.

The index has outperformed its benchmark comparator group in its first seven months, so in addition to safeguarding against climate risk, it also appears to be generating promising returns.

RECOMMENDATIONS:

- ▶ Governance bodies should quiz both current and prospective asset managers about their approach to climate change, and should consider the quality of their response when awarding mandates.
- ▶ Governance bodies should proactively seek out low-carbon investment options where they deliver comparable investment returns that would enhance the diversity of their portfolio. This approach should be applied both to the selection of individual investments across all asset classes – for example green infrastructure projects, or companies with a business strategy aligned with climate change mitigation efforts – and to index selection.

ENGAGEMENT

Investment choices are not the only means of generating value for pension funds or accounting for climate-related risks and opportunities. As shareholders, pension funds can also exert influence over the companies they invest in, to encourage them to introduce more sustainable business models.

As we have noted, this can be done by incorporating engagement on climate-related issues into asset manager selection, and setting out stewardship expectations of their managers. Whether or not the managers can demonstrate specific examples of how they have engaged with investee companies over climate-related issues and achieved positive change may provide an insight into how seriously they take this issue.

Expectations of investee companies (either raised directly by pension fund investors or via instructions to their asset managers) could relate to reporting of their greenhouse gas emissions and strategy for implementing a sustainable business model compatible with greenhouse gas reduction targets. The Transition Pathway Initiative, founded by the National Investing Bodies of the Church of England and the Environment Agency Pension Fund, has developed a free online toolkit for analysing fossil fuel and energy intensive companies' plans for transition to sustainable business models.³⁵

The toolkit provides a practical aid for pension funds' engagement activities. For example, the Church of England investing bodies are using it to profile climate-related risk in their major holdings, to assess their managers' holdings and how they have addressed transition risk, and to target engagement to those companies that are not aligned with the Paris Agreement targets, as well as inform AGM voting activities and potential divestment decisions.

The 'SMART' framework for project management is a further resource that can be applied to engagements. Examples of practices that could fit the SMART criteria are as follows:

- ▶ **SPECIFIC** – engagement should have a clear objective (e.g. reducing a company's reliance on fossil fuels)
- ▶ **MEASURABLE** – there should be clear criteria for measuring progress towards this objective (e.g. milestones for clean energy supply)
- ▶ **ACHIEVABLE** – can this be realistically achieved (e.g. are there examples of similar companies doing likewise? Is there buy-in from senior management?)?
- ▶ **RELEVANT** – will the engagement objective significantly remove climate-related risk or exploit opportunities deriving from the economic transition?
- ▶ **TIME-BOUND** – engagements should be subject to an agreed timeframe, with contingency measures (such as divestment or AGM voting escalation) if the intended objectives are not achieved within this timeframe.

