



A climate for change

A trustee's guide to understanding
and addressing climate risk





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In January 2005, the Carbon Trust and the Institutional Investor Group on Climate Change jointly commissioned Mercer Investment Consulting to produce a guide for pension trustees on climate change. The draft guide and accompanying training materials were piloted on two trustee training seminars held in London and Manchester in March 2005, and subject to extensive feedback.

The final materials (this guide and the accompanying training slides) are available free of charge, under licence from the Carbon Trust. Pension trustees have a unique role to play in the investment community, and their involvement and understanding of this issue is critical.

“Climate change is the greatest long-term challenge facing the international community. That might seem an extreme statement in a world trying to cope with the pressing challenges of terrorism, famine, war and disease; unfortunately, it’s true.”

The Rt. Hon. Margaret Beckett,
Secretary of State for Environment, Food and Rural Affairs



1 Executive summary

Climate change has become an important global, economic, social and political issue. It was identified as one of the key themes to be addressed during the UK's Presidency of the G8 and European Union in 2005. The Kyoto Protocol became legally binding for signatory nations in February 2005, eight years after its initial conception.

Climate change is also one of the most financially significant environmental issues facing investors today. While other environmental risks can be highly relevant to specific sectors, climate risk distinguishes itself through its widespread potential for impact on individual companies, across sectors and whole economies.

The impact of climate change will be felt directly (in terms of damage to agriculture, forestry, real estate and water), and will also have serious consequences for the sectors impacted by policy-driven strategies to mitigate climate change (such as energy, electric utilities, and autos).

Scientists have predicted that, over time, emissions of greenhouse gases "may have to be reduced by as much as 80 percent in order to stabilize the climate, suggesting very dramatic changes in how we produce and use energy".¹ To get only part of the way there will require a massive shift in our industrial, competitive, and economic landscape. Even more striking is that this

is no longer an issue for the leaders of the future to sort out: this is upon us now.

The goal of this publication is twofold:

- ▶ To raise awareness amongst pension fund trustees about the relevance of climate change as a fiduciary issue; and
- ▶ To communicate the opportunities that exist for trustees to address it.

It is crucial that actions to address climate risk be taken by pension fund trustees. This is because it is unlikely that other key actors in the investment community (consultants, investment managers) will make significant or early moves toward integrating climate change factors into investment decision-making in the absence of explicit client demand and leadership. Even though it is linked to financial performance, a number of barriers exist which prevent other market players from properly addressing the issue. Demand from trustees is therefore critical to ensuring that the assets in their care are properly managed in light of climate risk.

There is no escaping the reality that climate change is just one of the many issues facing pension trustees today. As such, it is essential that trustees have clear sight of the steps that can be taken to address the issue.

¹ Cited from "Questions and Answers for Investors on Climate Risk", Guide prepared for the INCR (Investor Network on Climate Risk) by CERES and the World Resources Institute, December 2004.

This is where; *A climate for change: A trustee's guide to understanding and addressing climate risk* comes in. This publication provides pension trustees with:

- ▶ Relevant, high-level information on the potential for climate change to impact financial risk and returns;
- ▶ An exploration of the roles and responsibilities of fiduciaries in light of this; and
- ▶ Information about the steps that can be taken to address climate risk, as outlined here:

Three steps to addressing climate risk

▶ **Step 1: Assess your understanding; determine associated investment position and policies**

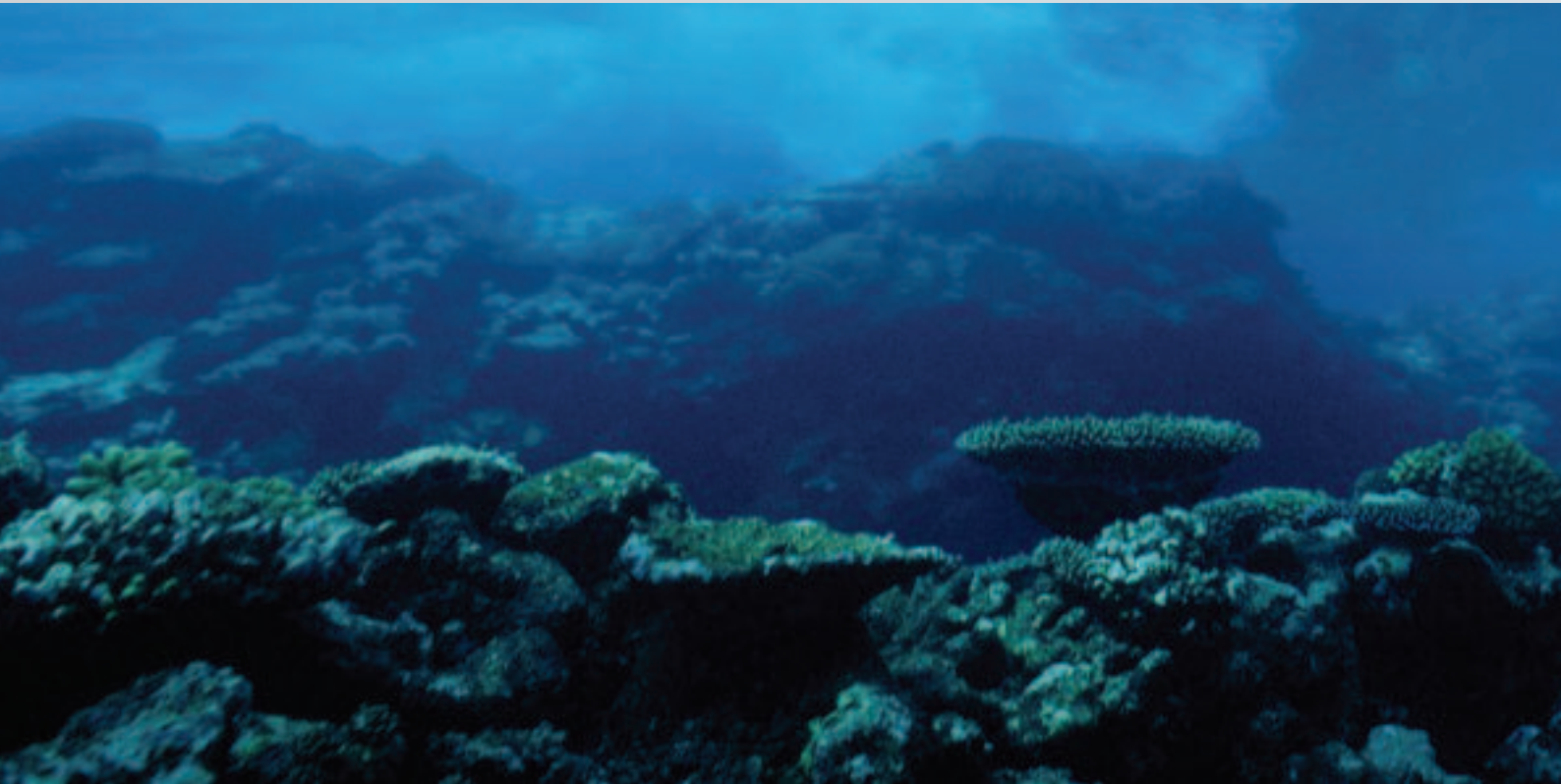


▶ **Step 2: Explore the current approach of your fund, and that of your external providers**



▶ **Step 3: Implementation options**

This report has been produced by Mercer Investment Consulting, for the Carbon Trust and the Institutional Investor Group on Climate Change (IIGCC). Further information and contact details for each organisation can be found at the end of this booklet.



2 Climate change: a primer

The vast majority of scientists agree with the growing consensus (supported by empirical evidence) that climate change is both happening and is a cause for concern.

Since the beginning of the industrial revolution, humans have been increasing the concentration of carbon dioxide (CO₂) and other greenhouse gases in the atmosphere through the burning of fossil fuels and the cutting down of forests. Simply put, these emissions have thickened the greenhouse blanket which covers the earth, causing gases to be trapped and the surface temperature of the earth to rise slightly.

At first sight, climate change may not seem a major problem: The temperature rises seen to date seem relatively low, and in certain regions, prospects of a warmer summer might initially seem attractive. Unfortunately, the situation is much more complex.

