Statement on Principal Adverse Impacts of Investment decisions on sustainability factors

30 June 2024



Table of contents

Annex 1	3
Table 1: Statement on principal adverse impacts of investment decisions on sustainability factors	9
Description of the principal adverse impacts on sustainability factors Indicators applicable to investments in investee companies	11
Climate and other environment-related indicators	11
Indicators for social and employee, respect for human rights, anti-corruption and anti-bribery matters	18
Indicators applicable to investments in sovereigns and supranationals	21
Indicators applicable to investments in real estate assets	22
Other indicators for principal adverse impacts on sustainability factors	s 23
Description of policies to identify and prioritise principal adverse impacts on sustainability factors	25
Historical comparison table in accordance with Article 6 Regulation (EU) 2019/2088	31
Climate and other environment-related indicators	31
Indicators for social and employee, respect for human rights, anti-corruption and anti-bribery matters	33
Indicators applicable to investments in sovereigns and supranationals	34
Other indicators for principal adverse impacts on sustainability factors	s 35

The following statement has been translated into the below languages:

Danish

Dutch

Finnish

French

German

Italian

Click on the links to view translated versions

Norwegian

Spanish

Swedish

Swiss German

Annex 1

to the Commission Delegation Regulation (EU) .../... Brussels, 6.4.2022 C(2022) 1931 final

Supplementing Regulation (EU) 2019/2088 of the European Parliament and of the Council with regard to regulatory technical standards specifying the details of the content and presentation of the information in relation to the principle of 'do no significant harm', specifying the content, methodologies and presentation of information in relation to sustainability indicators and adverse sustainability impacts, and the content and presentation of the information in relation to the promotion of environmental or social characteristics and sustainable investment objectives in precontractual documents, on websites and in periodic reports

Annex 1: Template principal adverse sustainability impacts statement

For the purposes of this Annex, the following definitions shall apply:

- (1) 'scope 1, 2 and 3 GHG emissions' means the scope of greenhouse gas emissions referred to in points (1)(e)(i) to (iii) of Annex III to Regulation (EU) 2016/1011 of the European Parliament and of the Council¹;
- (2) 'greenhouse gas (GHG) emissions' means greenhouse gas emissions as defined in Article 3, point (1), of Regulation (EU) 2018/842 of the European Parliament and of the Council²:
- (3) 'weighted average' means a ratio of the weight of the investment by the financial market participant in an investee company in relation to the enterprise value of the investee company;
- (4) 'enterprise value' means the sum, at fiscal year-end, of the market capitalisation of ordinary shares, the market capitalisation of preferred shares, and the book value of total debt and non-controlling interests, without the deduction of cash or cash equivalents;
- (5) 'companies active in the fossil fuel sector' means companies that derive any revenues from exploration, mining, extraction, production, processing, storage, refining or distribution, including transportation, storage and trade, of fossil fuels as defined in Article 2, point (62), of Regulation (EU) 2018/1999 of the European Parliament and of the Council³;
- (6) 'renewable energy sources' means renewable non-fossil sources, namely wind, solar (solar thermal and solar photovoltaic) and geothermal energy, ambient energy, tide, wave and other ocean energy, hydropower, biomass, landfill gas, sewage treatment plant gas, and biogas;
- (7) 'non-renewable energy sources' means energy sources other than those referred to in point (6);
- (8) 'energy consumption intensity' means the ratio of energy consumption per unit of activity, output or any other metric of the investee company to the total energy consumption of that investee company;
- (9) 'high impact climate sectors' means the sectors listed in Sections A to H and Section L of Annex I to Regulation (EC) No 1893/2006 of the European Parliament and of the Council⁴;
- (10) 'protected area' means designated areas in the European Environment Agency's Common Database on Designated Areas (CDDA);
- 1 Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds and amending Directives 2008/48/EC and 2014/17/EU and Regulation (EU) No 596/2014 (OJ L 171, 29.6.2016, p. 1).
- 2 Regulation (EU) 2018/842 of the European Parliament and of the Council of 30 May 2018 on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreement and amending Regulation (EU) No 525/2013 (OJ L 156, 19.6.2018, p. 26).
- 3 Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/31/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council (OJ L 328, 21.12.2018, p. 1).
- 4 Regulation (EC) No 1893/2006 of the European Parliament and of the Council of 20 December 2006 establishing the statistical classification of economic activities NACE Revision 2 and amending Council Regulation (EEC) No 3037/90 as well as certain EC Regulations on specific statistical domains Text with EEA relevance (OJ L 393, 30.12.2006, p. 1–39).

- (11) 'area of high biodiversity value outside protected areas' means land with high biodiversity value as referred to in Article 7b(3) of Directive 98/70/EC of the European Parliament and of the Council⁵;
- (12) 'emissions to water' means direct emissions of priority substances as defined in Article 2(30) of Directive 2000/60/EC of the European Parliament and of the Council and direct emissions of nitrates, phosphates and pesticides⁶;
- (13) 'areas of high water stress' means regions where the percentage of total water withdrawn is high (40-80%) or extremely high (greater than 80%) in the World Resources Institute's (WRI) Water Risk Atlas tool "Aqueduct";
- (14) 'hazardous waste and radioactive waste' means hazardous waste and radioactive waste;
- (15) 'hazardous waste' means hazardous waste as defined in Article 3(2) of Directive 2008/98/EC of the European Parliament and of the Council?;
- (16) 'radioactive waste' means radioactive waste as defined in Article 3(7) of Council Directive 2011/70/Euratom®;
- (17) 'non-recycled waste' means any waste not recycled within the meaning of 'recycling' in Article 3(17) of Directive 2008/98/EC;
- (18) 'activities negatively affecting biodiversity-sensitive areas' means activities that are characterised by all of the following:
- (a) those activities lead to the deterioration of natural habitats and the habitats of species and disturb the species for which a protected area has been designated;
- (b) for those activities, none of the conclusions, mitigation measures or impact assessments adopted pursuant to any of the following Directives or national provisions or international standards that are equivalent to those Directives have been implemented:
 - (i) Directive 2009/147/EC of the European Parliament and of the Council;
 - (ii) Council Directive 92/43/EEC;
 - (iii) an Environmental Impact Assessment (EIA) as defined in Article 1(2), point (g), of Directive 2011/92/EU of the European Parliament and of the Council;
 - (iv) for activities located in third countries, conclusions, mitigation measures or impact assessments adopted in accordance with national provisions or international standards that are equivalent to the Directives and impact assessments listed in points (i), (ii) and (iii);

- 5 Directive 98/70/EC of the European Parliament and of the Council of 13 October 1998 relating to the quality of petrol and diesel fuels and amending Council Directive 93/12/EEC (OJ L 350, 28.12.1998, p. 58).
- $6\ Directive\ 2000/60/EC\ of\ the\ European\ Parliament\ and\ of\ the\ Council\ of\ 23\ October\ 2000\ establishing\ a\ framework\ for\ Community\ action\ in\ the\ field\ of\ water\ policy\ (OJ\ L\ 327,\ 22.12.2000,\ p.\ 1).$
- 7 Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (OJ L 312, 22.11.2008, p. 3).
- 8 Council Directive 2011/70/Euratom of 19 July 2011 establishing a Community framework for the responsible and safe management of spent fuel and radioactive waste (OJ L 199, 2.8.2011, p. 48).

