

TfL PENSION FUND

REPORT ON SUSTAINABLE INVESTING 2021

FROM THE CHAIR

On behalf of the Trustees of the TfL Pension Fund, I am pleased to present our latest Annual Report on Sustainable Investing. This report explains the steps the Fund has taken since our last publication and shines a light on some exciting new developments the Trustees have committed to in helping address climate change challenges. We are acutely aware that failure to address climate change puts our members' pension savings at risk of financial losses and means we could be missing out on investment opportunities as we accelerate the transition towards a low carbon economy.

Over the past several months it has been impossible to escape the media coverage surrounding numerous extreme weather events that have occurred across the globe. From the harrowing scenes we witnessed in the Mediterranean region, as wildfires rampaged through Greece and Turkey, following the worst heatwave in recent years, through to the pictures of devastation caused by flooding in many Western European countries and even as far out as in China and India. Events like these have plagued every corner of our planet in 2021, sadly with devastating consequences. Put simply, climate change has the real potential to have debilitating impacts for economies and investments everywhere if concrete actions are not taken now and long-term capital is not steered in their direction to fund them.

As a responsible investor with a long-term view accountable to over 85,000 members and their dependents and responsible for managing assets in excess of £13 billion, we recognise our members' pension savings has power to help shape a better world for all future generations. It is for this reason we believe that change starts with us. The Trustees are united in their passion for a sustainable global economy and want to play their part to limit climate change by reducing carbon emissions across all our investments. We know our members want us to invest their pension savings responsibly and to act with drive and ambition in this area and to be an agent of positive change. That is why the Trustees are continually striving to understand and mitigate the risks associated with climate change and identify the investment opportunities that not only will form part of the solution, but will also generate the required target returns to future-proof our members' pension savings as we move towards a low carbon economy.

Our proactive approach has also seen the Fund as an early adopter when it comes to implementing climate change regulations and rules, the most recent being the TCFD (Task Force on Climate Financial Disclosures) - a disclosure framework for climate-related risks and opportunities. We have been shadowing this framework for two years now and

aligning our scheme with its recommendations well ahead of the October 2021 go-live date.

In this context, I am delighted to be able to share with you that the Trustee Board recently announced the Fund's Carbon Neutral Journey Plan, agreeing a long-term target of getting to net zero latest by 2045, five years ahead of the UK government's 2050 target date. To achieve this ambitious goal and to check that we are on track we have also set an interim milestone of reducing the carbon emissions of the Fund by 55% by 2030 at the latest. Both targets will be measured using the same metrics that the Fund has been employing for several years to allow for consistency and will be reported in future reports. These are ambitious targets but as more precise data around climate risks and opportunities becomes available, with advances in technology and new business models evolve to tackle climate change, it's imperative that we remain open-minded and agile around these targets so that they can be adapted if required.

As the city of Glasgow hosted the 2021 United Nations Climate Change Conference in November, also known as COP26, we recognise that though we have made progress in many sustainable areas, there is more to achieve and we will continue to work hard on your behalf to play our part. I hope this report provides an overview of the Trustees' approach in this area and the activities that have occurred over the past twelve months. We have also included a section on our future priorities as we continue along our journey in helping shape a better world and society for everyone and we welcome your feedback.

M. Antoniou

Chair, TfL Pension Fund

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EXECUTIVE SUMMARY

This is the fourth year the Fund has published its Sustainable Investing Annual Report and we are pleased to be able to share this with you. This Report captures the on-going efforts and evolving activities the Fund has undertaken during 2020/21, as we continue along this important journey to integrate ESG considerations across all of our investments. The Fund continues to employ the “RISEN” framework to reinforce its long-term thinking in this area (see page 6 of this Report). For those that would like a quicker read, a ‘short version’ of this report can be found [here](#).

CLIMATE CHANGE AND CARBON NEUTRAL JOURNEY PLAN

- In the 12 months since the last report, despite the pandemic causing huge disruptions to daily lives, the urgency of reducing global carbon emissions and preventing serious consequences of climate change has never been felt so strongly.
- In a year that’s marked by remote working, the Trustees have dedicated a significant amount of time at virtual meetings to consider and discuss the Fund’s response to climate change. The Trustees recently announced the Fund’s carbon neutral journey plan – a **net zero carbon emissions target for the Fund’s investment portfolio by 2045 at the latest and to reduce its carbon intensity by 55% by 2030 at the latest compared to a baseline of 2016** (the year that the Paris Agreement came into force). This is further explained in the Climate Change section.
- The United Nations Intergovernmental Panel on Climate Change (IPCC)’s 6th Assessment Report, published in early August, states that the world will need to move at a much faster pace on decarbonisation, if it wants to keep temperatures from rising by more than 1.5°C this century compared to pre-industrial levels. The Trustees reflected on the IPCC key findings at their September meeting and made decisions around the targets in the carbon neutral journey plan based on it.
- In terms of regulatory disclosures, the Fund has published its second Taskforce on Climate-related Financial Disclosures (TCFD) statement, which is contained within the 2021 annual report and accounts and can be accessed online [here](#).
- The Fund also joined a **new engagement programme, on Climate Change – Sustainable Forests and Finance**, which will target companies directly driving forest-related emissions, their customers, and their financiers to promote sustainable practices. The programme not only tackles carbon emissions but also preservation of biodiversity in forest systems. We have been closely involved from the beginning in July 2021, providing feedback on the scope and key goals of the engagement as well as selecting target companies. The programme will run for 3 years and we will report on the progress. More detail can be found on page 18.

SOCIAL ISSUES

Despite the focus on Climate Change this year, social issues remain firmly on the Trustees’ agenda. The Trustees have taken several actions to help them monitor and manage these issues.

- They have acquired new data services from the Fund’s

stewardship partner Sustainalytics, a leading provider of ESG research, in the areas of Controversy Research and ESG Risk Ratings. This will provide the Fund with more tools (in addition to the MSCI database) to monitor and take timely action to address material social and environmental violations by investee companies, with the support of the fund managers and Sustainalytics, who will engage with the companies.

- If sufficient progress has not been made or is not forthcoming, the Trustees are open to the consideration of divestment. Examples can be found in the Stewardship section, in particular under the Global Standards Engagement programme, which includes the engagements with Amazon on labour rights issues and with Facebook on data security and privacy.

STEWARDSHIP

- The Climate Change and Social Issues sections both touched on “engagement” with investee companies as a very important tool in helping to achieve the Fund’s sustainability goals. Engagement is one element of “stewardship”. This year we have expanded the Voting and Engagement section into the Stewardship section containing four elements - voting, engagement, collaboration and advocacy, recognising the need for collective effort in achieving critical systemic goals. Please turn to page 13 for more coverage on each of the four elements.
- Engaging with the asset managers is a key part of the Fund’s stewardship activities. In the past year the Fund **has incorporated specific ESG clauses into the segregated equity and fixed income mandate Investment Management Agreements (“IMAs”)** to clarify its expectation of manager responsibilities regarding sustainable investing and stewardship. As all assets are externally managed, this helps to strengthen the Trustees’ monitoring of ESG implementation. The Fund requested each of the managers to submit an annual ESG questionnaire summarising their ESG policy and processes, as well as, answering a list of questions with real examples. Most managers have responded thoughtfully. These will help the Fund create an ESG profile for each manager which will be combined with the investment consultant’s manager ratings in ongoing monitoring.

UN-BACKED PRINCIPLES FOR RESPONSIBLE INVESTMENT (“PRI”) ANNUAL ASSESSMENT

- Over the last year, another four of the Fund’s managers have become PRI signatories, meaning all managers are now committed to PRI’s principles. This is a direct reflection of the Fund’s engagement with its managers.
- The Fund has been a signatory to the PRI since 2016. The annual PRI assessment is a useful independent evaluation of the Fund’s sustainability work. In 2021 the PRI introduced a brand-new reporting and assessment framework to ensure that the framework remains relevant and useful after being in place for 10 years. The new framework was ambitious, and PRI received feedback from many signatories that the questionnaire required considerable efforts to complete. The Fund committed resources to submit a full response on time.
- While we normally expect to receive assessment results over the summer, the PRI announced in August that it will delay the release of the 2021 assessment results to June 2022, as

it needs significantly more time to process and analyse the datasets received.

- Although we are not yet able to report the results, we have taken onboard some new initiatives from the PRI's refreshed framework, including a stronger focus on the sustainability outcomes in this report.

INVESTMENT CASE STUDIES

- We would also like to highlight the investment case studies included from page 23 onward. The Fund continues to work in partnership with its managers to source investment opportunities that not only offer attractive rates of return, but equally are aligned to the United Nations Sustainable Development Goals. Here we showcase some of these exciting investment opportunities that the Trustees are proud to be part of.

Many of the case studies are in private markets, where the Fund's investments enable the delivery of climate-friendly infrastructure plants and buildings. This includes a recent investment in "controlled environment foods" which provides an innovative approach to supply food sustainably – do check out this [short video](#) which explains how it works and the benefits.



SUSTAINABILITY OUTCOMES

- Having reviewed the Fund's important activities over the year, we would like to summarise the sustainability outcomes from the Fund's investments with more detail throughout this report. It is important to look at this through multiple angles because measuring sustainability outcomes is not always straightforward. In this report, they are evident through three dimensions:

1. Portfolio-wide metrics to measure carbon emission reductions and wider sustainability impact (based on the UN Sustainable Development Goals framework)

The Fund's Carbon Emissions on the active equity and bond portfolios, measured by Carbon Emissions Intensity (CO₂e tonnes / \$m Sales), has **reduced by over 30% since 2016**. As of Q1 2021, the Fund's Carbon Emissions Intensity is **36% less than the benchmark** (see page 8);

The market value of companies aligned with Paris Agreement Pledges (or beyond) has increased from **57% to 81%** (out of all the Fund's active portfolio holdings assessed by TPI) over the past year (see page 11);

The Fund's active equity portfolio continues to **outperform its benchmark**, namely MSCI World, MSCI Emerging Markets and MSCI Small Caps, **across 16 out of the 17 UN Sustainable Development Goals** (see page 22);

2. The Fund's allocation to ESG tilted assets, including the Case Studies section that shows a small sample of these investments that we have made, especially in the private markets, where the investments are not captured by SDG or carbon analysis yet

The Fund has increased its allocation target to assets with a strong ESG tilt, from 5% (which has been achieved) to **15% by 2025**. This represents a material increase in our ambition to benefit from the opportunities presented by decarbonisation and "investment with purpose" objectives, and the Fund is well on track to deliver the target:

- As of Q1 2021, the allocation to ESG tilted assets makes up **9.8%** of the Fund's total assets;
- The Fund committed over **£750m of new investments** to sustainable farming, infrastructure (an asset class rich in renewable energy and low carbon opportunities), and private equity (up to 30% of which will be allocated in ESG tilted assets).

3. Voting and engagement outcomes

The Fund's stewardship partner Sustainalytics has been **engaging with 37 investee companies; 6 cases have been successfully resolved** since their appointment (see page 15);

Following persistent efforts by the Trustees and other like-minded investors, the Fund's passive equity manager BlackRock has significantly improved its engagement and voting. The manager **engaged with 490 companies** across different regions in Q1 2021; firm-wide engagements were **up by 24%**, and on environmental topics **increased by over 50%**.

Among the active holdings the Fund voted 'for' (i.e. in support of) **56%** of environmental and social shareholder proposals through Glass Lewis.

