

## LPPI Net Zero and TCFD Update December 2023

### Introduction

Following on from our communication with you earlier in the year regarding how LPPI will support you with the reporting requirements that will arise from the Department for Levelling Up, Housing & Communities ("DLUHC") Taskforce on Climate-related Financial Disclosures ("TCFD") requirements for LGPS Funds, we are updating you on latest developments at LPPI in relation to both TCFD and net zero.

Firstly, it is worth highlighting that the outcome of the consultation from DLUHC on the TCFD requirements for LGPS Funds is still pending. The working assumption is now that compulsory reporting requirements will not come into effect until December 2025 at the earliest.

Nevertheless, LPPI's work in relation to TCFD continues apace. As a regulated asset management firm, we are required to publish our TCFD reports by June 2024 for the calendar year 2022-23.

Our work on climate change incorporates both TCFD and our net zero commitment which are inherently linked. We are taking the opportunity to give an update on our net zero progress, having recently received approval from the Institutional Investor Group on Climate Change ("IIGCC") for our second phase of targets which means 50% of LPPI's Assets Under Management ("AUM") is now within coverage of net zero targets and monitoring (at September 2023 valuations).

### Net Zero – Phase One

LPPI's first set of net zero targets were set in November 2022 and covered 100% of the listed equities investments we manage through our Global Equities Fund ("GEF"), which was equivalent to **42%** of LPPI's AUM at that time. We aim to bring **100%** of AUM into scope of net zero target setting over time.

Details of our Phase One targets, as well as our roadmap for achieving net zero, can be found in the LPPI Net Zero Roadmap document available on our website [here](#).

#### What is LPPI's position relative to these Phase One targets?

Appendix 1 to this document includes a report outlining how LPPI was positioned relative to the Phase One net zero targets, as at 30 June 2023.

The report provides detail and analysis, with the table below providing a brief summary of LPPI's position against the targets at this date.

Net Zero Target (GEF)	Status	Outlook	LPPI Comment
<p><b>Portfolio Decarbonisation</b> (Scope 1 &amp; 2)</p> <p>Weighted average carbon intensity in tCO<sub>2</sub>e/\$m</p>			<p>Considerably better than target.</p> <p>GEF emissions intensity is <b>35 tCO<sub>2</sub>e/\$m sales</b> (down from 43 in Q1 2023).</p> <p>Our target is a reduction of at least 16% between 2019 and 2030.</p> <p>Q2 emissions intensity is <b>67%</b> lower than in 2019.</p>
<p><b>Engagement Threshold</b> (70% of financed emissions in material companies are net zero, aligned or under engagement)</p>			<p>Better than target at <b>72%</b> of financed emissions</p>
<p><b>Coverage Target</b> (32% of AUM in material companies are net zero, aligned or aligning by 2025)</p>			<p>Better than target at <b>29.5%</b> of AUM v Q2 2023 target of 23%</p>

As we hope you will agree, LPPI’s position relative to the Phase One net zero targets set in November 2022 shows we are in a good position at the current time, as well as looking forwards to 2030.

However, performance against the targets will change as a reflection of portfolio holdings and their valuations, as well as progress made by individual firms. We are not complacent and will continue to monitor and address issues in line with meeting our targets.

## Net Zero – Phase Two

Our recently approved Phase Two net zero targets cover corporate fixed income allocations within the LPPI Fixed Income Fund (“FIF”) and LPPI Credit Fund, and the directly managed portion of the LPPI Real Estate Fund (“REF”). We also revisited and refreshed the GEF decarbonisation target to incorporate new modelling capability available from MSCI.

Details of our Phase Two targets will soon be available on the IIGCC website and we will share the link with you once they have been published. In the meantime, the targets are summarised in the following table:

Asset Class	Decarbonisation	Coverage	Engagement
Real Estate (Direct)	- <b>50%</b> by <b>2030</b> compared to 2022	> <b>90%</b> by <b>2025</b> <b>100%</b> by <b>2040</b>	<b>90%</b> by <b>2024</b>
Fixed Income	- <b>50%</b> by <b>2030</b> compared to 2019	<b>Increase the % AUM</b> in companies within material sectors which are net zero, aligned or aligning by <b>2025</b> .	<b>70%</b> by <b>2025</b> ; <b>90%</b> by <b>2030</b> ;
Credit			Set <b>robust</b> external manager expectations (high level, qualitative)  Prioritise engagement with <b>highest emitters</b> (high impact sectors as defined by IIGCC)
Global Equities (Revised)	- <b>50.8%</b> by <b>2030</b> compared to 2019	<i>Same as Phase One</i>	<i>Same as Phase One</i>

We have set net zero targets for the directly managed portion of the **LPPI REF** in accordance with the IIGCC Net Zero Investment Framework target setting guidance. Targets encompass 50 assets in the Knight Frank Investment Management portfolio, and 2 additional single asset joint ventures. Collectively they cover c.65% of the LPPI REF's AUM. Work continues to source information on the indirect portion of the REF and a plan will be established which reflects the feasibility of target setting next year based on the data available, and an engagement strategy to address gaps where necessary.

As neither the **FIF** nor the **Credit Fund** invests in fixed income solely or in a fixed proportion, baselining and setting targets is challenging. The approach we have taken reflects what is practicable to address at this point. The corporate bonds portion is c.18% of the **FIF**.

LPPI plans to assess the feasibility of setting decarbonisation, coverage or engagement targets for the whole **LPPI Credit Fund** during 2024. The degree of data availability and transparency necessary for comprehensive quantitative target setting is not currently available. Our focus in 2023 has been to establish an engagement strategy which sets clear expectations for managers on reporting and engagement as the basis for being able to baseline and set targets going forward. Our conversations with IIGCC have indicated that these measures qualify as an engagement target which legitimately allows the fixed income portion of the Credit Fund to be considered in scope.

Our revision of the original decarbonisation target for **GEF** set in 2022 reflects a commitment made in our Net Zero Roadmap to transition from a benchmark approach to a portfolio emissions budget once modelling capabilities and data allowed. Access to a provisional data set via MSCI has enabled us to revise our target based on a bottom-up emissions methodology. It should be noted that the exact degree of portfolio emissions reduction required by 2030 to be 1.5C aligned is subject to change, pending the formal release of MSCI's updated Implied Temperature Rise (ITR) model scheduled for early 2024.

We will provide you with reports similar to that in Appendix 1 on a six-monthly basis going forwards. This will help keep you informed of LPPI's progress in relation to our net zero targets.

## TCFD progress

We set up an internal TCFD implementation project in Q3 2022 to address the Financial Conduct Authority's ("FCA's") and DLUHC's requirements relating to TCFD.

The key elements of the FCA's TCFD proposals are for firms to disclose how they take climate risks and opportunities into account in managing investments on behalf of clients. The core elements of the disclosures are set out under four pillars:

- **Governance** – the organisation's governance around climate-related risks and opportunities;
- **Strategy** – the actual and potential impacts of climate-related risks and opportunities on the organisation's business, strategy, and financial planning;
- **Risk Management** – the processes used by the organisation to identify, assess, and manage climate-related risks; and
- **Metrics and Targets** – the metrics and targets used to assess and manage relevant climate-related risks and opportunities.

One of the most challenging aspects of the disclosure standard set by TCFD is quantifying the evaluation of systemic (system wide) risks which are complex and multi-dimensional. TCFD requirements prompt organisations to attempt to measure current and future risks as part the 'Metrics and Targets' pillar, whilst the 'Strategy' pillar includes a requirement for scenario analysis focussed on assessing the resilience of strategy under future conditions. Both are new areas where methodologies are nascent, and organisations face challenges and choices about the best approach to take. Work continues in relation to climate scenarios, although as you may have picked up from recent industry comments, this is an area which is coming under additional scrutiny at the current time, in particular, the question of how meaningful the analysis is.

Our work on net zero has significantly contributed to progress with the work required on TCFD. In particular, the emissions metrics used in evaluating decarbonisation targets, amongst others, will form the basis of the metrics & targets elements of our TCFD reporting.

We have invested resource working with MSCI and others to determine the metrics that we will be using for monitoring and reporting across the majority of our asset classes, covering absolute emissions, emissions intensity, data quality and Paris alignment metrics where available. Set out in Appendix 2 is the current picture of the data and metrics available for different asset classes.

Whilst there are some data gaps across certain asset classes, most notably within Private Equity, where the industry itself is very much in its early stages of understanding TCFD requirements, we expect the position to improve over time as the industry and tools available mature.