The Intergovernmental Panel on Climate Change (IPCC) was established in 1988 to assess scientific, technical and socio-economic information relevant for the understanding of climate change. Figure 1 overleaf records the average global surface temperature as measured since 1860 (red line), compared to computer simulations predicting average temperatures that both exclude (left) and include (right) the effect of emissions caused by human activity.

We can see that actual temperature has correlated with the scenario in which human-made emissions are a factor.

The main estimates of global temperature change produced to date, from a wide set of scenarios by the IPCC are illustrated and compared against the past 1000 years in Figure 2 overleaf. This projects that global temperature will increase by 1.5 to 5.8°C by the end of the century.²

Other than changes to temperature and sea-level, the IPCC has included the following in the list of observed changes related to climate change:

“the thawing of permafrost, later freezing and earlier break-up of ice on rivers and lakes, lengthening of mid to high-latitude growing seasons, poleward and altitudinal shifts of plant and animal ranges, declines of some plant and animal populations, and earlier flowering of trees, emergence of insects, and egg-laying in birds”.³

As temperatures rise, these changes will intensify, with direct consequences, such as rising sea levels (threatening coastal communities, fisheries and coastal ecosystems) and more extreme weather events, including droughts, floods, and storms (threatening widespread impacts). Underlying precipitation (rainfall) patterns are also predicted

² Source: Intergovernmental Panel on Climate Change (IPCC).

³ Cited from IPCC Third Assessment, Climate Change 2001: Report on Impacts, Adaptation and Vulnerability (Policymakers Summary).

“...an unstable climate could lead to instability in some societies and economies. And as economic instability increases risk and undermines investment, so climate change will come to threaten our economic development and growth.”

Gordon Brown MP
Chancellor of the Exchequer

to change, with agricultural, operational and broader humanitarian implications.

Further detailed evidence on the facts, scenarios, uncertainty and implications surrounding climate change can be found in the Carbon Trust's 2004 publication *The Climate Change Challenge*.

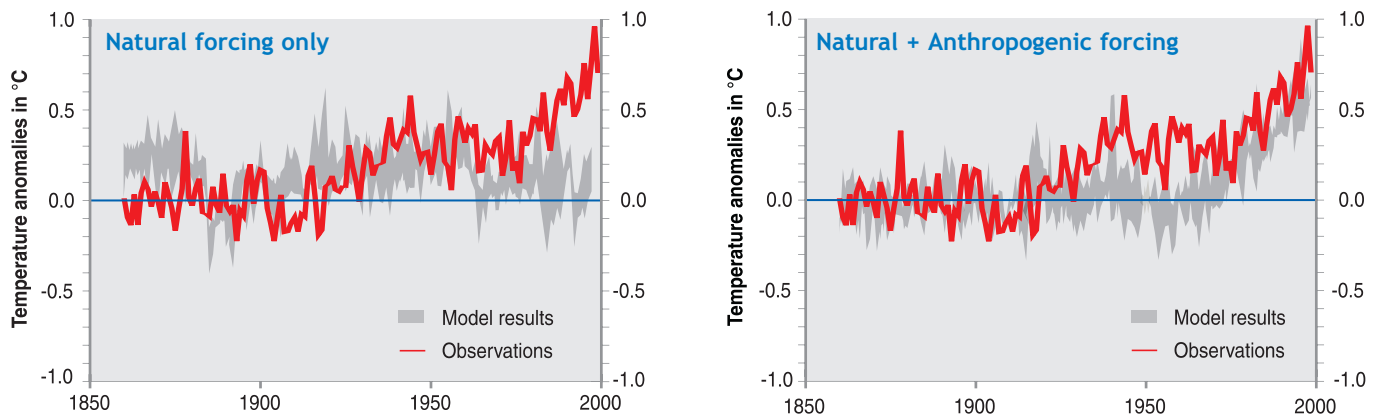
During his speech to the Energy and Environment Ministerial Roundtable in March 2005, Gordon Brown MP, Chancellor of the Exchequer, stated that “...an unstable climate could lead to instability in some societies and economies. And as economic instability increases risk and undermines investment, so climate change will come to threaten our economic development and growth”.

Increasing efforts by governments to mitigate climate changes are underway, seeking to control and reduce the emissions of greenhouse gasses by individuals, businesses and governments. These mitigation strategies have serious consequences and entail some significant changes: it is likely that the impact of many these policies will be felt acutely by businesses, with potential profitability and competitive positioning implications. Not all is bad news, and the challenge clearly introduces new opportunities. However, climate change action is needed and happening now - companies who do not recognise this yet, are putting themselves at increased risk.

As Adair Turner, Vice Chairman, Merrill Lynch stated in the inaugural Carbon Trust lecture in April 2003, “the problem [of climate change] is eminently solvable, but only with effective action and political leadership today. And without action and leadership today, the costs of adjustment will grow, and the dangers of irreversible damage will grow. In order to develop the energy efficiencies and renewables which will cut 2050 emissions by 60% at a cost of only 1 or 2% of GDP, we need to start now on the technological development and the capacity and efficiency investments required.”

Considering that both the physical and mitigation-related policy impacts of climate change will influence the ability for companies to create and maintain wealth for shareholders (in the short- and long-terms), pension trustees will want to ensure that these risks (and associated opportunities) are being addressed in relation to the funds in their care.

Figure 1 Comparison between modelled and observed temperature rise since the year 1860



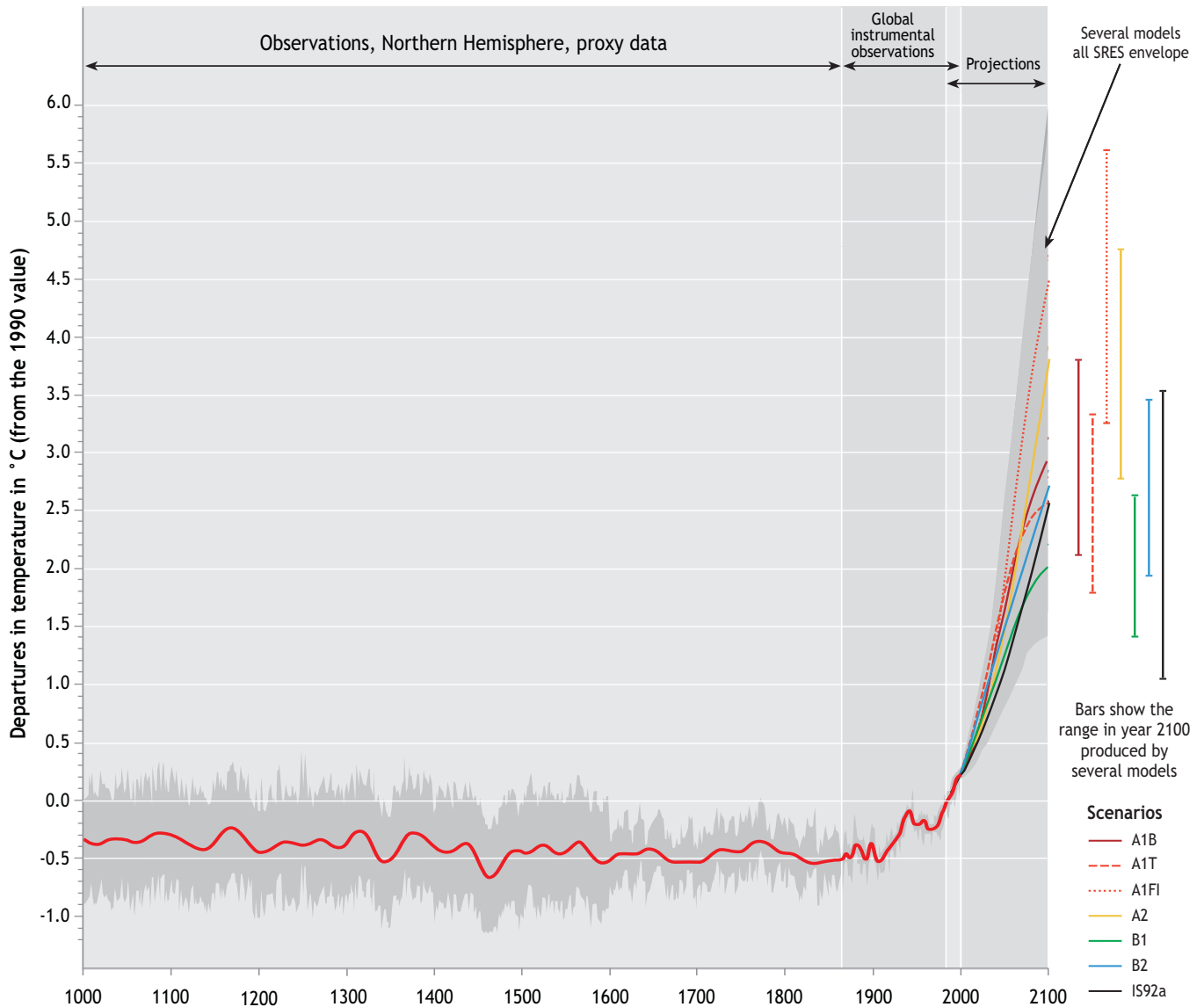
These figures show average global surface temperature as measured (red line), compared to estimates from a computer simulation, respectively without (left) and with (right) the effects of human emissions included.