- (b) for those activities, none of the conclusions, mitigation measures or impact assessments adopted pursuant to any of the following Directives or national provisions or international standards that are equivalent to those Directives have been implemented:
 - (i) Directive 2009/147/EC of the European Parliament and of the Council⁹;
 - (ii) Council Directive 92/43/EEC10;
 - (iii) an Environmental Impact Assessment (EIA) as defined in Article 1(2), point (g), of Directive 2011/92/EU of the European Parliament and of the Council¹¹;
 - (iv) for activities located in third countries, conclusions, mitigation measures or impact assessments adopted in accordance with national provisions or international standards that are equivalent to the Directives and impact assessments listed in points (i), (ii) and (iii);
- (19) 'biodiversity-sensitive areas' means Natura 2000 network of protected areas, UNESCO World Heritage sites and Key Biodiversity Areas ('KBAs'), as well as other protected areas, as referred to in Appendix D of Annex II to Commission Delegated Regulation (EU) 2021/2139;
- (20) 'threatened species' means endangered species, including flora and fauna, listed in the European Red List or the IUCN Red List, as referred to in Section 7 of Annex II to Delegated Regulation (EU) 2021/2139;
- (21) 'deforestation' means the temporary or permanent human-induced conversion of forested land to non-forested land;
- (22) 'UN Global Compact principles' means the ten Principles of the United Nations Global Compact;
- (23) 'unadjusted gender pay gap' means the difference between average gross hourly earnings of male paid employees and of female paid employees as a percentage of average gross hourly earnings of male paid employees;
- (24) 'board' means the administrative, management or supervisory body of a company;
- (25) 'human rights policy' means a policy commitment approved at board level on human rights that the economic activities of the investee company shall be in line with the UN Guiding Principles on Business and Human Rights;
- (26) 'whistleblower' means 'reporting person' as defined in Article 5(7) of Directive (EU) 2019/1937 of the European Parliament and of the Council¹³;
- (27) 'inorganic pollutants' means emissions within or lower than the emission levels associated with the best available techniques (BAT-AEL) as defined in Article 3, point (13) of Directive 2010/75/EU of the European Parliament and of the Council¹³, for the Large Volume Inorganic Chemicals- Solids and Others industry;
- 9 Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (OJ L 20, 26.1.2010, p. 7).
- $10\ Council\ Directive\ 92/43/EEC\ of\ 21\ May\ 1992\ on\ the\ conservation\ of\ natural\ habitats\ and\ of\ wild\ fauna\ and\ flora\ (OJ\ L\ 206,\ 22.7.1992,\ p.\ 7).$
- 11 Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment (OJ L 026, 28.1.2012, p. 1).
- 12 Directive (EU) 2019/1937 of the European Parliament and of the Council of 23 October 2019 on the protection of persons who report breaches of Union law (OJ L305, 26.11.2019, p. 17).
- 13 Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) (OJ L 334, 17.12.2010, p. 17).

- (28) 'air pollutants' means direct emissions of sulphur dioxides (SO2), nitrogen oxides (NOx), non-methane volatile organic compounds (NMVOC), and fine particulate matter (PM2,5) as defined in Article 3, points (5) to (8), of Directive (EU) 2016/2284 of the European Parliament and of the Council¹⁴, ammonia (NH3) as referred to in that Directive; metals (HM) as referred to in Annex I to that Directive;
- (29) 'ozone depletion substances' mean substances listed in the Montreal Protocol on Substances that Deplete the Ozone Layer.

For the purposes of this Annex, the following formulas shall apply:

(1) 'GHG emissions' shall be calculated in accordance with the following formula:

$$\sum_{n=1}^{\infty} \left(\frac{\text{current value of investment}_{i}}{\text{investee company's enterprise value}_{i}} \times \text{investee company's Scope}(x) \text{ GHG emissions}_{i} \right)$$

(2) 'carbon footprint' shall be calculated in accordance with the following formula:

$$\sum_{n}^{i} \left(\frac{\textit{current value of investment}_{i}}{\underbrace{\textit{investee company's enterprise value}_{i}}^{\text{\times investee company's Scope 1,2 and 3 GHG emissions}_{i}} \right)$$

(3) 'GHG intensity of investee companies' shall be calculated in accordance with the following formula:

$$\sum_{n}^{i} \left(\frac{\text{current value of investment}_{i}}{\text{current value of all investments (EM)}} \times \frac{\text{investee company's Scope 1, 2 and 3 GHG emissions}_{i}}{\text{investee company's EM revenue}_{i}} \right)$$

(4) 'GHG intensity of sovereigns' shall be calculated in accordance with the following formula:

$$\sum_{n}^{i} \left(\frac{\text{current value of investment}_{i}}{\text{current value of all investments (ϵM)}} \times \frac{\text{The country's Scope 1,2 and 3 GHG emissions}_{i}}{\text{Gross Domestic Product}_{i}(ϵM)} \right)$$

¹⁴ Directive (EU) 2016/2284 of the European Parliament and of the Council of 14 December 2016 on the reduction of national emissions of certain atmospheric pollutants, amending Directive 2003/35/EC and repealing Directive 2001/81/EC (Text with EEA relevance), OJ L 344, 17.12.2016, p. 1–31

(5) 'inefficient real estate assets' shall be calculated in accordance with the following formula:

((Value of real estate assets built before 31/12/2020 with EPC of C or below) + (Value of real estate assets built after 31/12/2020 with PED below NZEB in Directive 2010/31/EU))

(Value of real estate assets required to abide by EPC and NZEB rules@)

For the purposes of the formulas, the following definitions shall apply:

- (1) 'current value of investment' means the value in EUR of the investment by the financial market participant in the investee company;
- (2) 'enterprise value' means the sum, at fiscal year-end, of the market capitalisation of ordinary shares, the market capitalisation of preferred shares, and the book value of total debt and non-controlling interests, without the deduction of cash or cash equivalents;
- (3) 'current value of all investments' means the value in EUR of all investments by the financial market participant;
- (4) 'nearly zero-energy building (NZEB)', 'primary energy demand (PED)' and 'energy performance certificate (EPC)' shall have the meanings given to them in paragraphs 2, 5 and 12 of Article 2 of Directive 2010/31/EU of the European Parliament and of the Council¹⁵.

15 Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings (recast) (OJ L 153, 18.6.2010, p. 13)

Table 1: Statement on principal adverse impacts of investment decisions on sustainability factors

Financial market participant: LGIM Managers (Europe) Limited, LEI: 2138007FJWCCJQ6KZM89 (LGIME)

Summary

LGIM Managers (Europe) Limited (LGIME) considers principal adverse impacts of its investment decisions on sustainability factors. This is the consolidated statement on principal adverse impacts on sustainability factors of LGIME and covers the reference period from 1 January to 31 December 2023 It should be noted that LGIME is a subsidiary of Legal & General Investment Management (Holdings) Limited (LGIMH), LEI: 213800MCLBTNE3X4NH27 and has delegated investment management to LGIM Limited (LEI: 2138005NNERSR70DIC73) (LGIM), collectively referred to as "we", "us" or "our". Hence, this statement refers to investment activities undertaken by LGIM on behalf of LGIME. It should be noted that the data disclosed in the statement relating to principal adverse impacts pertains to investments made by LGIM Ltd on behalf of and/or held in LGIME funds (LGIME Funds) and Individual Portfolio Management (IPM) accounts (Segregated Portfolios).

LGIM's Sustainability Policy sets out the framework by which LGIM integrates sustainability risks and opportunities into the investment decision-making process and considers the principal adverse impacts (PAIs) of investment decisions on sustainability considerations. This policy has been formally adopted by entities within the LGIM Group, including LGIME. Please see the LGIM Sustainability Policy for further information.

LGIM, on behalf of LGIME, addresses PAIs through a variety of measures, and to varying degrees, depending on our assessment of the scale and severity of adverse impacts on the environment, society and economies. We have formalised our commitments to key PAIs including climate change, biodiversity and deforestation by becoming signatories to the Net Zero Asset Managers Initiative (NZAMI), the Finance for Biodiversity Pledge, and the COP 26 Commitment on Eliminating Agricultural Commodity Driven Deforestation from Investment Portfolios. We have developed firm-wide policies for these PAIs, as well as a policy for controversial weapons. We implement these firm-wide policies through dedicated engagement programmes, such as the Climate Impact Pledge, and exclusion policies on controversial weapons and coal that cover all non-U.S. actively managed funds and certain index funds, as well as certain segregated mandates, as directed by our clients.

In addition to firm-wide policies, LGIM also seeks to address PAIs through (i) active ownership activities, (ii) insights and actions by LGIM's Global Research and Engagement Groups (GREGs), (iii) systematic investment processes such as ESG Factor Evaluation, and (iv) ESG or sustainability strategies in LGIME funds and segregated mandates.

Through active ownership, LGIM strives to effect positive change in the companies and assets in which we invest. Our Investment Stewardship and Investment teams exercise voting rights across our entire book and engage with companies, policymakers and other stakeholders to deliver positive change on topics including net-zero emissions, ethnic diversity and gender diversity. LGIM's Climate Impact Pledge is the targeted engagement and voting campaign we began in 2016 to address the systemic issue of climate change. Under the Pledge, we vote against all companies that do not meet our published expected standards. By linking our votes to specific data points aligned with our principles-based approach, we aim to exert our influence consistently across markets.

LGIM's internal processes for identifying and prioritising sustainability risks, PAIs and opportunities are supported by the Global Research and Engagement Groups (GREGs), which enable LGIM to connect top-down macro and thematic views with bottom-up analysis of corporate and sector fundamentals to understand the materiality of sustainability risks and opportunities and prioritise them accordingly. Combining the capabilities of the Investment and Investment Stewardship teams also enables LGIM to scale and coordinate our engagement efforts with companies at the board and executive management levels, across all asset classes and investment styles.