As part of our own regulatory requirements, we will be producing an entity level TCFD report and product-level TCFD reports for the LPPI funds which fall under the Authorised Contractual Scheme ("ACS") structure, those being the LPPI Global Equity Fund, LPPI Fixed Income Fund and LPPI Real Estate Fund. These reports will be available on our website.

Alongside the above reports, we will develop similar reports covering other asset classes which is intended to provide the building blocks required for reporting to DLUHC when this comes into effect.

As we have previously noted, members of the LPPI team are working closely with the Scheme Advisory Board's Responsible Investment Advisory Group and other industry associations to stay close to developments with DLUHC, to ensure we are able to provide the necessary assistance as well as help shape a sensible and consistent set of requirements which ideally do not deviate materially from what the FCA expects of the asset management industry.

We hope that you have found this a helpful update, and we will continue to keep you updated on further developments. If you have any questions in the meantime, please let us know.

# Appendix 1 - LPPI – Net Zero Target Update

## Q2 2023

### Introduction

This report presents the position at Q2 2023 relative to LPPI’s Phase One net zero (“NZ”) targets, which address the listed equities investments managed through the LPPI Global Equities Fund (“GEF”).

### 1.1 NZ Universe:

The NZ framework LPPI is using (from the Institutional Investor Group on Climate Change) references material sectors and high impact sectors which are briefly explained below.

#### Material Sectors

Material sectors refers to NACE industry categories A, B, C, D, E, F, G, H, J, K, and L <sup>1</sup>

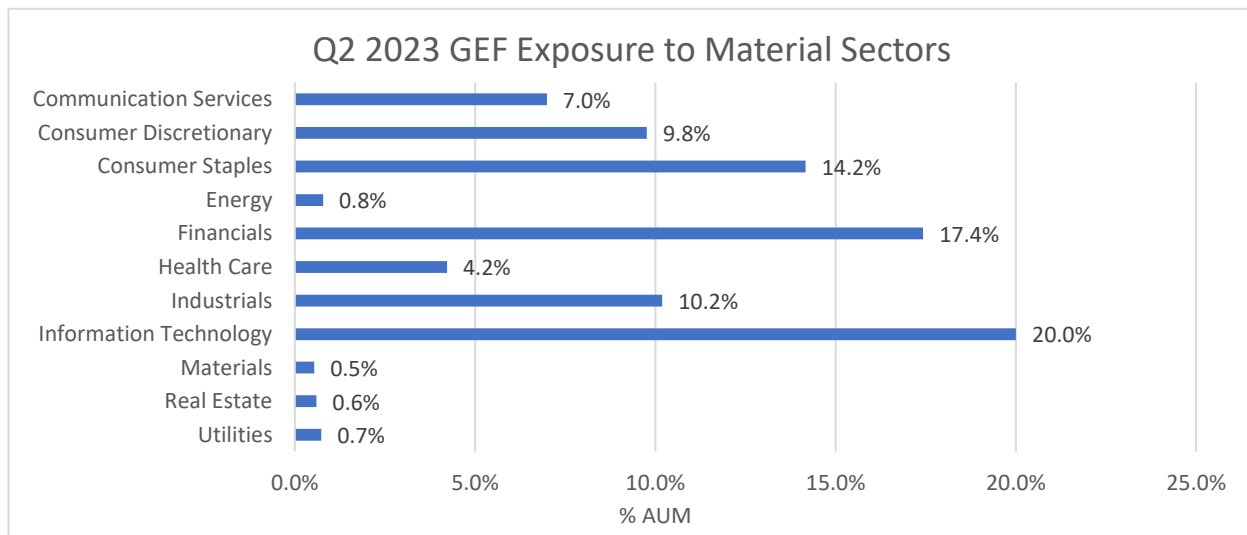
The NACE industry classifications mentioned above (A-H and J-L) translate to the Global Industry Classification Standard (GICS<sup>2</sup>) sectors listed in the appendix at the end of this report. Our reporting of GEF exposure will be based on these GICS sectors.

#### GEF exposure to Material Sectors:

Number of Companies: 277

Total % AUM: 85.4%

Sector Breakdown:



Source: LPPI, BNYM

<sup>1</sup> <https://ec.europa.eu/eurostat/web/nace>

<sup>2</sup> <https://www.msci.com/our-solutions/indexes/gics>

Monitoring exposure to material sectors offers insight into the size of this group as a proportion of total GEF. It also enables observation of how proportions in different sectors change over time. It should be noted that not all sectors and activities within the material group are high emitters. Some are critical enablers of decarbonisation by hard to abate industries and are identified by IIGCC as material to the mitigation of climate change globally on this basis.

**High Impact Sectors**

High Impact sectors, which are a subset of material sectors, are defined as companies which meet one or more of the following:

- in the Climate Action 100+ focus list (the full list of companies on the focus list can be found on <https://www.climateaction100.org/whos-involved/companies/>)
- companies which fall into the GICS sector identified by the Transition Pathway Initiative as being a high impact sector. GICS industry group classification of Banks
- GICS sector classification of Real Estate

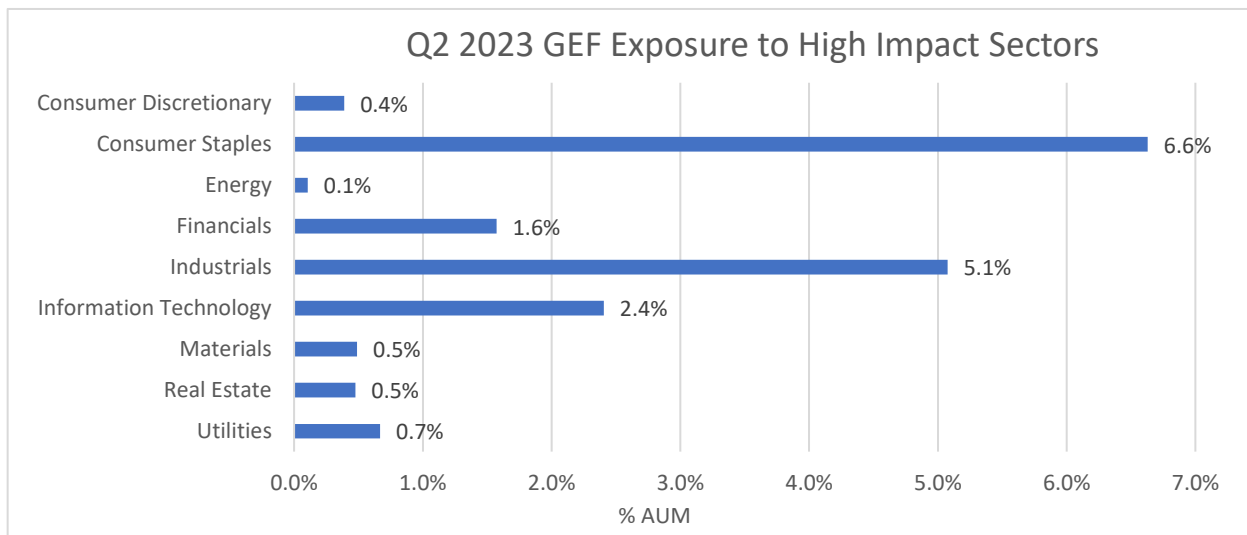
Companies in the high impact sectors fall within industries recognised to be the highest emitters globally. Their alignment with a net zero pathway is critical to achieving 1.5C and on this basis they are a key group who will be prioritised for engagement. They will need to meet stricter criteria to be considered Aligning to Net Zero, Aligned to Net Zero, or Net Zero (we define alignment methodology later in this report). Furthermore, they will be the first in line for escalation through voting if they fail to meet any of the alignment criteria or make slow progress against them.

**GEF exposure to High Impact Sectors:**

Number of Companies: 71

Total % AUM: 17.8%

Sector Breakdown:



Source: LPPI, BNYM

Monitoring exposure to high impact sectors offers insight into the size of this group as a proportion of total GEF and enables ongoing observation of where the highest exposures are and how proportions in different sectors change over time.

## 1.2 NZ Targets:

In the following sections, we present our progress towards our Net Zero (NZ) targets.

ESG and climate-related targets play a prominent role our investment decision making. We use ESG and climate data to monitor whether investments are performing in line with their stated intention.

In 2022 LPPI set short- and medium-term net zero targets for the Global Equities Fund to meet our commitment under the Net Zero Asset Managers Initiative. We are required to evidence how we consider our decarbonisation target to be consistent with delivering a fair share of the 50% global reduction in CO2 emissions by 2030 identified as a requirement in the IPCC special report on global warming of 1.5°C.

