APPENDIX B

**Greater Manchester Pension Fund**

Administered by Tameside Metropolitan Borough

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Dear Sir/Madam,

**Friends of the Earth / Fossil Free campaign for responsible investment**
**Our council's fossil fuel investments**

Thank you for your interest in the responsible investment work of the Greater Manchester Pension Fund and, in particular, our approach to climate change.

We recognise that financial decarbonisation of our economy is a complex and challenging issue for all long term investors. The Fund's long-term goal is for 100% of assets to be compatible with the net zero emissions ambition by c2050 in line with the Paris Agreement.

I therefore make no apology for the length of my response to address the concerns raised, which I hope explains why the call by Fossil Free UK to divest from fossil fuels creates an unacceptable risk and why the pace of decarbonisation must be consistent with our risk framework, and not detract in any way from our fiduciary responsibilities to pay our pension promises to public sector workers which are affordable and sustainable to the taxpayer. All employers and the taxpayer have benefited from this outperformance of the Greater Manchester Pension Fund through lower employer contribution rates and the Fund being better funded than most LGPS funds, which will provide more long term benefits to the employers in the Fund and enables more to be spent on local services. In particular residents of Greater Manchester have benefitted significantly from our approach to local investments both in terms of benefiting the local economy and creating local homes.

To assist, I set out the key takeaways from my response below:

- We recognise that climate change poses a key financially material environmental risk, and the Fund is committed to working towards a 2 degree warming scenario and were a signatory to the Paris Pledge for action.

- We wholly support the Bank of England Governor Mark Carney's statement that *'Financial decarbonisation of our economy is a major opportunity for long-term investors'. If pension funds are genuine long term investors, then they may be well placed to benefit.'*

- We welcome the recommendations of the Financial Stability Board's Taskforce on Climate-related Financial Disclosures (recently presented formally to the G20) to which we were a signatory and commit to including a TCFD statement in our financial reporting from 2018 as part of our on-going climate risk assessment and disclosure.

- The Fund has an excellent long term investment track record, over the last 30 years; the value of its **returns has been over £3 billion more** than would have been the case if it had achieved the average LGPS fund return. This has meant that every household in Greater Manchester has not had to pay an additional £2,500 to meet pension liabilities.

- *The Fund's long-term goal is for 100% of assets to be compatible with the net zero emissions ambition by c2050 in line with the Paris Agreement. The decarbonisation goal will be regularly evaluated in line with our objective of maintaining long term financial performance*.

- As a Local Government Pension Fund we are long-term investors with liabilities reaching way beyond the year 2100. The objective of the Fund is to meet the current and future pension benefits of public sector workers now and when they fall due.

- Independent Analysis by True Cost have found that the active decisions of the Fund managers have resulted in a less carbon intensive fund, which is better aligned with 2 degree scenario. This is because overall the equity holdings possesses lower fossil fuel proportion than the benchmark as we are less exposed to oil and coal, whilst the natural gas exposure is considerably higher than the proportions under IEA's 2 degree scenario for 2030 globally.

- The Fund acknowledges that it is transitioning and that this needs to be an orderly process to avoid stranded costs and ensure that we continue to deliver affordable and sustainable pensions for employers and taxpayers alike. The companies we invest in already produce more power through renewables than they do from coal and oil.

- Within the last two years, the Fund has increased its strategic allocation to infrastructure to 10%, unlocking over £2 billion of assets for this purpose. A key strategy within this allocation is investments in low carbon and renewable energy opportunities.

- The pace of decarbonisation must be consistent with our risk framework, and not detract in any way from our fiduciary responsibilities to pay our pension promises to public sector workers which are affordable and sustainable to the taxpayer. All employers and the taxpayer have benefited from this outperformance through lower employer contribution rates and the Fund being better funded than most LGPS funds, which will provide more long term benefits to the employers in the Fund and enables more to be spent on local services.

- The Fund is not adopting this approach from a standing start as regards climate-aware investing and much of the task now involves a scaling-up of activities. We have led the way and are the biggest direct investor in green energy.

- The Fund recognises that like all pension funds it has assets within its investment portfolio that are at risk of becoming 'stranded' in a 2 degree scenario. It will address this risk through a suitable decarbonisation plan that measures the Fund's ownership responsibility for emissions; locates the areas within the public equities portfolio of highest carbon and reserves intensity; and implements a plan for re-balancing the portfolio that substantially reduces exposure to this intensity. The decarbonisation plan will be similar to those being carried out by other leading European asset owners, such as ABP (Netherlands), AP4 (Sweden), FRR (France) and the Environment Agency Pension Fund (UK).

