Investing in a greener future

Legal & General Group Plc | Climate and nature report 2023
in line with recommendations by the Task Force on Climate-Related Financial Disclosures (TCFD)

Legal & General

Climate change is a systemic issue impacting the economies and societies in which we operate. Addressing this is central to our purpose.

Contents

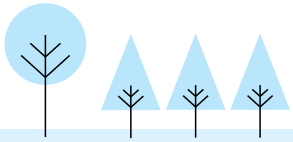
Annual report and accounts:
group.legalandgeneral.com/AnnualReport2023

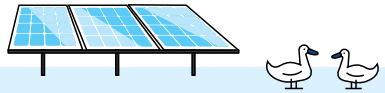
Climate transition plan:
group.legalandgeneral.com/ClimateTransitionPlan2023

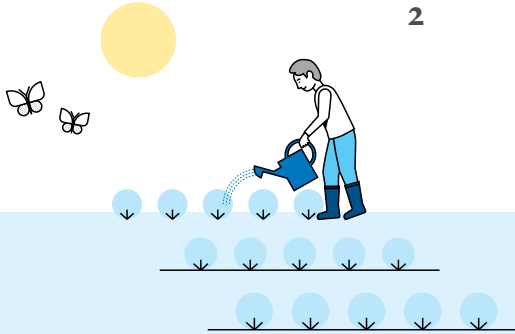
Social impact report:
group.legalandgeneral.com/SocialImpactReport2023

Climate and nature glossary:
group.legalandgeneral.com/ClimateGlossary2023

At a glance







Invest

We are incorporating climate considerations into how we invest our £92.5 billion of proprietary assets[1].

Net zero

asset portfolio aligned with a 1.5°C 'Paris' objective, with a 50% reduction in GHG emission intensity by 2030 and an 18.5% reduction by 2025[2].

Investment portfolio economic GHG emission intensity

56 tCO_2e/£m

(2022: 62 tCO_2e/£m)[3]
A 30% reduction from our 2019 base year.

Implied temperature alignment

2.5°C

(2022: 2.6°C)[3]

Influence

We are using our influence as an asset manager with £1.2 trillion of AUM to promote a 1.5°C net zero transition.

100%

of AUM in alignment with net zero by 2050, working in partnership with clients to reach net zero alignment across 70% of AUM by 2030[4].

Companies rated by our Climate Impact Pledge[5]

5,000

(2022: 5,000)

Number of environment-specific engagements[5]

2,000

(2022: 636)

Operate

We are changing the way we operate to decarbonise our business.

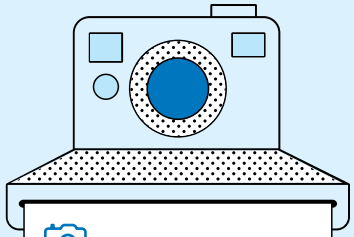
Net zero

scope 1 and 2 GHG emissions by 2050, with an absolute reduction of 42% by 2030 from our 2021 science-based target (SBT) base year[6].

Operational footprint (scope 1 and 2 (location))

27,722 tCO_2e

(2022: 30,062 tCO_2e)
A 29% reduction from our 2021 base year.



Employees embraced our photography competition, after we asked them to submit a photograph they had taken that encapsulates the importance of environmental and social issues. We have showcased some of the best imagery throughout this report.

1. We define proprietary assets as total investments to which shareholders are directly exposed, minus derivative assets, loans and cash and cash equivalents.
2. From a 2019 base year.
3. Metrics have been rebaselined through a combination of methodology and data sourcing changes. Figures from the 2022 report provided in the appendix.
4. For this interim target, we exclude sovereigns and derivative securities due to a lack of clear industry methodologies to account for these asset classes. Please see page 13 for our net zero definition.
5. Figures are approximate.
6. To account for the impact of the pandemic our 2021 base year includes estimated emissions data from our Real Assets portfolio based on 2019 data. All other base year emissions are from 2021.

Chief Executive Officer's statement

Transitioning to a greener future.