- Finally, contained in the last section of the report, **Way Ahead**, the Trustees set out their plans for next year which we encourage everyone to read.

TfL PENSION FUND'S ESG JOURNEY CONTINUES

BACKGROUND

Regulation and Investment Framework update

SUSTAINABLE DEVELOPMENT GOALS

Portfolio Impact analysis based on the UN global goals framework

SUSTAINABILITY PROGRESS: QUICK CHECKLIST

Noteworthy progress made since our last publication

CASE STUDIES

Investment with material ESG outcomes

CLIMATE CHANGE

Assessing the resilience of our investments to climate risks

STAKEHOLDER FEEDBACK

STEWARDSHIP

Collaboration with like-minded investors enhances our progress

WAY AHEAD





BACKGROUND

REGULATION AND INVESTMENT FRAMEWORK UPDATE

INVESTMENT BELIEFS

Before we begin to look in more detail at each section of the Report, we set out the Trustees' Investment Beliefs. The following beliefs are intended to set the background, against which all investment related decisions are taken to benefit the Fund. All discussions and decisions from investment strategy and implementation through to tactical views and funding are taken with these beliefs in mind. Although all beliefs are as equally important as each other, for the purposes of this Report, specific attention is drawn to Belief numbers 7, 8 and 10.

01 RISK AND RETURN ARE RELATED, BUT NOT ALL RISKS ARE REWARDED

02 CLEAR OBJECTIVES ARE ESSENTIAL AND SHOULD BE LIABILITY RELATED AND FUNDING DRIVEN

03 AN ACTIVE CORPORATE GOVERNANCE PROGRAMME CAN ADD VALUE

04 SKILLED INVESTMENT MANAGERS DO EXIST AND IT IS POSSIBLE TO OUTPERFORM THE MARKET

05 TIMING IS IMPORTANT: ASSET VALUATION CANNOT BE IGNORED WHEN PLANNING STRATEGIC CHANGE

06 LONG-TERM FOCUS IS IMPORTANT IN THINKING ABOUT INVESTMENT STRATEGY AND IMPLEMENTATION

07 RETURN AND SUSTAINABILITY ARE NOT CONFLICTING OBJECTIVES AND THE MAIN OBJECTIVE OF THE FUND IS TO DELIVER SUPERIOR INVESTMENT RETURNS AND SUSTAINABILITY IS A PART OF THIS, NOT SOME STANDALONE OBJECTIVE

08 CLIMATE CHANGE IS A SIGNIFICANT LONG-TERM FINANCIAL RISK WHICH HAS POTENTIAL TO IMPACT ALL HOLDINGS IN THE PORTFOLIO OVER TIME IF NOT PROPERLY MANAGED

09 THERE IS FREQUENTLY A FIRST MOVER ADVANTAGE, BUT TO EXPLOIT IT REQUIRES A WILLINGNESS TO TAKE UNCONVENTIONAL RISK

10 DIVERSIFICATION HELPS TO CONTROL RISKS AND IMPROVE EFFICIENCY

11 ILLIQUIDITY IS FREQUENTLY REWARDED IN THE LONG-TERM

12 THE EQUITY MARKET IS GENERALLY REWARDED IN THE LONG-TERM

13 UNREWARDED RISKS SHOULD BE MITIGATED WHERE POSSIBLE

14 THE IMPLEMENTATION OF ANY INVESTMENT OR STRATEGY SHOULD BE COST EFFECTIVE AND AT AN APPROPRIATE PRICE RELATIVE TO THE OPPORTUNITY

REGULATION UPDATE

PENSIONS REGULATION

- The Trustee Board continues to review the Fund's Statement of Investment Principles (the "SIP") annually to take into account new regulations and other necessary changes. This year, updates were made to the ESG Policy within the SIP to reflect the Fund's commitment to the Taskforce on Climate-Related Financial Disclosures (TCFD) recommendations.
- From 1 October 2020, trustees were required to produce an implementation statement setting out how they acted on the policies set out in the SIP. The Trustee Board has opted to publish a statement that is more comprehensive than the minimum requirement for Defined Benefits schemes (which is limited to a report on the engagement activities and votes exercised during the year). The Fund's implementation statement, which is included in the annual report and accounts, reports generally on the implementation of the Fund's ESG and other policies in the SIP as well as the engagement activities and voting during the year to March 2021. (It can be accessed online [here](#)) This report complements the implementation statement by providing more detail on the Fund's ESG activities over the year, including further case studies.
- Climate change remains under the spotlight and has been a key focus for the Trustee Board this year. In January we saw the publication of the DWP's (Department for Work and Pensions) best practice guidance on aligning pension schemes with the Taskforce on Climate-Related Financial Disclosures (TCFD) recommendations. This guide aims to help trustees evaluate the way in which climate-related risks and opportunities may affect their strategies. The TCFD-aligned requirements are coming into law through the

Occupational Pension Schemes (Climate Change Governance and Reporting) Regulations 2021, introducing mandatory disclosure effective from 1 October 2021. The Fund remains proactive and published its second TCFD statement in the 2021 annual report and accounts (it can be accessed online [here](#)).

- Elsewhere in Europe, the EU has imposed the Sustainable Finance Disclosures Regulation (SFDR) on financial products. While this does not impact the Fund as an asset owner, and this regulation has not become part of UK law, many of our fund managers are complying due to operating in the EU and this will hopefully make it easier for the Fund to obtain sustainable finance disclosures.
- As well as operating by reference to these specific investment regulations, there are also broader legal concepts which need to be taken into account in investment decision making, as explained in the next section.

FIDUCIARY DUTIES AND THE PRUDENT PERSON PRINCIPLE

- For trustees of DB schemes like the Fund, there are three core duties that they must consider when making investment

decisions:

- Exercise investment power for its proper use – the purpose of trustees’ investment powers is to invest in such a way as to provide the promised benefits in full.
- Take account of relevant financial factors – trustees should consider ESG issues as financially material factors. There is a growing body of evidence to suggest that ESG issues, like climate risk, can have a material impact on long-term risks and return outcomes. Incorporating ESG considerations into investment decision making is therefore critical for the health and well-being of the Fund in the long run.
- Act in accordance with the “prudent person principle” – recent advances in artificial intelligence and machine learning have improved ESG data, particularly data on climate risks and related financial opportunities. Trustees should now consider how future scenarios, such as a transition to a low carbon economy, could impact their schemes assets (and liabilities) and what a prudent course of action should be to mitigate against and contain any risks, while also seeking any related financial opportunities.

INVESTMENT FRAMEWORK

As in earlier reports it is useful to remind ourselves of the framework which the Trustees employ to guide them when looking at ESG and sustainable investing, what we have come to term the “RISEN” framework:

- R** **Recognising** that companies which fail to recognise and handle their social and environmental impacts with care, or ones that do not adopt ethical and responsible governance practices are poor long-term investments because they will be prone to financial losses and loss of reputation.
- I** **Improving** its ESG approach and practices from ongoing learning and doing, recognising that this is a new area for the Trustees and clearly more can and will be done as the collective knowledge improves over time.
- S** **Seeing** ESG factors not in isolation but as part and parcel of the investment process with a view to making ESG integration less of a labelling exercise and more of a push towards real and positive long-term changes in the underlying companies the Fund has invested in.
- E** **Engaging** with investment managers both during the selection process and their ongoing monitoring to understand how ESG is taken into account from a long-term risk management and valuation perspective.
- N** **Nudging** investment managers to consider in more detail the impact of the activities of companies in which they invest have on the environment, particularly when they operate in countries with less sophisticated and demanding regulatory requirements. This is to ensure companies are fairly treating all stakeholders (shareholders, customers and employees) and conforming to standard business principles of transparency, integrity and fair and reasonable dealing.

SUSTAINABILITY PROGRESS – QUICK CHECKLIST

A quick overview of the Fund's progress to date

2021

2020

ACTION PLAN					
	BEHIND THE CURVE Unlikely to stand up to any serious scrutiny	ON THE BACK FOOT Getting compliant	ON THE FRONT FOOT Embedding ESG into Trustee governance	GETTING AHEAD Making ESG and climate change a key strategic issue	
YOUR ACTION PLAN	1. Set investment beliefs	Trustee board relies on its investment consultants to tell them what to believe. Sets nothing out in writing.	Trustee board receives a brief training session before minuting that ESG and climate change are considered material financial factors.	Trustee board spends time on training before discussing and agreeing a responsible investment beliefs statement including a position on climate change risk.	Trustee board discusses ESG beliefs at least annually. Where applicable, trustee seeks to align beliefs with sponsor views. Considers alignment of strategy with UN SDGs.
	2. Review existing managers	No engagement with existing managers.	Takes stock of existing managers and uses investment consultant scoring framework to rate current managers on their ESG credentials. However, scores are only used as a differentiator where there are other reasons to review a manager.	Full consideration of each manager's ESG capabilities (including qualifications) with specialist input from investment consultants – includes being alive to "green-washing". Managers which require most attention identified and engaged with. Where no improvement is forthcoming or possible within current mandates, these will be reviewed.	All managers expected to demonstrate deep ESG integration. Integrates corporate environmental data in manager investment processes.
	3. Set a DB investment strategy	Existing strategy not reviewed.	Trustee keeps existing strategy under review as ESG experience develops.	For active mandates: considers diversification across sources of climate risk as well as traditional asset classes. Sustainability and low carbon indices considered for passive allocations.	Positive allocation to sustainable investment or investment in assets aligned with a below 2°C pathway. Consider tilting portfolio away from lower scoring ESG assets or sectors such as high carbon emitters.
	4. Document a Policy	Adds generic wording to SIP at suggestion of the investment consultant. No further thought by trustee. Trustee does not consider wording or how it will be implemented in practice.	Trustee considers wording in the SIP reflecting the circumstances of the scheme and existing manager mandates. Trustee agrees how wording is implemented in practice with their investment consultants.	Trustee develops a stand-alone responsible investment policy which supplements the SIP. This may start with existing manager mandates but will progress to deeper integration of ESG factors over time. The policy is periodically reviewed.	Extensive responsible investment policy with detailed consideration of ESG in each asset class, detailed climate change policy and stewardship policies. Climate change risk embedded across other trustee governance and internal control frameworks and considered as part of an integrated risk management framework (including any climate change risks pertinent to the scheme sponsor covenant).
	5. Ongoing manager monitoring	Reports on quarterly past performance figures only. No forward-looking consideration of manager ESG attributes or exposure of mandates to climate change risk in the longer term.	Active managers are expected to demonstrate how ESG criteria are being used in stock selection and de-selection.	Develops a robust monitoring process – reporting qualitatively and quantitatively against each manager. Managers expected to demonstrate integration of ESG in investment processes rather than the existence of separate "advisory" ESG analysts.	Measures alignment of listed equity and corporate bond portfolios across 2° transition sectors and technologies.
	6. Appointing new managers	Mentions ESG only as an afterthought in tender invitations and gives it no weight in selection criteria.	ESG is identified in tenders as an important issue on which potential new managers will be expected to demonstrate competency.	ESG credentials key in tender process. Investment management agreements negotiated to include specific ESG requirements.	Responsible investment requirements included across all asset classes including e.g. side letter terms in private equity funds.
	7. Stewardship & engagement	Not considered relevant. Justified based on an incorrect assumption that the scheme's investments are all pooled and therefore "stewardship is impossible".	Trustee expects managers to report on how they have exercised voting rights attached to shares (including across passive equity mandates). Managers are expected to be signatories to the FRC Stewardship Code.	Managers are expected to report in detail on their engagement policies and how these have been implemented. This should include examples of voting against the board on ESG related issues. Managers with a poor engagement record will be downgraded. Consider adoption of an off-the-shelf voting e.g. AMNT redlines.	Large schemes: takes an active and direct role engaging with investee companies across all asset classes. Considers joining other investors in filing climate-related shareholder resolutions where companies are underperforming on adaptation or disclosure. Small schemes: appoints proxy voting and engagement service reflecting trustee's ESG beliefs and position on climate risk.
	8. Scenario testing	None	Obtains broad estimates from consultants as to the potential significance of climate change on the scheme's portfolio.	Considers carbon foot-printing tests on portfolio. This may focus initially on listed equities and corporate bonds.	All-portfolio risk assessment (including all real asset holdings) to identify exposure to transition risks and potential physical damage risk under different climate scenarios.
	9. Reporting	Sends stock wording to any members causing a nuisance.	Some commentary provided to scheme members in annual report.	Considers TCFD reporting framework as a structure for internal governance.	Reports publicly against TCFD.
	10. Industry Involvement	None	Relies on advisers to provide updates on significant developments requiring action and training as required.	Trustee board keeps abreast of industry discussions and attends events to improve knowledge and observe best-practice. Considers becoming a UN PRI Signatory.	Joining investor groups such as IIGCC. Engage with policy makers to improve practice across the industry.