- Significantly 80% of survey respondents at the Funds Stakeholder event agreed with the Fund's general approach to engage with companies rather than divest from them.

The updated Fossil Free UK and Friends of the Earth report http://gofossilfree.org/uk/fuellingthefire has been shared with us to take into account in response to the Fund's consultation on our Investment Strategy Statement. The Investment Strategy Statement sets out our investment beliefs, and is reviewed tri-annually in line with statutory requirements. We are currently undertaking this review and we are grateful for the engagement with our consultation.

The strategy takes account of the investment risks described in your communication and describes our approach to identifying and mitigating these; as well as the opportunities that arise from the global transition to a low carbon economy.

There are many strands of activity to this work on climate risk – some of which form part of longstanding Fund policies on responsible ownership that see us engage with companies and policy-makers on this issue.

That said, the primary duty of the Management Panel is to pay the pension promises earned by its members.

The concerns raised are:

1. Do you agree that the council should divest its pension fund from fossil fuels and reinvest in ways that benefits the community?

2. What steps are the Council taking to end fossil fuel investments and invest responsibly?

The Greater Manchester Pension Fund is very much a long term forwarding thinking Pension Fund as recognised by the fact that we are the top performing LGPS Fund in the Country based over a 30 year rolling basis. Our strength and ability to ensure low cost pensions to employers and taxpayers alike is because of our long term sustainable approach.

The Fund has an excellent long term investment track record. It is important to note that over the last 30 years, the value of its returns has been over £3 billion more than would have been the case if it had achieved the average LGPS fund return.

Indeed, it has been the strength of our investment beliefs and strategy, which means that Greater Manchester Councils and in turn taxpayers across Greater Manchester have not had to find hundreds of millions of pounds equating to roughly an additional £2,500 household across Greater Manchester to meet Pension liabilities.

We know that climate change is one of the biggest social and economic risks the world faces today. Companies and investors are already being affected by the transition to a low carbon economy and the physical impacts of climate change, the effects of which will only increase over time.

We recognise that climate change poses a key financially material environmental risk, and the Fund is committed to working towards a 2 degree warming scenario. Indeed, the Fund joined with investors, businesses and other non-state entities from across the world in signing the Paris Pledge for Action. By joining the pledge, the Fund promised to ensure that the ambition set out by the Paris Agreement is met or exceeded to limit global temperature rise to less than 2 degrees Celsius.

As part of the consultation in reviewing our policy frame work we propose the following commitment: *The Fund's long-term goal is for 100% of assets to be compatible with the net zero emissions ambition by c2050 in line with the Paris Agreement. The decarbonisation goal will be regularly evaluated in line with our objective of maintaining long term financial performance*.

The Fund is a member of the Local Authority Pension Fund Forum (LAPFF), a collaborative shareholder engagement group which brings together over 70 local authority pension funds from across the UK with combined assets of over £200 billion.

LAPFF, which I am pleased and proud to be Chair of, is the Country's leading Shareholder Engagement Forum and our primary aim is to use our collective voice to challenge and engage with these companies on climate change.

The Greater Manchester Pension is an active participant in the work of the Local Authority Pension Fund Forum and the Institutional Investors Group on Climate Change, both of which have highly informative websites describing their influential work in this area.

We believe that this approach is far preferable to divesting our holdings and passing the problem to somebody else, who may not share our commitment to Responsible Investment. We agree that there is a place for disinvestment and we have done this in relation to those companies associated with the manufacture or distribution of cluster munitions and previously apartheid in South Africa.

However, we believe that divestment is a blunt tool and doesn't necessarily improve or change matters particularly in such complex area of carbon where every one of us, who drive cars, use washing machines, purchase food which has not been grown locally etc. is responsible to some degree. A major influence on investment strategy is the time taken to make the transition to sustainable sources. Vehicles continue to use petrol, albeit it on a reducing basis as we move towards greater use of electric powered vehicles, with a need for that power to come from sustainable sources. So the divestment strategy has to be very different to the case of tobacco where there was no reason to continue direct equity investment. The most recent failure of the disinvestment approach can be seen in relation to the poor working standards and corporate governance arrangements at Sports Direct, where the Chairman agreed to stand down if he received less than half independent vote. He ended up staying with 53% of the vote, following the disinvestment by Standard Life and Aviva of their shareholding and the new shareowners did not have the same qualms about the shocking employment practices.