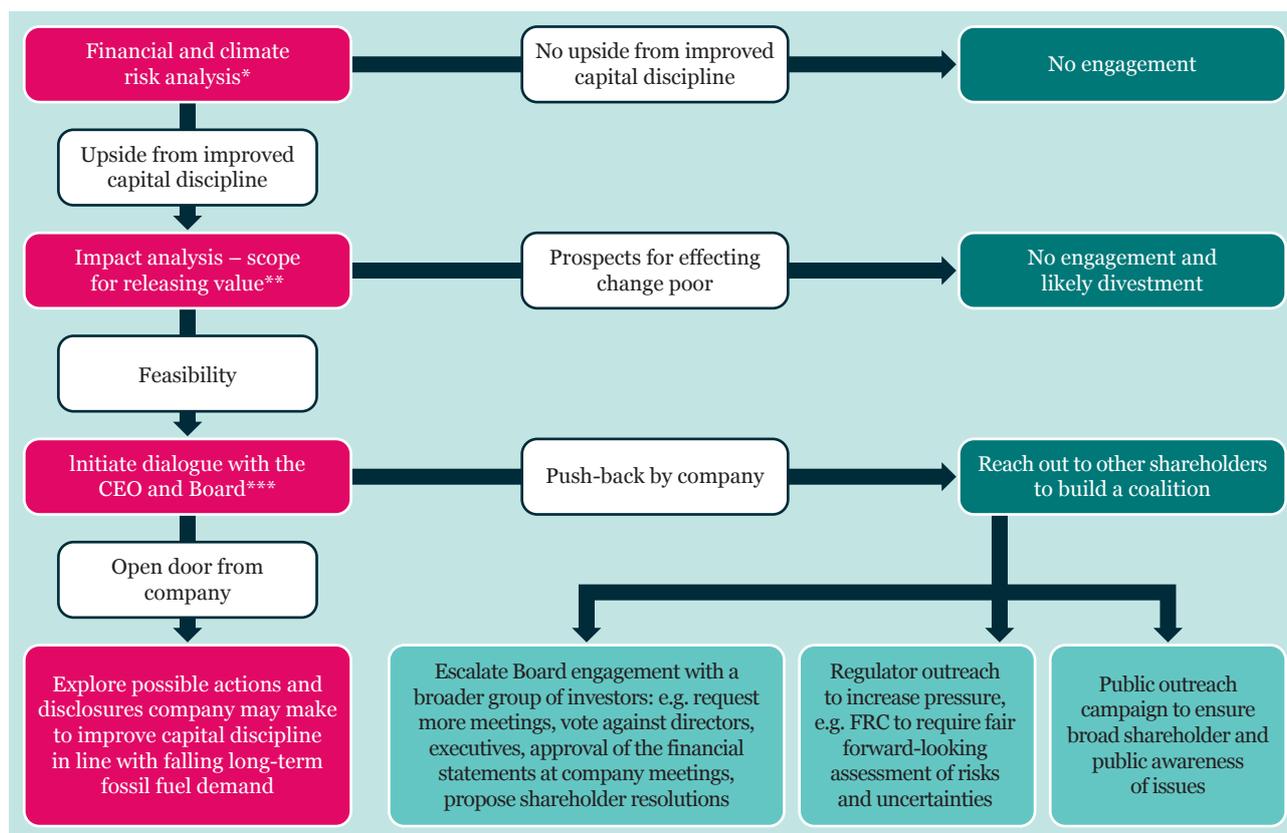
When working collectively with other investors, pension funds have greater scope to influence companies. There are a number of vehicles for pension funds' collective engagement, including:

- ▶ The Local Authority Pension Fund Forum (LAPFF) for local government schemes
- ▶ The Institutional Investors group on Climate Change (IIGCC)
- ▶ The PRI (Principles of Responsible Investment) campaign established by the UN.

Figure 6 frames Sarasin & Partners engagement process for their Climate Active strategy from initial contact with investee companies to escalation in partnership with other investors. It provides a useful model for identifying companies that might benefit from engagement over how their business model adapts to a carbon-constrained world and how to manage the process.

³⁵ London School of Economics, *Transition Pathway Initiative* (2017) via <http://www.lse.ac.uk/GranthamInstitute/tpi/>

Figure 6: Climate Active Endowment Fund engagement process



Notes

- * The financial and climate risk analysis will involve several financial and carbon emission metrics to allow us to narrow down the potential list of engagement candidates. The focus is on finding underperforming companies with respect to climate risk management, that offer potential upside from improved management.
- ** The impact analysis focuses on prospects for effecting improved capital discipline at the company. Considerations include: strength of the investment / engagement case; size of our holding; prospects for building an investor coalition with sufficient voting power; responsiveness / vulnerability of the Board; support of the broader media and political community.
- *** Dialogue may begin with a conversation at a regularly scheduled meeting, or a letter setting out in broad terms our concerns with a request for a meeting. Normally, the matter of capital discipline and strategy would be raised with the Board.

Source: Sarasin & Partners

The Climate Active Endowment Framework example highlights the value of AGM votes as a vital tool for escalating engagement when the company leadership fail to heed shareholder concerns. At UK AGMs typical resolutions include an advisory vote on the annual report and accounts and the re-election of individual board members. Where engagement has failed to result in appropriate efforts to incorporate climate change considerations into company governance, strategy and reporting, pension fund investors can vote against either the annual report or the re-election of individual directors, including the Chair. They can also vote against the remuneration policy, if this fails to incentivise the executive team to prioritise sustainability and a business model compatible with climate change mitigation efforts.

Similarly, shareholder resolutions on climate change have become increasingly commonplace and are a useful tool for influencing companies over climate-related issues. For example, the ‘Aiming for A’ coalition of investors proposed a series of resolutions at companies in the oil and gas and extractive industries to conduct a review of the compatibility of their business models with greenhouse gas emissions reduction targets. These resolutions were largely successful, and the resulting reviews will enable better information on which investors can base their future investment choices and engagement priorities.