Source: Sackers and Partners LLP



CLIMATE CHANGE

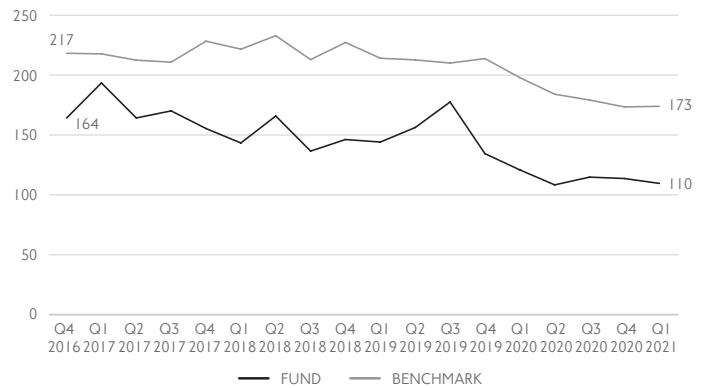
ASSESSING THE RESILIENCE OF OUR INVESTMENTS TO CLIMATE RISKS

FUND CARBON EMISSIONS

- Climate change presents one of the largest economic and political challenges. Assessing the carbon footprint of the Fund's portfolio is the first step in addressing the investment implications of climate change. Carbon footprint sets a baseline to inform future actions, which can range from reporting and engagement to decarbonisation.
- Carbon Emissions Intensity (per million dollars of sales), the key metric to measure the carbon footprint, asks an important question – How efficient is the Fund's portfolio in terms of carbon emissions per unit of output? The lower the carbon intensity, the lower volume of carbon emissions per million dollars of sales generated by portfolio companies over a specified time frame, the better the carbon efficiency.
- The Fund has been analysing its carbon footprint of companies in its active equity and bond portfolio based on MSCI Carbon Emissions Intensity measurement since 2016. The following chart provides an overview of the carbon intensity aggregated at the Fund level. Since 2016, the Fund carbon intensity continues to fall. As of Q1 2021, the Fund's portfolio has reduced 33% carbon intensity comparing to the level of 2016.
- The Fund has always outperformed the benchmark in terms of the carbon intensity measure. As of Q1 2021, the Fund's carbon intensity is 36% less than the equivalent benchmark.

- In the twelve months to 31 March 2021, the Fund's carbon emissions intensity across its active equity and bonds portfolio declined by a further 9%, falling from 121 CO₂e tonnes per million dollars of sales to 110 CO₂e tonnes per million dollars of sales.





CARBON EMISSIONS INTENSITY (TONNES / \$MN SALES)
Fund v.s. Benchmark



33% reduction in carbon emission intensity since 2016

36% lower carbon emission intensity than benchmark

ENVIRONMENTAL FOOTPRINT

MEASURE per USD 1m of revenue	TfL Pension Fund Equity	Custom Benchmark	POSITIVE IMPACT per USD 1m of revenue	
GREENHOUSE GAS EMISSIONS	113.1 metric tons CO ₂ p.a. ¹	182.8 metric tons CO ₂ p.a. ¹	38% LOWER CO₂ EMISSIONS p.a.¹ corresponds to CO ₂ emissions of 28 cars	
ENERGY CONSUMPTION	398.5 megawatt hours p.a.	429.7 megawatt hours p.a.	7% LOWER ENERGY USAGE p.a. corresponds to energy usage of 20 people	
WATER WITHDRAWAL	1,159 cubic metres p.a.	1,525 cubic metres p.a.	24% LOWER WATER USAGE p.a. corresponds to water usage of 8 people	
WASTE GENERATION	145.2 metric tons p.a.	425.7 metric tons p.a.	66% LOWER WASTE GENERATION p.a. corresponds to waste of 559 people	

¹ CO₂ and other gases that are recalculated into CO₂ equivalent

LGT COCKPIT TOOL MEASUREMENT

- The Fund continues its collaboration with LGT Capital, utilising LGT’s Cockpit tool to provide an alternative measurement of its environmental footprint, which covers not only carbon, but also water and waste.
- The Fund’s active equity portfolio consistently delivered superior performance when compared to the benchmark on all metrics. In particular, GHG (greenhouse gas) emissions, water withdrawal and waste generation are significantly lower than the reference index.

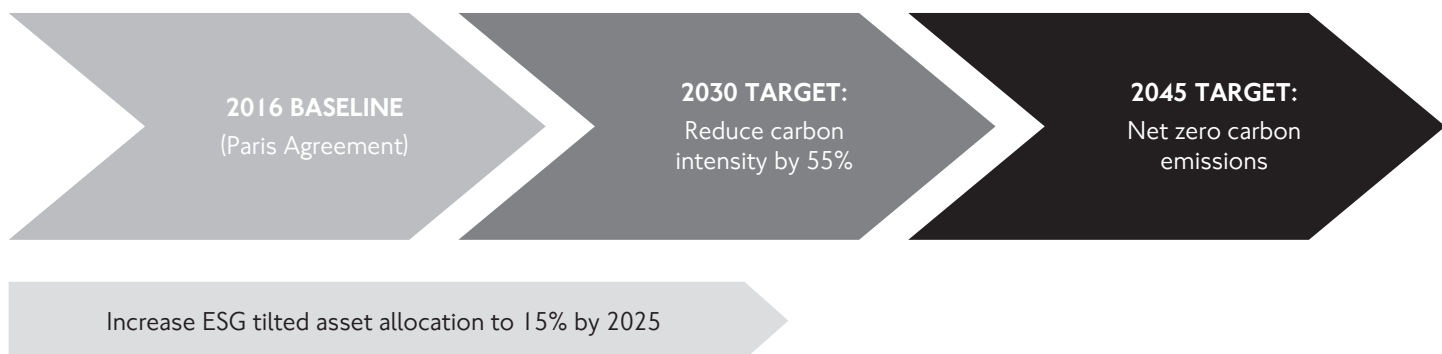
Energy consumption reduced from 711 to 398 megawatt hours per annum over the last year

CARBON NEUTRAL JOURNEY PLAN

- A number of countries, including the UK, have made commitments to move to a net zero carbon emissions economy. This is in response to climate science showing that in order to halt climate change, carbon emissions have to stop – reducing them is not sufficient. ‘Net zero’ means that any emissions originating in human activity are balanced by absorbing an equivalent amount from the atmosphere.
- In order to meet the 1.5°C global warming target in the Paris Agreement, global carbon emissions should reach net zero around mid-century. For developed nations such as the UK, this date may need to be earlier. Many businesses have also made net zero commitments.
- The Trustees have reinforced their view of climate change as a financial risk to the returns generated by the Fund’s assets by announcing their ambition to be Net Zero for carbon by 2045 at the latest, ahead of the UK government’s 2050 target date. The target mainly covers Scopes 1 and 2 emissions from the whole of the Fund’s investment portfolio.
- To support the 2045 long-term target, the Trustees have also set an intermediate target for 55% carbon reduction by 2030 at the latest, compared to a baseline year of 2016 (2016 being the year that the Paris Agreement came into force).
- Both targets will be measured using the weighted average carbon intensity (or “WACI” for short) when it comes to the Fund’s investment portfolio. This is the same metric that the Fund has been using to report its carbon footprint on page 8

of this report, and in the previous reports. WACI is selected as the metric to measure progress because it enables the Fund to compare the weighted average carbon efficiency or intensity of its portfolio with that of its benchmark.

- In addition, the Trustees have also established a target to allocate 15% of its portfolio to ‘ESG tilted’ assets by 2025, of which a large proportion will be in low carbon assets. This was an increase from the 5% allocation target by 2020, which has already been achieved.
- The Fund’s investments in ‘carbon mitigation’ assets such as renewable energy projects will result in Avoided Emissions (i.e. emissions that would have occurred if the ‘mitigation’ did not take place). Avoided Emissions will be measured and reported in an integrated climate reporting framework for the Fund and contribute towards the ‘net zero’ emission target.
- The announcement is the latest development in the Fund’s track record of recognising climate changes as an investment risk. In 2019, the Fund began to exclude (and disinvest where necessary) from its portfolio all companies that are materially involved in thermal coal mining and thermal coal power generation (where this accounts for more than 30% of a company’s revenues).
- The Trustees are now in the process of establishing implementation programmes to deliver on this ambition. Likely actions, some of which are already in progress, will include:
 - Review the carbon emissions baseline for the Fund’s assets, assess and prioritise high emission areas;
 - Establish guidelines and measure performance for the Fund’s investment managers to ensure that they take carbon (and other ESG factors) into account;
 - Continue to build on investments in low carbon mandates such as wind, solar and other sources of renewable energy, and other sectors that support the transition;
 - Collaborate with investment managers, advisors and other asset owners, to engage with and encourage investee companies to strive for material progress in this area, and also to decide what action should be taken where they do not transition fast enough (see the Stewardship section for more information, including the Fund’s involvement in Climate Action 100+);
 - Divest over time, when necessary, from companies in high carbon sectors that are not taking enough mitigating actions.
 - The Trustees will outline an objective and transparent oil divestment approach based on Transition Pathway Initiative (“TPI”) Framework (based out of the London School of Economics) in the near term. The next section provides the Fund’s current TPI assessment results.



TRANSITION PATHWAY INITIATIVE (“TPI”)

- The Transition Pathway Initiative (TPI) is a global initiative led by asset owners and supported by asset managers. It is rapidly becoming the go-to corporate climate action benchmark.
- The TPI assesses how prepared companies are for the transition to a low-carbon economy, with a focus on high impact sectors.
- The TPI tool ranks companies by two measures: how well their management is dealing with climate change risks and how effective are they at achieving carbon reduction.
- Performance assessments compare individual companies with internationally agreed benchmarks made as part of the Paris Agreement and assess their progress towards meeting the Paris goals.