These targets are primarily based on three key factors: Decarbonisation, Alignment, and Engagement. Although the Implied Temperature Rise is also discussed below, it is not a part of LPPI’s NZ targets.

The below targets and metrics are important measures of how LPPI is integrating climate-related risks in the overall investment strategy. As at Q2 2023, we are pleased to report that the GEF is outperforming each of the NZ targets.

### Decarbonisation

**LPPI full target:** *The LPPI Global Equities Fund will maintain a carbon intensity lower than the pathway required for the benchmark - MSCI ACWI - to achieve a 50% reduction in carbon intensity (Scope 1 & 2) by 2030 (December 2029), relative to GEF’s carbon intensity in 2019. This equates to a carbon intensity target for the GEF of 91 tCO2e/\$m revenue by 2030, and a reduction in emissions intensity of 16% from 2019 level.*

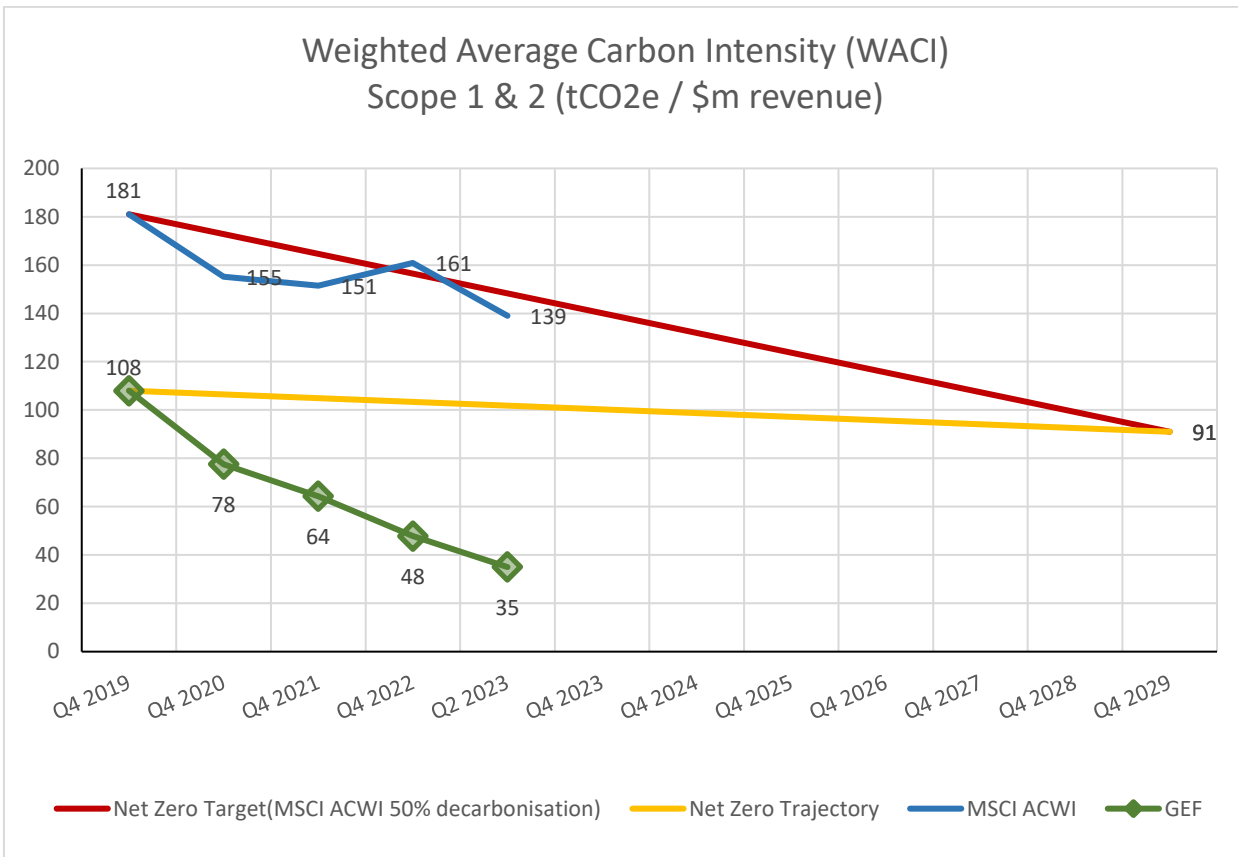
Latest position: **June 2023**

Decarbonisation	Q4 2019	Q4 2020	Q4 2021	Q4 2022	Q1 2023	Q2 2023
Weighted Average Carbon Intensity (WACI Scope 1&2 tCO2e/\$m revenue)	108	78	64	48	43	35

Source: LPPI, BNYM

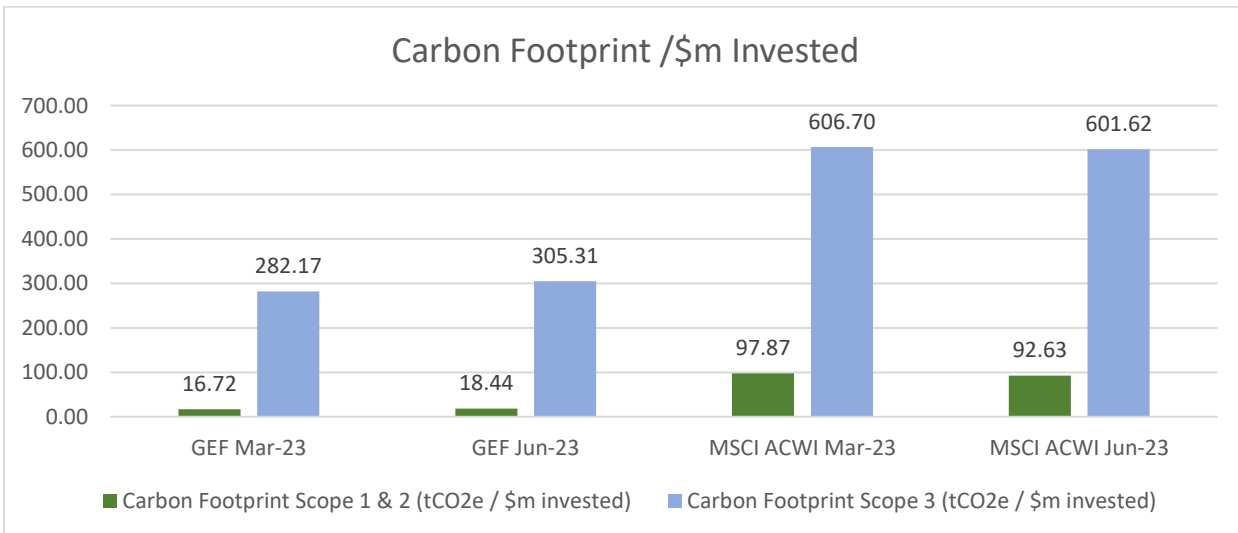
GEF’s WACI (green line), covering Scope 1 and 2 emissions, is reduced from 48 tCO2e/\$m revenue in December 2022 to 35 tCO2e/\$m revenue in June 2023. It remains well within the Net Zero Target (red line) and is significantly lower compared to WACI of the MSCI ACWI Index (blue line).





Source: LPPI, MSCI

Carbon Footprint metric, expressed as total carbon emissions normalised by market value of the portfolio (tCO<sub>2</sub>e/\$m invested), for GEF and MSCI ACWI is presented below.



Source: LPPI, MSCI

### Attribution Analysis

The drop in scope 1 & 2 portfolio carbon footprint between Q4 2022 and Q2 2023 was predominantly due to the Utilities sector. The reduction to the Utilities carbon footprint was largely due to high carbon intensity assets exiting the portfolio, most notably Xcel Energy which was one of the top contributors to the portfolio’s carbon footprint. This caused the Utilities % contribution to the portfolio’s carbon footprint to reduce by 11 percentage points between Q4 2022 and Q2 2023.

### 1.2.1 Implied Temperature

The Implied Temperature Rise (ITR) is a forward-looking alignment metric expressed in °C, which is used to estimate GEF’s alignment to a 2°C pathway. Although ITR is not included in LPPI’s Phase One NZ targets, it is incorporated into the Paris alignment metric being used for Task Force on Climate-related Financial Disclosures (TCFD) reporting.

ITR for GEF in June-23 is estimated as 1.76°C, indicating that GEF undershoots its Carbon Budget and hence is well-aligned to a 2°C scenario. MSCI ACWI’s ITR is estimated as 2.09°C in June-23.