By contrast the Local Authority Pension Fund Forum has seen the power of assets owners voting and engagement through its members using their share power co-filing and support strategic resilience resolutions. LAPFF strongly supports mandatory carbon emission reporting in the context of how companies are factoring the relevance of climate change into their business strategy. In particular, the Forum supports the 'Aiming for A' investor coalition which co-filed shareholder resolutions at the BP and Shell 2015 AGMs on behalf of 50 global investor organisations as well as individual shareholders. The resolutions asked BP and Shell to report effectively on climate related risk in their routine annual reporting. The resolutions received 98% and 99% shareholder support respectively. LAPFF's policy is that robust engagement on a collective basis is preferable to placing restrictions on particular types of investment. This year alone has seen unprecedented number of investors support climate related resolutions with companies such as Chevron, Exxon and PPL. Boards that have previously been intransigent on addressing the strategic business implications of climate change have had to devote attention and resources to it as a result of shareholder pressure, which would not be the case with non-ethical asset owners.

We have long recognised the imperative to address climate change as a systemic and long-term investment concern for members, as it poses material financial risks across all asset classes with the potential for loss of shareholder value.

They include the impact of regulation to achieve targets for global emissions reduction set in Paris in 2015 and of the global transition to a low-carbon economy now under way. These are factors which will catalyse real world market adjustments and bring changes to energy production, supply and consumption patterns. The timing and the consequences of climate change will vary across business sectors but will impact all companies in multiple dimensions, as producers, consumers, tenants and asset owners. The likely effects will include emissions and other resource related restrictions, asset stranding, technological obsolescence, and increased costs due to natural resource scarcity. For companies unable or unwilling to recognise, plan for and adapt their business to the risks and opportunities associated with climate change, the outcome will be business failure. Investors in unsustainable companies or within exposed sectors will ultimately suffer value loss.

There is broad acknowledgement that the COP21 Paris Agreement marked a significant change in the extent and seriousness of the global commitment to taking action on climate change. It was following this that LAPFF members agreed a series of actions including the production of a 'best practice' climate change investment policy framework, which would provide support and context for the development of member funds' investment and stewardship approaches. Signatories to the Paris Agreement in summary agreed to pursue 'efforts to limit the temperature to 1.5 degrees C above pre-industrial levels', in itself a more ambitious target than expected. Signatories also agreed to aim for c.2050 as a target for net zero carbon emissions i.e. where carbon emissions caused or produced by human activity are balanced by the removal of carbon by natural sinks.

In June 2017, the Bank of England published its strategic response to climate change. This reflects the Banks increasing focus on the impact of climate related financial risks within the broader context of actions being taken by central banks and by financial regulators globally and by the wider international community. Bank of England Governor Mark Carney has stated *'Financial decarbonisation of our economy is a major opportunity for long-term investors'. If pension funds are genuine long-term investors, then they may be well placed to benefit.'*

The Financial Stability Board (FSB) Task Force on Climate-related Financial Disclosures (TCFD) was set up in 2016 to develop voluntary, consistent climate-related financial risk disclosures. It identified the need for good information from companies to address investors' needs when making decisions on capital allocation, as well as being applicable to investors themselves. The current emphasis is on voluntary standards but there is the implication that this may change in future. In June 2017, the TCFD issued its final report with recommendations (www.fsb-tcfd.org). The TCFD includes Asset Owners in the scope for reporting and highlights the importance of their role at the top of the investment chain. The disclosure framework recommended by the Taskforce is defined across four themes of: (1) Governance; (2) Strategy; (3) Risk Management; and (4) Metrics and Targets. We intend that our revised Policy Framework will incorporate these four themes, recognising that the TCFD framework will be widely recognised as the best practice guide against which the activities of investors will be compared.

The Fund is also one of the signatories to the recommendations of the FSB Task Force on Climate-related Financial Disclosures (TCFD), which recommends a framework for disclosing climate related risks and opportunities, going beyond current practices.

The Fund acknowledges that it is transitioning and that this needs to be an orderly process to avoid stranded costs and ensure that we continue to deliver affordable and sustainable pensions for employers and taxpayers alike. .

In line with the Task-Force's recommendations that organisations should report within mainstream finance reporting, we intend to summarise the Fund's policy on climate change within our Investment Strategy Statements (Statement of Investment Principles,) Investment Beliefs, Investment Policy and/or Risk Register of funds as well as their Responsible Investment Policy. Ensuring that our annual reporting reflects this Policy will facilitate the Fund being able to report in line with the Task-Force recommendations.

To help clarify, I have set out below our proposed approach in line with these four themes:

As a Local Government Pension Fund we are long-term investors with liabilities reaching way beyond the year 2100. The objective of the Fund is to meet the current and future pension benefits of our members now and when they fall due.