Quality of the Management

- The Fund has been tracking its actively managed holdings against the TPI database since 2017. As detailed in the table

below, the number of Oil & Gas holdings has decreased from 9 to 2 and there is no longer any holding in coal mining. The market value of the Fund’s holdings in these sectors, as well as in all ‘high impact’ sectors assessed by TPI, has decreased too. This indicates that the Fund’s managers continue to tilt toward investment opportunities in low carbon sectors.

- The quality of management scores of the TPI identified companies have improved from 1.6 in 2017 to 3.3 in 2021. Management quality assessments rely on data from FTSE Russell to assign companies to one of five levels, ranging from level 0 (no recognition of climate change as a significant issue) to level 4 (climate change deeply integrated into a company’s business practices).
- Level 4 is the highest score representing companies which have set long-term quantitative targets for reducing greenhouse gas emissions, incorporated ESG issues into executive remuneration and incorporated climate change risks and opportunities in their strategy.

	# of Companies		Market Value (£mn)	
	Mar-21	Mar-17	Mar-21	Mar-17
Steel	2	4	32.0	27.1
Coal Mining	–	7	–	28.3
Diversified Mining	1	–	12.3	–
Cement	4	2	7.7	19.3
Electricity Utilities	5	4	39.0	22.0
Airlines	3	1	0.9	3.7
Other Industrials	8	7	70.1	65.7
Other Basic Materials	–	3	–	14.2
Oil & Gas	2	9	3.7	60.5
Services	1	3	–	20.9
Autos	4	8	25.8	48.9
Consumer Goods	3	2	30.6	4.4
Chemicals	8	–	55.6	–
Aluminium	2	3	2.0	19.9
Paper	2	1	–	1.2
Shipping	2	–	17.3	–
Total	47	54	297	336
Total Fund	565	632	12,842	9,752
% of Fund Value	8.3%	8.5%	2.3%	3.4%
Management Quality Score			3.3	1.6

TPI – CARBON ALIGNMENT

- TPI’s assessment of companies on their Carbon Performance consists of a quantitative benchmarking of companies’ emissions pathways against the international targets and national pledges made as part of the Paris Agreement on climate change.
- The key question the Carbon Performance assessment seeks to answer is: are companies aligned with the Paris Agreement goals, and, if not, will they be in the future?
- Based on the Fund’s March 2021 active equities holding analysis, more than 80% of the holdings are aligned with the Paris Agreement or more ambitious standards (2 degrees and below 2 degrees) versus 57% last year.
- 7 companies (19% by market value) are not aligned with any of the benchmarks. This is a significant decrease of market value (from 43%) for the non-aligned companies from last year. For each of these names, the respective fund manager provided a clear rationale for holding the company (i.e. they saw evidence that the company would be pursuing a low-carbon transition).
- The Trustees will outline an oil divestment approach based on TPI next year.

	Number of Companies	Market Value %
Not Aligned	7	19%
International Pledges	1	1%
Paris Pledges	4	4%
2 Degrees	1	14%
Below 2 Degrees	11	63%
	24	100%

FROM 57% TO 81%

- increase in market value of companies aligned with Paris Agreement as assessed by TPI

Company	Carbon Performance Alignment	Market Value (£mn)	Sector	MV %
A P MOLLER MAERSK B	Below 2 Degrees	15.7	Shipping	10%
AMBUJA CEMENTS LTD	Not Aligned	4.4	Cement	3%
ARCELORMITTAL SA	Below 2 Degrees	11.7	Steel	8%
EDISON INTERNATIONAL	Below 2 Degrees	16.8	Electricity Utilities	11%
ENEL	Below 2 Degrees	7.8	Electricity Utilities	5%
EXXON MOBIL CORP	Not Aligned	3.7	Oil & Gas	2%
FORTESCUE METALS GROUP LTD	Not Aligned	12.3	Diversified Mining	8%
HEIDELBERGCEMENT AG	Below 2 Degrees	1.3	Cement	1%
HONDA MOTOR LTD	2 Degrees	21.2	Autos	14%
JAPAN AIRLINES LTD	Not Aligned	0.9	Airlines	1%
KIA CORPORATION CORP	Not Aligned	2.5	Autos	2%
MITSUI OSK LINES LTD	Below 2 Degrees	1.7	Shipping	1%
NATIONAL GRID PLC	Below 2 Degrees	1.3	Electricity Utilities	1%
ORSTED	Below 2 Degrees	13.2	Electricity Utilities	9%
POSCO	Below 2 Degrees	20.4	Steel	14%
RENAULT SA	Paris Pledges	1.1	Autos	1%
RIO TINTO LTD	Below 2 Degrees	3.5	Aluminium	2%
RWE AG	Below 2 Degrees	1.0	Electricity Utilities	1%
SEMEN INDONESIA (PERSERO)	Not Aligned	2.2	Cement	1%
SOUTHWEST AIRLINES	Not Aligned	1.9	Airlines	1%
STORA ENSO CLASS R	Paris Pledges	1.1	Paper	1%
TOTAL	Paris Pledges	2.3	Oil & Gas	2%
UPM-KYMMENE	Paris Pledges	1.1	Paper	1%
WIZZ AIR HOLDINGS PLC	International Pledges	1.0	Airlines	1%



STEWARDSHIP

VOTING, ENGAGEMENT, COLLABORATION AND ADVOCACY

INTRODUCTION

The Fund’s approach to stewardship is one of closely monitored delegation and collaborative action. The Fund also plays an active role in the pensions and investment community, engaging policymakers and market participants on systemic issues.

Since April 2020, there has been a centralised voting and engagement programme which is carried out on the Fund’s behalf by the stewardship partners (Sustainalytics and Glass Lewis). The fund managers continue to carry out engagement with investee companies as part of their fiduciary duties.

KEY OUTCOMES ON VOTING

Between the 1st July 2020 and 30th June 2021:

- 614 company meetings were held across five regions with Glass Lewis voting 7,635 resolutions on behalf of the Fund on the active holdings
- The Fund voted on 54 environmental and social shareholder proposals
- The Fund voted ‘for’ (i.e. in support of) 56% of environmental and social shareholder proposals
- For the passive holdings, during the same period, BlackRock voted at 6,466 meetings and voted 11,309 ballots

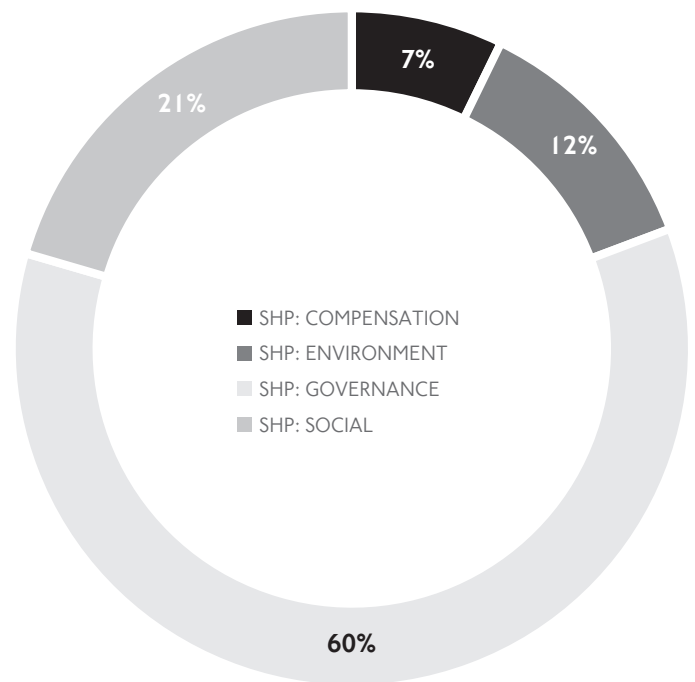
Shareholder proposals regarding climate change that passed:

- Booking Holdings Inc: Shareholder Proposal Regarding Climate Transition Report
- Delta Air Lines, Inc: Shareholder Proposal Regarding Lobbying Activity Alignment with the Paris Agreement
- Norfolk Southern Corp.: Shareholder Proposal Regarding Lobbying Activity Alignment with the Paris Agreement

VOTING

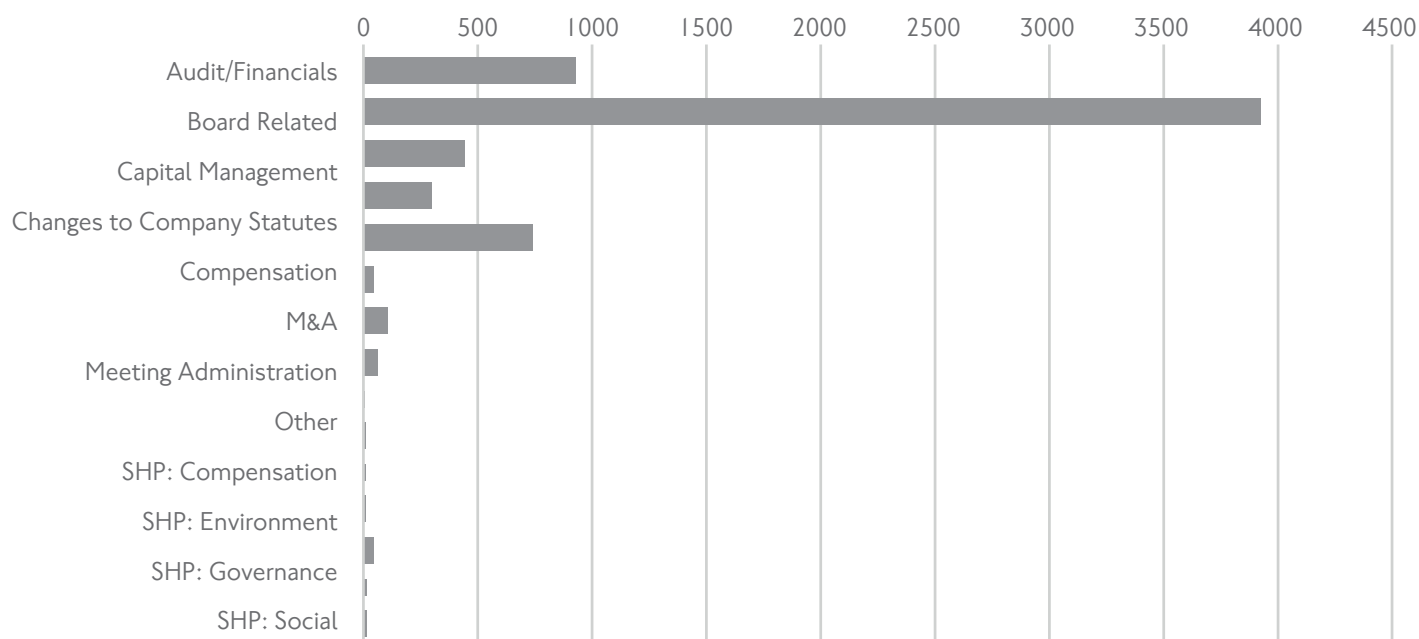
- As an institutional investor the Fund owns a small share of thousands of companies globally. Our goal is to vote at all the shareholder meetings of companies in our equity portfolio. We have a responsibility to use our ownership rights to improve corporate governance practices in both financial and ESG areas across our investee companies.
- As can be seen from the chart below, Shareholder Proposals (“SHP”) on environmental and social issues are still in the minority compared to governance proposals. However, they are being raised more frequently and are increasingly important to hold management to account on these issues.