BOX 4: HSBC PENSION FUND CASE STUDY

In Q1 2017, the HSBC Bank UK Pension Scheme allocated its DC equity default investments to a new fund (The Future World Fund) with the aim of improving risk-adjusted returns, protecting members from climate change risk and engaging more strongly with investee companies on climate transition issues.

The fund is based on the FTSE All World Index ex Controversial Weapons Manufacturers universe of companies, but weights holdings according to value, quality, low volatility and size factors and then tilts away from carbon reserves and carbon emissions and towards green revenues. This creates the FTSE All World (ex CW) Climate Balanced Factor Index.

LGIM (the asset manager of the fund that is benchmarked against the new index) targets companies in six sectors for climate transition engagement:

- ▶ Oil and gas – companies that extract and distribute oil and gas
- ▶ Mining – companies that extract ores, especially coal
- ▶ Electric utilities – companies that generate electricity, mainly by burning fossil fuel
- ▶ Automobiles – companies that manufacture cars and vehicles
- ▶ Banks and insurance – companies that finance/own projects and companies linked to climate change
- ▶ Food retail – companies that provide a wide variety of food and consumer goods.

LGIM wrote to the Chairs of the 84 largest companies in these sectors wanting to discuss the plans that company was making in transitioning its business to a sustainable future. If after a year of engagement the company was not making sufficient progress on such plans in LGIM's opinion, then LGIM would vote against the re-election of the company's Chair at the next AGM with all of its assets under management. LGIM has approximately £300 billion invested in equities. This is the LGIM Climate Impact Pledge. The Future World Fund goes one step further in that although such companies would remain part of the index they would be divested from the fund.