The LGIM(H) Board has the ultimate responsibility for LGIM's sustainability policy. The LGIM Executive Committee provides management oversight of the implementation of the sustainability policy and related activities. The Executive Risk Committee considers sustainability-related risks identified in the LGIM Enterprise Risk Framework. For the UK and Europe (other equivalent processes apply in the US), the Product Governance Committee ensures that products meeting the naming and construction framework are applied across LGIM. The Responsible Investment Oversight Committee monitors how sustainability risks and opportunities are integrated in public market strategies that have explicit responsible investing objectives, and for our Real Assets portfolios there is an equivalent group, the Responsible Investment Oversight Matters Committee.

LGIME oversees the application and consideration of PAIs in its capacity as manager of LGIME funds and Segregated Portfolios.

Approach to Adverse Sustainability Indicators

Several factors were considered to determine the approach, including LGIM's standard ESG metrics, sustainable finance standards, and due diligence on external data providers' offerings. The adverse sustainability indicators reported here comprise data from LGIM and external data providers. It should be noted that the availability and quality of data are still very limited across many adverse sustainability indicators within the broad investment universe and that reporting standards are continuously evolving. Notwithstanding the limitations on data and methodologies, LGIM remains committed to transparency and has, on a best-endeavours basis, represented the adverse sustainability indicators as accurately as is currently practicable.

Description of the principal adverse impacts on sustainability factors Indicators applicable to investments in investee companies

Adverse sustaina	ability indicator	Metric	Impact 2023	Impact 2022	Explanation	Actions taken, and actions planned and targets set for the next reference period
Greenhouse gas emissions	1. GHG emissions	Scope 2 GHG emissions Scope 2 GHG emissions Scope 3 GHG emissions Total GHG emissions	2,054,857 tons CO2e 45.1% Coverage 529,325 tons CO2e 45.1% Coverage 30,862,673 tons CO2e 45.1% Coverage Scope 1 and 2 2,584,182 tons CO2e Scope 3 30,862,673 tons CO2e 45.1% Coverage	3,308,426 tons CO2e 35.6% Coverage 954,761 tons CO2e 35.6% Coverage N/A 4,263,188 tons CO2e 35.6% Coverage	Standard LGIM ESG methodology stipulates that the GHG¹⁶ emissions are calculated by multiplying the carbon footprint by the AUM. Hence both components can impact this value. The decline in carbon emissions is attributable to a significantly reduced carbon footprint, and reduced AUM. GHG corporate emissions data for the carbon footprint was sourced from ISS, while Refinitiv was used for the EVIC data. Data coverage was above 45% for Scope 1, 2 & 3.	LGIM(H), of which LGIME is a part, has committed to the Net Zero Asset Managers Initiative (NZAMI) to work in partnership with our clients to (i) reach net-zero greenhouse gas emissions by 2050 or sooner across all assets under management, (ii) reach an interim target of 70% of eligible AUM ¹⁷ being managed in alignment with this net-zero ambition by 2030, and (iii) achieve net-zero carbon across our real estate portfolio by 2050. Our overarching ambition is to help decarbonise the real economy. To this end, we have deployed the following policies and programmes: 1. LGIM's Climate Change policy: LGIMs policy on climate change 2021 2. LGIM's Net Zero framework: LGIM has set standards for investment portfolios to be considered net zero aligned.
	2. Carbon footprint	Carbon footprint	Scope 1 and 2 32.15 tons CO2e/1mn invested Scope 3 383.8 tons CO2e/ 1mn invested 45.1% Coverage	46.51 tons CO2e/1mn invested 35.6% Coverage	GHG corporate emissions data was sourced from ISS, while EVIC data was sourced from Refinitiv. Data coverage was above 45% for Scope 1, 2 & 3. The reduction in carbon footprint that is evident from the GHG indicators has been driven mainly by growth in enterprise value including cash (EVIC). The reduction in GHG emissions by companies was small relative to the growth in enterprise value. Scope 3 Indirect emissions produced in a company value chain (Scope 3 emissions) have been included in this year's report as the quality and consistency of metrics has improved. Value chain emissions now form part of the Environmental (E) pillar in LGIM's ESG score.	3. Active Ownership, in particular our dedicated climate engagement programme, LGIM Climate Impact Pledge. Under the Pledge, we vote against all companies that do not meet our published expected standards. By linking our votes to specific data points aligned with our principles-based approach, we aim to exert our influence consistently across markets. We now assess over 5,000 companies across 20 'climate critical' sectors and we have almost doubled (to 105) the number of companies that we engage with directly and consider 'dial-movers' in their sectors' net-zero endeavors.

¹⁶ GHG Green House Emissions: LGIM uses ISS as the vendor for carbon data and Refinitiv for EVIC (Enterprise Including Cash). There is up to a two-year lag between the reporting date and the carbon emissions date. Companies usually report carbon emissions over a fiscal year, but there may be differences in the reporting dates between companies.

¹⁷ For this first interim target, unveiled as part of the Net Zero Asset Manager initiative, LGIM has excluded government securities and derivative assets due to lack of clear industry methodologies to account for these asset classes to date.

Adverse sustainability indicator	Metric	Impact 2023	Impact 2022	Explanation	Actions taken, and actions planned and targets set for the next reference period
3. GHG intensity of investee companies	GHG intensity of investee companies	Scope 1 and 2 86.72 tons CO2e/1mn revenue Scope 3 1008.5 tons CO2e/1mn revenue 47.1% Coverage	119.91 tons CO2e/1mn revenue 45.2% Coverage	GHG emissions and revenue data were sourced from ISS. Data coverage was above 45% for Scope 1, 2 & 3. The reduction in carbon footprint that is evident from the GHG indicators has been driven mainly by growth in enterprise value including cash (EVIC). With the exception of decarbonisation experienced during the COVID-19 pandemic between 2020 and 2021, the reduction in GHG emissions by companies was small relative to the growth in enterprise value. Indirect emissions produced in a company value chain (Scope 3 emissions) have been included in this year's report as the quality and consistency of metrics has improved. Value chain emissions now form part of the Environmental (E) pillar in LGIM's ESG score.	 4. Exclusions: a. Our Coal Policy is an exclusionary policy on certain companies involved in the mining and extraction of thermal coal or thermal coal power generation. This is applied to all LGIME actively managed funds and certain index funds, as well as certain segregated Individual Portfolio Management (IPM) mandates. b. Certain funds and segregated IPM mandates also employ other fossil fuel-related exclusionary policies, including but not limited to those that implement the Future World Protection List, the EU Climate Benchmark requirements, and LGIM's Net Zero framework. Finally, certain funds implement investment exclusions that result from companies failing to meet our minimum expectations as part of our Climate Impact Pledge. 5. Products: we continue to introduce or enhance climate-related investment strategies through new and existing products: LGIM Net Zero, Paris-Aligned Benchmark, Carbon emission intensity or footprint reduction strategies.

Adverse sustainability indicator	Metric	Impact 2023	Impact 2022	Explanation	Actions taken, and actions planned and targets set for the next reference period
4. Exposure to companies active in the fossil fuel sector	Share of investments in companies active in the fossil fuel sector	4.3% 48% Coverage	5.66% 44.6% Coverage	Fossil fuel exposure data was sourced from Sustainalytics. Data coverage was above 45%.	a. LGIM ESG Score: The LGIM ESG Score, which is used in a range of equity and fixed income funds, takes into account carbon emissions intensity, carbon reserve intensity, green revenues and temperature alignment, as well as the scope of
5. Share of non-renewable energy consumption and production	Share of non-renewable energy consumption and non-renewable energy production of investee companies from non-renewable energy sources compared to renewable energy sources, expressed as a percentage of total energy sources.	Production: 16.1% 9.8% Coverage Consumption: 56.1% 27% Coverage	Production: 13.83% 10% Coverage Consumption: 60.78% 25.2% Coverage	Share of renewable energy production and consumption data were sourced from Sustainalytics. Data coverage for production was below 10% while consumption was above 25%. The low coverage for production may be due in part to the limited number of companies and sectors involved in producing energy. The coverage for consumption may depend on the extensiveness of company disclosure.	 GHG emissions disclosure in assessing companies. a. ESG Factor Evaluation: Through the ESG Factor Evaluation, which is used in a range of active strategies, certain companies that do not meet minimum quantitative or qualitative thresholds have restricted exposure. ESG Factor Evaluation takes into account companies' Scope 1 and 2 GHG emissions, GHG emissions intensity, GHG emissions reduction programmes, GHG risk management, renewable energy use, renewable energy programmes, energy efficiency, thermal coal extraction and power generation, oil sands and arctic oil. GREGs: 7. The Global Research and Engagement Groups ("GREGs") consist of nine groups of cross-asset sector specialists and research analysts from our Active Equity, Credit and Investment Stewardship teams. Together, they identify, explore and debate the structural changes affecting the world we live in, connecting the macro with micro through an ESG lens. The GREGs frequently share research highlights and deep dives from each sector group. More information on the GREGs can be found in the LGIM Sustainability Policy.