Latest position: **June 2023**

Implied Temperature Rise (ITR)	GEF Q2 2023	MSCI ACWI Q2 2023
ITR °C	1.76°C	2.09°C

Source: LPP, MSCI

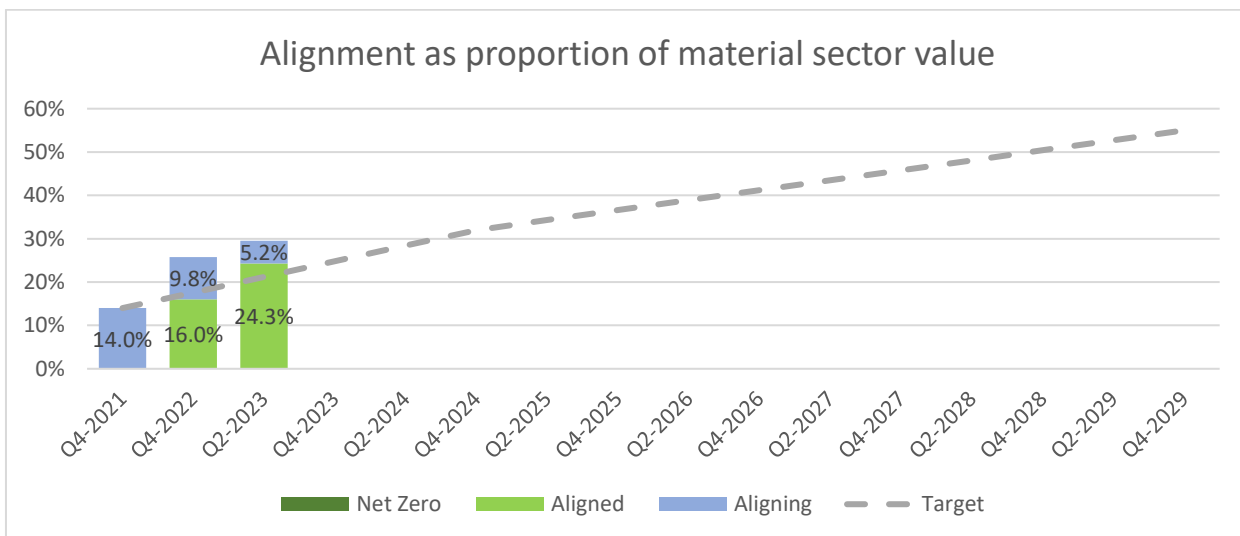
### 1.2.2 Alignment Goal (Coverage Target)

**Target:** 32% of AUM in material sectors is considered net zero, aligned or aligning by 2025; 55% by 2030; 100% of AUM in material sectors is considered net zero or aligned to net zero by 2040.

Latest position: **June 2023**

Alignment	Q4 2021	Q4 2022	Q2 2023
% of AUM that is Net Zero/Aligned/Aligning	14%	26%	29.5%

Source: LPP, MSCI



Source: LPP, MSCI

**Alignment Methodology**

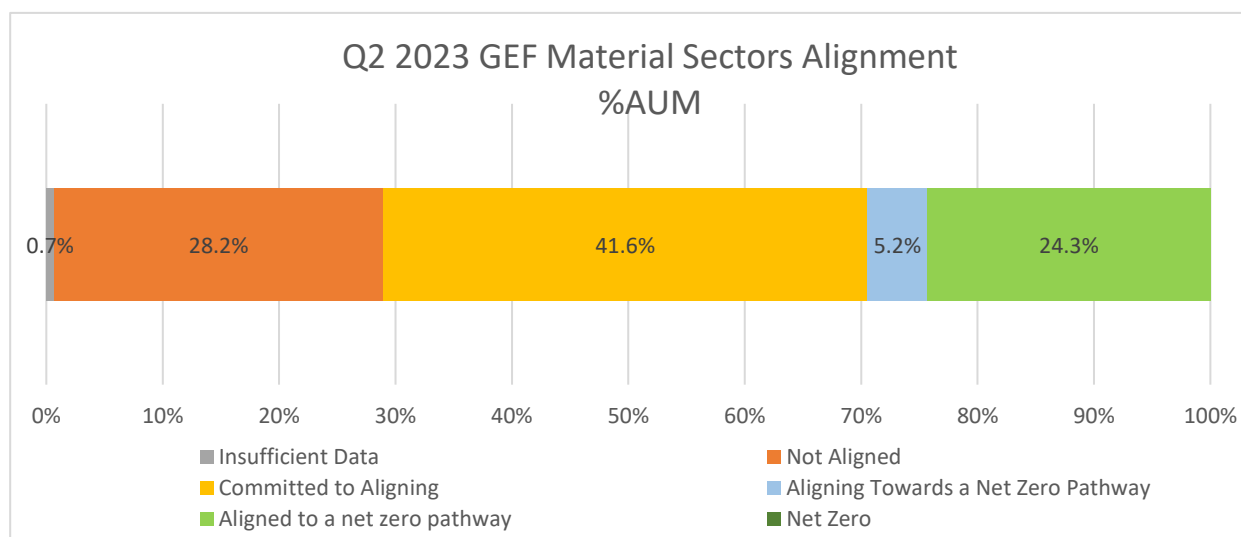
LPP method for assessing alignment is as follows:

<b>Alignment Category</b>	<b>Criteria for Assessment</b>
Committed	The company pledges to achieve net-zero carbon emissions in the long term.
Aligning (Material but not High Impact)	In addition to a net-zero carbon goal, the company also establishes short and medium-term targets (scope 1, 2 and material scope 3) for emission reduction and provides transparency by disclosing their current emissions.
Aligning (High Impact)	At this stage, the company meets the criteria for ‘Aligning (Material but not High Impact)’, but with an added <b>Decarbonisation Strategy</b> <sup>1</sup> . This strategy is a quantified plan outlining how the company intends to meet their greenhouse gas (GHG) targets, measure their green revenues and monitor any increases in these green revenues.
Aligned (Material but not High Impact)	At this stage, the company meets the criteria for ‘Aligning (Material but not High Impact)’ and in addition shares its emissions performance relative to its emissions targets.
Aligned (High Impact)	At this stage, the company meets the criteria for ‘Aligned (Material but not High Impact)’ and in addition the company demonstrates that their capital expenditures align with the goal of achieving net-zero emissions by 2050.
Net Zero <sup>2</sup>	This is the ultimate stage where the company has attained the required emission intensity for 2050, and its ongoing investment plan or business model is designed to sustain this Net Zero performance.

<sup>1</sup>To assess decarbonisation strategies, we have incorporated the results of the CA100+ decarbonisation criteria assessment for those companies in scope of CA100+. Until a more robust method is more widely available, a manual assessment (using the CA100+ methodology) has been carried out on non-CA100+ high impact companies that have the potential to move up an alignment category.

<sup>2</sup>A full assessment of net zero alignment will be carried out at a further progress update following the conclusion of MSCI’s planned update to their alignment methodology.

A breakdown of the portion of material sector companies in each category is as follows:



### 1.2.3 Engagement Target

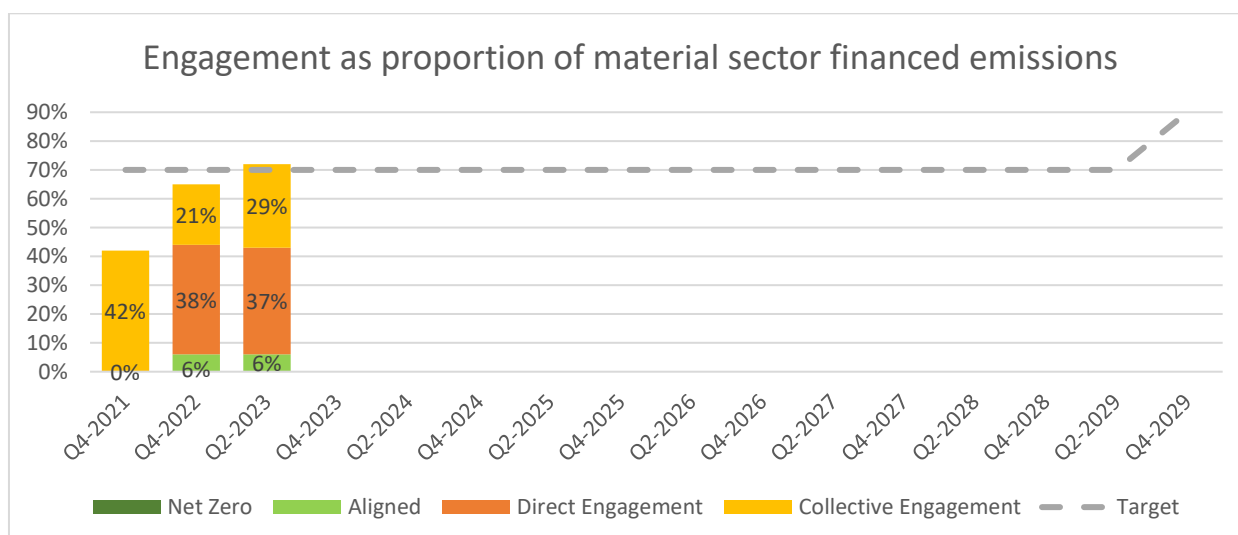
**Target:** 70% of financed emissions in material sectors will either be assessed as already net zero, aligned with a net zero pathway, or subject to direct or collective engagement and stewardship actions by 2022; 90% by 2030.