Key updates

- Our Climate transition plan was approved at our 2023 Annual General Meeting with support from over 97% of votes.
- We delivered against our plan, achieving a year-on-year reduction of 9% for our investment portfolio GHG emission intensity, and 8% for our scope 1 and 2 operational carbon emissions.
- We made significant developments in our understanding of nature, harnessing the existing work we have done on climate change and deforestation.
- We continued to make new investments in early stage companies, such as Cambridge Electric Cement, who are pioneering the decarbonisation of the cement industry.
- We collaborated to launch a range of new investment products, helping to encourage the reallocation of capital towards the climate transition.
- Employees moved into our new Cardiff office, Calon, which has achieved a BREEAM 'Outstanding' rating and has been designed to operate in line with the current UK GBC net zero pathway.

Scientists expected 2023 to be one of the hottest years on record. As it happened, the reality surpassed predictions. The average temperature was 1.45°C hotter than pre-industrial levels. Alongside this, we saw record ocean heating and unprecedented loss of Arctic and Antarctic ice sheets. The second year of El Niño is expected to be even hotter.

The UN Environment Programme forecasts the current trajectory of global warming to be well above the target agreed in Paris, even if countries achieve their current climate commitments. Such an outcome would be devastating to ecosystems and hugely disruptive to economies.

This backdrop challenges even the most committed optimists (I count myself as one). However, the picture in 2023 was not universally bleak. While the impact of climate change is accelerating, so is the engagement of governments, companies and individuals in what needs to be done.

The COP 28 UN Climate Change Conference in Dubai last year resulted in a ground-breaking consensus to transition away from fossil fuels. Although it stopped short of an absolute commitment to phase-out coal, oil and gas, it is a significant step that fossil fuels were fundamental to the final agreement. Alongside the scale-up of clean energy technologies – renewable energy capacity increased by 50% during 2023 – it provides hope that we can, together, hold-off more significant warming.

Recent data from the Office for National Statistics shows more than eight in 10 adults in Great Britain report having made at least some changes to their lifestyle to help tackle environmental issues. The picture may be negative, but positive action is being taken at all levels.

So what can we do? Legal & General has a duty to help prevent the worst outcomes from climate change: this is a fundamental part of good risk management on behalf of our customers, clients and shareholders. Our Climate transition plan received approval from over 97% of our shareholders in May. This ambitious roadmap sets out how we will both manage the risks and grasp the opportunities that climate change presents, through our influence as a shareholder, the investment choices we make and the actions we take within our operations.

Our scale and expertise give us the potential to play a crucial role in the reallocation of finance towards drivers of the global transition to net zero, both through our own assets and through those we manage on behalf of our clients. In 2023, we launched our new Clean Power (Europe) Fund alongside our partners NTR. This raised €390 million in its first close, using third-party capital, as well as our own, to invest in Europe's decarbonisation and energy security.

Looking ahead, we continue to develop our understanding of the Group's impacts and dependencies on nature. This topic is intrinsically linked to climate change, posing some similar risks and opportunities as capital is reallocated to enable nature-positive outcomes. Our response to nature will build on our existing climate strategy and we've chosen to rename this report our 'Climate and nature report', in recognition of this work.

In my first months at Legal & General, I've been impressed by the depth of our knowledge and the commitment of our people, to meeting and mitigating the challenges of climate change. I am looking forward to supporting our continued progress and ambition, to play our part in safeguarding our environment for generations to come.