Adverse sustainability indicator	Metric	Impact 2023	Impact 2022	Explanation	Actions taken, and actions planned and targets set for the next reference period
6. Energy consumption intensity per high impact climate sector	Energy consumption in GWh per million EUR of revenue of investee companies, per high impact climate sector	(In GWh/1mn revenue) Wholesale & Retail Trade & Repair of Motor Vehicles & Motorcycles: 1.94 0.9% Coverage Water Supply, Sewerage, Waste Management & Remediation Activities: 0.63 0.3% Coverage Real Estate Activities: 0.61 1.3% Coverage Mining & Quarrying: 5.65 0.9% Coverage Manufacturing: 6.07 9.6% Coverage Electricity, Gas, Steam & Air Conditioning Supply: 4.77 1.0% Coverage	(In GWh/1mn revenue) Wholesale & Retail Trade & Repair of Motor Vehicles & Motorcycles: 0.85 0.9% Coverage Water Supply, Sewerage, Waste Management & Remediation Activities: 0.63 0.3% Coverage Real Estate Activities: 0.71 1.2% Coverage Mining & Quarrying: 13.66 1.1% Coverage Manufacturing: 12.01 9.5% Coverage Electricity, Gas, Steam & Air Conditioning Supply: 7.87 1.0% Coverage	Energy consumption data was sourced by Sustainalytics. Data coverage was below 10% and in most cases, below 1%. The low coverage may be due in part to the limited number of companies and sectors involved in each high climate impact sector. Wholesale & Retail Trade & Repair of Motor Vehicles & Motorcycles: Due to very low coverage this number is relatively volatile. Mining & Quarrying: The decrease is mainly due to a drop in the reported energy consumption intensity for mining and quarrying. Manufacturing: The decrease is mainly due to a drop in the reported energy consumption intensity for manufacturing. Electricity, Gas, Steam & Air Conditioning Supply: Due to very low coverage this number is relatively volatile.	The GREGs conduct analyses into various issues affecting greenhouse gas emissions to identify how companies are exposed to and managing their risks and hence, opportunities for engagement. Going forward, our NZAMI commitments will continue to direct our efforts towards enhancing more portfolios to meet the LGIM Net Zero Framework requirements. This will require enhancements to data to better assess expansionary plans in coal and oil sands, product enhancements to incorporate the LGIM Net Zero Framework requirements in more funds and partnering with clients to identify opportunities for aligning their mandates to net-zero outcomes.

negatively affecting biodiversity sensitive areas was sourced from Sustainalytics. Data coverage biodiversity sensitive areas was sourced from Sustainalytics. Data coverage believe that recognising the potential risks from sasets. Our approach on biodiversity comprise following policies and programmes: 1. LGIM's Biodiversity policy: LGIMs Biodiversity policy: LGIMs Biodiversity policy: our deforestation	Adverse sustainal	bility indicator	Metric	Impact 2023	Impact 2022	Explanation	Actions taken, and actions planned and targets set for the next reference period
those investee companies negatively affect those areas To financial information related to nature, organised by the Japanese Ministry of the Environment to support listed companies in gaining practical insights in preparation release of the TNFD framework. We are pastering committee of the Financial initiative of over 30 financial initiative of over 30 financial initiative.		7. Activities negatively affecting biodiversity-sensitive	investments in investee companies with sites/ operations located in or near to biodiversity-sensitive areas where activities of those investee companies negatively affect those	0.13 0.1% Coverage • Agriculture, Forestry & Fishing: 3.60 0% Coverage • Transportation & Storage: 1.69 0.5% Coverage	105.96 0.1% Coverage Agriculture, Forestry & Fishing: 6.12 0.1% Coverage Transportation & Storage: 1.93 0.6% Coverage	The very high number in 2022 is due to a vendor data error that hugely overstated energy consumption intensity for one Chinese company. Agriculture, Forestry & Fishing: Due to very low coverage this number is relatively volatile. In addition, some of the underlying companies have been moved to different NACE sectors. Data pertaining to activities negatively affecting biodiversity sensitive areas was sourced from Sustainalytics. Data coverage	 LGIM's Biodiversity policy: LGIMs Biodiversity policy 2021 sets out our approach to biodiversity. LGIM's Deforestation policy: our deforestation policy sets out how LGIM aims to meet its COP26 commitment to eliminating agricultural commodity-driven deforestation from investment portfolios. Active ownership: We are supportive of – and a 'forum member' of – the Taskforce for Nature-related Financial Disclosures (TNFD). For example LGIM participated in a workshop on the disclosure

Adverse sustaina	ability indicator	Metric	Impact 2023	Impact 2022	Explanation	Actions taken, and actions planned and targets set for the next reference period
						 4. Biodiversity factors incorporated in ESG approaches: the ESG Factor Evaluation and embedded within the LGIM ESG Score are metrics assessing companies' approaches to the management of biodiversity and deforestation risks. 5. GREGs: 2023 Research included: a. Novel technologies for basic materials. b. UK supermarkets including a look at targets set for nature/deforestation and food waste.
Water	8. Emissions to water	Tonnes of emissions to water generated by investee companies per million EUR invested, expressed as a weighted average	0.28 tons/1mn invested 1.8% Coverage	0.41 tons/1mn invested 1.8% Coverage	Water emissions data was sourced from Sustainalytics. Data coverage was below 5%. While overall emissions to water increased, these were more than offset by the significant increase in the denominator (EVIC). In addition, the definition of what constitutes emission to water has been updated to exclude inorganic salts.	Water pollution can make water unsafe for human use and disrupts aquatic ecosystems. LGIM is focused on fresh water and oceans, including water quantity and quality, helping to preserve and protect nature and ecosystems. 1. Active Ownership: During 2023, LGIM has been involved in multiple engagements, both individually and alongside other investors, with the key UK water companies, their major shareholders and the industry regulators, in a combined effort between the Investment team and Investment Stewardship members as part of a GREGs working group. We continue to be active members of the collaboration on microfibres, organised by First Sentier Investors, which recently won the Environmental Finance ESG engagement initiative of the year award, EMEA. Through this collaboration, alongside 30 of our peers, we have put pressure on governments around the world to introduce legislation for compulsory microfibre filters on new washing machines. 2. Water factors are incorporated in the ESG Factor Evaluation and the LGIM ESG Score integrates metrics on water management and employs tilts using the LGIM ESG Score. 3. GREGs: Research includes how active credit investors can help reduce sewage pollution.

Adverse sustain	ability indicator	Metric	Impact 2023	Impact 2022	Explanation	Actions taken, and actions planned and targets set for the next reference period
Waste	9. Hazardous waste and radioactive waste ratio	Tons of hazardous waste and radioactive waste generated by investee companies per million EUR invested, expressed as a weighted average	11.92 tons/1mn invested 35.3% Coverage	40.26 tons/1mn invested 10.9% Coverage	Hazardous and radioactive waste ratio data was sourced from Sustainalytics. Data coverage was above 35%. While reported hazardous waste production slightly increased, the signficant increase in the current value of investments denominator, EVIC, resulted in a substantial decrease in this metric.	Our approach to hazardous waste and radioactive waste is in its early stage. We factor in adverse impacts in waste through ESG Factor Evaluation, which takes into account companies' waste intensity.

Adverse sustainability indicator	Metric	Impact 2023	Impact 2022	Explanation	Actions taken, and actions planned and targets set for the next reference period
Social and employee matters 10. Violations o UN Global Compact principles and Organisation for Econom Cooperatior and Developmer (OECD) Guidelines f Multinationa Enterprises	investments in investee companies that have been involved in violations of the UNGC principles or OECD r Guidelines	0.17% No coverage value	0.13% No coverage value	Data pertaining to violations of UNGC and OECD guidelines for Multinational Enterprises was sourced from LGIM's Future World Protection List. This proprietary methodology identified perennial violators that were in breach of at least one of the UNGC principles for a continuous period of three years or more. The underlying data used to identify these companies was sourced from Sustainalytics, which takes into account both UNGC and OECD guidelines. The proportion of corporate holdings was 59%.	The UN Global Compact ("UNGC") and OECD Guidelines for Multinational Enterprises ("OECD Guidelines") represent globally agreed standards for human rights, labour rights, the environment, corruption and other norms. Companies whose activities breach such principles may present increased risks due to lax governance and management of their operations, which can lead to reputational damage and potential future liabilities. LGIM's policy: LGIMs Human rights policy document emphasises our commitments on human rights as a global investor and outlines our specific expectations of investee companies regarding human rights. Exclusions: Our Future World Protection List, which is applied to a subset of our funds, excludes companies that are in breach of at least one of the UNGC principles for a continuous period of three years or more. The data used to identify these companies was sourced from Sustainalytics, which incorporates the OECD Guidelines as well. Certain funds also exclude UNGC violators through their own exclusion policies. Engagement: LGIM votes against the re-election of the chair or other directors of any company that is on our Future World Protection UNGC violator list where we maintain a holding in other funds.