TOTAL SHAREHOLDER PROPOSALS

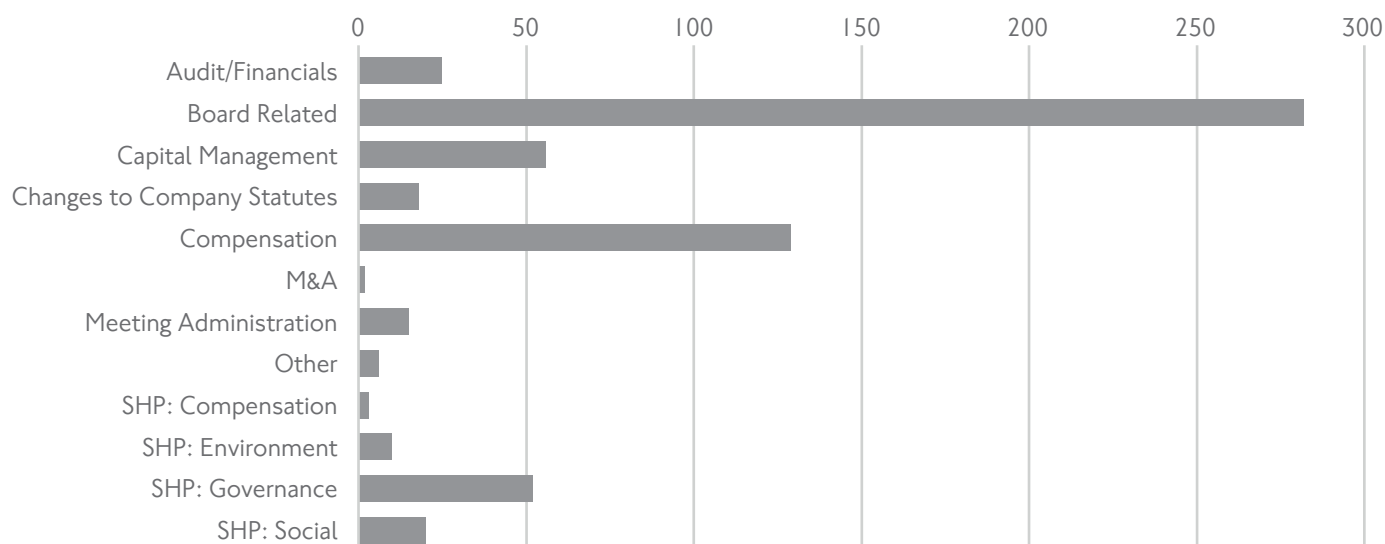


- Social proposals this year included: racial equity audits, gender and ethnicity pay equity reports, human rights expertise on the board and human rights impacts of facial recognition technology.
- Environmental proposals this year included: climate transition reports, lobbying activity alignment with the Paris Agreement, audited reports on net zero emissions scenario analysis and Paris-aligned Greenhouse Gas Emissions reduction targets.
- Voting is a key tool for the Trustees to use if engagement with a company and its board has not been as successful as expected. Voting against management tends to be seen as a more severe course of action; however, it is warranted when the Trustees believe management needs to be held to account for bad practices or lack of communication on key issues. The charts below summarise the votes cast ‘for’ and ‘against’ management.

VOTES "FOR" MANAGEMENT CATEGORISATION



VOTES "AGAINST" MANAGEMENT CATEGORISATION



Note: SHP stands for shareholder proposal

SUSTAINALYTICS VOTING OVERLAY

- In the year to 30 June 2021, Sustainalytics provided policy advice on 31 meetings and 494 resolutions. 'Voting overlay' is used as a means of engagement escalation with focus on non-responsive companies. This can be seen as 'value-add' on voting. The rationale on the voting advice is presented through two examples listed in the adjacent table.

Company	Country	Proposal Description	Voter Rationale	Sustainalytics Advice
Siemens AG	Germany	Shareholder Proposal Regarding Shareholder Rights at Virtual General Meetings	In the best interests of shareholders	Siemens AG is part of the Global Standards Engagement. However, based on the company's willingness to engage and performance so far, we see no reason to modify the existing voting recommendations.
Facebook Inc	United States	Elect Mark Zuckerberg	Unwillingness to engage	Facebook is part of the Global Standards Engagement programme. In view of the company's unwillingness to engage on Privacy Breaches issues with Sustainalytics, we recommend voting against the election of the Chairman agenda item.

ENGAGEMENT

- The Trustees strongly believe that the best way to work with public companies on mutually beneficial improvements is through constructive dialogue with the boards of the companies that they hold.
- The Fund participates in three engagement programmes with Sustainalytics. In this section we will look at each of these programmes and some of the cases.
- Resolution through engagement is a long multi-year process and patience and perseverance is critical.

Engagement topics covered and case performance over the past year

Norm	Engaged Cases	Resolved	Performance		
			High	Medium	Low
Business Ethics	8	1	5	2	-
Environment	1	-	1	-	-
Human Rights	8	-	2	6	-
Labour Rights	2	-	-	2	-
Total	19	1	8	10	-

GLOBAL STANDARDS ENGAGEMENT

- Global Standards covers engagement on companies regarding their compliance with international conventions and guidelines on environment, human rights and corruption.
- It is intended to capture severe, systemic and structural violations of international norms as enshrined by the UN Global Compact Principles, with the aim not only to resolve the incident, but also to improve the company's future ESG performance and risk management to ensure incidents don't occur again.
- The table below summarises the performance of current Global Standards engagements with the Fund's active equity holdings; two example cases follow in the next page.
- The small number of cases below compared to the Fund's total holdings shows that most companies in the Fund's equity portfolio are compliant with international ESG standards.

Cases resolved since joining the programme: 5

AMAZON (Performance – Medium)

Case Background: Over the past several years, Amazon has experienced recurring health and safety issues at its operations. These include employee fatalities and serious physical injuries, which have occurred at rates that show a trend of deterioration in safety measures. There have also been allegations of poor and stressful working conditions that have negatively affected the mental condition of many of the company's warehouse workers.



Engagement Objective: Amazon should introduce appropriate improvements involving Health & Safety (H&S) policies and practices aligned with international standards, including proactively mitigating hazards and improving working conditions. The company should report on its Health & Safety performance and consider independent third-party verification of its management system.

Engagement Update: Case opened in February 2020. Amazon acknowledged the importance of workplace H&S during two conference calls in 2020 and reported notable investment in H&S management during the year. Further, Amazon's Global Human Rights Statement includes a formal commitment to health and safety.

In May 2021, Sustainalytics began attempts to schedule a follow-up call to further the engagement. Amazon has expressed reticence at continuing the dialogue, but efforts continue on Sustainalytics' part to book a meeting. Once scheduled, it is hoped to focus on Amazon's existing disclosure, understanding how it has established a level of comfort with its management, such as key metrics it utilises, and how the company is prioritising aspects for disclosure.

FACEBOOK (Performance – Medium)

Case Background: In recent years, Facebook has been associated with frequent privacy and data security-related management lapses. These include allegations that it was mining data from users' private messages and selling it to advertisers. It has also been accused of sharing information with third parties without informed user consent. Facebook is now under regulatory investigations in multiple jurisdictions, some of which have resulted in fines.



Engagement Objective: Facebook should implement its commitments to privacy and data security by ensuring that it has in place adequate internal controls systems and risk management procedures to manage the cybersecurity risks. Specifically, the company should ensure an adequate protection level for personal data. Facebook should increase transparency in reporting on the management of data security and users' privacy.

Engagement Update: The initial engagement contact was sent in March 2018. In 2018 Facebook announced a new strategy for enhancing transparency about its social media platform. The company has committed to re-evaluating its approach towards its responsibility to the users and other stakeholders.

Following an initial conference call, the company continued the dialogue with an email exchange through early 2020. Since then, there has been a lack of interest in dialogue, but Facebook is making investments into its privacy management program and progress is noted. While it does have policies that address privacy and user data, it is less clear how these are monitored and reviewed.

Sustainalytics will review Facebook's current reporting and send the company an agenda of questions to attempt to establish a meaningful dialogue.

MATERIAL RISK ENGAGEMENT

- This programme was launched in March 2020. Currently 16 of the Fund's active equity holdings are being actively engaged under Material Risk Engagement.
- The engagement aims to promote and protect long-term value by engaging with high-risk companies on financially-material ESG issues.
- The engagement is focused on the material ESG issues with the largest management gap (gap between risk exposure and risk management). It adopts a collaborative and constructive approach to help high-risk portfolio companies to better identify, understand and manage their ESG risks.

Case performance over the last year:

Engaged Cases	16 (total)
Resolved	0
Good	3
Standard	8
Poor	1
Too early to determine	4*

WIZZ AIR

Case Background:

Wizz Air is one of the fastest-growing airlines in Europe focusing on the Central and Eastern European region. Sustainalytics identifies that the company needs to improve on ESG risk assessment and disclosure.

Engagement Objective:

- Support the company in the development of a thorough ESG-risk management system.
- Improve transparency about policies, explain how these are implemented and report against global reporting standards, with a focus on environmental policies and product governance.

Engagement Update:

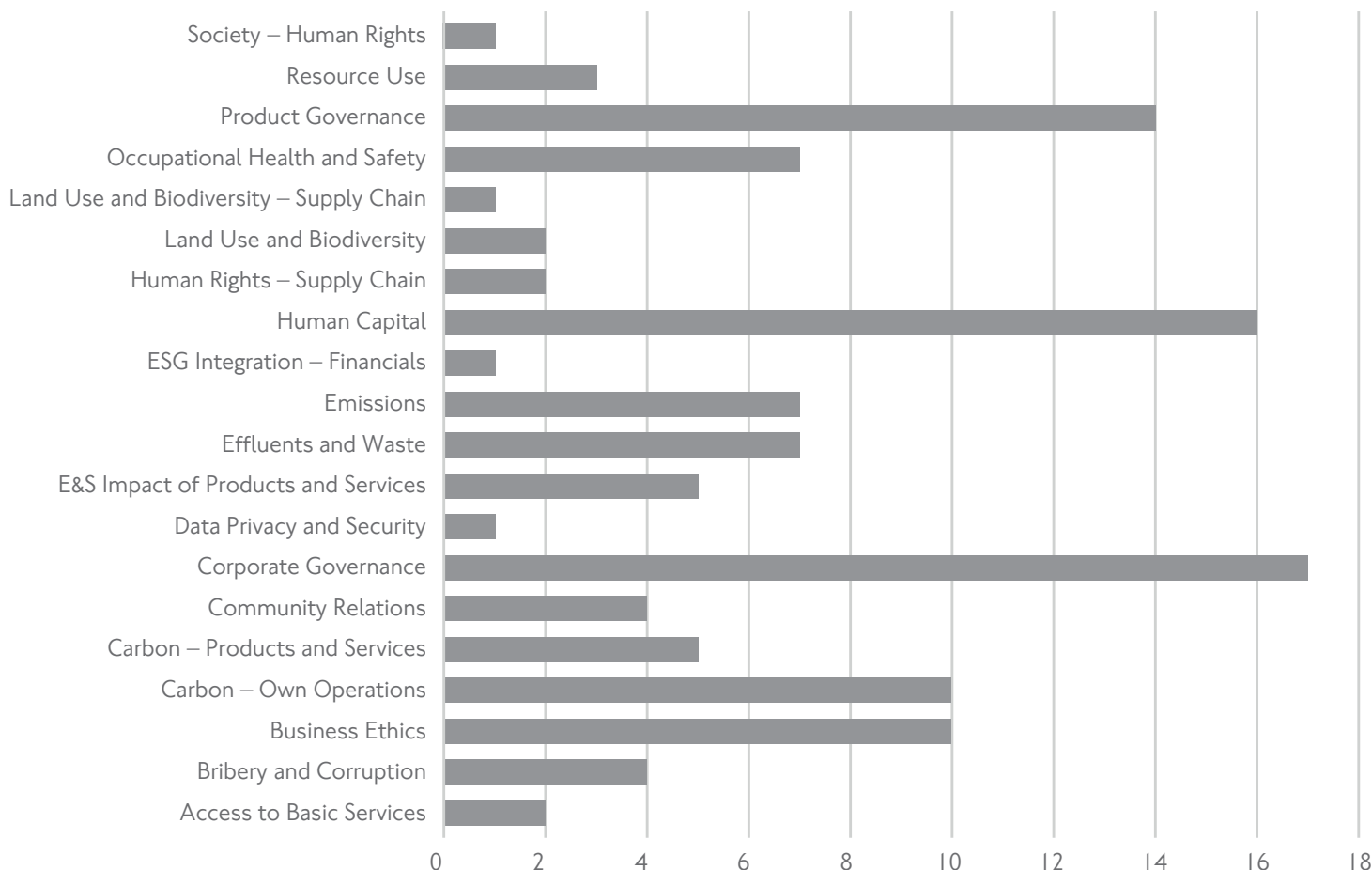
This is a new engagement under the Material Risk programme that initiated in May 2020. The company has been generally interested to engage and brought several experts to the introductory call in 2020, to provide information, but also to learn about investor expectations. Further calls will be scheduled to follow up on issues discussed in the first call.