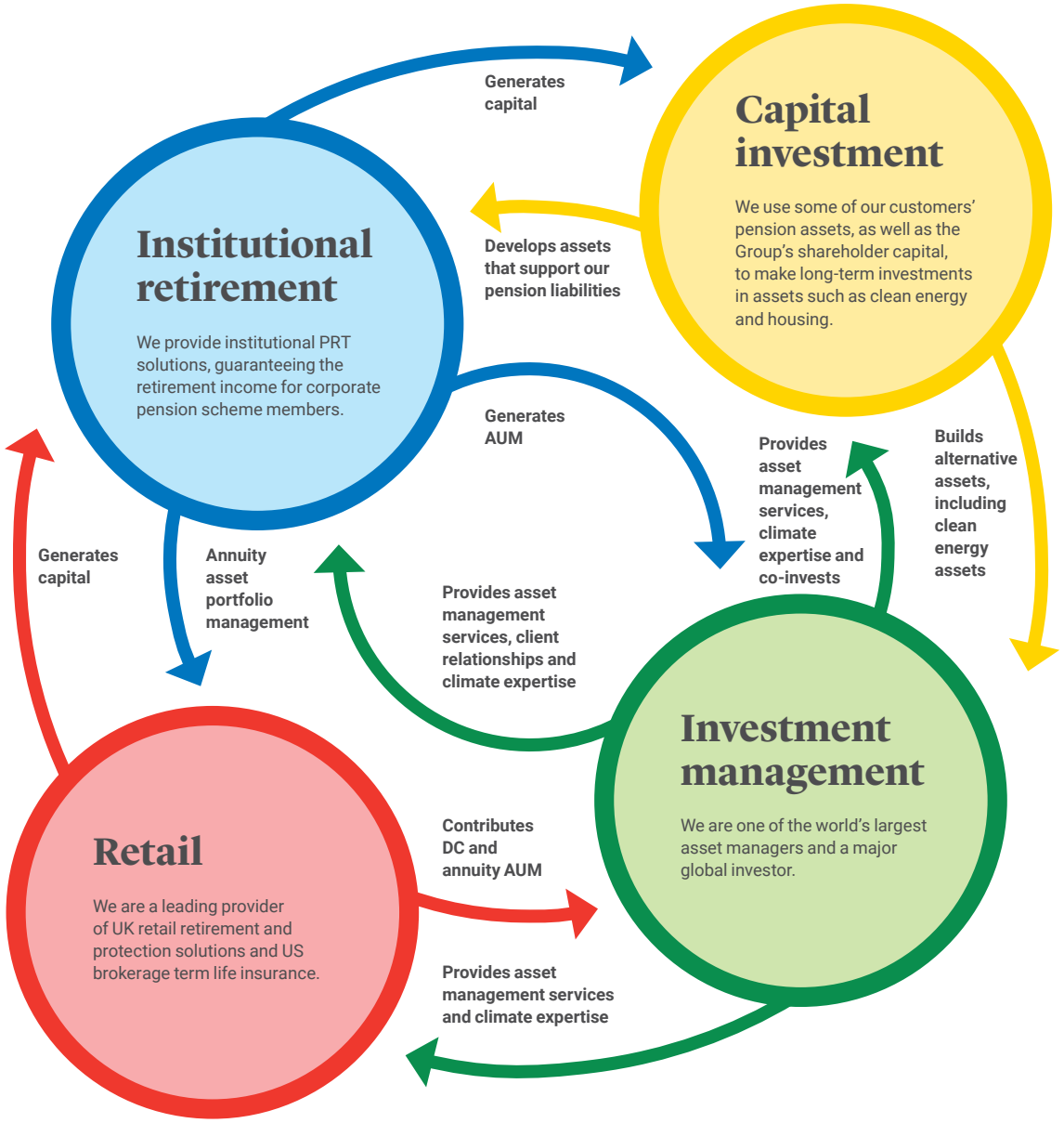
António Simões
Chief Executive Officer

The business context

Our businesses work together to deliver our strategic purpose and generate value for our shareholders, customers and communities. Climate change and nature-loss do not fundamentally alter our business model but they do impact how we execute our strategy.

This page provides a visual representation of our business model, demonstrating how synergies are driven across the Group to deliver our purpose. It provides the context required to understand each division's contribution to our strategic growth driver, addressing climate change.

Division	Context
Institutional retirement (LGRI)	LGRI is targeting a net zero asset portfolio by 2050, with our annuity assets being managed as a single portfolio.
Investment management (LGIM)	LGIM has a market-leading investment stewardship team and uses its influence to promote the transition to a low-carbon economy.
Capital investment (LGC)	LGC invests in clean energy, technology and aims to deliver real estate that has a low impact on the environment.
Retail	Retail aims to decarbonise its annuity assets in conjunction with LGRI and provide workplace customers with opportunities to invest in the transition.