Adverse sustainability indicator	Metric	Impact 2023	Impact 2022	Explanation	Actions taken, and actions planned and targets set for the next reference period
11. Lack of processes and compliance mechanisms to monitor compliance with UN Global Compact principles and OECD Guidelines for Multinational Enterprises	Share of investments in investee companies without policies to monitor compliance with the UNGC principles or OECD Guidelines for Multinational Enterprises or grievance /complaints handling mechanisms to address violations of the UNGC principles or OECD Guidelines for Multinational Enterprises	43.51% 45.7% coverage	46.02% 43.2% Coverage	Data pertaining to lack of processes and compliance mechanisms was sourced from Sustainalytics. Data coverage was over 45%.	ESG Factor Evaluation: ESG Factor Evaluation takes into account and restricts exposure to companies deemed to have breached UNGC principles or those involved in severe controversies. LGIM is a signatory of the UN PRI Advance, a stewardship initiative to advance human rights launched in 2022. In 2023, we further expanded our collaborative engagement efforts on human rights to include the Investor Alliance for Human Rights, the ICCR Living Wage campaign for US workers and the Platform for Living Wage Financials.
12. Unadjusted gender pay gap	Average unadjusted gender pay gap of investee companies	23.05% 2.9% Coverage	23.43% 2.3% Coverage	Data pertaining to unadjusted gender pay gap was sourced from Sustainalytics. Data coverage was below 5%.	LGIM focuses on in-work poverty because living in poverty can impact a worker in a number of ways, including health (both physical and mental) and productivity. Under our Global Corporate Governance and Responsible Investment Principles, we expect companies to disclose information on their gender pay gap, along with initiatives in place and actions being taken to close any stated gap.

Adverse sustaina	bility indicator	Metric	Impact 2023	Impact 2022	Explanation	Actions taken, and actions planned and targets set for the next reference period
						LGIM's policy: Our published guidelines relating to income inequality set out our expectations. The aim is to drive the adoption of a living wage strategy and encourage its public disclosure. Under this policy, LGIM will vote against the annual report of those companies that fail to disclose their living wage strategy by 2025.
						Gender pay gap factors incorporated in ESG approaches: Board gender diversity factors are incorporated in the LGIM ESG Score, which takes into account the percentage of women on the board.
						ESG Factor Evaluation: ESG Factor Evaluation takes into account companies' fair remuneration and equal opportunity policies.
	13. Board gender diversity	Average ratio of female to male board members in investee companies, expressed as a percentage of all board members	32.77% 38.3% Coverage	30.38% 43.8% Coverage	Data pertaining to board gender diversity was sourced from Refinitiv. Data coverage was above 35%.	LGIM's policy: We have recently updated our expectations and published our <u>Diversity Policy</u> , which states our commitment to push the companies in which we invest globally to meet our minimum diversity expectations. <u>LGIM's diversity approach and expectations - policy document - categorisation</u> Company Engagement: We continue to advocate for gender diversity at board, executive, management and workforce levels. Board gender diversity factors are incorporated in the LGIM ESG Score, which takes into account the percentage of women on the board.
	14. Exposure to controversial weapons (anti-personnel mines, cluster munitions, chemical weapons and biological weapons)	Share of investments in investee companies involved in the manufacture or selling of controversial weapons	0.00% No coverage value	0.00% No coverage value	Controversial weapons data was sourced from LGIM's Controversial Weapons Policy. The methodology was proprietary to LGIM, while the underlying data used to identify these companies was sourced from Sustainalytics. The proportion of corporate holdings was 59%.	Controversial weapons are illegal in many jurisdictions and in some it is also illegal to invest in the debt and equity of these companies. LGIM has a widely applied controversial weapons policy that excludes from its investments those companies involved in the manufacture and production of cluster munitions, anti-personnel landmines, and biological and chemical weapons. LGIM(H) Controversial Weapons Policy

Indicators applicable to investments in sovereigns and supranationals

Adverse sustain	ability indicator	Metric	Impact 2023	Impact 2022	Explanation	Actions taken, and actions planned and targets set for the next reference period
Environ-mental	15. GHG intensity	GHG intensity of investee countries	199.53 tons CO2e/1mn 46.4% Coverage	193.41 tons CO2e/1mn 52.8% Coverage	GHG intensity data pertaining to sovereigns was sourced from ISS. Data coverage was over 45%.	In 2023, we created the Sovereign Risk ESG scoring framework to expand ESG integration in index strategies investing in government debt markets. The framework consists of four pillars, including an 'Environment' pillar that looks at themes such as decarbonisation, natural capital, sustainability, biodiversity and physical risk.
Social	16. Investee countries subject to social violations	Number of investee countries subject to social violations (absolute number and relative number divided by all investee countries), as referred to in international treaties and conventions, United Nations principles and, where applicable, national law	Absolute: 2.5 46.4% Coverage Relative: 2.54% 46.4% Coverage	Absolute: 3.08 Relative: 3.17% No coverage value	The investee countries subject to social violations were identified using Sustainalytics' methodology. The proportion of sovereign holdings was 51%.	There are currently multiple sets of sanctions related to Russia in light of Russia's ongoing invasion of Ukraine. The sanctions include the following: Asset freezing of targeted entities Capital market restrictions on targeted entities Restrictions on the Russian state's access to capital through sovereign debt In 2023, we created the Sovereign Risk ESG scoring framework to expand ESG integration in index strategies investing in government debt markets. The scoring framework consists of four pillars, including a 'Social' pillar that looks at themes such as education, health, innovation, labour rights and human rights.

Indicators applicable to investments in real estate assets

Adverse sustain	ability indicator	Metric	Impact 2023	Impact 2022	Explanation	Actions taken, and actions planned and targets set for the next reference period
Fossil fuels	17. Exposure to fossil fuels through real estate assets	Share of investments in real estate assets involved in the extraction, storage, transport or manufacture of fossil fuels	N/A	N/A		LGIME does not have any physical real estate assets in its portfolios.
Energy efficiency	18. Exposure to energy- inefficient real estate assets	Share of investments in energy-inefficient real estate assets	N/A	N/A		LGIME does not have any physical real estate assets in its portfolios.

Other indicators for principal adverse impacts on sustainability factors

Adverse sustainability indicator	Metric	Impact 2023	Impact 2022	Explanation	Actions taken, and actions planned and targets set for the next reference period
companies without carbon emission reduction initiatives	Share of investments in investee companies without carbon emission reduction initiatives aimed at aligning with the Paris Agreement	35.08% 46.0% Coverage	42.15% 42.7% Coverage	Data pertaining to investments in companies without carbon emission reduction initiatives was sourced from Sustainalytics. Data coverage was above 45%.	 Our ambition is to help decarbonise the real economy. To this end, we have deployed the following policies and programmes: 1. LGIM's overarching Climate Change policy: LGIMs policy on climate change 2021. Additionally, expectations and transition pathways for each key sector we engage with are set out in our net-zero sector guides available here: Climate Impact Pledge Climate change LGIM Institutional. 2. LGIM's Net Zero framework: LGIM has set standards for investment portfolios to be considered net-zero aligned. As part of the framework, our engagement is focused on issuers responsible for more than 50% of a portfolio's associated emissions that do not have verified science-based targets for net zero. 3. Active Ownership, in particular our dedicated climate engagement programme, LGIM's Climate Impact Pledge. Further, certain funds implement investment exclusions that result from companies failing to meet our minimum expectations as part of our Climate Impact Pledge. 4. Exclusions: a. Our Coal Policy is an exclusionary policy on companies involved in the mining and extraction of thermal coal or thermal coal power generation. It recognises and exempts companies that have set out clear Paris-aligned plans to phase out coal by 2030 in OECD and 2040 in non-OECD. b. Certain funds implement investment exclusions that result from companies failing to meet our minimum expectations as part of our Climate Impact Pledge. 5. Data enhancements: For the YE2023 Scope 3 carbon emissions will be included in ESG Quarterly reports to increase the information available on the carbon impact of a fund's holdings.