Source: Intergovernmental Panel on Climate Change, Third Assessment, Synthesis Report, 2001 (Figure SPM-2).

“without action and leadership today, the costs of adjustment will grow... we need to start now on the technological development and the capacity and efficiency investments required.”

Adair Turner
Vice Chairman, Merrill Lynch

Figure 2 Projected temperature change compared to past 1000 years



The chart shows projected changes in global temperature (relative to 1990) for this century compared to the record since 1000 (northern hemisphere proxy data only available for period before 1860, direct global measurements since then). The lines show (past) the 50-year averaged and (future) projected temperatures associated with the various emission scenarios of the IPCC assuming average climate sensitivity. The grey zones illustrate (past) estimated uncertainties in measurements, and (future) in temperature projections arising from combination of different scenarios and climate sensitivities.

Source: Intergovernmental Panel on Climate Change, Third Assessment Synthesis Report (Figure. SPM-10b).



3 How climate change can affect pension assets: risks and opportunities

Pension funds are substantial owners of assets. By the end of 2003, for example, UK based pension funds owned 16% of the UK equity market.⁴

At the end of 2004, the average UK pension fund had about 70% of its assets invested in listed equities, of which approximately 40% were in UK equities and 30% in overseas equities.⁵ When you include an approximate allocation of 2.5% to corporate bonds, this tallies a total significant exposure to corporations of 72.5%. Hence, with such a significant exposure, any impact from climate change on these underlying companies will have a subsequently significant effect on the performance of UK pension funds.

This is not to say that the other 27.5% of assets are 'sheltered from the storm'. Other types of assets, and hence asset classes, are also vulnerable to climate change impacts. Property investments, for example, can be impacted negatively both by the physical impacts of climate change (such as increased wind speeds or storms), and by the mitigation strategies introduced because of it (for example, energy efficiency or transportation policies).

In this chapter, we will look first at the potential for climate change to impact corporations (and hence 70+% of the average UK pension plan's underlying assets), and then more broadly at its potential to impact other asset classes.

"The issue about climate change is that there are big risks which we do not really understand. But we know there is a cost oncoming and that is going to hit the bottom line in various ways either in the costs of the products they [companies] use or in the value of what they sell."

Peter Scales
Chief Executive, London Pensions Fund Authority.

⁴UBS Pension Fund Indicators Report 2005 (Figure 3.7).

⁵WM Company.



Climate risk and corporate performance

The exact impact of climate risk on corporate performance is of course impossible to measure, but there is growing evidence that it can be material in a number of ways.

As an example, research last year by Innovent Strategic Value Advisors on the US electricity sector indicated that, even under a relatively conservative scenario, up to 5.1% of market capitalisation could be at risk from the consequences of climate change and absent risk management action. Under a more high-risk (but still plausible) scenario, their calculations indicate this figure could be over ten times higher.⁶

It is increasingly clear that the impact of climate change on corporations is not just something to worry about over the longer-term, it is an issue to consider today. Companies are already being impacted in financial terms due to the effects of climate change on their costs, revenues, assets or liabilities.

The case studies presented in separate panels over the following pages provide examples of companies that have taken initiatives with regard to climate change, which have resulted in both notable efficiency gains and financial benefits.

Pension plans as Universal Owners

The concept of universal ownership has emerged to refer to large institutional investors that, because of their size, own a 'slice' of the investable market. Large investors are holders of a broad selection of different companies and other assets, and are often therefore tied into the performance of markets or economies as a whole just as much as they are in the performance of individual companies. This is particularly visible with funds which employ index or passive investing strategies. Hence, as a result of their broad ownership, these investors have a vested interest in the long-term health of the economy as a whole, making cross-market issues like climate change particularly relevant.

⁶ Innovent Strategic Value Advisors, "US Electric Power Sector – April 2004".



Photo: Courtesy of BT

BT is one of Europe's leading providers of telecommunications services, and is one of the UK's largest consumers of electricity. This made them a target during the UK government's 1980s push towards reduced energy consumption. In reaction to this, BT:

- ▶ Identified and eliminated waste energy through new computer-based energy management systems.
- ▶ Took into account the whole life costs of its plant when assessing purchases, creating incentives for the purchase of more efficient equipment.
- ▶ Acted as a pioneer in the large scale purchase of renewable energy.

The financial benefit as a result of energy savings is equivalent to £119 million since 1991.

Source: The Climate Group; www.theclimategroup.org

The specific risks that companies face in this area depend on their sector and geographic location. A recent document prepared for the US State Pension Fund-led Investor Network on Climate Risk⁷ classifies these risks as five broad categories, as described/adapted here:

1. **Regulatory risk:** Efforts by governments at the international, national and state levels to regulate Greenhouse Gas (GHG) emissions will have direct implications for the industry sectors and businesses with the highest emissions. The ratification of the Kyoto Protocol, as well as the advent of the Emission Trading Scheme in the European Union (the EU ETS) in January 2005 makes this the most potent risk faced by investors. The specific policy designs under Kyoto and the ETS will determine which sectors will be affected and the severity of financial impacts, but the following sectors are most likely to face significant regulatory risk due to their high GHG emissions: electric power, manufacturing, oil and gas, and transportation.
2. **Physical risk:** Some sectors and businesses will face direct consequences from the physical impacts of climate change, including droughts, floods, storms and rising sea levels. Sectors such as agriculture, fisheries, forestry, health care, insurance, real estate, tourism and water may be particularly exposed because of their dependence on the physical environment, human health, water and weather—all of which are now less predictable.
3. **Litigation risk:** Companies could face risk from lawsuits. For instance, in an initiative led by New York Attorney General Eliot Spitzer, eight states and New York City have filed an unprecedented lawsuit against five of America's largest power companies, demanding that they cut carbon dioxide emissions because of global warming. The companies named in the suit are American Electric Power Co., Southern Co., Xcel Energy, Cinergy and the federal Tennessee Valley Authority. Similar to the lawsuits faced by the tobacco and asbestos industries, there is a possibility that companies and sectors responsible for large amounts of GHG emissions could be liable for damages associated with the physical effects of climate change (e.g., flooding, severe weather damage, crop failures, etc.).
4. **Competitiveness risk:** Companies that take positive and proactive measures to mitigate climate risk may create a competitive advantage for themselves relative to the rest of their sector. These advantages may take the form of lower costs and higher profit margins and/or enhanced reputation and customer loyalty.
5. **Reputational risk:** Companies that are viewed negatively with respect to climate change (either for their politics or their pollution) may face backlash from consumers in markets where the public is concerned about climate change. At present climate change is not a material consumer issue, but precedents show that this can change rapidly. When this happens, recent analysis by Lippincott Mercer for the Carbon Trust shows that the implications for individual sectors could be substantial.⁸

⁷ Reproduced from "Questions and Answers for Investors on Climate Risk". Guide prepared for the INCR (Investor Network on Climate Risk) by CERES and the World Resources Institute, December 2004.

⁸ The Carbon Trust "Brand Value at Risk From Climate Change", March 2005.

“Business generally accepts that we need to move to a low carbon economy, whether the driver is climate change or the scarcity of secure, low cost hydrocarbons. The question is over what time scale this transformation will happen and the challenge is to retain and create shareholder value in the process.”