Developing our approach to nature

Introduction

Reducing greenhouse gas (GHG) emissions is a major area of focus for us, but action on climate change must be pursued alongside efforts to halt environmental degradation. We understand there are material interdependencies between climate change and the natural environment and first recognised this publicly in our Climate transition plan, released in April 2023.

Since then, we have seen the formal launch of the Taskforce on Nature-related Financial Disclosures (TNFD) global framework for nature, providing a risk management and disclosure framework to identify, assess and respond to nature-related issues. Over the last year we have continued to develop our approach to nature across our business, in response to these external changes, and have sought to understand the impacts and dependencies that our business has on nature. Some of the highlights are set out on this page, with further details throughout this report.

Climate change remains our most material sustainability issue (see our impacts, risks and opportunities assessment on page 46) and has historically been the main focus of this report. Our work on climate change is currently more detailed and quantified than our nature-related disclosures, with this report being only the first step on our journey in consideration of the TNFD recommendations. We intend to adopt these more widely through our future reporting.

1. Sectors defined by the TNFD guidance (www.tnfd.global/publication/additional-disclosure-guidance-for-financial-institutions/). A range is provided noting the data gaps and resultant uncertainties in mapping our exposures to the defined sectors.
2. Figure is approximate.
3. www.lgim.com/landg-assets/lgim/_document-library/capabilities/nature-policy-document.pdf

Emerging metrics for understanding the risks

Financial exposure to highly nature-dependent sectors[1]

35-50%

Number of nature-specific engagements[2]

200

Integrating nature into our existing climate strategy

Invest

We recognise that, as with climate change, our biggest exposure to the risks from nature-loss is through our £92.5 billion of proprietary assets. The metric above is the first step in quantifying this risk and helps us also consider how investments can be channelled towards nature-positive outcomes. The debt-for-nature swap opposite is one example of this.

Influence

We have been engaging on nature, as an asset manager with £1.2 trillion of assets under management (AUM), for many years, such as through our Climate Impact Pledge (CIP) which incorporates deforestation and biodiversity considerations. We continue to evolve our nature-led engagement as our understanding of the risks develops and have recently released our Nature Framework for engagement[3].

Operate

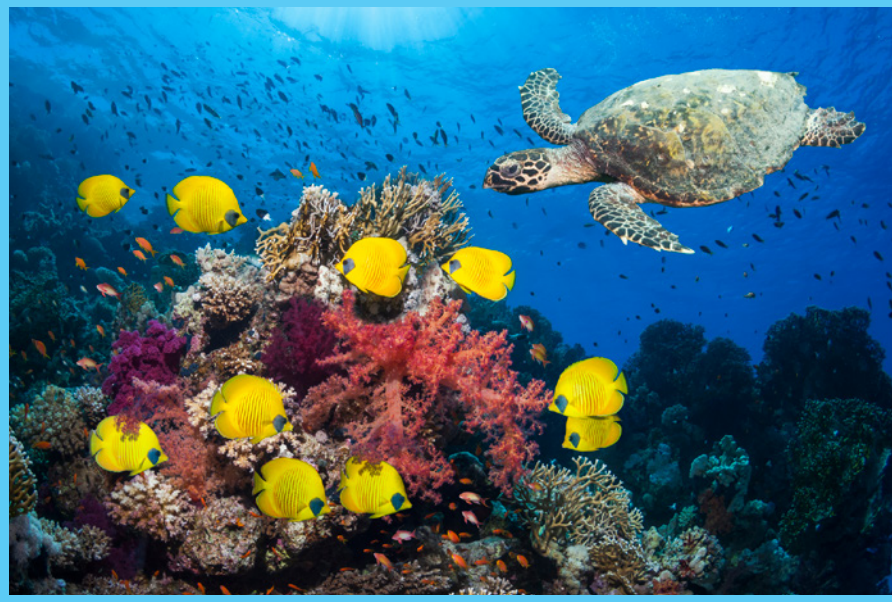
We disclose the impacts our operations have on environmental issues (such as waste and water) and continue to develop our approach to these issues. As part of this, our real assets business and housing businesses have been preparing for Biodiversity Net Gain regulations.