Other indicators for principal adverse impacts on sustainability factors

Adverse sustainability indicator	Metric	Impact 2023	Impact 2022	Explanation	Actions taken, and actions planned and targets set for the next reference period
Human Rights (Table 3) 14. Number of identified cases of severe human rights issues and incidents	Number of cases of severe human rights issues and incidents connected to investee companies on a weighted average basis	1.38 48.0% Coverage	0.97 44.6% Coverage	Data pertaining to severe human rights issues and incidents was sourced from Sustainalytics. Data coverage was above 45%. The increase is partially due to a rise in reported issues and incidents.	 We are a signatory to UN PRI Advance, a stewardship initiative to advance human rights launched in 2022. LGIM takes the issue of human rights very seriously and considers as part of the investment process whether investee companies are involved in severe human rights issues and incidents. To this end, in 2023 we published our first Human Rights Policy. 1. LGIM's policy: LGIM's Human Rights Policy document emphasises our commitments on human rights as a global investor and outlines our specific expectations of investee companies regarding human rights. 2. Exclusions: Our Future World Protection List, which is applied to a subset of our funds, excludes companies that are in breach of at least one of the UNGC principles (including those related to human rights) for a continuous period of three years or more. The data used to identify these companies is sourced from Sustainalytics, which incorporates the OECD Guidelines. Certain funds also exclude UNGC violators through their own exclusion policies. In our LGIME fund range, 24 ETFs and 35 other funds used UNGC exclusions as at the end of 2023. 3. Engagement: LGIM votes against the re-election of the chair or other directors of any company that is on our Future World Protection UNGC violator list. 4. ESG Factor Evaluation: ESG Factor Evaluation takes into account and restricts exposure to companies deemed to have been involved in breaches of UNGC principles.

LGIM's Sustainability Policy sets out the framework by which LGIM integrates sustainability risks and opportunities into the investment decision-making process and considers the principal adverse impacts (PAIs) of investment decisions on sustainability considerations. This policy has been formally adopted by entities within the LGIM Group, including LGIME. Please see the <u>LGIM Sustainability Policy</u> for more information.

LGIME, in adherence to the LGIM Sustainability Policy, believes the consideration of sustainability risks reflects a core part of our fiduciary role to act in the best interests of our clients. This starts with identifying key macroeconomic sustainability risks that could result from inaction in response to the world's environmental or societal challenges. We also believe opportunities arise from long-term sustainability-related structural changes that can be value-creating for investment portfolios. We combine an analysis of these macro drivers with sector-level and issuer-level analysis to determine how companies and assets are positioned in respect of the sustainability risks that are most relevant to them.

LGIM's global stewardship themes are based on environmental, social and governance issues that direct most of our sustainability-oriented research and engagement. These encompass climate, nature, health, people, digitisation and governance. We believe these themes are financially material to our clients' portfolios; often pose systemic risks and opportunities; and cover areas where LGIM as an asset manager can influence change. These themes represent high-level topics, under which further adverse impacts and areas of focus can arise, including human capital management issues, modern slavery and deforestation.

LGIM's internal processes for identifying and prioritising sustainability risks, PAIs and opportunities are supported by the GREGs, which bring together representatives from the Investment and Investment Stewardship teams across regions and asset classes. The GREGs enable LGIM to connect top-down macro and thematic views with bottom-up analysis of corporate and sector fundamentals to understand the materiality of sustainability risks and opportunities and prioritise them accordingly. Combining the capabilities of the Investment Stewardship teams also enables LGIM to scale and coordinate our engagement efforts with companies at board and executive management levels, across asset classes and investment styles.

We believe that to fully understand sustainability risks and opportunities, investors need access to relevant, comparable, consistent and verifiable ESG data across markets, regardless of size, geography or asset class. Therefore, LGIM communicates clear expectations to listed and private investee companies as to what information they should disclose, as well as engaging with occupiers across its directly owned real estate portfolios.

Approach to Adverse Sustainability Indicators

The approach to adverse sustainability indicators takes into consideration a number of key factors to determine the metric and data source to reflect LGIME's principal adverse impacts:

- Consideration of LGIM's standard ESG data metrics used across investment and business processes, including external reporting, to ensure continuity and consistency;
- Consideration of other sustainable finance regulations and industry initiatives, including but not limited to the Task Force on Climate-Related Financial Disclosures (TCFD), the FinDatEx European ESG Template (EET) and the Investment Consultants Sustainability Working Group in the U.K.;
- Consideration of LGIM's proprietary approach, such as our Controversial Weapons Policy, and UN Global Compact exclusions as determined in the LGIM Future World Protection List; and
- Due diligence on external data providers' offering for SFDR PAI reporting, in particular the quality of the metrics used to address the relevant adverse sustainability indicators and the coverage of the metrics, including the proportion of reported and estimated data.

The adverse sustainability indicators reported in this PAI statement comprise data from LGIM, as well as third-party data providers including Sustainalytics, ISS and Refinitiv. Where data coverage figures were provided, these were computed based on all assets including corporate and sovereign assets. Where the proportions of eligible assets were provided, the proportion of corporate assets held across LGIME was used for the corporate-related adverse sustainability indicators, while the proportion of sovereign assets held across LGIME was used for the sovereign-related adverse sustainability indicators.

Limitations of Data and Methodologies

It should be noted that the availability and quality of data are still very limited across many adverse sustainability indicators within the broad investment universe. This is for a number of reasons, including but not limited to lack of issuer disclosure of relevant information as corporate disclosure of the adverse sustainability indicators is mostly voluntary, and the limited number of companies or sectors that are targeted in some of the adverse sustainability indicators. Hence, this is an issue faced across the industry. While the data used was largely based on issuer-reported information, some researched data and estimates have also been used to broaden data coverage, which may introduce risk that the data is not fully representative of the issuers' actual adverse impacts. The accuracy of the data sourced, researched, or estimated cannot be fully guaranteed in the absence of formal regulation. Large variances in data may also be expected across the industry as different data sources and methodologies have been used. Data coverage and quality are expected to improve over time, as corporate disclosure becomes mandatory and the volume and quality of issuer disclosures improve. However, some volatility in the data reported will be expected in subsequent reference periods.

Further, methodologies used by LGIM and third-party data providers may also evolve in line with legislation, regulatory guidance, industry best practice and proprietary insights of the respective data providers, including LGIM.

Notwithstanding the limitations mentioned above, LGIM remains committed to transparency and has, on a best endeavours basis, represented the adverse sustainability indicators as accurately as currently practicable.

Engagement policies

We believe effective stewardship involves working with companies, regulators, policymakers, peers and other stakeholders around the world to tackle systemic issues, material risks and opportunities - as well as collaborating with our investment teams to identify future challenges. The Investment Stewardship team has successfully advocated for change on key issues, from corporate governance to diversity and climate change, escalating action when necessary to reach the desired outcome.

We have a responsibility to use our scale and influence in a transparent, accountable fashion. LGIM will take public positions, even when this causes controversy.

Exercising voting rights is a powerful engagement tool with which to hold company boards to account and raise market standards; it is used extensively by our Investment Stewardship team. Importantly, the team votes with one voice across all of our clients' investments where we have discretion, because it operates independently from - but in collaboration with - our portfolio managers. As part of this process, the Investment Stewardship team also participates in our GREGs. For more detail on how the team prioritises engagement, please see our Engagement Policy.

How our Investment Stewardship team engages

1. Select stakeholders

Using our stewardship themes, we identify the relevant stakeholders across the policymaking, corporate and broader market ecosystem, where we have influence. We also set the overall thematic objectives we seek to achieve.

a. Consider the policy and regulatory backdrop

We determine where we can use our influence effectively across the policymaking and regulatory environment to create well-functioning markets. Our engagement with policymakers is vital to our aim of raising global standards across the markets in which our clients invest, because many sustainability challenges require systemic policy reform.

b. Select companies

We select companies to target for engagement, taking into account factors including:

- Data that identifies companies as underperforming against our minimum expectations
- LGIM clients' exposure to relevant companies and sectors
- The 'engage-ability' of companies how likely our influence is to result in changes at the company
- How influential a company is within its country, industry and supply chains we may also seek engagements with companies considered leaders in sustainability issues to help develop our understanding of these topics in certain industries or markets
- The relevant geographic coverage for our engagement on a particular theme

2. Set objectives

We set out milestones to be achieved and the timeframes in which we expect this to happen, in line with our public policy documents – including the potential consequences of not meeting our expectations.

3. Structure of corporate engagement and escalation steps

We determine how we might escalate the issue if progress is not made. In doing so, we decide on our tools and the angles of accountability. Escalation can include targeting the board, by casting votes to elect directors; specific resolutions on reports or policies; and supporting or co-filing shareholder resolutions.