Tom Delay

CEO, The Carbon Trust

Speech to G8 Ministerial Round Table on Energy and the Environment, March 2005

Although climate change does represent risks, it also presents opportunities. For example, the need to mitigate climate change will result in increased renewable energy development and deployment, as well as demand (and potentially fiscal support) for new energy efficiency technologies. The European Emissions Trading Scheme (EU ETS) which is already in place in Europe not only poses a risk, but also gives companies flexibility. The EU ETS allows participants to buy and sell permits to release CO₂ into the atmosphere, allowing companies which exceed individual CO₂ emissions targets to buy allowances from other companies. While providing short-term flexibility to high emitters, this allows companies investing in cleaner technologies to turn these investments into profits, and nurture the growth of tomorrow's technologies.

In addition, to the EU ETS, other climate-linked policy facing UK-based companies includes:

- ▶ The Climate Change Levy (a charge on electricity use introduced in 2001) and the Climate Change Levy Agreements (exemption agreements, provided targets to reduce emissions are agreed);
- ▶ The Renewables Obligation (a mechanism designed to incentivise electricity producers to provide renewable electricity); and
- ▶ Other EU legislation, including the Large Combustion Plant Directive, the Energy Performance of Buildings Directive and the broader package of policies under the European Climate Change Programme (the ECCP).

Analysts look at a myriad of factors associated with a company when assessing investment potential. For longer term investors, it can be risky if analysts are not yet measuring and accounting for the risks brought to companies by climate change when assessing investment opportunities in general (see chapter 4 for a discussion of what barriers currently exist to this type of analysis being undertaken).

Climate risk and other asset classes

Property

Property is the conduit (through its construction, use and demolition) for about half of all CO₂ emissions in the UK.⁹ This naturally makes property a likely future focus for policy, the impact of which has yet to be fully understood in the property sector. To date, asset valuations and market pricing have been slow to reflect the environmental and running cost benefits of low-energy buildings or account for the risks of accelerated functional obsolescence for increasingly undesirable energy inefficient buildings. However, legislation will very likely change this.

The EU Directive on the Energy Performance of Buildings (which comes into effect in 2006), will impact the market significantly in this regard, through the requirement for widespread disclosure of information around energy efficiency in buildings and the establishment of increasingly stringent requirements on new and refurbished buildings. Similarly, any trend in transport policy towards encouraging greater use of public transport would impact on the relative attractiveness of building locations, potentially weakening the utility of car-borne destinations and reinforcing those well serviced by public transport.

Property also has a high level of exposure to the physical impacts of climate change. The main risks include increased incidence of flooding, wind damage and subsidence. Extensive analysis of both location and physical construction will be important aspects of 'climate-proofing' property investments.

Meeting demands for building comforts (such as increased air conditioning under warmer conditions) will complicate the situation still further. These demands might more often have to be met through innovative building techniques and thermally efficient properties, rather than energy-dependent devices such as air-conditioners. As high users of energy, properties are also vulnerable to rising energy prices. All of the above should impact the evaluation of property assets both today and in the future. Climate change and policy responses to it will mean that 'green' buildings may well have lower relative risks and higher relative income growth and, thereby, prove superior investment opportunities going forward.

Government bonds

Governments' securities are affected by, amongst other things, public borrowing. Such public borrowing can be driven by climate related events.¹⁰ That said, OECD countries should be able to absorb any public costs associated with climate damage relatively easily when compared to elsewhere. There is the potential for climate change to have dramatic physical impacts in low-lying countries and islands, many of which are in developing countries where local economies and governments have relatively limited capacity to respond. This precarious situation could result in quite significant impacts on currency movements as well as on government finances.

Alternatives, private equity and carbon markets

Major investments in renewable energy and related technologies will need to be financed over the coming years, and this will present an opportunity within the private equity and venture capital asset classes. As part of the ten-point action plan developed by the US-based Investors Network on Climate Risk, institutional investors (including US and British pension funds) have pledged to invest \$1 billion in clean energy companies in an effort to reduce risks posed by climate change.¹¹

There are already several carbon markets; the most advanced being the European Emissions Trading Scheme (EU ETS). Trading in these markets is now widespread, with 8 million tonnes of carbon traded in the European market in February 2005.¹² Carbon is traded via government backed permits and international project-based credits, for use in Phases 1 and 2 of the EU ETS (2005-2007 and 2008-2012). The entities involved in this trading are companies that are impacted by emissions regulations,¹³ banks, trading houses and specialised trading funds (e.g. the European Carbon Fund).

⁹ Both residential and commercial property.

¹⁰ For example, the Association of British Insurers June 2004 report, A Changing Climate for Insurance, notes that 'flood damage in the UK may increase to between £2 - 20 billion by 2080'.

¹¹ See www.incr.com for more information.

¹² Provided by CO2e.com

¹³ The Climate Group, April 2005.

“The question that you may be asking is why should a pension fund be interested in a long-term issue like climate change, when many of us live or die by quarterly or yearly performance data?”

Given that this is the case, why does USS as a pension fund believe that we should be addressing climate change as an issue for our fund? There are two reasons: Firstly, we are universal owners¹⁴. Secondly, we need to meet the real needs of our members and beneficiaries.”

Professor Sir Graeme Davies
Chairman, Universities Superannuation Scheme Ltd

CASE STUDY**BP**

Photo: Courtesy BP Photographic Services

One of the world's largest energy companies, BP looked into targeting reduced emissions back in 1998. They achieved this by integrating emissions caps into managers' performance targets, and by developing an internal carbon trading system that makes lowest cost reductions first, and encourages business units to seek out innovative strategies to cut emissions. The financial benefits of these actions have been a saving of US\$650 million over the three years to 2001, from an estimated outlay of US\$20 million. In addition to the financial benefits, BP has achieved a leadership position on emissions trading, strengthening relationships with policymakers.

Source: The Climate Group; www.theclimategroup.org

¹⁴ See page 9 for an explanation of Universal Ownership.



4 Climate change and the investment community: hot or cold?

We have learned from prior sections that:

- ▶ Climate change is happening, and will have consequences both through its direct physical impacts and via the policies implemented to mitigate it; and
- ▶ This translates into risks and opportunities for investors across the range of asset classes.

However, this is not the whole story when it comes to understanding the relationship between climate change and the investment community. This is because investors such as pension trustees are just one player in the wider capital markets system. Thus, the picture is not complete without an understanding of who the other players are, their roles, and their approaches to climate change – both now and in future.

In November 2003, the 'Climate Change and Institutional Investors' conference was held in London, organised by the IIGCC and sponsored by the Carbon Trust. The conference identified the following key players with roles in mitigating the impact of climate change on capital markets going forward: trustees, institutional investors (which as a group, include pension funds, insurance companies, investment managers, endowments and foundations, etc.), investment consultants, fund managers, and sell-side brokers.



The respective roles and responsibilities of these groups were outlined as follows:¹⁵

- ▶ **Trustees** need to investigate the linkages between climate change and their fiduciary duties with respect to providing pension funds over the long term. Within these fiduciary duties, corporate pension funds should be encouraged to align their approach to climate change risks with sponsoring company policies.
- ▶ **Institutional investors** need to engage more actively with the climate policy process to protect the interests of their beneficiaries, and collaborate internationally to achieve this aim.
- ▶ **Investment consultants** need to integrate climate change into the advice they provide to institutional investors, and, where appropriate, their evaluations of asset managers.
- ▶ **Fund managers** need to evaluate how climate change affects investment decision-making. This would include evaluation of the information sources they utilise vis à vis inclusion of this issue in the analysis they receive from the sell side. There needs to be improved communications on climate change risks between specialist SRI analysts and their fund managers.
- ▶ **Sell-side brokers** need to embed climate change into their macro-economic and company analysis.

There is evidence that some investment analysts and portfolio managers are changing their views about the potential importance of environmental factors, as is demonstrated by the following quote from the Goldman Sachs research team:

“Environmental and social issues count ... In an increasingly complex world, we believe such issues are part of the relative quality of overall management performance needed to compete successfully.”¹⁶

However, a broader assessment of where capital markets are suggests that the roles and responsibilities outlined above reflect a recommendation rather than current reality. This is because a number of barriers exist to the effective integration of environmental, social and governance factors into today’s mainstream investment analysis – including climate change risks.