**INVESTMENT BELIEFS**

The Board and Management of the Fund believe that, over the expected lifetime of the Pension Fund, climate-related risks and opportunities will be financially material to the performance of the investment portfolio. As such, we will consider climate change issues across the Fund and specifically in areas such as Strategic Asset Allocation, Investment Strategy, Investment Manager Selection and Risk Management with the aim of minimising adverse financial impacts and maximising the opportunities for long-term economic returns on our assets.

The climate change investment policy will guide the Fund in terms of Governance, Investment Strategy, Risk Management and Metrics and Goals.

### (1) Governance

The Management Panel (governing body) has responsibility for the direction of policy and has access to expert advice and have members with appropriate skills and knowledge. Responsibility for the implementation of the Fund's policy lies with the Director of Pensions and is adequately resourced. Regular monitoring of reports and impact assessments of policy implementation will be presented to the Management Panel and to the Local Pension Board (this is the statutory scrutiny committee).
We acknowledge that appropriate responses to the investment challenge of climate change are evolving rapidly and we commit to review our climate change strategy and policy every three years or otherwise as in line with the investment review cycle.

### (2) Investment Strategy

We are aware that climate change will impact all asset classes over the lifetime of the fund. As a result, many assets will be re-priced but the timing of this is uncertain and the impact will vary by asset class due to geography, liquidity and the underlying life of our assets. We also recognise that there is uncertainty over the direction and speed of policy changes in this area. We aim to integrate climate change considerations into the Investment Strategy in a number of ways, as follows.

*Asset Allocation*

We will consider a range of alternative investment strategies available to manage risks and opportunities related to climate change. These may include active management of carbon risk which results in some reduction of exposure, such as a tilt towards low-carbon companies and assets, alongside company engagement and an increased allocation to low-carbon investment opportunities.

*Investment Managers' Oversight*

We will engage with our investment managers to ensure they take account of climate change in investment practices and processes. Managers will be encouraged to ensure that active portfolios include positions that maximise the investment benefits, and minimise the risks, from climate change. All Investment Managers are and will be continued to be monitored on their approach to climate change as part of the regular review process.

*Use of scenario analysis*

We will review a variety of research and analytical materials to encourage the use of scenario analysis which provides estimations of relative performances of asset classes and sectors under different scenarios. When we have found scenario analysis that we consider robust and meaningful, we will request such research be utilised where possible in our Asset Allocation decisions and encourage our investment advisers to do likewise.

*Climate-Related Investment Opportunities*

Climate-related investment opportunities are available in areas such as energy efficiency, choice of energy sources, products and services and new markets. We consider that currently there are limited climate related investment opportunities in the public markets with more opportunities existing in the private markets across private equity, private debt, infrastructure and real assets. This has asset allocation implications due to the illiquidity and complexity of some of these asset classes. Property is a significant asset class allocation and we are aware that buildings are responsible for over one-third of total green-house gas emissions in the UK. For directly-held properties, we will look to work with our property management teams on focus areas such as energy management and owner-occupier relations to reduce these emissions, and we will expect indirectly held property managers to do likewise.

Through the drive and vision of the Greater Manchester Pension Fund Management Panel, in April 2015, the Fund and the London Pensions Fund Authority formed a joint venture to invest directly in infrastructure assets, offering excellent value for money with a focus on the UK. West Yorkshire, Merseyside and Lancashire County Council pension funds joined in December 2016, increasing commitments to GLIL of **£1.3 billion**. GLIL began investing in October 2015 and has completed three transactions with a total value of more than £250 million as at 31 March 2017 and two particular key renewable energy investments include:

- *Clyde Wind Farm* - **£150m** commitment - GLIL's largest transaction was the purchase from Scottish and Southern Energy of a 21.7% stake in Clyde wind farm. Clyde is one of the largest wind farms in Europe, with 154 operational turbines capable of generating 350 megawatts. GLIL has recently exercised its option for a follow on investment in this asset to construct a further 54, more powerful turbines on the site.
- *East Anglia rail franchise* - The financing of new rolling stock of 378 new vehicles to replace old rolling stock, creating faster, more frequent and less polluting journeys.
- *Leeming Biogas Limited* – **£60m** commitment in one of the largest anaerobic digesters in the country - converting up to 80,000 tonnes of food waste a year into bio methane which will be injected direct into Northern Gas Network's pipeline and provides enough energy to power more than 2,500 homes.

Another innovative approach adopted by the Fund is an allocation of up to **£210 million** into an Impact Portfolio. This portfolio has the twin aims of generating a commercial return and delivering a positive local impact. Examples of investments made in renewable energy include:

- *Albion Community Power* - **£20m** commitment to a power generation company seeking to develop community-scale renewable energy projects. It is one of the largest single sources of equity funding available for projects in the sector.
- *Iona North West Investments* - **£40m** commitment into new and existing environmental infrastructure projects in the North West, which was stated to create hundreds of jobs from clean energy funding in the coming years.