Our structured approach to engagement provides us with various methods for escalation:

Transparency: our LGIM ESG Scores and Climate Impact Pledge ratings are publicly available. We also publish policies and blog updates on our views, approach and analysis

- Direct engagement: this provides a powerful engine to incentivise and help companies to govern better and manage risks and opportunities, with the aim of impacting our clients' investments positively over the long term
- Collaborative engagement: working with peers and industry bodies enables us to strengthen and amplify our voice and pool resources
- Voting: as an active and engaged investor, we take seriously our responsibility to exercise voting rights on behalf of our clients we publish our voting decisions on our website, including the rationale for dissenting votes
- Capital allocation: where permitted by their investment mandate, certain funds may exclude or tilt away from companies that do not meet our minimum expectations. In some portfolios, we specifically allocate capital towards companies where we are undertaking in-depth engagement
- Public pressure: we 'name and shame' persistent laggards that fail to improve following targeted engagement; we also publicly celebrate successes
- Shareholder resolutions: filing a resolution can compel a company to respond to, discuss and resolve issues with investors

4. Commence engagement

We commence engagement and, over the course of typically 18 to 36 months, build the relationship and assess progress, incorporating escalation steps as appropriate.

5. Conclude engagement

Across our corporate and policy engagements, we assess the progress that has been made towards our expectations. We consider the extent to which the engagement has been wholly or partially 'successful' and reassess how to continue – potentially starting another engagement cycle. For more detail, please see our policy.

We are currently refining our engagement framework, incorporating our prioritised campaigns, in conjunction with our updated themes. We expect to publish an updated Engagement Policy document in 2024.

Our Corporate Governance and Responsible Investment policies (global and regional) set out our expectations of investee companies and outline our approach to voting and engagement. Our policies on climate change, deforestation and biodiversity provide more detail on LGIM's approach and commitments to tackling these issues, and how this will affect our expectations of companies. All our policies are fully compliant with the Shareholder Rights Directive II and available online.

VDS Dashboard (issgovernance.com)

LGIM's Diversity policy

LGIM Human Rights policy

LGIM Biodiversity policy

LGIM Climate Change policy

LGIM Deforestation policy

References to international standards

LGIM as an entity regulated by the Financial Conduct Authority (FCA) has an internal framework of policies, procedures and standards that promote appropriate behaviours and compliance with regulatory principles and requirements across all business activities of the firm. LGIME as an entity regulated by the Central Bank of Ireland (CBI) has a separate framework of policies, procedures and standards that promote appropriate behaviours and compliance with regulatory principles and requirements across the firm and specific to the jurisdiction of Ireland.

Each entity framework is outlined below with examples of the key frameworks in place:

LGIM Code of Ethics	Personal Account Dealing Policy	LGIM(H) Conflict of Interest Policy
Regulator Relationship Policy	Breaches Escalation Guide	SM&CR, Certified and Code Staff attestations
Cyber and IT policies	HR Disciplinary, Grievance and Harassment and Bullying Policy	Technology Risk Guidelines
	Remuneration Policy	

LGIM (Group) Employee Conduct Risk Policy	LGIME Conflicts of Interest Policy	LGIME Market Conflict Policy
LGIME Whistle Blowing	LGIME IT Cyber-Security	Delegation Policy
LGIME Fitness and Probity Policy	LGIME Code of Ethics	LGIME Connected Party Transaction Polciy

LGIME believes that ongoing adherence to, and the development of, strong responsible investment standards, regulations and frameworks, are fundamental to our commitment to embedding sustainability. Demonstrating this commitment, LGIM is a signatory to the UN Principles for Responsible Investment and implements its six principles to incorporate and report on ESG activities. LGIM reports in line with the Task Force on Climate-Related Financial Disclosures under Legal & General Group's Climate Report. LGIM is a signatory to the UK Stewardship Code, submitting on an annual basis to the UK Financial Reporting Council our annual report on the implementation of the Code's 12 Principles. Additionally, LGIM has signed up to the Net Zero Asset Managers Initiative with a commitment to support the goal of net zero greenhouse gas emissions by 2050, in line with global efforts to limit warming to 1.5°C and a commitment to support investing aligned with net zero emissions by 2050 or sooner.

LGIME offers quarterly ESG reports for most LGIME funds that incorporate the following climate-related metrics, among others: carbon footprint, weighted average carbon intensity, total carbon emissions, carbon reserves, green revenues, SBTi coverage, implied temperature alignment and climate engagements. The data sources include third party ESG data providers such as ISS and HSBC, as well as proprietary data, in particular implied temperature alignment. Implied temperature alignment is sourced from LGIM Destination@Risk, our proprietary climate change toolkit. We develop our own bottom-up scenarios of how the energy and land systems may evolve through 2050. LGIM Destination@Risk translates these scenarios into company, sector and portfolio-level implications. We use two main metrics: one is climate risk, which describes the potential risk from various climate scenarios to asset valuations, and the other is temperature alignment, which assesses whether companies are contributing to the changes we require to reach global climate commitments, or whether they put them at risk.

Historical comparison table in accordance with Article 6 Regulation (EU) 2019/2088

Climate and other environment-related indicators

Greenhouse Gas Emissions

As a firm, we continue to leverage on our scale and the weight of our votes in advocacy and engaging with policy makers, regulators and companies on climate change. In 2023, we continued to focus on climate change. We assess over 5,000 companies across 20 'climate-critical' sectors. These sectors are responsible for the vast majority of global greenhouse gas (GHG) emissions from listed companies and from LGIM corporate holdings. They are also vital to the global climate transition, as well as being the most carbon-intensive sectors in LGIM portfolios. We have been writing to companies in our Climate Impact Pledge and have communicated with over 1,500 so far. In 2023, we identified 299 companies as subject to voting sanctions for not meeting our 16. As reported in June 2023, we almost doubled (to 105) the number of companies we engage with directly under the Pledge; these are companies we believe can be 'dial-movers' on climate action in their sectors, given their size and potential to galvanise action. In 2023, successful engagement led us to remove one previously divested company from our divestment list for applicable funds, while two companies were added.

By the end of 2023, 32 LGIME funds had committed to participation in the Climate Impact Pledge divestment campaign, up from 23 funds in 2022. In an effort to continuously evolve and improve approaches and methodologies for identifying and weighting the relevant PAI indicators, the LGIM ESG score was upgraded in 2023 to include four new indicators:

- Deforestation
- II. Water Management
- III. Value Chain Emissions (Scope 3 GHG emissions)
- IV. Climate Lobbying

At a product level, LGIME continues to launch climate-related investment strategies in line with LGIM's Net-Zero framework:

- a. LGIM Net Zero: three new funds launched in 2023 meet LGIM's Net-Zero framework requirements;
- b. **Paris-Aligned Benchmark:** In 2023 we launched one fund which uses a Paris-Aligned Benchmark. We now have six index funds and ETFs that track Paris-Aligned Benchmarks in LGIME fund ranges;
- c. **Carbon emissions intensity or footprint reduction:** in addition to the Net-Zero funds mentioned above, five further funds were launched in 2023 which use carbon reduction strategies.

In the LGIME fund range, two index funds employ tilts using the LGIM ESG Score, which takes into account carbon emissions intensity, carbon reserve intensity, green revenues and temperature alignment, as well as the scope of GHG emissions disclosure in assessing companies. Additionally, LGIM ESG Factor Evaluation, which considers companies' Scope 1 and 2 GHG emissions, GHG emissions intensity, GHG emissions reduction programmes, GHG risk management, renewable energy use, renewable energy programmes, energy efficiency, thermal coal extraction and power generation, oil sands and arctic oil are employed in 28 LGIM E funds.

In 2023, LGIME was awarded a mandate by the Swedish Pension Provider AP7 representing 5 million Swedish pension savers to establish an innovative climate transition strategy. By leveraging LGIM's stewardship expertise and engagement track record, combined with LGIM's proprietary Destination@Risk tool, the mandate will invest in and then engage with, specific companies that are 'climate laggards' in their sectors. The strategy seeks to identify those companies across climate-critical sectors that are currently not, but have the potential to become, successfully aligned with the Paris goals. This contrasts with approaches that invest in those companies already aligned with Net Zero by 2050.

GREGS continue to conduct research and analysis into various issues affecting GHG emissions to identify how companies are exposed to and are managing climate and environment-related risks.