Four such barriers are identified in the table overleaf, as defined by the Climate Change Working Group of the United Nation Environment Program’s Finance Initiative:¹⁷

¹⁵ Cited from: Climate Change and Institutional Investors: IIGCC 2003 Conference report: Managing the Risks and Profiting from the Shift to a Lower Carbon Economy.

¹⁶ Goldman Sachs, quoted in “Who Cares Wins – Connecting Financial Markets to a Changing World”, UN Global Compact, 2004.

¹⁷ Source: UNEP Finance Initiative, “CEO Briefing on Climate Change”, 2003.

“Environmental and social issues count ... in an increasingly complex world, we believe such issues are part of the relative quality of overall management performance needed to compete successfully.”

Source: Goldman Sachs.¹⁸

Barriers preventing the financial sector from earlier engagement with climate change ¹⁹			
Cognitive	Political	Analytical	Market operational
<ul style="list-style-type: none"> ▶ Issue is seen as being marginal to companies' financial performance. ▶ Sense of shared responsibility deters any one group from taking the initiative. ▶ Financial sector cannot see any monetary value in climate action as it doesn't see the connection between climate change and financial risk. 	<ul style="list-style-type: none"> ▶ Delay in creating favourable political conditions for regulation and monitoring. ▶ Uncertainty about regulators' commitment to the issue and about regulations for emissions trading systems. ▶ Various local restrictions on foreign financial institutions. 	<ul style="list-style-type: none"> ▶ Insufficient analysis and information from key finance and insurance sector advisors. ▶ Little understanding of the financial benefits. ▶ Poor data availability makes analysis of potential company risks difficult. 	<ul style="list-style-type: none"> ▶ Lack of market mechanisms to give the technology commercial advantage. ▶ Inefficiencies and complexity in present GHG emissions trading markets. ▶ Initial investment required can be disproportionate to project size, and appear to have high overhead and transaction costs.

Source: Summary of UNEP Financial Initiative analysis.

¹⁸ Goldman Sachs, quoted in "Who Cares Wins – Connecting Financial Markets to a Changing World", UN Global Compact, 2004.

¹⁹ Source: UNEP Finance Initiatives (No's), "CEO Briefing on Climate Change", 2003.

Additional barriers to the financial sector's consideration of climate-related risks and opportunities might include the short time frames within which some stocks are being assessed. If stocks are being traded to optimise portfolio performance over short time horizons, the five risks that companies face because of climate change become less relevant as many of their implications will be over the longer term. Such short-time horizon investing will often be inappropriate for investors such as pension funds for other reasons – such as the transaction costs that come with high turnover.

An additional barrier is that it is usually the case that the market does not reward a focus on issues such as climate risk. For example, fund managers are not directly incentivised to address these types of risk in the mandates they receive from pension funds. Similarly, sell-side analysts often are not perceived to be producing research notes which include analysis of the implications of longer term risks such as climate change.

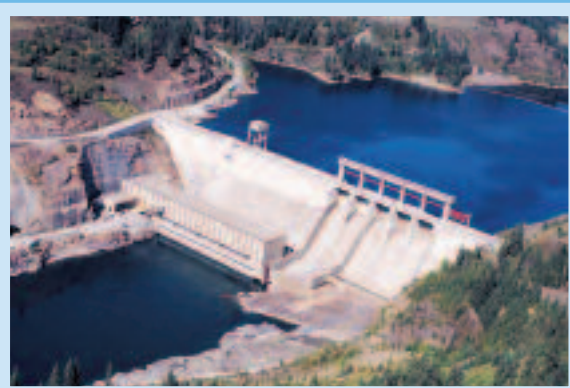
The presence of these barriers impacts all the key parties with roles to play in relation to climate change and the capital markets. In sum, they suggest that this area is complex, and that while there may be good reasons for each party to act, it is unlikely that each group will proactively decide to do so without incentives.

This means that various catalysts are needed to spark change. Many of these will come from government, and some will come from market players who see appropriate reward opportunities for being early leaders.

However, the participant with the ultimate power to promote change is the owner of assets. This is also the group with the most at stake. With ultimate responsibility for where and how major pools of assets are invested, pension fund trustees play this pivotal role in the investment chain. As clients, you can demand that other market players take up their appropriate roles and responsibilities with regards to managing climate issues.

CASE STUDY

»»» Norske Canada



Seven Mile Dam, courtesy: BC Hydro

Norske Canada is a major North American manufacturer of groundwood printing papers. With an annual energy bill of approximately CA\$200 million, reducing expenditure through energy efficiency was one of the primary motivators for the company's efforts to reduce its GHG emissions. Some of the main actions that Norske Canada took to address this included:

- ▶ CA\$400 million mill modernization.
- ▶ Environmental Management Systems installed in all company mills.
- ▶ Identification of internal power saving opportunities with BC Hydro (electrical utility).
- ▶ Implementation of self-generating power.

Norske Canada's actions resulted in CA\$2 million in benefits from energy provider BC Hydro as a result of reduced energy consumption and an estimated saving over the past 10 years of CA\$20-\$30 million due to energy efficiency and related measures.

Source: The Climate Group; www.theclimategroup.org



5 A trustee's perspective: addressing climate change as a fiduciary issue

We have now learned that if capital markets are to react more proactively to climate change developments, pension trustees are likely to need to play a major role.

The question is: *In light of the potential for climate change to impact the portfolios for which you have fiduciary responsibility, should you take such action to address it?*

To date, it is fair to say that climate change will not have received much consideration by trustees. There are some very good reasons for this, including:

- ▶ The fact that trustees deal with a range of issues and responsibilities, and have only a limited amount of time;
- ▶ The mistaken belief that consideration of issues like climate change would actually come at the cost of financial returns, rather than protecting them; and
- ▶ The lack of best-practices on how to address climate risk.

Although it is neither practical nor necessary to think that you should become experts on climate risk, climate risk can have a real impact on portfolio holdings. There is a growing case for trustees to attain some level of knowledge around these issues, and to take steps to mitigate any negative consequences of not taking action.

Is it your fiduciary responsibility to address climate risk?

In order to answer this, we need to first explore what responsibilities are incumbent with being a fiduciary.

Legal framework

– private sector pension schemes

UK private sector pension schemes are governed by Statute and Trust Law. The latter defines the scope of fiduciary duty which trustees have towards scheme beneficiaries.

In investment policy-making, this has typically been interpreted as acting in the best interests of all beneficiaries, with “best interests” typically construed as best financial interests.

As climate change has broad potential to impact company performance (and even economies as a whole), it can clearly be identified as a financial concern. Ergo, fiduciaries’ active management of climate change risks would be in the interest of all beneficiaries. Such active management, rather than hurting scheme performance, could potentially safeguard the underlying value of its assets and possibly even add value.



Legal framework

– Local Authority pension schemes

The Local Government Pension Scheme (Management and Investment of Funds) Regulations 1998 (as amended) is the primary legislation governing the investment of UK Local Authority funds. These regulations reference the need for diversification, and for investing with a view to the suitability of the investments. It has been long established that the elected members of a local authority are under a duty to those who supply the funds that enable the authority to carry out its functions.

This duty is similar to the duty of a trustee. It is a duty to have regard for the best interests of both the beneficiaries of the funds held and of those who supply the funds. This can mean that Local Authority funds owe a duty to a wider group of people, including:

- ▶ The Council Tax Payers;
- ▶ The employer contributors, scheduled, resolution and admitted bodies; and
- ▶ The beneficiaries of the Fund.

It would therefore appear that the issues affecting trustees to a private sector pension scheme apply equally, if not with more weight, to the investment of Local Authority funds.

The answer is “Yes” for both private and Local Authority pensions

The materiality of climate change as outlined in this document clearly shows that climate change risk could have the potential to impact a Fund’s investments over the long term. In addition, we suspect climate change risk is neither fully known nor understood and that it is not yet properly managed by the various groups involved in the ongoing management of pension scheme assets.

In line with these definitions of fiduciary responsibility, we suggest that it is consistent with fiduciary responsibility to address climate change risk.



6 Addressing climate risk: a trustee's toolkit

Whilst it is one thing to state “I can see that climate change has the potential to affect materially the assets held in our fund’s investment portfolios”, it is quite another to be able to add “and I know what to do about it”.