Collective engagement covers engagements by Robeco, CA100+, CDP NDC and the IIGCC NZEI (Net Zero Engagement Initiative). Direct encompasses engagement via our managers and our internal equities team.

Latest position: **June 2023**

Engagement	Q4 2021	Q4 2022	Q2 2023
% Of financed emissions that are Net Zero	0%	0%	0%
% Of financed emissions that are Aligned (If not already Net Zero)	0%	6%	6%
% Of financed emissions that are under collaborative engagement (If not already Net Zero or Aligned)	42%	21%	29%
% Of financed emissions that are under direct engagement (or will be) (If not already Net Zero, Aligned or under collaborative engagement)	0%	38%	37%
<b>Total</b>	<b>42%</b>	<b>66%</b>	<b>72%</b>

Source: LPP, MSCI



Source: LPP, MSCI

**Under Direct Engagement**

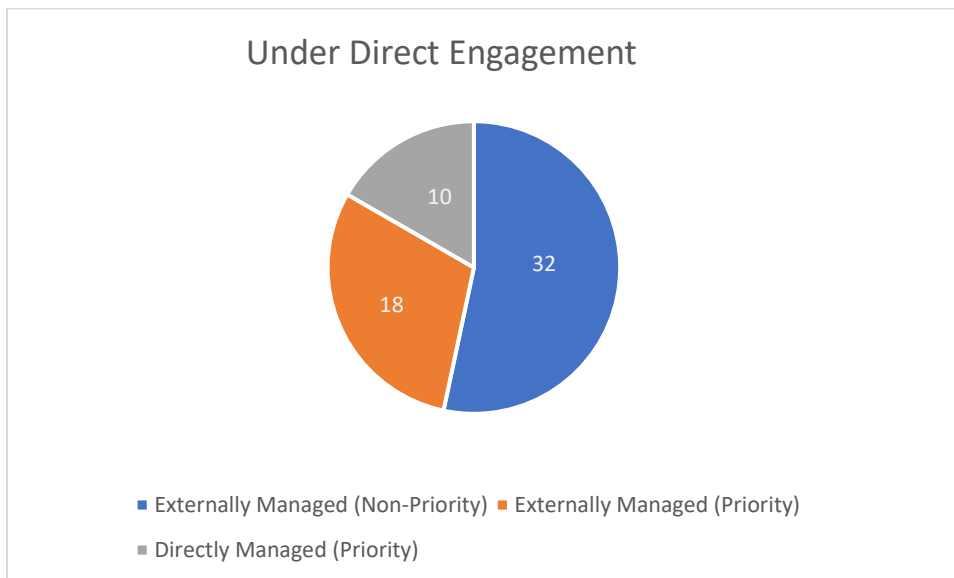
Latest position: **June 2023**

Number of companies: 63

LPPI has created a prioritisation framework to help focus our engagement efforts on those companies where progress is needed the most in order to help us to meet our coverage and engagement targets. The framework takes account of where engagement is already taking place with a company, for example by collaborative engagement initiatives, and aims not to duplicate efforts. Those that are eligible for direct engagement are grouped into 3 categories which identify an engagement priority list that LPPI focuses on. LPPI’s engagement priority list is a selection of companies which are in a high impact sector or have a high contribution to the portfolio’s carbon intensity and are not otherwise being engaged with which are then chosen to undergo focused engagement activity and are subject to enhanced engagement monitoring.

The 63 companies under LPPI’s direct engagement have been bucketed into the following three categories:

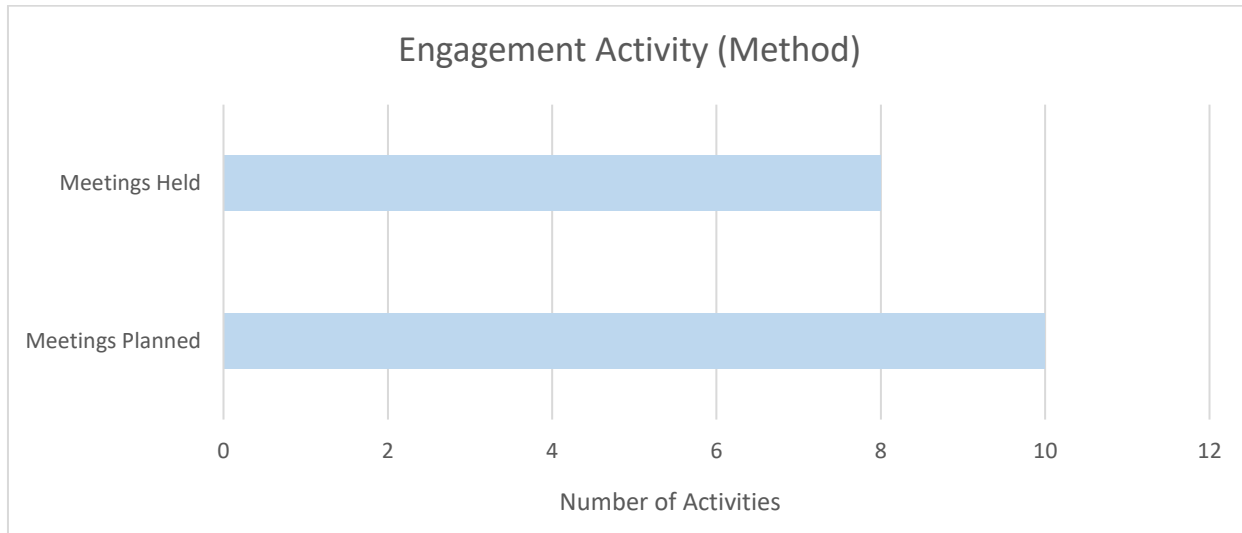
- Externally Managed (Non-priority): LPPI has identified several managers that have a good quality climate-related engagement strategy which allows us to class all assets under these mandates as under engagement and therefore do not need to be part of LPPI’s engagement priority list.
- Externally Managed (Priority): For those managers with a less robust engagement strategy, a select number of assets for each manager have been chosen to be part of LPPI’s engagement priority list. LPPI has selected these companies in partnership with the managers and requested that the manager carry out engagement with those companies.
- Directly Managed (Priority): For those assets directly managed by LPPI, a select number of assets have been chosen to be part of LPPI’s engagement priority list.



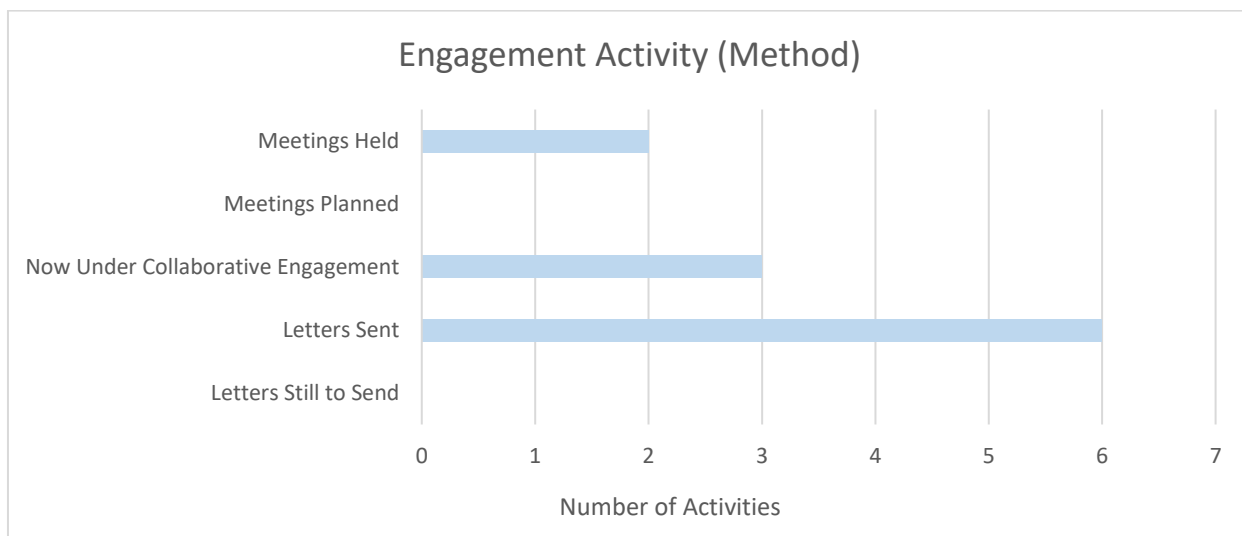
**Priority List Engagement Activity**

Latest position: **June 2023**

Externally Manged (Priority):