In 2023, GREGS research included (but was not limited to) the following topics:

- a. Energy sector: 2023 AGM proxy season
- b. Role of biofuels and biogas in the energy transition
- c. Wind turbine supply chain

Biodiversity	In 2023, LGIM structured its approach to nature engagement across four key sub-themes: natural capital management; deforestation; the circular economy; and water, with a highlight on 'agriculture' as set out in LGIM's Nature Framework. Deforestation is a key factor affecting land-use change and one of the direct drivers of biodiversity loss on land, and in 2023 LGIM evolved its approach to assessing and engaging on deforestation risk with relevant companies in 'deforestation-critical' sectors. During the course of 2023, LGIM engaged with over 160 companies on the topic of deforestation and this was the first year the company applied specific deforestation vote sanctions. With improvements in the breadth of coverage and quality of data and in an effort to continuously evolve and improve approaches and methodologies for identifying and weighting key sustainability factors, in 2023 the LGIM ESG score was upgraded to include a Deforestation and Water Management metric. The addition of the Deforestation and Water Management metrics demonstrates our increased focus on natural capital management as part of our engagement strategies. In the LGIME fund range, two index funds employ tilts using the LGIM ESG Score. Additionally, the LGIM ESG Factor Evaluation, which is employed in 28 LGIME funds, takes into account companies' biodiversity programmes.
Water	During 2023, LGIM was involved in multiple engagements, both individually and alongside other investors, with the key UK water companies, their major shareholders and the industry regulators, in a combined effort between the Investment team and Investment Stewardship members as part of a GREGS working group focused on water pollution. In 2023, the LGIM ESG score was enhanced to add a water management metric to the existing biodiversity metric in the Nature theme. LGIM ESG Factor Evaluation: ESG Factor Evaluation takes into account companies' water intensity and water policies. In the LGIME fund range, 28 funds employ ESG LGIM's Factor Evaluation. In terms of impact, water emission measurement coverage is still very low across industries, and as a result, data can be volatile, making comparability challenging for this indicator.
Waste	Data coverage and quality remain challenging for this indicator. The substantial decrease in hazardous waste production is attributable to an increase in the current value of investments rather than an organic decrease in waste production by investee companies.

Social and employee matters

In 2023, LGIM continued to implement its strategy to prevent modern slavery occurring in its business and supply chain as laid out in L&G's Modern Slavery Statement. In 2023, LGIM further expanded its collaborative engagement efforts on human rights including signing up to the Investor Alliance for Human Rights, the ICCR Living Wage campaign for US workers and the Platform for Living Wage Financials.

As well as being a Living Wage Employer, as an asset manager, LGIM continues to advocate for income equality with a specific focus on in-work poverty and by engaging with investee companies to ensure they are paying their employees a living wage and addressing issues such as the Gender Pay Gap. In 2023, LGIM launched its inaugural engagement campaign on the topic of the Living Wage and identified 15 supermarket retailers in developed economies as targets for engagement.

In line with LGIM's long-term record of engaging with consequences on diversity, in 2023 our expanded stewardship engagement led to LGIM voting against 75 companies in the FTSE100 and S&P500 indices for having all-male executive committees. At the end of the year, LGIM wrote to 16 companies to request deeper engagement, and LGIM's Diversity Policy was published.

In Japan, we have continued to hold discussions on diversity with the FSA, the Tokyo Stock Exchange (TSE), and the Japan Cabinet Office. Discussions have included advocating for faster and higher levels of board gender diversity, including a tighter definition of 'executive' is in the government's policies. It was confirmed during our engagement with the FSA that our discussions and view in the open letter we helped draft, and co-signed in late 2022, have fed into the government's diversity policies at Japanese companies.

¹⁸ The government defines "executives" to include board directors, kansayaku (statutory auditors), and shikkōyaku (for companies with three committees as defined by the Companies Act) as well as shikkōyakuin (executives in charge of business administration) and other equivalent officers.

¹⁹ In October 2022, we helped draft, and co-signed, an open letter suggesting a series of targets for improving board gender diversity in TSE Prime Market boards through further changes to the listing rules and the Corporate Governance Code. The letter also touched on the importance of strengthening the female talent pipeline internally and expanding the pool of female executives.

Indicators applicable to investments in sovereigns and supranationals

The introduction of LGIM's proprietary Sovereign Risk ESG framework in 2023 represents a meaningful step forward in expanding ESG integration in index strategies investing in government debt markets, particularly taking into account geopolitical risk and stability as an enhancement to sovereign ESG assessment.
The framework draws on the objectives of the United Nations Global Compact, the Climate Change Initiative, the UN Sustainable Development goals, the Organisation for Economic Co-operation and Development, and labour and human rights factors to assess ESG factors that relate to sovereigns. All data is sourced from third-party ESG providers to avoid institutional bias on the scoring of any metrics. The scores provided by the framework are applied to certain LGIME index funds and are available to clients seeking integration of ESG criteria into government debt segregated mandates.
As part of our engagement on Japan's energy policy, our Head of Japan Investment Stewardship has been working on the ground, notably with the Japan Climate Leaders' Partnership (JCLP). This has included meeting with members of Japan's parliament, where we shared our views as a global investor on the market's need for a greater supply of renewables. Following these meetings, we have welcomed the government's intentions ²⁰ to make regulatory changes to allow the development of large-scale offshore wind power beyond territorial waters and in the exclusive economic zone (EEZ).
In light of Russia's ongoing invasion of Ukraine and the persistence of sanctions, which include asset freezing of targeted entities, capital market restrictions on targeted entities and restrictions on the Russian state's access to capital through sovereign debt.
During the course of 2023, LGIM continued to reduce clients' exposure to Russian securities.
As a global systemic issue, we believe improving health issues requires a market-wide approach. That is why engagement with governments and regulators is so important. LGIM is an investor member of the Investor Action on AMR, founded by the Access to Medicine Foundation, the FAIRR Initiative and the UK Department of Health and Social Care. LGIM supported the Call to Action that Investor Action on anti-microbial resistance (AMR) sent to G7 finance ministers highlighting various policy actions that governments could implement to tackle the growing threat of AMR. LGIM was one of only two institutional investors that participated in the World Antimicrobial Resistance Congress in September 2023, which gathers academics, medics, healthcare professionals, companies, government officials, international organisations, policymakers and regulators from around the world to share research, innovations, new developments, and considered and inspiring thinking on AMR.

Other indicators for principal adverse impacts on sustainability factors			
Emissions	In 2023, LGIM identified 299 companies as subject to voting sanctions for not meeting our minimum, quantitatively assessed, climate-change standards. 2 As reported in June 2023, we almost doubled (to 105) the number of companies we engage with directly under the Pledge. Our 'dial-mover' engagements led to an additional 43 vote sanctions. In 2023, successful engagement led us to remove one previously divested company from our divestment list for applicable funds and two companies were added.		
Human Rights	In 2023, LGIM adopted a Human Rights Policy focusing on human rights, society, labour and the environment. From screening to integration and engagement, various approaches take human rights into consideration in LGIM's investment stewardship and investment activities. Where relevant and available, human rights metrics are incorporated into tools that are used in the investment due diligence process in supporting investment analysis. LGIM's Global Research and Engagement Groups (GREGS) have integrated various human rights relevant topics when evaluating companies held in portfolios, and we have also established a framework for approaching human rights in the context of sovereigns in our investments. LGIM will continue to review and refine our human rights due diligence approach in evaluating related risks and identifying opportunities in its portfolios.		

Contact us

For further information about LGIM, please visit lgim.com or contact your usual LGIM representative











Key risks

The value of an investment and any income taken from it is not guaranteed and can go down as well as up, you may not get back the amount you originally invested.

Important information

The views expressed in this document are those of Legal & General Investment Management Limited and/or its affiliates ('Legal & General', 'we' or 'us') as at the date of publication. This document is for information purposes only and we are not soliciting any action based on it. The information above discusses general economic, market or political issues and/or industry or sector trends. It does not constitute research or investment, legal or tax advice. It is not an offer or recommendation or advertisement to buy or sell securities or pursue a particular investment strategy.

No party shall have any right of action against Legal & General in relation to the accuracy or completeness of the information contained in this document. The information is believed to be correct as at the date of publication, but no assurance can be given that this document is complete or accurate in the light of information that may become available after its publication. We are under no obligation to update or amend the information in this document. Where this document contains third party information, the accuracy and completeness of such information cannot be guaranteed and we accept no responsibility or liability in respect of such information.

This document may not be reproduced in whole or in part or distributed to third parties without our prior written permission. Not for distribution to any person resident in any jurisdiction where such distribution would be contrary to local law or regulation.

© 2024 Legal & General Investment Management Limited, authorised and regulated by the Financial Conduct Authority, No. 119272. Registered in England and Wales No. 02091894 with registered office at One Coleman Street, London, EC2R 5AA.