This toolkit provides you with:

- ▶ Questions to ask to determine whether you are currently addressing climate change risks; and
- ▶ Direct actions you can take in relation to those risks.

Follow the steps below to consider how you can address climate risk in the context of your fund.



▶ Step 1

You must first be knowledgeable about the issues facing the funds in your care, then develop associated investment positions and policies to address these, thus setting the stage for appropriate outcomes. To this end, the toolkit begins with an overview of the questions that you can ask yourself about climate risk, and explores how associated investment policies can be developed.

▶ Step 2

You then should ask whether these policies are reflected in the way funds are invested, and whether external service providers are on top of the issues. This step outlines the process for considering the former, and includes questions for your service providers.

▶ Step 3

Finally, you need to consider options to address climate change. The options provided in this toolkit are appropriate for trustees who determine that their current practices do not properly address the issues, and also serve as a range of options for trustees that have taken the first step and are ready to go further. This step of the toolkit also outlines the benefits and challenges of each action. You can regard these actions as an ongoing process. Don't worry; no one would expect this to be done all at once!

Three steps to addressing climate risk

▶ **Step 1: Assess your understanding; determine associated investment position and policies**



▶ **Step 2: Explore the current approach of your fund, and that of your external providers**



▶ **Step 3: Implementation options**

▶ Step 1: Assess your understanding; determine associated investment position and policies

a. Questions you can ask yourself

Before embarking on conversations with others, you should first take stock of where you are in relation to understanding and managing climate risk within the funds under your care. Sample questions to ask yourself as a trustee group are:

? Questions you can ask yourself as Trustees

- ▶ Is there the potential that climate change could have material impact on the assets in our care?
- ▶ How significant is the impact of climate change likely to be on our portfolio?
- ▶ Are we providing incentives (via our mandates and fees spent) for the risks associated with climate change to be addressed?
- ▶ Are our concerns about climate change such that we want to address it more actively? Could we work together with other investors?
- ▶ What are the appropriate resources to dedicate to this issue?
- ▶ Should we identify an individual to have responsibility for keeping us abreast of climate change? Is there an appropriate person?

The outcome of this discussion should help you determine which of the steps on the following pages may be most suitable for you, and to identify an individual or group to take responsibility for this issue.

Many trustee groups will likely find that, if there is consensus that climate risk could materially impact the assets under their care, they do not yet have a formal statement in place about this view, nor have they reflected it in their investment policy.

It may be that as a trustee group you lack the tools to be able to answer these questions. If this is the case, then external advice could be sought (from your investment consultant or specialist groups).

b. Determine your investment position

Investment positions (or investment beliefs) form the foundation of investment decision making. To determine your investment position with respect to climate change, you should have a discussion at the board/committee level. Such a discussion would ideally lead to the development of a formal statement, for example:

We believe that climate change poses a real and material risk to the financial performance of our investments (particularly over the long term), and therefore the returns that the fund will make.

Having a position around climate change is important, as it provides the framework for further decisions and actions. Once formalised, your position could be made public and shared with relevant parties.

c. Consider your time horizon

By nature, many institutional investors are long-term investors, typically with a time horizon of more than five years. Impacts of climate change will be felt most acutely over the long-term, so the management of the assets that are being invested over this term should take account of this. Associated performance monitoring frameworks, evaluation criteria and manager fee structures should be clearly defined to align the interests between trustee groups and investment managers.

d. Enhance your investment policy

Once an investment position on climate change has been developed and time horizon determined, you should review your investment policies to ensure that both issues are appropriately addressed therein.

Taking this step to address explicitly the importance of climate change as a material issue and outline the approaches that will be taken to address it, is important. Your enhanced policy can be made public and shared with relevant parties.

Both the nature of each fund's investment policy (how exhaustive it is), and their investment approach will factor in to what a revised investment policy might look like. A plan that is 100% externally managed, with an oversight committee that does not have ample time or resource, may want to add something like this:

We will encourage our external investment managers to ensure that they address the potential risks stemming from climate change in our investment portfolio, and ask for annual updates in regard to this to ensure appropriate consideration to this effect.

(See Step 3 for discussion about how these policies can be enacted).

On the other hand, a different plan may choose a more active route and enhance their policy to say something like this:

We will encourage our external investment managers to ensure that they address the potential risks stemming from climate change in our investment portfolio. To ensure this, we will:

- ▶ *Ask our managers to include updates on their ongoing management of climate issues in their regular monitoring reports.*
- ▶ *Use stock-level research to conduct periodic audits of our portfolio, to highlight any stocks of specific concern, and discuss with our investment managers to assess and ensure their awareness of these issues.*
- ▶ *Ask our investment consultant to incorporate the above two points as an element in our annual monitoring report.*

We will seek to use the weight of our assets to promote climate change risk management and mitigation within the market as a whole.

The investment policy can also go on to address proxy voting and any portfolio-specific items being pursued in relation to climate change, such as specific investments or investment guidelines that are developed.

The following table outlines the benefits and challenges of this first step:

Step 1: Assess your understanding; determine associated investment position and policies

Action	Benefits	Potential challenges
a. Assess your understanding	Provides focus and starting point	Knowledge gap among trustees
b. Develop your investment position	Lay foundation for other activities, gain clarity	Diverging views among trustees
c. Consider time horizon	Provides context for decision making	Requires strategic discussion
d. Enhance your investment policy	Provides framework for decision making	Requires strategic discussion and broad consensus

▶ Step 2: Explore the current approach of your fund, and that of your external providers

a. Assess current situation

Entering Step 2, trustees should now have:

- ▶ Considered their own understanding of the issues and identified someone in their organisation to oversee this issue going forward;
- ▶ Considered their investment beliefs and their investment horizon; and
- ▶ Revised their investment policy, or confirmed that their current policy appropriately reflected their beliefs and time horizon.

At this stage, trustees should review their current investment approach to explore whether it appropriately reflects their policy in regards to managing climate change risks and opportunities. If it does not, you can follow the rest of Step 2 and explore Step 3 to address this.

Having a dialogue with investment consultants and investment managers in relation to this issue should be relatively straightforward and can:

- ▶ Inform you about the perspectives and capabilities of your service providers on this issue;
- ▶ Help you to further your own understanding of the issues and opportunities, and how they are or can be managed; and

- ▶ Lead the broader investment community to understand that this is an issue of importance to the end-owners of assets, thereby encouraging them to develop appropriate capabilities to manage the implications of climate change going forward.

b. Questions you can ask your investment consultant

Investment consultants assist trustees in many stages of the investment decision-making and monitoring process, such as helping to determine strategic asset allocations, and select and monitor investment managers. In this role, it is fitting for investment consultants to be able to advise trustees on the long-term implications of issues such as climate change, and help to incorporate these into the various stages of the investment process. Such involvement will mandate a certain level of awareness of the issues at hand, and ideally some tools which can help trustees to implement any specific approaches. Having a dialogue with your consultant will also provide a useful check that the consultant is at least having regard to these issues when formulating advice in more general areas.

Specific questions you can ask of your investment consultants:

? Questions you can ask your investment consultant

- ▶ Have you developed internal expertise in this area? How many of your consultants and actuaries have a reasonable level of understanding around the potential for climate change issues to impact financial risk and return?
- ▶ What are the implications of climate change regarding the short, medium and long term performance of fund assets (and therefore our ability to meet liabilities)?
- ▶ How does climate change relate to asset allocation and investment mandates?
- ▶ Do our current mandates expose the fund to longer-term risks like climate change by driving a shorter term focus amongst our fund managers?
- ▶ Are we benchmarking our fund managers correctly and against the correct time frame?
- ▶ Have you done any specific work to evaluate the capabilities of investment managers in relation to their management of climate change issues?
- ▶ If climate change is not being properly addressed by investment managers, what incentives can be provided to address this?
- ▶ Does any of your consulting advice incorporate a perspective on climate risk, and if not, what would be the opportunities for it to do so?

c. Questions you can ask your investment manager

Investment managers are a key player in terms of bringing climate change related analysis into the investment management process. No matter what other proactive steps trustees take to address climate change, if the associated risks to underlying assets are not being managed, real loss of value could occur which no afterthought can recover.

Through the use of services of external investment managers, you are effectively delegating the management of climate change risk. Nonetheless, trustees can (and should) still ensure that managers are taking proper action in this area. This is similar to monitoring managers in other areas, such as ensuring investment guidelines are not being breached.