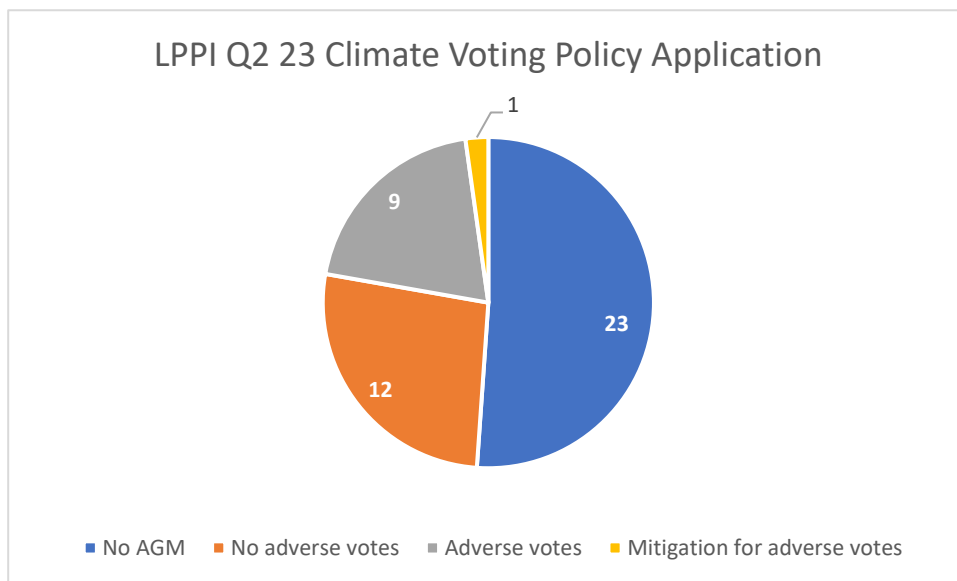
Directly Managed (Priority):\*



\*Nb. Some directly managed priority companies are now under collaborative engagement because LPP began direct engagement with them individually before proceeding to join the engagement groups for those companies as part of the IIGCC Net Zero Engagement Initiative.

**LPP Climate Voting Policy**

In Q2, the meetings of 23 companies in LPP's climate voting watchlist occurred. A vote against management was cast at nine holdings (including shareholder resolutions). These were typically cast against the Chair of the Audit Committee, which is the role frequently identified as having oversight for climate-related risks. LPP also supported relevant shareholder resolutions and votes against reports and accounts. Adverse votes occurred due to poor disclosure against the Net Zero Investment Framework pillars or, where coverage allowed, the CA100+ benchmark. Companies typically avoided votes against management where disclosure had improved or there was evidence of adequate progress prior to reporting (e.g. as ascertained through engagement calls).



## Appendix:

### **GICS Sub Industries classed as Material:**

Aerospace & Defense	Financial Exchanges & Data	Multi-Sector Holdings
Agricultural & Farm Machinery	Food Distributors	Multi-Utilities
Agricultural Products	Food Retail	Office REITs
Air Freight & Logistics	Footwear	Office Services & Supplies
Airlines	Forest Products	Oil & Gas Drilling
Airport Services	Gas Utilities	Oil & Gas Equipment & Services
Alternative Carriers	General Merchandise Stores	Oil & Gas Exploration & Production
Aluminum	Gold	Oil & Gas Refining & Marketing
Apparel Retail	Health Care Distributors	Oil & Gas Storage & Transportation
Apparel, Accessories & Luxury Goods	Health Care Equipment	Other Diversified Financial Services
Application Software	Health Care REITs	Packaged Foods & Meats
Asset Management & Custody Banks	Health Care Supplies	Paper Packaging
Auto Parts & Equipment	Health Care Technology	Paper Products
Automobile Manufacturers	Heavy Electrical Equipment	Personal Products
Automotive Retail	Highways & Railtracks	Pharmaceuticals
Brewers	Home Furnishings	Precious Metals & Minerals
Broadcasting	Home Improvement Retail	Property & Casualty Insurance
Building Products	Homebuilding	Publishing
Cable & Satellite	Homefurnishing Retail	Railroads
Coal & Consumable Fuels	Hotel & Resort REITs	Real Estate Development
Commercial Printing	Household Appliances	Real Estate Operating Companies
Commodity Chemicals	Household Products	Real Estate Services
Communications Equipment	Housewares & Specialties	Regional Banks
Computer & Electronics Retail	Hypermarkets & Super Centers	Reinsurance
Construction & Engineering	Independent Power Producers & Energy Traders	Renewable Electricity
Construction Machinery & Heavy Trucks	Industrial Conglomerates	Residential REITs
Construction Materials	Industrial Gases	Retail REITs
Consumer Electronics	Industrial Machinery	Semiconductor Equipment
Consumer Finance	Industrial REITs	Semiconductors
Copper	Insurance Brokers	Silver
Data Processing & Outsourced Services	Integrated Oil & Gas	Soft Drinks
Department Stores	Integrated Telecommunication Services	Specialized Finance
Distillers & Vintners	Interactive Home Entertainment	Specialized REITs
Distributors	Interactive Media & Services	Specialty Chemicals
Diversified Banks	Internet & Direct Marketing Retail	Specialty Stores
Diversified Capital Markets	Internet Services & Infrastructure	Steel
Diversified Chemicals	Investment Banking & Brokerage	Systems Software
Diversified Metals & Mining	IT Consulting & Other Services	Technology Distributors
Diversified Real Estate Activities	Leisure Products	Technology Hardware, Storage & Peripherals
Diversified REITs	Life & Health Insurance	Textiles
Diversified Support Services	Life Sciences Tools & Services	Thrifts & Mortgage Finance
Drug Retail	Managed Health Care	Tires & Rubber
Electric Utilities	Marine	Tobacco
Electrical Components & Equipment	Marine Ports & Services	Trading Companies & Distributors
Electronic Components	Metal & Glass Containers	Trucking
Electronic Equipment & Instruments	Mortgage REITs	Water Utilities
Electronic Manufacturing Services	Motorcycle Manufacturers	Wireless Telecommunication Services
Environmental & Facilities Services	Movies & Entertainment	Cargo Ground Transportation
Fertilizers & Agricultural Chemicals	Multi-line Insurance	Passenger Ground Transportation
Broadline Retail	Commercial & Residential Mortgage Finance	Transaction & Payment Processing Services