Debt-for-nature swap

In May 2023, LGIM became the cornerstone investor in the largest debt-for-nature swap to date for the Government of Ecuador. Debt-for-nature transactions essentially enable a country to refinance debt under more favourable terms and allocate a portion of the proceeds towards specific nature-related outcomes.

The transaction, which was arranged and structured between Ecuador's advisors, a global investment bank and Pew Bertarelli Ocean Legacy and insured by the US Government, allows Ecuador to restructure its debt at much lower repayment rates. In return, Ecuador will direct savings of USD 450 million to marine conservation activities around the Galápagos Islands, which are home to more than 3,000 species, 20% of which are not found anywhere else on Earth.

Ecuador is targeting 18 milestones to demonstrate its sustainability performance, for which progress will be verified by an independent assessor and reported upon publicly. In the event that it does not achieve these milestones, there will be financial penalties.



Strategy

Our purpose-driven approach

Our purpose is to improve the lives of our customers, build a better society for the long term and create value for our shareholders. We cannot do this without addressing climate change. This has long been a priority for us and is one of our six strategic growth drivers.

Calon, The Interchange, Cardiff
Our new office

Our purpose-driven approach

At Legal & General, our strategy is driven by six long-term strategic growth drivers. Environmental, social and governance issues are inherent to all six and central to inclusive capitalism.

We believe that addressing climate change is the right thing to do, not just for our business but for the many different stakeholder groups our business impacts. Our long-term strategic response remains resilient in the face of specific short-term issues.

We place great importance on considering the needs of all of our stakeholders in our decision-making and actively encourage their participation. As a systemic issue, this makes addressing climate change an inherent part of our strategy and the illustration opposite demonstrates how our approach aligns with the Group's wider strategy and purpose.

Our Climate transition plan is clear that addressing climate change must be pursued in tandem with halting nature and biodiversity loss. During 2023, it was increasingly recognised globally the impacts and dependencies our economies have on nature. We welcomed the release of the TNFD recommendations during the year and have made our first steps towards adoption of these in this report. We are building our approach to nature on the three pillars of our climate strategy, while recognising that integrating nature into decision-making poses some unique challenges.

Our purpose

Our purpose is to improve the lives of our customers, build a better society for the long term and create value for our shareholders – we call this inclusive capitalism.

Inclusive capitalism is what we do. It drives our strategy, shapes our culture and has sustainability at its core.

Our strategy

Environmental issues are central to inclusive capitalism and are inherent to our six strategic growth drivers. These affect all of us.

Ageing demographics	Globalisation of asset markets	Investing in the real economy	Welfare reforms	Technological innovation	**Addressing climate change**

In responding to these long-term drivers, our strategic priorities are set to deliver sustainable profits as well as positive environmental and social outcomes.

Addressing climate change

We are able to support the fight against climate change and nature-loss through the positioning of our own investments, using our influence as one of the world's largest asset managers and the way we operate.

As global economies make the changes needed to address climate change, this creates an important shift in investment allocation and the biggest investment opportunity of our lifetime.

Invest

- Through reducing the intensity of our financed emissions.
- Through investing in the transition.

+

Influence

- Through the products we offer.
- Through our engagement with companies, governments and policymakers.

+

Operate

- Through our operations.
- Through the businesses we control.

Climate and nature-related opportunities and risks

While the risks from climate change and nature-loss are increasingly evident, the transition to net zero and the reallocation of capital to nature-positive outcomes, also creates opportunities. This table highlights material climate and nature-related opportunities and risks that our business has identified. These are long-term assessments informed by our strategic priorities. Over 2023 our key climate and nature-related opportunities and risks have remained consistent.

The impacts of climate change and nature-loss cause different challenges to each of our businesses. This is explained in further detail throughout this chapter. They are also likely to shift over time and we have used a heat map approach to illustrate this. The impacts identified do not take account of potential mitigating actions we will take. Further information on our risk management and identification is available on pages 30 to 35.