Our Infrastructure Funds portfolio has a number of funds that have invested in renewable energy production in the UK, the US and in parts of Europe. The following are the main examples:

- Arclight Energy Partners VI - **$45m** commitment in US wind and hydroelectric assets.
- I Squared Infrastructure - **$50m** commitment in US hydroelectric power assets, various wind and solar assets in the US, solar assets in Spain.

There are also two specialist renewable energy funds within the portfolio:

- Impax New Energy Investors II - **€11m** commitment - portfolio of mainly European wind assets but also a couple of solar PV assets.
- Capital Dynamics Clean Energy Infrastructure - **$32m** commitment - portfolio of wind assets in the US and the UK.

### (3) Risk Management

Climate risk will be measured and managed by integrating climate change into our risk management processes. We, or our managers on our behalf, will also consider the following:

- include climate related financial risk on our risk register;
- monitor the scheme's carbon intensity;
- monitor policy dialogues for early indicators of change; and
- increase internal awareness of publicly available climate change scenarios and other risk analysis tools.

This will include seeking to reduce climate-related risks by improving the resilience of our investments where possible as well as identifying investments where appropriate in suitable low-carbon assets to rebalance the investment portfolio away from carbon intensive assets.

*Company Engagement*

Where shares are held directly by the Fund, we identify, with guidance from investment managers and advisers, companies in our portfolios that are at the greatest financial risk from the transition to a low-carbon economy. We use our shareholder rights to engage directly, collaboratively (including with LAPFF) and through our fund managers, with companies exposed to the greatest risks, to encourage them to adapt their business models to ones that are better aligned to a low carbon economy. We further encourage companies to take account of the Financial Stability Board Task-Force on Climate-Related Financial Disclosure (TCFD) recommendations. Company responsiveness to engagement is taken into account in voting activity and the Fund will co-file and support relevant shareholder resolutions where appropriate. Where possible, we extend this engagement to investee companies across all asset classes.

Additionally, we are a signatory to The Climate 100+ which aims for investors to primarily engage with companies in their 'home' markets. Outcomes are demonstrable and can be endorsed. For example, Carbon Tracker has identified that 90% of Petrobras' reserves will be required in a 2 degree scenario because they are low cost reserves relative to the reserves of the rest of the market. If companies are able to conclusively demonstrate that their business is consistent with the below 2 degree scenario, they may be de-listed from the Climate Action 100+ initiative.

*Public Policy*
Policy uncertainty is a major source of climate-related risk, as policy unpredictability makes the parameters of investment decisions and forecasts of economic outcomes less certain. As such, the Fund commits to play an active role in engagement with policymakers and regulators whether directly, through its membership of LAPFF and other groups, or both. This encompasses encouraging policy makers to address market failures and to provide an appropriate strategy and policy framework, which encourages the transition to a low carbon economy. We will report on our policy objectives and activities annually in our Annual report starting with the next one due to be published in September 2018.

*Collaboration*
We believe collaboration with other investors helps influence and improve market best practice standards as well as strengthening the voice of asset owners and their pension beneficiaries. Consequently, through our own activities and by our membership of the Local Authority Pension Fund Forum and other organisations, we aim to support 1.5 to 2 degree business model scenarios and participate in:

- engagement with companies to improve their approaches to climate change as well as encourage them to report on their actions for future business model scenarios;
- influencing policy makers; and
- promotion of relevant research projects in areas, such as developing standardised carbon intensity measures, and investment initiatives that improve information flow and investment opportunities.

Recent significant developments to our approach include:

- Supporting the Transition Pathway Initiative (TPI), which aims to evaluate what the transition to a low carbon economy looks like for companies in high-impact sectors starting with oil and gas, mining, electricity generation, cement, iron and steel and autos. This enables asset owners and other stakeholders to make informed judgements about how companies with the biggest impact on climate change are adapting their business models to prepare for the transition to a low carbon economy.

- Partnering with the 50/50 Climate Project, which will provide research on company risks and opportunities, analysis of corporate-board climate competencies, and involvement in campaigns to refresh boardrooms as well as supporting the development of a pipeline of credible 'climate-literate' director candidates.