**Q2 2023 - Material Companies:**

AARTI INDUSTRIES LTD	C.H. ROBINSON WORLDWIDE INC	GODREJ CONSUMER PR
AARTI PHARMALABS LTD	CANADIAN NATIONAL RAILWAY CO	GODREJ PROPERTIES
ACCENTURE PLC	CDW CORP	GOLD FIELDS LTD
ADOBE INC	CHARLES SCHWAB CORP	GROEP BRUSSEL LAMBERT NV
ADVANCED MICRO DEVICES INC	CHINA MENGNIU DAIRY CO LTD	GRUPO MEXICO SAB DE CV
ADYEN NV	CK ASSET HOLDINGS	GUOCO GROUP LTD
AERCAP HOLDINGS NV	CLEAN HARBORS INC	HALEON PLC
AERIS IND COM DE EQUIP GER ENERGIA SA	CLOUDFLARE INC	HANGZHOU TIGERMED CONSULTING CO LTD
AFFIRM HLDGS INC	COLGATE-PALMOLIVE CO	HD HYUNDAI HEAVY INDUSTRIES CO LTD
AIA GROUP LTD	COMCAST CORP	HD KOREA SHIPBUILDING & MARINE CO LTD
ALIBABA GROUP HOLDING LTD	COMPAGNIE FINANCIERE RICHEMONT SA	HDFC BANK LTD
ALIMENTATION COUCHE-TARD INC	CONSTELLATION SOFTWARE INC	HEICO CORP
ALPHABET INC	CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	HEINEKEN HOLDING NV
AMAZON.COM INC	COPART INC	HENKEL AG & CO KGAA
AMBEV SA	COSTCO WHOLESALE CORP	HERMES INTERNATIONAL SCA
AMERICAN EXPRESS CO	COUPANG INC	HINDUSTAN UNILEVER LTD
AMG CRITICAL MATERIALS NV	CREDICORP LTD	HIROSE ELECTRIC CO LTD
ANALOG DEVICES INC	CUMMINS INC	HONG KONG EXCHANGES AND CLEARING LTD
ANSYS INC	DANAHER CORP	HONGKONG LAND HOLDINGS LTD
AON PLC	DANONE SA	HOSHIZAKI CORPORATION
ARTHUR J. GALLAGHER & CO.	DAVIDE CAMPARI MILANO NV	HOUSING DEVELOPMENT FINANCE CORP
ASML HOLDING NV	DEERE & CO	HUMANA INC
ASSA ABLOY AB	DELTA ELECTRONICS INC	HYSAN DEVELOPMENT CO LTD
ATLASSIAN CORP	DENTSPLY SIRONA INC	HYUNDAI MOBIS CO LTD
AUTODESK INC	DEXCOM INC	ICU MEDICAL INC
AUTOZONE INC	DIAGEO PLC	IDEXX LABORATORIES INC
AYALA LAND INC	DIVI'S LABORATORIES LTD	ILLUMINA INC
B3 SA BRASIL BOLSA BALCAO	DIXON TECHNOLOGIES INDIA LIMITED	IMCD NV
BAE SYSTEMS PLC	DOUGLAS EMMETT INC	INPOST S.A.
BAIDU INC	EDELWEISS FINANCIAL SERVICES	INTACT FINANCIAL CORP
BAJAJ FINANCE LTD	EDENRED SE	INTER & CO INC
BANGKOK BANK PCL	ELEVANCE HEALTH INC	INTERCONTINENTAL EXCHANGE INC
BANK NEGARA INDONESIA	ENGIE	INTUIT INC
BANK OF NEW YORK MELLON CORP	ESTEE LAUDER COMPANIES INC	INTUITIVE SURGICAL INC
BANK RAKYAT INDONESIA (PERSERO) TBK PT	ESTUN AUTOMATION CO LTD	INVESTOR AB
BDO UNIBANK INC	ETSY INC	IPG PHOTONICS CORP
BECTON DICKINSON AND CO	EVERSOURCE ENERGY	ITAUSA S.A.
BEFESA SA	EXPEDITORS INTERN OF WASHINGTON INC	JACK HENRY & ASSOCIATES INC
BERKELEY GROUP HOLDINGS PLC	FANUC CORP	JARDINE MATHESON HOLDINGS LTD
BERKSHIRE HATHAWAY INC	FIDELITY NATIONAL FINANCIAL INC	JD.COM INC
BHARTI AIRTEL LTD	FINECOBANK BANCA FINECO	JIANGSU HENGLI HYDRAULIC CO LTD
BLACK KNIGHT	FLOOR & DECOR HOLDINGS INC	JM FINANCIAL LTD
BLACKROCK INC	FLOWERVE CORP	KANZHUN LTD
BOSTON PROPERTIES INC	FOMENTO ECONOMICO MEXICANO SAB DE CV	KERING
BRENNTAG SE	FORTIVE CORP	KEYENCE CORP
BRITISH AMERICAN TOBACCO PLC	FULL TRUCK ALLIANCE CO LTD	KINGDEE INTERNATNL SOFTWARE GRP CO LTD
BROOKFIELD CORP	GINKGO BIOWORKS HOLDINGS INC	KINGSOFT CORP LTD
BROWN & BROWN INC	GLOBE LIFE INC	KOMATSU LTD
BUDWEISER BREWING COMPANY APAC LTD	GLODON CO LTD	KOREA AEROSPACE INDUSTRIES
BWX TECHNOLOGIES INC	GODADDY INC	KRAFT HEINZ CO

**Q2 2023 – Material Companies (continued):**

KT&G CORP	ORKLA ASA	TESLA INC
LEGRAND SA	PDD HOLDINGS INC	TEXAS INSTRUMENTS INC
LG CHEM LTD	PEPSICO INC	TITAN COMPANY LTD
LKQ CORP	PERFORMANCE FOOD GROUP CO NEW	TRANE TECHNOLOGIES PLC
LLOYDS BANKING GROUP PLC	PERNOD RICARD SA	TYLER TECHNOLOGIES INC
LOCALIZA RENT A CAR SA	PHILIP MORRIS INTERNATIONAL INC	U.S. BANCORP
LONDON STOCK EXCHANGE GROUP PLC	POLYUS PJSC	UGI CORP
L'OREAL SA	POWER CORPORATION OF CANADA	UNILEVER PLC
LOTTE HOLDINGS	PPG INDUSTRIES INC	UNION PACIFIC CORP
LOTTE WELLFOOD CO LTD	PRO MEDICUS LTD	UNITEDHEALTH GROUP INC
LOWE'S COMPANIES INC	PROSUS NV	USS CO LTD
LUFAX HLDG LTD	RECKITT BENCKISER GROUP PLC	VAT GROUP AG
LUMINE GROUP INC	RELIANCE INDUSTRIES LTD	VENUSTECH GROUP INC
LVMH MOET HENNESSY LOUIS VUITTON SE	ROBLOX CORP	VISA INC
MARAVAI LIFESCIENCES HOLDINGS INC	ROCKWELL AUTOMATION INC	W. R. BERKLEY CORP
MARKETAXESS HOLDINGS INC	ROLLINS INC	WAL-MART DE MEXICO SAB DE CV
MASIMO CORP	ROSS STORES INC	WALMART INC
MASTERCARD INC	RPM INTERNATIONAL INC	WASTE CONNECTIONS INC
MAX FINANCIAL SERVICES LTD	SAFRAN SA	WEC ENERGY GROUP
MEDTRONIC PLC	SALESFORCE INC	WENDEL SE
MERCADOLIBRE INC	SAMSARA INC	WEST PHARMACEUTICAL SERVICES INC
META PLATFORMS INC	SAMSUNG SDI CO LTD	WEYERHAEUSER CO
MICROSOFT CORP	SANOFI SA	WILLIS TOWERS WATSON
MIDEA GROUP CO LTD	SAP SE	WORKDAY INC
MIPS AB	SBI LIFE INSURANCE COMPANY LIMITED	WULIANGYE YIBIN CO LTD
mitsubishi electric corp	SCHINDLER HOLDING AG	XP INC
MITSUBISHI ESTATE CO LTD	SCHLUMBERGER NV	YUNNAN BAIYAO GROUP CO LTD
MOLINA HEALTHCARE INC	SEA LIMITED	
MOODY'S CORP	SHENZHEN MINDRAY BIO-MEDICAL ELECT	
MOTOROLA SOLUTIONS INC	SHENZHOU INTERNATIONAL GRP HLDS LTD	
MS&AD INSURANCE GROUP HOLDINGS INC	SHIMANO INC	
MSCI INC	SHOPIFY INC	
MUTHOOT FINANCE	SITEONE LANDSCAPE SUPPLY INC	
NARI TECHNOLOGY CO LTD	SMC CORP	
NASPERS	SOMPO HOLDINGS INC	
NAVER	SPIRAX-SARCO ENGINEERING PLC	
NEMETSCHEK	SPOTIFY TECHNOLOGY SA	
NESTLE SA	SRF LTD	
NETFLIX INC	STONECO LTD	
NETWORK INTERNATIONAL HOLDINGS PLC	SUZANO SA	
NIKE INC	SVENSKA HANDELSBANKEN AB	
NINTENDO CO LTD	T&D HOLDINGS INC	
NIO INC	T.HASEGAWA CO LTD	
NIPPON LIFE ASSET MGMT LTD	TAIWAN SEMICONDUCTOR MANUFACT CO LTD	
NOMAD FOODS LTD	TATA COMMUNICATIONS LTD	
NOV INC	TATA CONSULTANCY SERVICES	
NOVARTIS AG	TATA CONSUMER PRODUCTS LTD	
NUTRIEN LTD	TECHTRONIC INDUSTRIES CO LTD	
NVIDIA CORP	TENARIS SA	
ORACLE CORP	TENCENT HOLDINGS LTD	