The following questions could be posed to investment managers to better understand areas that require further attention, and get to climate change on your managers' agendas:

? Questions you can ask your investment manager

- ▶ Have you developed internal expertise in this area? How many of your investment analysts and portfolio managers (across different asset classes) have a reasonable level of understanding around the potential for climate change issues to impact financial risk and return?
- ▶ Do you have any individual or group with a dedicated focus on climate change? If yes, how does that group relate to your traditional operations?
- ▶ Have you made any public statements about climate change as a financial risk? To which asset classes does this extend?
- ▶ How often are climate change issues discussed with company management? Are these issues addressed during specific meetings between environmental specialists and management, or as part of your mainstream analyst meetings with management?
- ▶ What are some of the climate change related discussions you've had with company managements in the past 12 months?
- ▶ Do you purchase any external research, or participate in any external networks on this issue?
- ▶ Is there a process for ensuring climate risks are built into your traditional investment decision-making process? How is this accomplished?
- ▶ How do you encourage brokers to include analysis of these issues in their research notes?
- ▶ Do you participate in the Enhanced Analytics Initiative or any other mechanism to incentivise brokers to integrate climate change factors into company analysis?
- ▶ Are there mandate qualities or particular benchmarks which would encourage climate change issues to be better incorporated into investment decision-making?
- ▶ Do you collaborate with others to address climate change risks and opportunities (e.g., the IIGCC, the US Investor Network on Climate Risk (INCR), the Australian IGCC, Carbon Disclosure Project, etc)?
- ▶ Can you incorporate a regular discussion of climate change analysis into our fund's monitoring reports?

Step 2: Explore the current approach of your fund, and your external providers

Action	Benefits	Potential challenges
a. Assess current situation	Provides information	Requires resource
b. Explore your investment consultant's capabilities re climate change	Understand and encourage consultant capabilities, learn what help is available in addressing other actions	Resistance; lack of consultant's commitment/knowledge on climate change investment risks
c. Explore your investment managers' capabilities re climate change	Better understanding of how risks are being managed	Outcome may lead to further necessary actions

▶ Step 3: Implementation options

Outlined below are the various actions trustees can take to address climate change. Typically, a fund would start with a consideration of their investment time horizon and policy, as covered in Step 1.

The approaches below provide opportunities for trustees to address risks that come through climate change not being properly managed by their fund managers, as well as opportunities to engage with companies themselves.

Many of these options could be done simultaneously, consecutively, or in place of each other. Remember, addressing climate risk is an ongoing process, which you can take one step at a time.

a. Behave as an active owner

Globally, the end-owners of assets are increasingly interested in behaving (and encouraged to behave) as active owners of capital. In 2002, the UK Institutional Shareholders' Committee ('ISC'), which is made up of key industry groups, published a Statement of Principles, known as the ISC Code. This code is meant to guide both fund managers and pension scheme trustees when determining how to approach their shareholder rights (in particular, voting shares and engaging with investee companies). It states that fund managers and trustees should:

ISC Code guidance

- ▶ Set out their policy on how they will discharge their responsibilities as active owners;
- ▶ Monitor the performance of investee companies in order to identify problems in their early stages;
- ▶ Intervene in their investee companies when necessary, including voting their shares whenever it is practical to do so; and
- ▶ Evaluate the effectiveness of their activism and, in the case of fund managers, report to their clients on their activities and the effectiveness of these activities.

Actions that could be taken by Trustees to address these policies from a climate change perspective include:

1. **Develop proxy voting guidelines** (either directly or with an advisor) which reflect an active approach towards addressing climate change and related risks. Consider optimal ways for your fund to implement its proxy voting guidelines (via fund managers, or external proxy voting services). Participate in voting decisions and/or monitor that votes are effectively cast per your approach. Publish your voting record.
2. **Participate in shareholder engagement activities:**
This could be:
 - ▶ Directly with companies as an individual shareholder;
 - ▶ In conjunction with other shareholders (e.g. via IIGCC or INCR); or
 - ▶ Indirectly as a signatory to multi-party initiatives (e.g., the Carbon Disclosure Project).²⁰
3. **Encourage engagement:** Ask your fund manager to undertake engagement on climate change risks and opportunities on behalf of your assets. If your fund manager is unable to provide engagement services directly, you may wish to consider an engagement overlay service, whereby you outsource the responsibility for active shareholding with investee companies to a third party provider.
4. **Participate in the public policy debate.** Trustees are responsible for protecting the assets of their beneficiaries and, essentially, for ensuring the long-term security provided by these assets. In this role, it is valid for trustees to consider participating in the public policy debate around climate change. Many climate-related policies being discussed (increased corporate disclosure, carbon taxes, emission reduction targets and credit-trading schemes) have ramifications for long-term asset owners. Trustees could engage with policy-makers to encourage policies that best meet the long-term interest of the economy and hence the long-term mandates in their care. While it is not realistic for many funds to participate directly, they can encourage their main pension trade bodies (such as the National Association of Pension Funds (NAPF)) to undertake work in this area, and/or join specialist climate change membership organisations such as the IIGCC and INCR or focus groups within the Carbon Trust and the Local Authority Pension Fund Forum.²¹

²⁰ For more information on the Carbon Disclosure Project see www.cdproject.net.

²¹ See www.lapfforum.org.

5. Encourage the sell-side. Instruct your fund managers to allocate a proportion of your broker commissions to encourage the inclusion of extra financial issues in broker analysis, and better research on issues like climate change.²²

In the US, shareholder activity also takes the form of filing or co-filing shareholder resolutions on climate change. In 2004, US investors filed record numbers of climate resolutions with corporations. In total, 28 resolutions were filed, requesting risk disclosure and plans to reduce greenhouse gas emissions, with 22 companies.²³

b. Review your portfolio holdings

For equities and corporate bond portfolios, trustees could use company-level research to determine the extent to which their assets are exposed to climate change risks. This process can be insightful in allowing you to learn what the existing risks in equity portfolios are (on a per company level), and whether your managers are aware of those risks (on a per company level) through follow-up discussions. Serving as a litmus test, actions can follow – depending on what the findings are.

For example, if there were one or two risks discovered during the process of which your managers were not aware, you could ask them to develop systems to measure and manage these risks better in future. If, over time, you still feel these risks are not being properly factored in, you may wish to select an investment manager with superior capabilities in this area.

The information needed to undertake such a review could come from mainstream broker research or specialist environmental research providers – many of whom (in the UK) are listed at www.uksif.org. This process could be undertaken directly, or in conjunction with your investment consultant.

In other assets, it is possible to assess the exposure of property portfolios to flood risk, for example.

c. Consider your investment mandates and monitoring process

During Step 2 of this process, you may have explored the capabilities of your investment consultants and managers in relation to climate change. Whilst asking service providers about their capabilities may help you to spur them into action, trustees also need to ensure that any structured agreements with these parties properly encourage and reward the incorporation of climate risks.

1. Structure investment mandates to effectively address climate risk

Investment mandates could:

- ▶ Request that investment managers include a rigorous analysis of climate risks and opportunities as part of their ongoing investment management process;
- ▶ Align reward structures so that investment management performance over the long-term is directly related to fees;
- ▶ Request that these issues be included in regular monitoring reports, so that you can ensure that the appropriate analysis is undertaken;
- ▶ Request fund managers to appropriately encourage and reward brokers to produce research that analyses climate risk to companies; and
- ▶ Suggest that fund managers behave as active investors vis à vis climate change.

2. Investment manager monitoring reports

Regular monitoring reports provide trustees with the means to monitor the performance and management of their assets, so asking your service providers to include a discussion of climate risks is a reasonable way to stay on top of this issue, and to make sure that your providers are staying on top of it too!

A request that investment managers include a discussion of climate risk in relation to the management of assets would not be unreasonable (although climate risk may not warrant pages of discussion every quarter). However, there will be risks that relate to climate change which could impact buy or sell decisions.

²² See www.enhancedanalytics.com.

²³ Cited from "Questions and Answers for Investors on Climate Risk", Guide prepared for the INCR (Investor Network on Climate Risk) by CERES and the World Resources Institute, December 2004.

