LGPS **INTELLIGENCE**

Changing climate, changing investments?

Amid the US China trade war and worries of a UK recession, recent months might not have been the best time for the dollar or sterling, but they were a remarkable period for Celsius, with the hottest July and September in recorded history.[1]

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Galvanised by Greta Thunberg and the Extinction Rebellion movement, six million protesters took to the streets around the world in late September, with an estimated 100,000 in London alone,[2] calling for climate action. For its part, the UK government has passed landmark legislation targeting net zero greenhouse gas emissions by 2050, and over half of local councils have now declared a climate emergency.[3]

As Bank of England Governor Mark Carney warns that companies which fail to adapt to the low-carbon economy 'will fail to exist',[4] regulators are also sounding the alarm. In 2018, the Department of Work and Pensions (DWP) asked pension fund trustees to report on how they are managing material financial risks, including those from climate change.[5] In July this year, all financial regulators issued a joint statement saying they will be closely watching firms' approaches to climate change.[6]

But there are also grounds for hope, as 'clean tech' continues its remarkable progress: wind and solar are the cheapest source of new power in more than two thirds of countries globally.[7] In the UK, renewables have for the first time produced more electricity than fossil fuels.[8]

Faced with public and regulatory pressure, changing market dynamics, as well as the changing climate, how can the Local Government Pension Scheme (LGPS) respond?

DIVESTED INTERESTS

One radical suggestion put forward by activist campaigners calls for full divestment from fossil fuels by LGPS funds. But a single, simple cause and effect – that reliance on fossil fuels is driving a dangerous rise in global emissions – does not mean that a simple solution is at hand.

1 https://eu.usatoday.com/story/news/nation/2019/10/04/global-warming-september-2019-hottest-record/3865898002/
2 https://www.theguardian.com/environment/2019/sep/27/climate-crisis-6-million-people-join-latest-wave-of-worldwide-protests
3 https://www.localgov.co.uk/Over-half-of-councils-declare-%E2%80%98climate-emergency%E2%80%99/47899
4 https://www.cityam.com/businesses-must-tackle-climate-change-fail-exist-bank/
5 See our 'ESG checklist' for trustees for more details: https://www.lgim.com/uk/en/insights/our-thinking/client-solutions/material-change-a-five-step-esg-checklist-for-trustees.html
6 https://www.bankofengland.co.uk/prudential-regulation/publication/2019/joint-statement-on-climate-change
7 https://about.bnef.com › new-energy-outlook
8 https://www.theguardian.com/business/2019/oct/14/renewable-electricity-overtakes-fossil-fuels-in-uk-for-first-time

Legal & General INVESTMENT MANAGEMENT

First, there is the question of sheer scale: around a third of the world's equities and bonds are linked to high-carbon, energy-intensive sectors.[9] In the UK – the country to which average LGPS fund assets have one of the highest allocations[10] – just two large oil and gas companies pay around a fifth of all dividends from FTSE100 companies.[11] Pension scheme trustees understandably worry whether excluding a large part of the investment universe would have a negative financial impact, and therefore potentially clash with their fiduciary duty to scheme members.[12]

The complexity stems in part from different time horizons, since it is also in the long-term interest of members to avoid the costs of unmitigated climate change – which the IMF recently warned could be 'potentially infinite'.[13] However, it is unclear whether divestment alone has a strong enough positive environmental impact. Trading in secondary markets does not directly influence company behaviour, which is why we prioritise company engagement. And as long as there is a buyer– which there is likely to be for highly liquid markets such as oil and gas – the mere act of selling fossil fuel assets does not reduce the probability of those fossil fuels being burnt.

In practice, moreover, excluding high-carbon sectors is likely to result in over-exposure to sectors such as financials, i.e. to the banks and insurers which lend to and insure the very same fossil fuel projects. Climate risks have not necessarily been reduced, just hidden. Finally, blanket divestment from fossil fuels can also overlook the fact that the risks and opportunities might often lie in the same sector – some utilities with coal plants are also major developers of renewable energy, for example.

We believe the bigger question, then, is not what to exclude, but how to effectively encourage all companies and stakeholders – from oil and gas producers to banks and IT companies – to adapt their business models for a sustainable future.