Cases resolved since joining the programme: 1

The chart below summarises engagement topics covered (each case has multiple issues being engaged on):

MATERIAL ISSUES BEING ADDRESSED (NO. OF CASES)



* The Material Risk programme was launched in March 2020 so new cases continue to be added.

CLIMATE CHANGE: SUSTAINABLE FORESTS AND FINANCE

This new thematic engagement will aim to address climate risks and pressures on global forest systems. The programme will be focusing on three groups of key actors directly driving forest related emissions: companies involved in the degradation of forests, their customers, and their financiers.

The Fund, as a key participant, was involved in the selection of the target companies as well as defining the goals of the project.

Several companies in the Fund's active and passive equity portfolio are covered in the programme:

Packaged Foods/ Food Retail/ Restaurants: Minerva, Marfrig, Yum, McDonald's, Woolworths

Banking: Morgan Stanley, DBS, UBS, Sumimoto Mitsui

The Fund will take an active part in the 3-year engagement following launch and provide updates in future reports.



PLASTICS & CIRCULAR ECONOMY

- Despite growing awareness and action by multiple stakeholders in recent years, the COVID-19 pandemic has accelerated the plastic waste crisis to unprecedented levels, requiring urgent action from companies, consumers and policy makers.
- This thematic engagement aims to encourage the companies to improve the quality and economics of recycling practices, to shift strategic focus towards redesign and innovation and to increase the reusability of products.
- Currently, two of the Fund's active equity holdings are being engaged (Michelin and Sony). However, as a participating investor, the Fund is providing financial support for Sustainalytics to engage with 20 companies in key sectors exposed to risks associated with plastics – electronics, automotive and packaging and consumer goods.
- The programme is in its third and final year. We are seeing notable improvements from companies on their governance and reporting surrounding circular economy, as well as many pockets of innovation in operations. A prominent trend is continuing affiliation with long-term ambitions or goals aligned with a circular economy (see the example of Sony below).

SONY

Sony has included targets to improve the resource efficiency of products such as elimination of plastic packaging of newly designed small products, reduce the volume of plastic packaging used per product by 10%, and reduce the volume of virgin plastic materials per product by 10% as part of its Green Management Plan 2025.

During a conference call in November 2020, Sony explained that it is still a big challenge to increase the recycled plastic content in products. The product team is working on expanding the number of product models that incorporate recycled content and also outsource recycled plastics from other Asian countries.



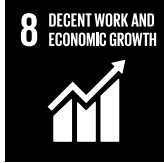
MANAGER ENGAGEMENT ACTIVITIES

The majority of engagements with investee companies are carried out by the fund managers who ultimately decide whether to hold a company's stocks. Over 850 engagements were carried out in the last 12 months. Two examples of manager engagement with low ESG rating companies are covered below.

LUXSHARE PRECISION INDUSTRY CO, LTD

Overview

Luxshare is one of the world's largest manufacturers of cables and connectors and is a major supplier to Apple, which accounts for almost 70% of its sales. The holding has the lowest MSCI ESG Rating of CCC. The Fund reached out to the manager for comments and the manager expressed a different view. The MSCI report raised several issues and below we cover one of the key issues.



Labour Management

MSCI noted that the company has a large workforce relative to peers and relatively limited labour management initiatives compared to peers.

The manager acknowledged that disclosure might not be as comprehensive as other companies, and this is something which needs to be monitored. However, there are labour management initiatives in place and so far, they have not encountered any serious issues from their own research/engagement. For example, to address employees' parenting challenges, the company offers childcare services such as school shuttle bus pickups and after-school care services.

The manager also explained that contrary to some reports, the company does have a whistle-blower system in place and whistle-blowers are protected from retaliatory acts.

Conclusion

As a large supplier to Apple, the company comes under more scrutiny. This has helped it to drive higher ESG standards and to continue to look for improvements.

The manager's ongoing engagements with the company will encourage improvements in the level of disclosures. The manager's local presence and knowledge of the companies is a key strength in terms of understanding how companies and their management are operating in the region. The manager also triangulates their own findings/analysis with access to third party data and ratings to help derive an overall view. If the team are not satisfied with the way in which a company interacts and discloses information, and are not confident in the progress which they see from management, they are ultimately very prepared to exit positions where conviction in the stock cannot be justified.

GENERAL ELECTRIC (GE)

Overview

GE is a stock where part of the investment opportunity came from the litany of material ESG issues that, once exposed to the market, contributed to the massive collapse in stock price. Remediating these ESG issues is part of the turnaround opportunity and the manager thinks that the current management team is best placed to return the business to profitability over time.



The manager's confidence in the current management teams comes in part from the extensive engagement they have had with them since becoming shareholders.

Environmental

The majority of business segment earnings comes from natural gas power generation. It is a cleaner alternative to coal and widely regarded as an important transition fuel for the foreseeable future. Turbine (i.e. energy) efficiency is one of the key performance metrics and GE has always performed well in this regard.

While GE does have a renewables business in the form of wind turbines, margin on the wind turbine business is lower than that for the gas turbines. Despite these challenges, GE has a growing share of the renewables market and the manager expects this to continue to increase.

Governance

Allegations of accounting fraud and mispricing of insurance liabilities have weighed on stock price in recent years. While serious, these are legacy issues and the current management team had no part to play in these events and have already taken steps to address them.

The manager continues to advocate for enhanced oversight of accounting assumptions and making sure that senior management and the Board receive sufficient information to make informed business decisions. GE recently made the decision to bid out and subsequently change its incumbent auditor.

Conclusion

Overall, it is the manager's assessment that the ESG issues are very real at GE, but a successful turnaround is dependent on management addressing them. Therefore, a return to profitability is well aligned with continued focus on ESG issues.

COLLABORATIVE ENGAGEMENTS

In addition to approaching ESG through voting and engagement, the Fund is also an active member of several global and industry initiatives as the Trustees accept that there is a limit to what they can achieve as a single investor. Here we look at some of the collaborations that the Fund has been involved in since our last Report.

CLIMATE ACTION 100+

Since 2018 the Fund has been a supporting investor in Climate Action 100+, which is a 5-year initiative of PRI and other prominent investor groups who are seeking to focus more efforts on the largest corporate greenhouse gas emitters. It is engaged with 161 global companies which account for up to 80% of global industrial emissions.

For those companies for which the Fund was a supporting investor (Rolls Royce, Anglo-American and Rio Tinto) this included face-to-face (or virtual) engagement with company management, usually at Board level, making a statement at AGM (Annual General Meeting) and supporting shareholder resolutions that align with Climate Action 100+ goals.

The discussions with the companies are confidential, but certain materials are published. This year's progress on the three target companies based on published information is summarised below:

Rolls Royce

In June 2020, Rolls Royce published its 1.5°C Business Pledge, committing the business to net zero carbon and representing a significant step forward. One year on, in June this year they made an investor presentation outlining the interim targets:

"Our new products will be compatible with net zero operation by 2030 and all our products will be compatible with net zero by 2050";

"Defining a science-based interim target to reduce the lifetime emissions of new sold products from our Power Systems business by 35% by 2030";

"Pivoting our R&D expenditure towards more lower carbon and net zero technologies: moving from ~50% to at least 75% by 2025".

Anglo American

In 2020 Anglo American made a commitment to "achieving carbon neutrality across our operations (Scopes 1 and 2) before 2040 and we are aiming to have eight of our assets (roughly a third of their business) carbon neutral by 2030." This year at the AGM they made a few highlights:

- they have started the process to demerge their thermal coal operations in South Africa;
- they have now secured 100% renewable electricity supply across their South American operations, cutting CO2 emissions at those sites by up to 70%;
- they will trial a hydrogen fuel-cell haul truck at the Mogalakwena PGMs mine later this year (truck fleets for transporting mining products contribute to scope 3 emissions);
- they will give shareholders an advisory vote on climate at the 2022 AGM.

Rio Tinto

In its 2019 climate report the company published its new ambition to reach net zero operational emissions by 2050 (scopes 1 & 2 emissions), and associated targets to reduce (a) emissions intensity by 30% by 2030, compared with a 2018 equity baseline and (b) absolute emissions by 15% over the same timeframe. One year on, this February the company published its 2020 climate report, and the main highlights are:

"Since 2018, we have reduced Scope 1 and 2 emissions by 1.1Mt CO2e, or 3%, which is on track with our 2030 target for absolute emissions. However, in 2020, our emissions remained at the same level as in 2019 at 31.5Mt CO2e. We expect progress on emissions to accelerate later in our 2030 target period as we develop and implement our mitigation projects, studies and R&D."

"Over the past year we have further developed our asset-by-asset decarbonisation roadmaps and started work on mitigation projects, with a particular focus on renewables, process heat and ways to replace diesel fuel in our mobile fleets and rail networks."

"With about 80% of our Scope 3 emissions from our customers' hard-to-abate processes, our Scope 3 goals are mostly focused on our contribution to the development and deployment of low-carbon technologies, as well as the emissions from shipping our products." (The company sets out details on their customer partnership projects and goals in page 5 of their report)

Net-Zero Company Benchmark

Over the last year Climate Action 100+ published its Net-Zero Company Benchmark (referred to as the Benchmark) on the focus companies. The Benchmark assesses the performance of focus companies against the initiative's three high-level goals: emissions reduction, governance, and disclosure. It is a useful overview on each company and provides a consistent 'ruler' for investors to evaluate progress and identify the gaps. The assessments can be found here: <https://www.climateaction100.org/whos-involved/companies/>

In addition Climate Action 100+ publishes a progress report towards the end of each year and this can be accessed here: <https://www.climateaction100.org/progress/progress-report/>

CDP (formerly the Carbon Disclosure Project)

As in previous years, the Fund participated in CDP's Non-Disclosure Campaign which targets companies that failed to disclose on climate risk in the year prior. The objective of the campaign is to drive further corporate transparency around climate change, which is a key building block in managing the Fund's climate risks. In 2020, the Fund co-signed 64 letters to companies through this campaign, out of which 8 responded by making climate disclosures through CDP's platform. In 2021, the Fund reached out to 83 companies, out of which 26 companies (31%) have now made disclosures.