If an investment manager is undertaking climate change analysis and is aware of these issues, they should be able to discuss the role that they play in broader investment decision-making over time. Furthermore, if managers are investing for the long-term, they should be able to comment on activities and decisions taken in this context.

3. Investment consultant monitoring reports

If an investment consultant is engaged to provide regular monitoring across all of a fund's investments, they could aggregate individual investment manager commentary on climate risk into a consolidated report for trustees. In addition, tools could also be developed by investment consultants to provide independent insight into managers' ongoing management of climate-related risks, as well as into any portfolio-wide, macro-issues of which they should be aware.

d. Consider climate change-related investments

Investors who believe that climate change issues can be financially material, may wish to consider investing a portion of their assets in strategies that specifically incorporate elements of climate change analysis in their investment philosophies (and which would benefit from the shift to a lower carbon economy). Such potential opportunities might include:

1. **Property:** Invest in energy or climate efficient buildings, or traditional real estate portfolios which actively manage climate risks and opportunities.
2. **Equity products:** Invest in funds which take into consideration the impacts of climate risk (possibly along with other environmental, social or corporate governance issues), or explicitly require inclusion of the impact of climate change into the risk management strategies of more mainstream portfolios.
3. **Fixed Income products:** Invest in fixed income products which take climate risk and opportunities into consideration (of particular relevance for corporate bonds and emerging market debt).

4. **Alternative investments:** Allocate a portion of assets to new markets such as emission trading, where climate-themed funds are now available.

5. **Private Equity/Clean Technology:** Invest in new technologies either directly or through Fund of Fund arrangements.

The table opposite outlines the benefits and potential challenges of this third step.

Which approach to choose? Benefits and challenges of each

There are clearly many actions that you can take to address climate risk. That said, not every approach will suit every trustee group. A number of factors will play into which approach is right for you, both in the short and longer term, such as:

- ▶ The characteristics of the trustee group (shared position on this issue, decision making process and governance structure);
- ▶ The characteristics of the fund in question (asset size, funding status, maturity, asset allocation and investment approach, internal vs. external management and monitoring); and
- ▶ The perspective of plan members and sponsor (alignment with member views, and sponsor's sustainability policies – corporate, government or other).

As a first step, the chair of the trustee group should put the issue of climate change on the agenda. Once trustees have familiarised themselves with the issues using this book as a guide, they can sit down and determine which steps to take first, and formally allocate the appropriate time and budget (up-front, and ongoing) to meet their needs in addressing this important issue.

Step 3: Implementation options

Action	Benefits	Potential challenges
a. Behave as an active owner	Meets fiduciary obligations	Varying degrees of time/dedication needed
b. Review portfolio holdings	Facilitates learning, identifies actual issues to discuss with managers, can inform engagement strategy	Some commitment of time and money
c. Consider your investment mandates and monitoring process	Can address steps in holistic fashion. Sends signal to market	Requires strategic discussion
d. Consider climate change related investments	Sends positive signal, supports market development	Needs broad buy-in for asset allocation decisions, necessitates selecting and monitoring new managers





7 Conclusion

You now have some high-level information about how climate change can impact financial risk and returns, and a trustee's toolkit for addressing this issue. You should feel equipped to embark on a discussion about climate change with your trustee board, and in so doing, to fulfill your fiduciary responsibilities in this area.

To continue successfully on this path, trustees will require ongoing learning. Undertaking discussions on climate change risk, joining relevant groups, challenging the status quo and reading the relevant press are all activities you should consider.

Within the UK, further support on climate change issues as they affect institutional investors can be accessed through both the Institutional Investor's Group on Climate Change (IIGCC) and the Carbon Trust's Investor Engagement programme.

Membership of the IIGCC

Membership of the IIGCC provides opportunities for learning, opportunities for joint engagement and the opportunity to support a group promoting improved management and analysis of climate risk.

See www.iigcc.org for more information.

A similar US group exists, called the Investor's Network for Climate Risk (INCR) www.incr.com.

The Carbon Trust

A further source of information is the Carbon Trust. The Carbon Trust is part of the UK Government's climate change programme, specifically mandated to work with business and the public sector. It is a source of expertise on low carbon technologies and carbon reduction opportunities in business. It runs an active Investor Engagement programme. Further information is available through the general www.thecarbontrust.co.uk website, or by emailing investors@thecarbontrust.co.uk.



While climate change risk is just one of the many issues you face in your role as pension scheme trustee, it is an increasingly important one. We hope this publication has been helpful in terms of helping you to address the climate related risks and opportunities that impact the funds in your care (see the appendix for a one-page sheet that can be used to facilitate trustee group discussions).

Climate change and your day job

Many of you have other functional roles and responsibilities in the organisations that sponsor the pension schemes to which you are a trustee. In that functional capacity, you also have the opportunity to address how your organisation is handling climate change issues. This opportunity to be a 'climate change educator' could help to ensure that your organisation is:

- ▶ Effectively managing any key business risks associated with climate change,
- ▶ Protecting its assets (physical and financial) from climate risk,
- ▶ Providing any related education necessary to ensure the above, and
- ▶ Supporting employees and employee-sponsored trustees who seek to be aware and proactive about these issues.

6 Appendix

Step 1: Assess your understanding; determine associated investment position and policies

Action	Benefits	Potential challenges
a. Assess your understanding	Provides focus and starting point	Knowledge gap among trustees
b. Develop your investment position	Lay foundation for other activities, gain clarity	Diverging views among trustees
c. Consider time horizon	Provides context for decision making	Requires strategic discussion
d. Enhance your investment policy	Provides framework for decision making	Requires strategic discussion and broad consensus

Step 2: Explore the current approach of your fund, and your external providers

Action	Benefits	Potential challenges
a. Assess current situation	Provides information	Requires resource
b. Explore your investment consultant's capabilities re climate change	Understand and encourage consultant capabilities, learn what help is available in addressing other actions	Resistance; lack of consultant's commitment/knowledge on climate change investment risks
c. Explore your investment managers' capabilities re climate change	Better understanding of how risks are being managed	Outcome may lead to further necessary actions

Step 3: Implementation options

Action	Benefits	Potential challenges
a. Behave as an active owner	Meets fiduciary obligations	Varying degrees of time/dedication needed
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c. Consider your investment mandates and monitoring process	Can address steps in holistic fashion. Sends signal to market	Requires strategic discussion
d. Consider climate change related investments	Sends positive signal, supports market development	Needs broad buy-in for asset allocation decisions, necessitates selecting and monitoring new managers

This Booklet has been prepared by Mercer Investment Consulting for the Carbon Trust and the Institutional Investor Group on Climate Change.

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The Carbon Trust

The Carbon Trust is an independent not for profit company set up in 2001 by the UK Government to take the lead on low carbon technology and innovation within the public and private sector in the UK. It is funded by the Department for Environment, Food and Rural Affairs, the Scottish Executive, the Welsh Assembly Government and Invest Northern Ireland. Full information on the organisation's activities can be found on the Carbon Trust website: www.thecarbontrust.co.uk.

The Carbon Trust engages directly with UK companies in a number of ways, including through its Carbon Management service. This offers wide support on energy efficiency and other low carbon issues, and enables companies to take a broad view of the implications of climate change on their activities. In addition to its work with UK companies, the Carbon Trust also engages with the financial community, through its Investor Engagement programme. The company has also produced a wide variety of publications which are available online, free of charge.

For further information, please visit the website or contact Emma Johnson, Head of Investor Engagement, on 020 7170 7000 or through investors@thecarbontrust.co.uk

The Institutional Investor Group on Climate Change (IIGCC)

The IIGCC is a forum for collaboration between pension funds and other institutional investors on issues related to climate change. It seeks to (a) promote better understanding of the implications of climate change amongst its member and other institutional investors, and (b) encourage companies and markets in which IIGCC members invest to address any material risks and opportunities to their businesses associated with climate change and a shift to a lower carbon economy.

In May 2005, the IIGCC was incorporated as a semi-autonomous unit into The Climate Group, a membership organisation composed of corporations and governments acting as leaders to solve climate change issues.

For further information, please visit www.iigcc.org or email contact@iigcc.org

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This report accompanies a selection of pension trustee training presentation slides, which are available for use by third parties, free of charge, under licence from the Carbon Trust. Please visit www.thecarbontrust.co.uk/trustees for further information.

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Making business sense
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