GAUGING ENGAGEMENT

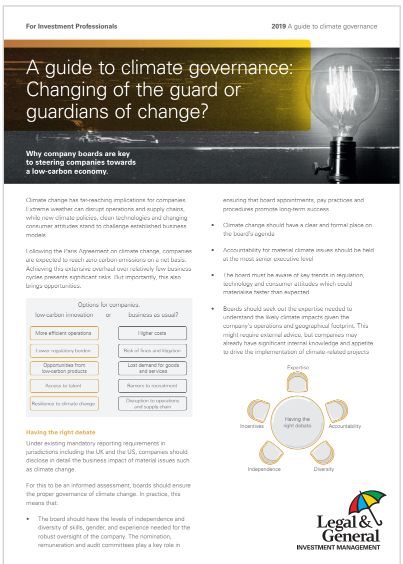
Effective engagement is the first important option available to the LGPS. Investors have a key role to play in accelerating the low-carbon transition: asset owners set expectations for their asset managers, who must then in turn press for change at the investee companies. However, it is clear that more needs to be done. Commenting on the variation in industry practices, the UK pensions minister recently proposed "three simple tests that pension schemes could apply to distinguish proper long-term managers from fund management 'zombies'":[14]

> "More than half of fund managers had no climate change-related voting policies or guidelines. This is utterly unacceptable. There are of course some notable exceptions [...] Legal and General's Future World Fund withdraws investment in companies who don't engage with climate change, forcing those firms to act fast in the hope of being reinstated."[14]
>
> **Guy Opperman MP**, Minister for Pensions and Financial Inclusion

1. HOW OFTEN DO ASSET MANAGERS VOTE AGAINST COMPANY RESOLUTIONS?

At LGIM, we believe board appointments, pay practices and procedures should foster long-term sustainability. In our company engagements, we aim to provide constructive feedback on how companies could improve their climate resilience.

We will also vote against companies that fall short of our principles: **in the first half of 2019, for example, LGIM voted against at least one resolution at almost 50% of companies that we invest in globally.**


For Investment Professionals

2019 A guide to climate governance

A guide to climate governance: Changing of the guard or guardians of change?

Why company boards are key to steering companies towards a low-carbon economy.

Climate change has far-reaching implications for companies. Extreme weather can disrupt operations and supply chains, while new climate policies, clean technologies and changing consumer attitudes stand to challenge established business models.

Following the Paris Agreement on climate change, companies are expected to reach zero carbon emissions on a net basis. Achieving this extensive overhaul over relatively few business cycles presents significant risks. But importantly, this also brings opportunities.

Options for companies: low-carbon innovation or business as usual?

low-carbon innovation	business as usual?
More efficient operations	Higher costs
Lower regulatory burden	Risk of fines and litigation
Opportunities from low-carbon products	Lost demand for goods and services
Access to talent	Barriers to recruitment
Resilience to climate change	Disruption to operations and supply chain

Having the right debate

Under existing mandatory reporting requirements in jurisdictions including the UK and the US, companies should disclose in detail the business impact of material issues such as climate change.

For this to be an informed assessment, boards should ensure the proper governance of climate change. In practice, this means that:

- The board should have the levels of independence and diversity of skills, gender, and experience needed for the robust oversight of the company. The nomination, remuneration and audit committees play a key role in ensuring that board appointments, pay practices and procedures promote long-term success
- Climate change should have a clear and formal place on the board's agenda
- Accountability for material climate issues should be held at the most senior executive level
- The board must be aware of key trends in regulation, technology and consumer attitudes which could materialise faster than expected
- Boards should seek out the expertise needed to understand the likely climate impacts given the company's operations and geographical footprint. This might require external advice, but companies may already have significant internal knowledge and appetite to drive the implementation of climate-related projects

Expertise
Accountability
Diversity
Independence
Incentives
Having the right debate

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Access LGIM's guide[15] to climate governance for company boards