- We are also collaborating with ShareAction on a European-wide project led by the World Wide Fund for Nature (WWF) that aims to foster the alignment of investment portfolios with a below 2°C scenario. In February 2017, WWF started engaging with the 100 largest European asset owners offering each participant the opportunity assess the alignment of their public equity holdings to the 2°C climate scenario from the International Energy Agency (IEA). They are using a methodology currently being developed and tested by the Sustainable Energy Investment (SEI) metrics research consortium, led by 2 Degrees

Investing Initiative and of which WWF is a member. The SEI methodology is rapidly gaining mainstream recognition, for example:

- AXA used the SEI methodology in the report which won them "Best Investor Climate-Related Disclosures" in the contest organized by the French Minister of the Environment last October: https://cdn.axa.com/www-axa-com%2Fcb46e9f7-8b1d-4418-a8a7-a68fba088db8_axa_investor_climate_report.pdf).
- The Swiss government and 2 Degrees Investing Initiative are carrying out this assessment for approximately two-thirds of the country's insurance and pension funds https://www.ipe.com/news/esg/swiss-pension-funds-insurers-offered-2c-climate-alignment-tests/www.ipe.com/news/esg/swiss-pension-funds-insurers-offered-2c-climate-alignment-tests/10018733.fullarticle

- WWF has published the below report in July covering a sample of SEI assessment results for Nordic asset owners: http://www.wwf.eu/?303711/Biggest-EU-investors-are-partly-aligned-with-Paris-Agreement-but-more-efforts-needed.

We believe this project will be a valuable source of information for the Fund, especially in light of the current TCFD recommendations on scenario analysis.

### (4) Metrics and Goals

We will report progress in our Annual Report and Accounts where possible in line with TCFD recommended metrics. We will also report additional metrics such as the number of collaborative and direct company engagement meetings held. Any measures of carbon intensity undertaken will be used to feed into investment strategy and risk management processes, to highlight specific risks and to guide company and investment manager engagement. We aim to set targets that are measureable and reportable over time. These will cover climate related training, analysis of climate risk across the portfolio, addressing climate risk with asset managers and on asset allocation, including climate-related investment opportunities across asset classes. The Fund's long-term goal is for 100% of assets to be compatible with the net zero-emissions ambition by c.2050 in line with the Paris agreement. This decarbonisation goal will be regularly evaluated in line with our objective of maintaining long-term financial performance.

The Global investor Coalition on Climate Change recommend measuring and reporting to reduce the carbon intensity of portfolios. In order to understand the sources of carbon risk the Fund engaged the leading carbon audit service provider, Trucost, to measure carbon emissions and intensity and provide a carbon footprint of the Fund's listed equity portfolios.

Carbon foot printing is widely accepted to offer a way for investors to quantify, measure and subsequently manage the carbon exposure associated with their investments. There is no agreed or accepted standard to footprint an investment portfolio and understand carbon risks. It requires a combination of quantitative and qualitative assessments. As might be expected, in some sectors, direct emissions are a key component of business drivers, while others have carbon embedded in areas over which they have limited control. Emission numbers are the simplest and most widely available quantitative data. These can outline how much carbon is emitted by each portfolio using comparable data sets. The Greenhouse Gas Protocol, the most widely used international accounting tool for government and business leaders to assess Greenhouse Gas emissions (GHG), classifies a company's direct and indirect GHG into three scopes.

- Scope 1 – All direct greenhouse gas emission from sources owned or controlled by an organisation.
- Scope 2 – Indirect greenhouse gas emissions from consumption of purchased electricity, heat or steam or other sources of energy.
- Scope 3 – Emissions that are a consequence of the operations of an organization, but are not directly owned or controlled by the organisation. Scope 3 includes a number of different sources of GHG including employee commuting, business travel, third-party distribution and

logistics, production of purchased goods, emissions from the use of sold products, and several more.

It is worth highlighting that emissions data and analysis are not flawless. While scope 1 and 2 are disclosed relatively widely and the data quality can be monitored to some extent, scope 3 is extremely patchy in disclosure and there is a lack of consistent disclosure methodologies. Disclosure can differ widely from one company/industry to another. In addition by showing the three elements at the same time (scope 1, 2 and 3) the same emission can be double or even triple counted by different companies.

Carbon footprint analysis quantifies GHG embedded within the portfolio presenting these as tonnes of carbon dioxide equivalents (tCO2e). Comparing the total GHG emissions of each holding relative to annual revenue, gives a measure of carbon intensity that enables comparison between companies, irrespective of size or geography. The carbon footprint is an analysis of the GHG embedded within the portfolio. This is achieved by carrying out a carbon footprint for each individual holding encapsulating both direct and first tier indirect impacts. Direct emissions result from a company's own operations and include GHG emissions from boilers and company owned vehicles, emissions from any manufacturing operations and waste produced. First tier indirect impacts, also termed supply chain impacts, occur because of the goods or services a company procures. This includes purchase electricity, business travel and logistics.