In addition, this year the Fund took part in the CDP Science-Based Targets (SBTs) Campaign. The SBT Campaign helps asset owners play a key role in accelerating the adoption of science-based climate targets in the corporate sector, by collaboratively engaging companies on this matter. In driving the adoption of science-based emission reduction targets, the Fund can decarbonise its portfolio over time and mitigate climate-related risks.

SYSTEMIC STEWARDSHIP AND ADVOCACY

The Fund recognises the need for collective effort in achieving critical systemic goals. As a result, in addition to collaborative engagements, the Fund is involved in systemic stewardship including engagement with policy makers, industry bodies and service providers.

We are one of the largest UK pension funds and regularly get invited to comment on policy consultations, for which we always respond. As an example, we responded to the DWP's consultation on TCFD requirements.

In addition, the Chair of the Investment Committee represents the Fund on the Accounting for Sustainability (A4S) Asset Owners Network and provides input on important matters at meetings, including climate change. Our Chief Investment Officer, Pensions is a member on CFA UK Society's Asset Owner Councils and provides input to CFA UK's ESG initiatives. He has also been involved in Brookings Institute's 17 Rooms Initiative covering Private Climate Finance and Modern Slavery Risk Tracking tools.

The Fund sets out in its contracts with the fund managers its expectation for the managers to promote the adoption of TCFD and other ESG best practices (such as the SASB Materiality Map) among the investee companies.

The Fund takes part in product trials with service providers such as BlackRock Aladdin to provide constructive feedback on their development of ESG and climate data toolkits.



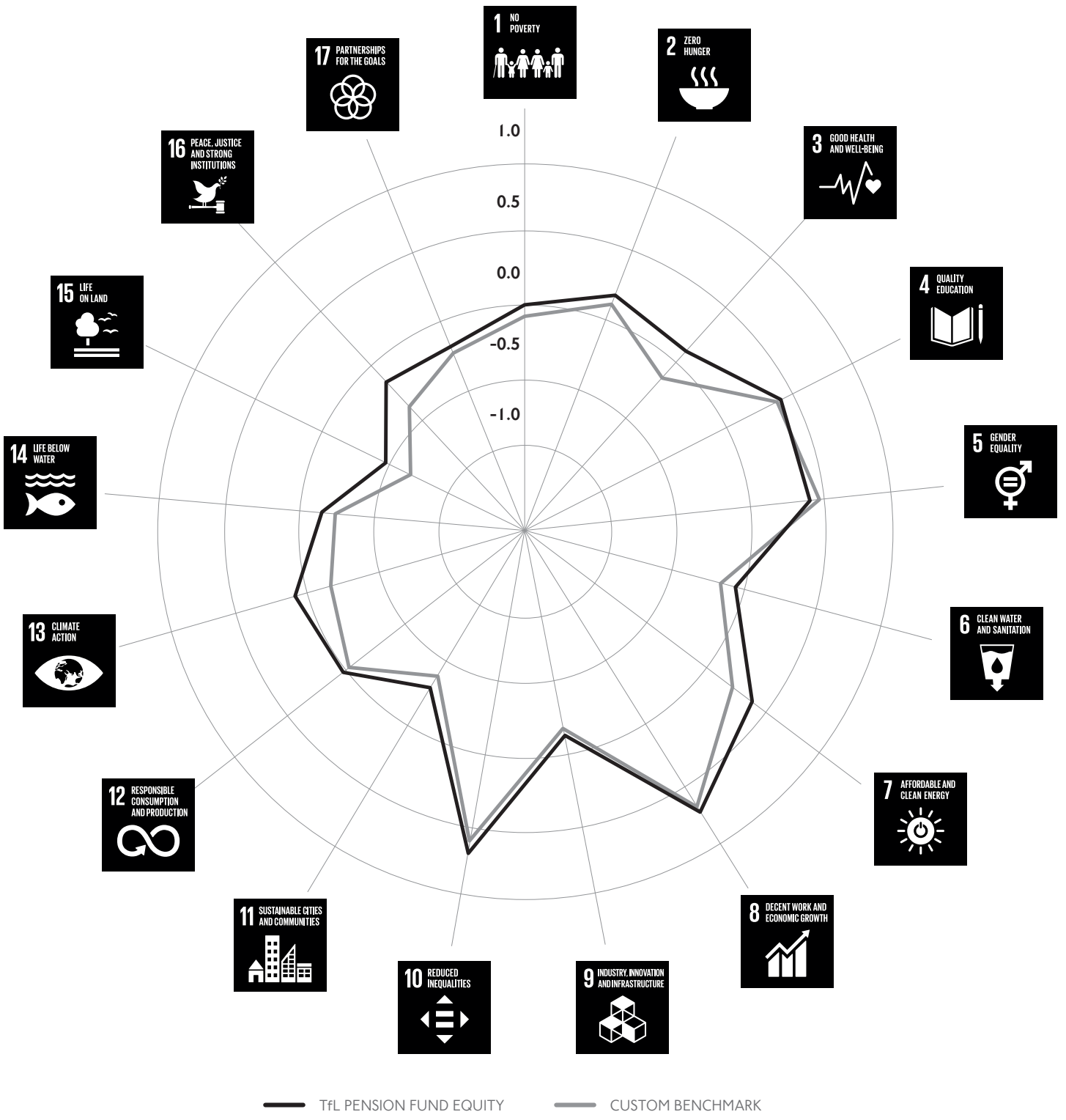
SUSTAINABLE DEVELOPMENT GOALS AND CASE STUDIES

SUSTAINABLE DEVELOPMENT GOALS ("SDG'S")

Portfolio Impact analysis based on the UN global goals framework

- The Fund once again partnered with leading sustainability manager, LGT Capital Partners, to conduct analysis on the SDG impact of the active equity portfolio. The exercise assesses the impact of different product and service categories on the respective SDGs, and summarising companies' revenue share in these categories. The resulting impact values range from -10 (worst) to +10 (best).
- The Sustainable Development Goals are the blueprint to achieve a better and more sustainable future for all. They address the global challenges we face, including poverty, inequality, climate change, environmental degradation, peace and justice.
- We can see in the spider graph how the Fund measures up against the custom benchmark for SDG impact, the Fund outperforms notably on all 17 goals, with the only exception of Goal 5 (Gender Equality). This is due to less gender diversified board member and workforce for small cap and Emerging Market companies.
- Climate Action, Goal 13, is the area the Fund has the most positive impact among all the goals, representing the effort made in the past years to focus on low carbon investment opportunities.
- If this analysis could capture the Fund's numerous private market investments then undoubtedly the SDG impact scores would be more materially superior versus the benchmark across several of the Goals. Although portfolio-level analysis is not yet available on private market investments (because ESG data on private market investments is less readily available), in the Case Studies section that follows we will look at some of these private market investments and how they map onto the SDGs.

The Fund's active equity portfolio outperforms its benchmark on 16 out of 17 goals

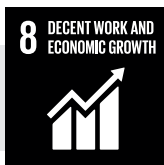


CASE STUDIES

Investments which meet the Fund’s return profile and strongly contribute to the United Nations Sustainable Development Goals

Over the last twelve months, the Trustees have held numerous meetings with its investment managers to discuss identifying investment opportunities that offer not only good returns, but also contribute to the 17 Sustainable Development Goals. Developed in 2015 by the United Nations, these SDGs are aimed at, among other things, eradicating hunger and poverty, climate action and clean water and sanitation. In this section we look more closely at some of these investments of which we are proud to be associated with.

#1 Infrastructure – Lineage Logistics



Overview

- The pandemic has brought online shopping and the logistics sector behind it into a prominent position in the global economy. Both the Fund’s real estate and infrastructure managers have found attractive investments with strong ESG credentials inside this sector. While real estate focuses on the building, infrastructure involves the operator too – below is an example.



- Lineage is the world’s largest owner and operator of temperature-controlled warehouses globally with over 340 locations offering 2.1 billion cubic feet of cold storage and spanning 15 countries across North America, Europe, Asia, Australia, New Zealand, and South America.

Solutions and Outcome

- Lineage was named #17 on the 2021 CNBC Disruptor 50 companies, an annual list featuring forward-thinking private companies that are growing quickly and whose innovations are changing the world.
- Lineage has an ongoing innovation and sustainability program which is embedded as a core function in the business’ operations. Certain recently completed or ongoing sustainability initiatives include:



34% Lineage’s innovation in energy efficiency has led to a 34% decrease in energy intensity over a four-year period

40% Patented “blast freezing” process has reduced wasted food, saved customers’ crops, and further reduced energy consumption by 40%

8 Lineage is engaged in various renewable energy adoption projects, including the negotiation of solar projects across 8 company facilities

#2 Real Estate – Montepino Spanish Logistics Venture



Overview

- The Montepino Spanish Logistics Venture focuses on Grade A developments in the logistics sector in Madrid’s Corredor de Henares.
- The venture has a strong commitment to ESG and sustainability, aiming to be at the forefront of sustainability and design standards.
- The manager promotes the use of sustainable practices and adoption of new technologies.



Solutions and Progress

- These include maximising the use of natural light, using renewable energy, committing to using local materials with low carbon footprint and minimising waste.
 - 6% of the top deck area is designated with skylights that allow uniform natural lighting across the entire warehouse.
 - Solar panels on the roof collect photovoltaic energy as a source of electricity.
 - Montepino is committed to using local materials with low carbon footprints to reduce the construction impact on the environment.
- The manager aims to develop sustainably certified properties and have LEED (Leadership in Energy and Environmental Design) certification in place for 100% of their assets.

Outcome

- These initiatives have resulted in a 40% reduction in energy usage, 39% CO2 emission reduction, 70% solid waste diverted from landfill through recycling and reduction, and 5% of total energy demand met with on-site renewable energy.
- 65% of the portfolio has been LEED certified (as of 2019) with 100% of new development LEED certification currently progressing.

#3 Renewables - Soltage

Overview

- The manager has partnered with Soltage, LLC (“Soltage”) to create an investment vehicle that will fund a ~450 MW-dc pipeline of distributed solar and storage projects across the U.S.
- Soltage is a proven developer and leader in distributed energy development, financing, and asset management. The manager committed \$250 million to this vehicle.

Solutions and Progress

- The partnership announced its first investment into a 14.5 MW portfolio of solar assets representing \$30 million of project costs. This initial portfolio, which is expected to finalise construction and begin operations this year, is comprised of five distributed solar projects in Maine, North Carolina, South Carolina and Virginia. The power purchasers from this portfolio include utilities, corporates and community solar offtakers aiming to achieve both cost savings and clean energy goals.

Outcome

- The portfolio will continue to grow but at the end of last year, the equivalent number of homes powered was 46,200 homes.