9 https://bankunderground.co.uk/2017/01/23/the-tip-of-the-iceberg-the-implications-of-climate-change-on-financial-markets/
10 See our February LGPS Intelligence piece: http://www.lgim.com/files/_document-library/knowledge/thought-leadership-content/lgps-intelligence/feb-2019.pdf
11 https://www.ajbell.co.uk/sites/ajbell.co.uk/files/20190620_AJBYI_Dividend_dashboard%20FINAL.pdf
12 However, some research suggests that the financial implications of divestment need not always be negative, and depends on the sector excluded, the timeframe and diversification of portfolio: http://www.lse.ac.uk/GranthamInstitute/news/the-mythical-peril-of-divesting-from-fossil-fuels/
13 https://www.imf.org/~/media/Files/Publications/WP/2019/wpiea2019185-print-pdf.ashx
14 https://www.responsible-investor.com/home/article/guy_opperman_ri/
15 https://www.lgim.com/files/_document-library/capabilities/a-guide-to-climate-governance.pdf

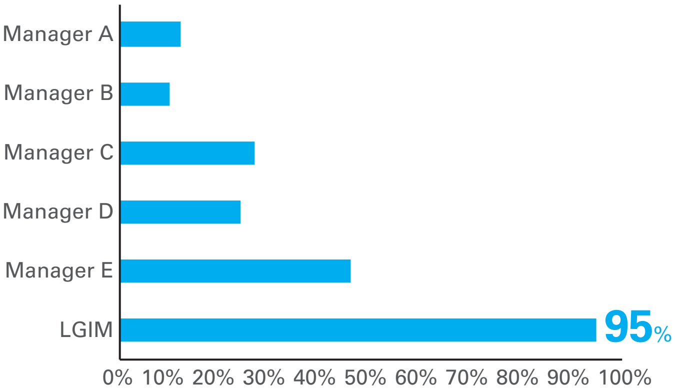
2. DO THEY PROPOSE THEIR OWN SHAREHOLDER RESOLUTIONS?

Putting forward a shareholder proposal is one way to ensure that sustainability is on the board agenda. In 2019, LGIM, alongside other investors including several LGPS funds put forward a proposal calling on major oil company BP to report on how its strategy is aligned with the Paris Agreement. The resolution was supported by the BP board and an overwhelming majority of shareholders.

3. DO THEY SUPPORT SHAREHOLDER RESOLUTIONS ON CLIMATE CHANGE?

Independent research found that in 2019, the 10 largest asset managers in the world supported just 32% of 'climate-critical' resolutions in the US.[16] By contrast, LGIM supported 95% of such proposals.

Support for 'climate-critical' resolutions in US from LGIM vs. top 5 asset managers (2019)



Source: Climate 50/50 Project - Asset Manager Climate Scorecard 2019, analysis of the voting records of the world's 13 largest asset managers that report mutual fund votes, focused on resolutions at US energy and utility companies. Charts show voting record of 5 largest asset managers on climate change, political influence and executive compensation.

However, voting is not an end in itself, but a way to improve the effectiveness of engagement. For example, under LGIM's Climate Impact Pledge (our engagement programme with over 80 of the world's largest companies) we will vote against the chairs of – and in select funds, potentially divest from – companies that are showing signs of inaction on climate change.

Collaboration is another tool, with recent DWP legislation recognising the importance of investors engaging not just with companies, but also with regulators and their peers. For LGPS funds, collaboration groups such as the Local Authority Pension Fund Forum (LAPFF), the Climate Action 100+ initiative or the Institutional Investor Group on Climate Change provides an opportunity for asset owners to speak with one voice in promoting sustainable markets.

Engagement, too, is a means to promote better market outcomes for long-term savers. It is therefore important that the investment beliefs of asset owners are reflected in the chosen investment strategy and aligned with the practices of designated asset managers.

LGIM has co-written a detailed, 'how-to' guide on climate change investment, outlining practical steps that asset owners can take to better integrate climate risks and opportunities in the investment process. The guide can support LGPS funds in board-level deliberations, when setting their Investment Strategy Statement (ISS) and in deciding whether to adopt climate-related metrics and targets.

Access LGIM's guide[17] to climate change for asset owners

16 https://www.majorityaction.us/asset-manager-report
17 http://www.lgim.com/files/_document-library/capabilities/iigcc-guide-addressing-climate-risks-and-opportunities-in-the-investment-process.pdf

Funds can also draw on significant pockets of expertise within the LGPS itself, with a growing number of funds already adopting or in the process of implementing best practices. A review in April 2019 found that around a third of LGPS funds explicitly recognised climate change as a material investment risk in their ISS, with 21% of funds referencing low carbon investments as 'a positive investment strategy to respond to climate risk'.[18] This brings us to the second important option for LGPS funds – capital allocation.