The two principal reasons why the carbon exposure of active equity may differ from the benchmark are industrial sector and stock allocation decisions. Sector allocation decisions will cause the carbon intensity of the portfolio to diverge markedly from the benchmark where the sector/s are either carbon intensive or low carbon. If the portfolio is overweight in carbon intensive sectors the portfolio is likely to be more carbon intensive than the benchmark. However, if the stocks within a carbon intensive sector are the most carbon efficient companies, it is possible that the portfolio may still have a lower carbon footprint than the benchmark.

The Pension Fund's alignment with a 2 degrees objective will allow us to measure and understand the pension Fund's contribution to the international goal of limiting global warming to 2 degrees Celsius by 2050.

Trucost have analysed the Fund's holdings against a benchmark of the 27 countries of the European Union and of the OECD countries (source: World Bank). The assessment has been made on companies involved in power generation in the portfolios. This is because power generation is often considered the most carbon intensive activity in a portfolio it is a good proxy for a 2 degrees alignment measurement. The results shows that the portfolio's current share of renewable power generation as well as the alternative power generation in the mix is lower than that of EU27, OECD status in 2014.

I'm pleased to say the Independent Analysis by True Cost have found that the active decisions of the Fund managers have resulted in a less carbon intensive fund, which is better aligned with 2 degree scenario. This is because overall the equity holdings possesses lower fossil fuel proportion than the benchmark as we are less exposed to oil and coal, whilst the natural gas exposure is considerably higher than the proportions under IEA's 2 degree scenario for 2030 globally.

Whilst the Fund has historically had a relatively high exposure to fossil fuel companies, it is also at the forefront of actions to finance an orderly transition to a low carbon economy. It is vital that as a society, we invest in new renewable energy capacity, to replace our historic reliance on fossil fuels.

As long term investors, we are clear that pension funds can play a crucial role in this.

Within the last two years, the Fund has increased its strategic allocation to infrastructure to 10%, unlocking over £2 billion of assets for this purpose. A key strategy within this allocation is investments in low carbon and renewable energy opportunities.

However, the pace of investment must be consistent with our risk framework, and not detract in any way from our fiduciary responsibilities to pay our pension promises to public sector workers which are affordable and sustainable to the taxpayer.

All employers and the taxpayer have benefited from this outperformance through lower employer contribution rates and the Fund being better funded than most LGPS funds, which will provide more long term benefits to the employers in the Fund and enables more to be spent on local services.

Over the shorter term, returns from our holdings in companies exposed to fossil fuels have materially enhanced the Fund returns reducing the liability impact on employer and taxpayers who ultimately meet the costs of pensions if insufficient returns are not made on investments.

Finally, the Fund is committed to transparency. In October, the Greater Manchester Pension Fund held what is believed to be the first LGPS stakeholder engagement and stewardship event with support from the Pensions & Investment Research Consultants Ltd (PIRC). PIRC are Europe's largest independent corporate governance and shareholder advisory consultancy whose objective is to facilitate and support responsible capital stewardship by long-term investors. PIRCs role is to assist the Greater Manchester Pension Fund effectively exercise its shareowner rights and to identify and mitigate governance risk in its portfolios and set 'Environmental, Social and Governance (ESG) Criteria'.

The Environmental, Social and Governance (ESG) Criteria is a set of standards for a company's operations that socially conscious investors use to screen investments. Environmental criteria looks at how a company performs as a steward of the natural environment. Social criteria examines how a company manages relationships with its employees, suppliers, customers and the communities where it operates. Governance deals with a company's leadership, executive pay, audits and internal controls, and shareholder rights.

The event which was open to all stakeholders provided an opportunity to learn about the Fund's current approach to Responsible Investment and to have an input into shaping the evolution of the future approach. Almost 80% of survey respondents agreed with the Fund's general approach to engage with companies rather than divest from them. There was overwhelming support to the approach that the Fund is taking which will enable it to continue to be the most successful local Government Fund over the last 30 years, and in particular the table below sets out the response in favour of the Fund's approach:

| To what extent do you agree with the Fund's: | % in support |
|---|---|
| ✓ policy statements represent a positive approach to ESG issues? | 83% |
| ✓ approach to its voting policy? | 86% |
| ✓ collaborative approach to engagement? | 90% |
| ✓ general approach to engage with companies rather than disinvest from them? | 76% |
| ✓ approach to measuring climate change risk? | 85% |
| ✓ approach to managing climate risk? | 85% |
| ✓ approach to holding the Fund Managers to account for their implementation of the Fund's ESG policies? | 86% |
| ✓ approach to being transparent on its ESG policies? | 91% |
| ✓ broad approach to investing locally with the twin aims of making a positive ESG impact and achieving a commercial rate of return? | 92% |
| ✓ approach to direct UK infrastructure investing? | 93% |
| ✓ ambition to develop housing in the local area? | 90% |

**IN CONCLUSION**

The Fund's Management Panel (governing body) intends that the Fund's Responsible Investment policy be brought into line with the goals of the 2015 Paris Agreement addressing climate change.