46,200 – estimated number of homes powered



#4 Real Estate - ODEON

Overview

The Fund invests in a long lease property fund that invests across and UK with a focus on providing long-term, sustainable cash flows. Financial sustainability and ESG impacts are inextricably linked and the strategy of the property fund reflects this. An example of where that has come to light is the ODEON in Islington.

Solutions and Progress

- In 2020, working with BlackRock, ODEON undertook a multi-million pound refurbishment of a cinema in Islington. A beautiful grade II listed building, the property was highly inefficient from an energy usage perspective.
- As part of the conversion works into a new ODEON Luxe format, a considerable sum was invested into the fabric and fit out that have considerably increased the efficiency of the property.
- In addition, the team are undertaking a stewardship strategy, which involves a combination of using external consultants and in situ smart metering to get better quality carbon data from the buildings for ongoing monitoring of energy consumption.

Outcome

- Using energy assessor estimates the manager believes the works have reduced CO2 emissions from the site by 263 tonnes per year, a 58% reduction. This is equivalent to removing 61 family cars from the road.
- Along with reducing carbon emissions the works should make the property more economical to run and reduce the chance of future tax liability on less sustainable assets.

CO2 emission reduction equivalent to removing 61 family cars from the road



#6 Private equity Co-Investment – Gainwell Technologies

Overview

- Gainwell Technologies is a carve-out of DXC Technology’s U.S. State & Local Health and Human Services Business
- The company’s Medicaid Management Information System (“MMIS”) delivers mission critical end-to-end technology and services necessary for states to run their Medicaid/other Health & Human Service programmes
- Company generates ~91% of its revenue from the design, implementation, operation, and maintenance of states’ MMIS

Solutions

- The business model contributes to a well-functioning Medicaid system that reaches in-need populations
- Medicaid provides health and long-term care for low income and disabled Americans, and serves as a safety net for vulnerable populations

Outcome

- **The Company serves 42 U.S. states/territories and its solutions impact approximately 48 million of the 73 million Medicaid beneficiaries in the U.S. (66% of Medicaid beneficiaries). Medicaid covers 1 in 5 Americans**
- **100% of the end beneficiaries qualify for Medicaid, and the vast majority lack access to other affordable health insurance. Children account for 48% of all Medicaid enrollees, and seniors and people with disabilities account for about 25%, but represent almost two-thirds of Medicaid spending**



#5 Controlled Environment Foods – Tehachapi, California

Background

Faced with pervasive drought in the west and southwestern U.S. and many recent food safety recalls, the U.S. lettuce industry is seeing an increasingly rapid shift to a controlled environment as a solution for safer and more resource-efficient production of lettuce and leafy greens. This [short video](#) shows how it works.

SOLUTIONS AND OUTCOME

In late 2019, the asset was acquired. Upon completion, the Tehachapi greenhouse will be among the largest and most resource-efficient lettuce greenhouses in the U.S.

- The greenhouse is designed with a closed-loop irrigation system to minimise water use and to effectively eliminate the discharge of harmful nutrient-laden water into nearby water systems.
 - Water is continuously recirculated and reused throughout the greenhouse, reducing the facility's draw on local water sources while reducing operating costs. As a result, **the Tehachapi lettuce greenhouse will use 97% less water and save 15 million litres per year**, relative to traditional field farming of the same crop.
 - Rainwater is also captured from the roof, stored in retention ponds, and filtered for irrigation use within the facility to further reduce water demands.
- **The greenhouse is expected to be 20x more productive than comparable field product and use 95% less arable land than comparable field lettuce farming.**

- **The controlled growing environment is expected to render obsolete the need for chemical pesticides and herbicides within the facility and rely entirely on insect exclusion and biological control.**

- A portion of the facility will likely achieve organic certification, reducing the use of carbon-intensive chemical fertilisers.
- *The subsequent reduction in exposure to harmful chemicals routine in conventional farming will be beneficial for worker health and welfare.*

- The facility includes a high-efficiency supplemental LED light system, which provides a reliable light source throughout the year and throughout shifting weather patterns.

Advanced greenhouses like Tehachapi are designed to be able to optimise their climate year-round. The ability to control the temperature, light, humidity, and CO₂, among other factors, allows the facility to mitigate the impact an increasingly volatile climate, while growing in a greenhouse also eliminates risks with soil degradation and nutrient extraction.



MEDICAID COVERS
1 IN 5
AMERICANS

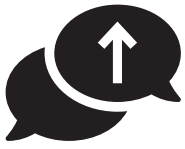


CHILDREN ACCOUNT FOR
48%
OF ALL MEDICAID ENROLLEES



SENIORS AND PEOPLE WITH
DISABILITIES ACCOUNT FOR
25%

BUT THE TWO GROUPS ABOVE REPRESENT ALMOST 2/3 OF MEDICAID SPENDING



STAKEHOLDER FEEDBACK AND WAY AHEAD

STAKEHOLDER FEEDBACK

We have requested and listened to feedback from our stakeholders/ fund managers on how we have performed in the ESG area. Some of the feedback is already incorporated into this report, for example, we have reduced the amount of detail in the report to make it more readable and provided a ‘short version’ for those wanting a quick digest.



There is clear internal accountability and oversight of ESG integration into the investment program, with frequent engagement with the Tfl Pension Fund investment team broadly and up to the most senior levels.



The report is, however, quite voluminous (reflecting the comprehensiveness and detailed descriptions and information) making it somewhat a challenge to digest and to facilitate future reports that can conveniently track progress.



Tfl has been an early adopter of ESG best practises with sustainability clearly embedded in their investment beliefs.



Engagement with the Tfl team has helped inform our focus for ESG this year such as transparent reporting on governance and ESG metrics and forward-looking initiatives like climate change risk mapping.



Regarding Environment (or “physical”) metrics, Carbon gets considerable attention but other key metrics – energy, water, and waste – pop up only in the LGT Cockpit section. Consider expressing goals or objectives across all “ESG” dimensions – at either overall portfolio level or for some asset-class level – that can be clearly tracked for progress.



There has been clear engagement from the Tfl Pension Fund with ourselves, as third party managers, in fostering the integration of ESG matters into the investment program.



The Fund’s report is one of the more thorough, comprehensive impact reports we’ve seen, to-date.



WAY AHEAD

In this final section the Trustees set out their plans for taking the Fund's sustainability work further over the coming year.

- Following the announcement of the Fund's carbon neutral journey plan, the real work of putting it into implementation will start immediately. The Fund will work with its managers and data providers, to enhance the measurement and monitoring of carbon emissions across its whole portfolio.
- We will work closely with the managers to redesign and identify low carbon, as well as other sustainability focused investments, to move toward its 2025 goal of 15% ESG tilted asset allocation. This will be starting with mandates that have the 'toolkits' more readily available, such as the passive equity portfolio.
- Becoming carbon neutral is a greater good that cannot be achieved by the Fund alone. Through voting, engagement, collaboration and advocacy, the Fund will work with the portfolio companies, fellow investors and policy makers, to drive changes at individual business and systemic market levels. On collaboration and advocacy, this will be through actively participating in existing programmes such as Climate Action 100+, CDP, PRI, CFA Institute and A4S, and if suitable, considering new initiatives.
- On voting and engagement, the Fund has built a strong partnership with Sustainalytics, with its feedback being highly valued. This will continue as the Fund considers further utilising Sustainalytics' research expertise to provide an ESG overlay on its proxy voting. With the new engagement on Sustainable Forests and Finance, the Fund will also be more actively involved.
- Other than decarbonisation, the Fund will also look at more ways to measure its portfolio impact across the whole E, S and G spectrum, using the UN SDG framework. In addition to the 15% ESG tilted asset allocation target, we will consider other suitably measurable goals for sustainability outcomes.
- The Fund will look to establish an ESG/ Controversies Assessment and Action Framework, which will be a monitoring process to review holdings with potentially problematic ESG or reputational issues and make rules-based decisions on whether to take action against certain holdings. This should improve governance around this area and enhance consistency and transparency.
- The Fund will continue its work on ESG integration with the fund managers. With the equity and fixed income mandates, a good monitoring framework has been put in place and ongoing conversations will be held through regular catchups.
- There will also be more work done to expand the ESG Integration to the Fund's Alternative Assets, namely real estate, infrastructure and private equity. This is expected to take time, partly due to limited ESG data available on private market assets making it difficult for the managers to meet the same requirements as listed equity/bond managers, but we are pushing the managers to improve data availability and disclosures on their assets.

GLOSSARY

AMNT: Association of Member Nominated Trustees

Climate Action 100+: An investor initiative to ensure the world's largest corporate greenhouse gas emitters take necessary action on climate change

Carbon Intensity (Weighted Average Carbon Intensity): Carbon intensity (or emission intensity) measures the carbon emissions per unit of output (expressed as CO₂e tonnes / \$m Sales). Weighted average means each company's carbon intensity is adjusted by its weight in the Fund's total portfolio (as a percentage of the total market value)

CDP: formerly the Carbon Disclosure Project. The CDP is an international non-profit organisation that helps companies and cities disclose their environmental impact.

CO₂e: "Carbon dioxide equivalent" or "CO₂e" is a term for describing different greenhouse gases in a common unit. For any quantity and type of greenhouse gas, CO₂e signifies the amount of CO₂ which would have the equivalent global warming impact.

COP26: The 2021 United Nations Climate Change Conference, also known as COP26, is the 26th United Nations Climate Change conference. COP stands for Conference of the Parties, and will be attended by countries that signed the United Nations Framework Convention on Climate Change (UNFCCC) - a treaty agreed in 1994.

DB: Defined Benefit

ESG: Environmental, Social and Governance

Fiduciary duty: The legal duty of one party (the fiduciary) to act in the best interests of another (the principle). In the investment chain there are a number of these relationships including the duty that boards have to shareholders, the duty between trustees and beneficiaries and the duty between asset managers and their clients

FRC Stewardship Code: Financial Reporting Council Stewardship Code

GHG: Greenhouse Gases

IIGCC: Institutional Investors Group on Climate Change

MSCI: Morgan Stanley Capital International, a global provider of equity, fixed income, hedge fund stock market indexes, and multi-asset portfolio analysis tools

Paris Pledges: By joining the pledge, businesses, cities, civil society groups, investors, regions, trade unions and other signatories 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

Scope 1 emissions: Direct emissions from owned or controlled sources

Scope 2 emissions: Indirect emissions from the generation of purchased energy

Scope 3 emissions: Scope 3 emissions are the result of activities from assets not owned or controlled by the reporting organisation (in this case, the Fund's investee companies), but that the organisation indirectly impacts in its value chain. Scope 3 emission sources include emissions both upstream and downstream of the organisation's activities, such as business travel, procurement, waste and water.

SDGs: Sustainable Development Goals

SIP: Statement of Investment Principles

Stewardship: A purposeful dialogue between shareholders and boards with the aim of ensuring a company's long-term strategy and day-to-day management is effective and aligned with shareholders' interest. Good stewardship should help protect and increase the value of investments

TCFD: Task Force on Climate-related Financial Disclosures

TPI: Transition Pathway Initiative

UN PRI: United Nation Principles of Responsible Investment

Voting rights: Equity investors typically enjoy rights to vote at annual and extraordinary general meetings (AGMs and EGMs). The resolutions on which shareholders vote will vary according to individual countries' legal frameworks. They may include voting on an individual director's appointment, remuneration or mergers and acquisitions