CAPITAL ALLOCATION: FROM QUAKERS TO QUANTS

That conversations around capital allocation have so far tended to revolve around divestment reflects the historical origins of responsible investment. In the 18th and 19th centuries, Quakers and other faith groups began asking whether their religious beliefs clashed with investing in 'sinful' sectors. But back then, the primary purpose was the pursuit of personal redemption, not portfolio returns.

Modern definitions, however, tend to abandon the absolute partitioning of industries into 'good' and 'bad', recognising that the impacts of any given company will lie on a continuum: coal power may be responsible for an increase in deaths from air pollution, yet increasing use of electric power is also reducing infant mortality in emerging markets. Aided by the remarkable growth in the quality and quantity of environmental, social and governance (ESG) data and analytics, investors are now able to ask much more sophisticated questions about individual *companies*, not just sectors. As DWP regulations recognise, the issue then is no longer about ethics, but about financial *materiality* – i.e. the winners and losers of the low-carbon energy transition.

What are the least polluting, most energy-efficient companies? What percentage of a company's revenues come from 'green' products and services? Which companies have high standards and transparency across their supply chain? Which companies are most exposed to changes in regulation, such as a rising carbon price?

Modelling the energy transition

LGIM has partnered with a leading consultancy to create a bespoke model of the global energy system as far out as 2050. We have set out to identify the implications of disruptive low-carbon technologies, and the lowest-cost options to meet global climate targets, with our results highlighting trillions of dollars of investment opportunities. We anticipate transformative change in the energy system over the next decade, as climate policies could see global oil demand peak around 2025.[19]

Through Bloomberg terminals alone, fund managers now have access to more than seven million ESG data points[20] to assist them in identifying climate-related risks and opportunities. Taking advantage of the explosion in data, some investors are going further, constructing proprietary ESG methodologies and models, across all asset classes and strategies.

As LGPS funds consider low-cost solutions that maintain investment performance, it is worth noting that ESG data can be transparently and rigorously applied into an index strategy. One popular option is the use of 'tilts' which start from a market-capitalisation-based index, increasing or decreasing the weight of securities according to their performance on climate or on broader ESG-related metrics.

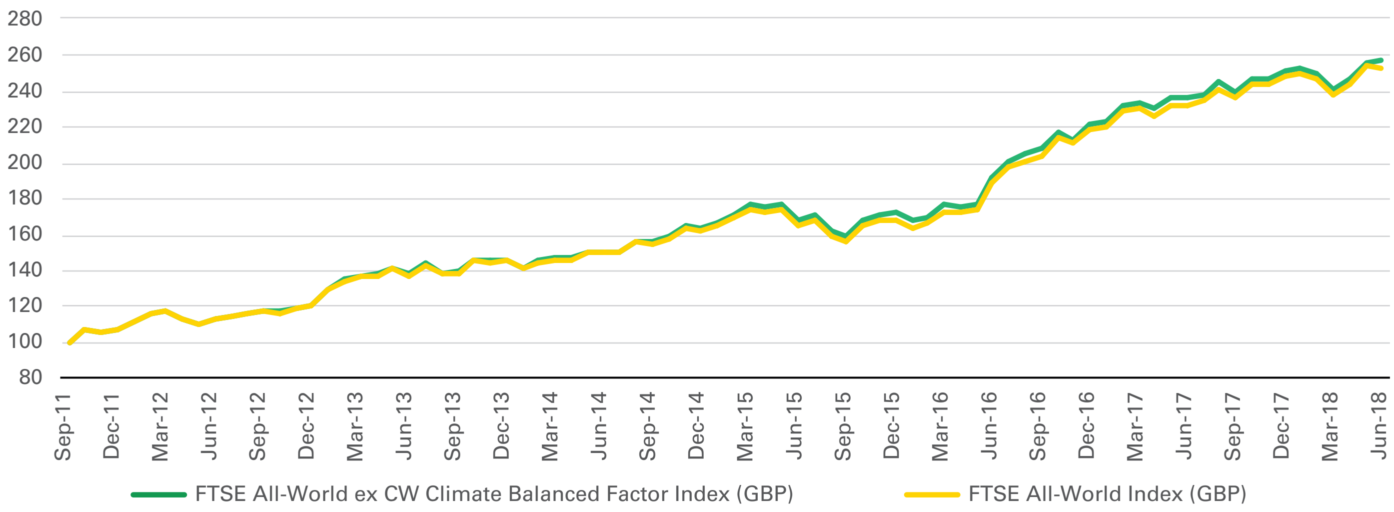
'Tilt' investment strategies, which overweight high environmental, social and governance (ESG) stocks … have outperformed global benchmarks for close to a decade."[21]