We are undertaking a strategic review of the Fund's exposure to climate risk to be carried out and options for a decarbonisation plan. The Fund recognises that climate change is a systemic risk and thus, a material long-term financial risk for investors who must meet long-term obligations. Our Climate Risk approach is developing in four key areas:

1. Strategic review – which looks at how climate change may be integrated into investment beliefs and investment policies.
2. Strategic asset allocation – covering the measurement and management of climate change risks and opportunities within existing asset allocation and through evolving asset allocation over time.
3. Mitigation investment actions – looks at options for reducing the carbon intensity of existing assets, along with opportunities to invest in low carbon, clean energy and energy efficient assets.
4. Adaptation investment actions – looks at options for reducing the vulnerability of existing assets to the physical impacts of climate change as well as building exposure to adaptation solutions.

The Fund is not adopting this approach from a standing start as regards climate-aware investing and much of the task now involves a scaling-up of activities.

As part of the strategic review we will use climate scenario analysis to further articulate our investment beliefs on climate and to shape these into investment strategy goals (e.g. at the asset allocation level). We welcome the recommendations of the Financial Stability Board's Taskforce on Climate-related Financial Disclosures (recently presented formally to the G20) and commit to including a TCFD statement in our financial reporting from 2017/18 as part of our on-going climate risk assessment and disclosure.

The Fund recognises that like all pension funds it has assets within its investment portfolio that are at risk of becoming 'stranded' in a 2 degree scenario. It intends to address this risk through a suitable decarbonisation plan that measures the Fund's ownership responsibility for emissions; locates the areas within the public equities portfolio of highest carbon and reserves intensity; and implements a plan for re-balancing the portfolio that substantially reduces exposure to this intensity. The decarbonisation plan may involve a partial divestment of carbon intensive assets, but full divestment of fossil fuels companies is not considered to be sufficiently in line with fulfilling the Fund's investment objectives. The decarbonisation plan will be similar to those being carried out by other leading European asset owners, such as ABP (Netherlands), AP4 (Sweden), FRR (France) and the Environment Agency Pension Fund (UK).

The Fund will continue to engage appropriately with the fossil fuel companies in its ownership to require that they adequately review and align their business models towards transition to a low carbon economic future. The engagement will be carried out collaboratively (with LAPFF & others) and informed and shaped by Carbon Tracker and the Transparency Pathway Initiative.

The Fund will continue to deploy capital at scale into renewable energy. This is being carried out primarily through the Fund's investments in Infrastructure, which is 10% of the strategic asset allocation. The projects supported include large and smaller scale wind, solar, hydro and energy-from-waste projects in the U.K. and overseas.

The Fund is considering a portfolio decarbonisation exercise, which will <u>measure and report</u> its portfolio carbon footprint as including carbon emissions intensity and carbon reserves. The Fund commits to reduce this footprint by changing the composition of its passive (index-tracking) public equities portfolio in such a way that significantly reduces emissions and reserves intensity from the current level. The details of how this will be implemented are in the process of being worked through, but will likely involve a process of risk-based screening of particular stocks from the passive portfolio (either by a reduction or a removal of their presence in the portfolio) over the next two years.

We believe that this exercise could be described as a 'partial divestment' using FF:UK's definition of that term, although the Fund considers this to be primarily a risk-based approach in line with our long-term strategic goals.

I hope this explains why the call by Fossil Free UK to divest from fossil fuels creates an unacceptable risk and why the pace of decarbonisation must be consistent with our risk framework, and not detract in any way from our fiduciary responsibilities to pay our pension promises to public sector workers which are affordable and sustainable to the taxpayer. All employers and the taxpayer have benefited from this outperformance of the Greater Manchester Pension Fund through lower employer contribution rates and the Fund being better funded than most LGPS funds, which will provide more long term benefits to the employers in the Fund and enables more to be spent on local services. In particular residents of Greater Manchester have benefitted significantly from our approach to local investments both in terms of benefiting the local economy and creating local homes.

Yours sincerely,

**Executive Leader &**
**Chair of the Greater Manchester Pension Fund**