## High Impact – GICS

<u>TPI Sector</u>	<u>GICS Sector Name</u>	<u>GICS Sub Industry / Code</u>	<u>GICS Sub Industry (Duplicates Removed)</u>
Electricity utilities	Energy	Integrated Oil & Gas (10102010)	Integrated Oil & Gas
		Electric Utilities (55101010)	Electric Utilities
	Utilities	Independent Power Producers & Energy Traders (55105010)	Independent Power Producers & Energy Traders
		Multi-Utilities (55103010)	Multi-Utilities
Oil & gas	Energy	Integrated Oil & Gas (10102010)	
		Oil & Gas Refining & Marketing (10102030)	Oil & Gas Refining & Marketing
		Oil & Gas Exploration & Production (10102020)	Oil & Gas Exploration & Production
		Oil & Gas Storage & Transportation (10102040)	Oil & Gas Storage & Transportation
	Materials	Diversified Chemicals (15101020)	Diversified Chemicals
Oil & gas distribution	Energy	Oil & Gas Storage & Transportation (10102040)	
		Oil & Gas Exploration & Production (10102020)	
	Materials	Diversified Chemicals (15101020)	
Coal mining	Energy	Coal & Consumable Fuels (10102050)	Coal & Consumable Fuels
		Oil & Gas Refining & Marketing (10102030)	
	Consumer discretionary	Automobile Manufacturers (25102010)	Automobile Manufacturers
		Industrials	Industrial Conglomerates (20105010)
	Trading Companies & Distributors (20107010)		Trading Companies & Distributors
	Materials		Diversified Metals & Mining (15104020)
		Steel (15104050)	Steel
Autos	Consumer discretionary	Automobile Manufacturers (25102010)	
Airlines	Industrials	Airlines (20302010)	Airlines
Shipping	Energy	Oil & Gas Storage & Transportation (10102040)	
	Industrials	Marine (20303010)	Marine
Aluminium	Materials	Aluminum (15104010)	Aluminum
		Diversified Metals & Mining (15104020)	
	Industrials	Trading Companies & Distributors (20107010)	
Cement	Materials	Construction Materials (15102010)	Construction Materials
Pulp & paper	Materials	Paper Packaging (15103020)	Paper Packaging
		Paper Products (15105020)	Paper Products
Steel	Materials	Steel (15104050)	
Chemicals	Materials	Commodity Chemicals (15101010)	Commodity Chemicals
		Diversified Chemicals (15101020)	
		Fertilizers & Agricultural Chemicals (15101030)	Fertilizers & Agricultural Chemicals
		Industrial Gases (15101040)	Industrial Gases
		Specialty Chemicals (15101050)	Specialty Chemicals

<b>TPI Sector</b>	<b>GICS Sector Name</b>	<b>GICS Sub Industry / Code</b>	<b>GICS Sub Industry (Duplicates Removed)</b>
Diversified mining	Materials	Diversified Metals & Mining (15104020)	
		Copper (15104025)	Copper
		Steel (15104050)	
Other industrials	Information technology	Electronic Equipment & Instruments (45203010)	Electronic Equipment & Instruments
		Technology Hardware, Storage & Peripherals (45202030)	Technology Hardware, Storage & Peripherals
	Industrials	Aerospace & Defense (20101010)	Aerospace & Defense
		Construction Machinery & Heavy Trucks (20106010)	Construction Machinery & Heavy Trucks
		Heavy Electrical Equipment (20104020)	Heavy Electrical Equipment
		Electrical Components & Equipment (20104010)	Electrical Components & Equipment
	Consumer discretionary	Consumer Electronics (25201010)	Consumer Electronics
	Materials	Construction Materials (15102010)	

High Impact also includes all:

- Banks
- Real Estate
- Companies in CA100+

**Q2 2023 - High Impact Companies:**

AARTI INDUSTRIES LTD	NIO INC
AERCAP HOLDINGS NV	NUTRIEN LTD
AERIS IND COM DE EQUIP GER ENERGIA SA	PEPSICO INC
AMG CRITICAL MATERIALS NV	PPG INDUSTRIES INC
APPLE INC	RELIANCE INDUSTRIES LTD
AYALA LAND INC	ROCKWELL AUTOMATION INC
BAE SYSTEMS PLC	RPM INTERNATIONAL INC
BANGKOK BANK PCL	SAFRAN SA
BANK NEGARA INDONESIA	SAMSUNG ELECTRONICS CO LTD
BANK RAKYAT INDONESIA (PERSERO) TBK PT	SITEONE LANDSCAPE SUPPLY INC
BDO UNIBANK INC	SRF LTD
BERKSHIRE HATHAWAY INC	SUZANO SA
BRENNTAG SE	SVENSKA HANDELSBANKEN AB
BWX TECHNOLOGIES INC	T.HASEGAWA CO LTD
CK ASSET HOLDINGS	TESLA INC
COLGATE-PALMOLIVE CO	TRANE TECHNOLOGIES PLC
CONTEMPORARY AMPEREX TECHNOLOGY CO LTD	U.S. BANCORP
CREDICORP LTD	UNILEVER PLC
CUMMINS INC	WALMART INC
DANONE SA	WEC ENERGY GROUP
DIXON TECHNOLOGIES INDIA LIMITED	WEYERHAEUSER CO
ENGIE	NIO INC
EVERSOURCE ENERGY	NUTRIEN LTD
FINECOBANK BANCA FINECO	PEPSICO INC
GINKGO BIOWORKS HOLDINGS INC	PPG INDUSTRIES INC
GODREJ PROPERTIES	RELIANCE INDUSTRIES LTD
GRUPO MEXICO SAB DE CV	ROCKWELL AUTOMATION INC
GUOCO GROUP LTD	RPM INTERNATIONAL INC
HD HYUNDAI HEAVY INDUSTRIES CO LTD	SAFRAN SA
HD KOREA SHIPBUILDING & MARINE CO LTD	SAMSUNG ELECTRONICS CO LTD
HDFC BANK LTD	SITEONE LANDSCAPE SUPPLY INC
HEICO CORP	SRF LTD
HONGKONG LAND HOLDINGS LTD	SUZANO SA
HOUSING DEVELOPMENT FINANCE CORP	SVENSKA HANDELSBANKEN AB
HYSAN DEVELOPMENT CO LTD	T.HASEGAWA CO LTD
IMCD NV	TESLA INC
INTER & CO INC	TRANE TECHNOLOGIES PLC
ITAUSA S.A.	U.S. BANCORP
JARDINE MATHESON HOLDINGS LTD	UNILEVER PLC
KEYENCE CORP	WALMART INC
KOMATSU LTD	WEC ENERGY GROUP
KOREA AEROSPACE INDUSTRIES	WEYERHAEUSER CO
LEGRAND SA	
LG CHEM LTD	
LLOYDS BANKING GROUP PLC	
LOTTE HOLDINGS	
MITSUBISHI ELECTRIC CORP	
MITSUBISHI ESTATE CO LTD	
NARI TECHNOLOGY CO LTD	
NESTLE SA	

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## Appendix 2

The table below provides a summary of the current status of coverage (availability of data & metrics) for the asset classes that LPPI manages.

As expected, coverage is lower within private market asset classes, with many of the challenges related to poor disclosure by underlying companies being an industry-wide issue as opposed to an LPPI-specific issue.

We expect that the data & metrics coverage will increase over time, as disclosure requirements become more standardised and the industry responds to the investor need for consistent comparable data.

Asset Class	Status for Data & Metrics
<b>Global Equities</b>	Data & metrics available for GHG emissions, emissions metrics, alignment metrics and climate risks metrics.
<b>Fixed Income</b>	<b>Corporate / Sovereign Bonds:</b> Data & metrics available for GHG emissions, emissions metrics, alignment metrics and climate risks metrics.
	<b>Other instruments (securitised):</b> Not currently available.
<b>Real Estate</b>	<b>Direct Assets:</b> Data & metrics available for GHG emissions, emissions metrics, alignment metrics and climate risks metrics.
	<b>Indirect / Fund Investments:</b> emissions data available at the fund level, asset look-through data not yet available. Gaps in emissions metrics/ alignment metrics and climate risks metrics.
<b>Infrastructure</b>	<b>Direct Assets:</b> Data & metrics available for GHG emissions, emissions metrics. Alignment and climate metrics either not yet available, or work is required.
	<b>Indirect / Fund Investments:</b> Data & metrics available for emissions through managers. Alignment and climate metrics not yet available.
<b>Private Equity</b>	Data & metrics not currently available. Industry issue as opposed to LPPI specific.
<b>Credit</b>	Data & metrics available for some strategies but not all, through a combination of internally available data and requests sent to managers.
<b>Diversifying Strategies</b>	Approach to data sourcing being evaluated.