- **Mark Carney,** Governor of the Bank of England

The advantage of such strategies is that they are designed to retain the risk/return profile of a traditional index, while simultaneously achieving impact on climate-related metrics.

18 Unison and ShareAction – Responsible Investment in LGPS, April 2019
19 https://www.legalandgeneralgroup.com/media-centre/press-releases/lgim-research-into-the-energy-transition-reveals-trillion-dollar-investment-opportunity/
20 Goldman Sachs –The PM's guide to the ESG revolution (2019)
21 Mark Carney – speech at the UN General Assembly (2019). Please note, this view and the data on which it is based derive from the reported comments of Mark Carney in the quoted source and are not necessarily reflective of LGIM's research, data and views.

Performance of a climate tilted factor index versus a standard index



Sources: Chart – FTSE and LGIM, as at 31 March 2019.

Impact on climate metrics[22]

Carbon reserve reduction	57%
Carbon emission intensity reduction	22%
Green revenue increase	83%

In practice, this means that exposure to high-emitting companies and fossil fuel producers (owners of 'carbon reserves') can be significantly reduced but without excluding sectors altogether, thereby maintaining diversification. With the EU warning that standard benchmarks are likely to be aligned with 'catastrophic' scenarios of global warming,[23] we anticipate that interest in alternatively weighted ESG benchmarks will continue to increase.

REPORTING FOR DUTY

The final option for LGPS funds is to report in more detail about their approach to climate change. Information on how a scheme invests, and on how its designated asset managers seek to influence positive change at investee companies, can be used to make LGPS beneficiaries more engaged with the impacts of their investments. An LGIM survey found that 53% of respondents said they would engage more with their pension if they knew it had positive social impact.[24] Moreover, this option seems increasingly less of an "option" and more of a requirement, as the UK Government has outlined an expectation that all large asset owners issue a climate report in line with the recommendations of the Task Force on Climate-related Disclosures by 2022.[25]

ENGAGEMENT FOR CHANGE

Policymakers and the general public increasingly recognise that, as the pensions minister put it, "there is an onus on our multi-billion pound pensions industry to limit the risk to members from the biggest threat facing life on this planet".[26] In our view, the scale of the necessary transformation cannot be achieved by divestment alone, and should therefore require sustained, forceful engagement from investors across virtually all sectors of the economy. It will also require significant amounts of capital. The growing popularity of mainstream investment options which reward companies taking positive steps toward sustainability, while aiming not to compromise on performance, is an encouraging first step. As investors with a truly long-term horizon and an established public purpose, LGPS funds are uniquely positioned to rise to and lead this challenge, but the window of time for action is narrowing fast. At LGIM, we look forward to continuing to support LGPS funds along their journey to a sustainable future.

22 FTSE All-World ex CW Climate Balanced Factor Index vs FTSE All-World, as at 30/09/2019. Carbon reserves measure the embedded CO2 equivalent (CO2e) in fossil fuel reserves of investee companies, per m$ invested. Carbon intensity expressed as CO2e per m$ of revenue generated by underlying companies. Green revenues measure low-carbon products and services (increase shown as proportion of total revenue % from the index's underlying companies). Source: FTSE Russell. Past performance is not a guide to the future.
23 EU Technical Expert Group on Sustainable Finance interim report on benchmarks and disclosure, 2019.
24 Source: LGIM survey of ~1,000 contract-based pension scheme members, Mastertrust members and Legal & General staff members
25 BEIS - Green Finance Strategy, July 2019
26 https://www.responsible-investor.com/home/article/guy_opperman_ri/