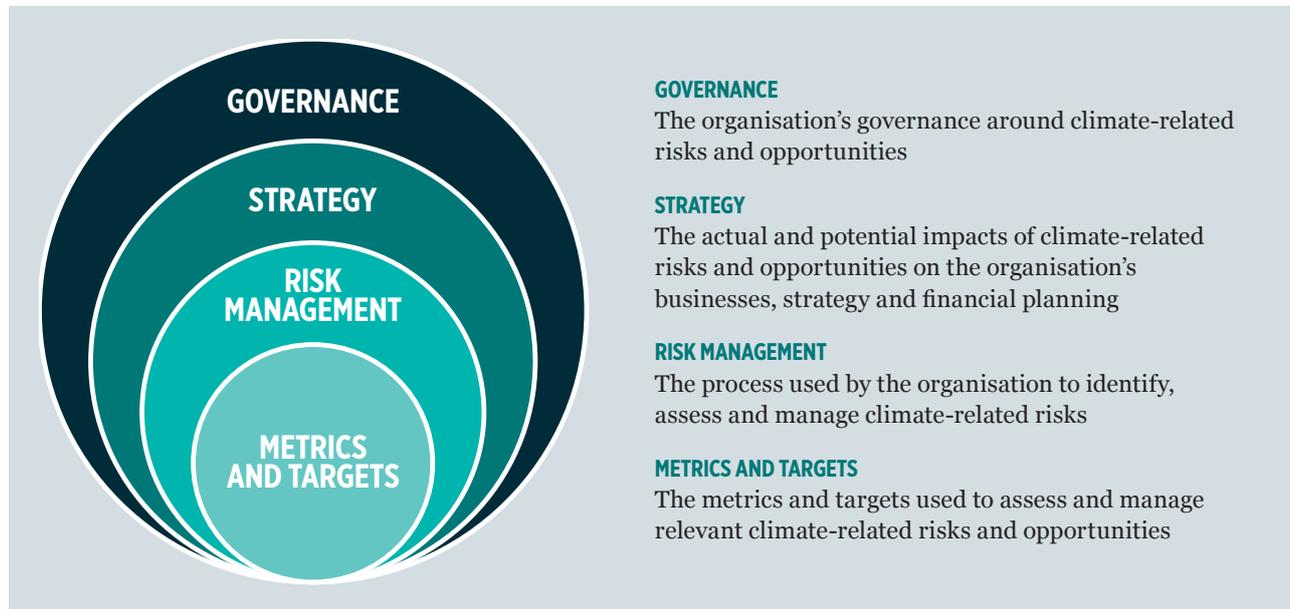
RECOMMENDATIONS

- ▶ Governance bodies should review current and prospective asset managers' approach to engagement on risks and opportunities resulting from climate change – including whether or not they can demonstrate a track record of successful engagements in this respect.
- ▶ Pension funds should also engage directly with investee companies, where they invest directly in those companies, and set out clear expectations for asset managers in terms of climate-related engagement when they invest on their behalf.
- ▶ Pension funds should support collective engagement and join the relevant initiatives that facilitate this.
- ▶ When negotiating contracts with asset managers, pension funds should put policies in place to ensure that at company AGMs their shares are voted in support of companies and directors that take an engaged, long-term approach to the governance, strategy and reporting of climate-related issues, and against those that do not. Where full control over voting policy is not possible - for instance with some pooled funds, involving multiple other investors alongside the pension fund – governance bodies should consider setting out voting policies to managers, and asking them to explain when they do not vote in line with them.

REVIEWING AND REPORTING

The Financial Stability Board’s Task-Force on Climate-related Financial Disclosures (TCFD) sets out a framework for reporting relevant to pension funds, endorsed by the UK government.³⁶

Figure 7: TCFD reporting framework



The framework is useful, both in terms of the reporting standards that pension funds expect from their investee companies and of their own reporting to beneficiaries, regulatory bodies and other stakeholders.

The oversight structures outlined in the ‘governance’ section of this guide would clearly fall under the TCFD’s ‘governance’ heading, while reporting of the practices outlined in the ‘investment’ and ‘engagement’ sections could be included in reporting on strategy and risk management.

Measuring the overall climate impact of the pension fund’s aggregate investments could support the development of metrics and targets. Questions that governance bodies should bear in mind during this process could include whether or not they measure their portfolio’s current emissions or attempt the more ambitious target of projecting future emissions based on investees’ carbon reduction plans; as well as the methodologies used by different research agencies. Investment advisers should be able to provide advice in this respect.

³⁶ Financial Stability Board Task Force on Climate-related Financial Disclosures, *Final TCFD Recommendations Report* (2017) via <https://www.fsb-tcfid.org/publications/final-recommendations-report/>

BOX 5: WEST MIDLANDS PENSION FUND CASE STUDY

Within its annual report, the West Midlands Pension Fund includes a section on responsible investment, including a climate change report structured in line with the TCFD framework.

Topics covered under each of the framework's sections include:

- ▶ **Governance – quarterly updates on the fund's climate change strategy at pensions committee meetings and training for committee members.**
- ▶ **Strategy – the fund's policy of incorporating climate considerations into asset manager selection and review, and encouraging better disclosure from investee companies through engagement and AGM voting. The strategy is set by the pensions committee, but the fund's staff are responsible for day-to-day implementation.**
- ▶ **Risk management – for active equities, climate risk is one of a number of factors considered as part of investment selection, while it is part of the due diligence for private equity and infrastructure. Climate-related regulatory pressures are the focus of investment risk assessments, but factors such as the physical impacts of climate change and supply chain exposure are also considered.**
- ▶ **Targets and metrics – The fund is reviewing the use of portfolio greenhouse gas emissions measures and targets, and has already estimated the carbon footprint of an equity portfolio that it manages in-house.**

RECOMMENDATIONS:

- ▶ Governance bodies should detail to their beneficiaries how climate change considerations are incorporated into their investment practices in their annual reports, using the TCFD framework for reporting.
- ▶ Governance bodies should seek advice from investment advisers on measurement of the past and future impact of their investments on climate change, and report on this to their beneficiaries.

CONCLUSIONS AND NEXT STEPS

Taken together, these recommendations represent a substantive programme that pension funds can undertake in order to give their beneficiaries confidence that risks to their incomes in retirement deriving from climate change are being responsibly managed.

The PLSA provides a number of resources for pension fund governance bodies to support good stewardship and responsible investment practices. Regulatory bodies, investment consultants and civil society organisations can also provide useful tools for pension funds interested in this issue.

For more information, please contact PLSA Policy Lead for Stewardship and Corporate Governance Luke Hildyard via [**luke.hildyard@plsa.co.uk**](mailto:luke.hildyard@plsa.co.uk).







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