Short, medium and long term

- Our **short-term** horizon looks at a three year period.
- Our **medium-term** horizon looks forward up to 10 years.
- Our **long-term** horizon looks at the time horizon up to 2050. This strives to challenge and shape the very core of our business as well as the overall strategy.

TCFD recommendation
Describe the climate-related risks and opportunities the organisation has identified over the short, medium and long term.

Opportunities

Strategic pillar	Potential opportunities	Business area most impacted	Horizon Short	Med.	Long
Invest	Investing in the technology and infrastructure needed to transition away from carbon emissions, such as renewable energy sources, low-carbon properties, low-carbon heating, electrification of transport and nature-based solutions	LGRI, LGIM, LGC, Retail	Medium	High	High
Influence	Attracting and retaining clients by supporting their needs to decarbonise their investment portfolios, for example through net zero-aligned investment products and funds and provision of data and analytical tools	LGIM, LGC	High	High	High
	Managing funds that provide clients with access to financing opportunities in transition technologies and infrastructure and nature-positive outcomes		High	High	High
	Engaging with companies and governments to encourage a fast and orderly 'just transition', enhancing trust in our brand		High	High	Medium
Operate	Enhanced returns from investing in homes and commercial properties by enabling them to operate with net zero carbon emissions and helping to protect and restore nature	LGRI, LGIM, LGC	High	High	Medium
	Increasing our market differentiation through reduced embodied carbon in construction		High	Medium	Low
	Protecting our long-term returns by developing real assets with high levels of climate resilience		Low	Medium	High

Risks

Strategic pillar	Potential risks	Business area most impacted	Horizon Short	Med.	Long
Invest	Investments in sectors or companies which are adversely exposed to a transitioning economy lose value or are downgraded, and investments prove ineffective resulting in loss	LGRI, LGIM, LGC, Retail	Medium	High	High
	Disruptive technology impacting the value of investments		Medium	High	High
	Increased frequency and/ or severity of extreme weather events, or increased nature-loss, impacting on the value of physical assets or the value of companies with high exposures to these risks		Low	Medium	High
Influence	Loss of market share should investment solutions be perceived as not meeting rapidly evolving client needs	LGIM, LGC	Low	Medium	Medium
	A breach of evolving legislative or regulatory requirements may expose us to litigation or regulatory sanction and damage our brand		Low	High	Medium
	Reputational risk from not meeting our own commitments, or if activities across the Group are not aligned		Medium	Medium	Medium
Operate	High delivery costs of low-carbon or nature-positive solutions for residential and commercial properties impacting viability	LGRI, LGIM, LGC, Retail	High	Medium	Low
	High delivery costs due to changing climate and nature-related disruptions to our supply chain, leading to increased costs and material shortages		Low	Medium	High
	Property values fall due to increased risk of extreme weather impacts, higher insurance costs or poor energy efficiency		Low	Medium	High
	Inherent exposure to the risk that key personnel leave the Group, with an adverse affect on performance		Low	Low	Low

Key
High impact | Medium impact | Low impact

Invest
Our journey to net zero

We are incorporating climate considerations into how we invest our £92.5 billion of proprietary assets[1].

2023

Delivering on our transition plan
Highlights

- We took action to reduce the GHG emissions of our investments, achieving a 30% reduction (from a 2019 base year), keeping us ahead of our 2025 interim target.
- We continued to invest in early stage and growth equity companies, such as Cambridge Electric Cement, who are pioneering the decarbonisation of cement.
- We have disclosed our exposure around deforestation and highly nature-dependent sectors, as we develop our knowledge of our impacts and dependencies on nature.

Dependencies and outlook

Our portfolio transition will be dependent on investee entities delivering on their decarbonisation targets and the availability of attractive assets for investing in the transition, alongside delivery of government policy actions. The world is not currently on a pathway that will limit global warming to 1.5°C, which increases the risk of us not achieving our commitments.

The lack of reliable, accurate, verifiable, consistent climate and nature-related data continues to make it challenging to accurately disclose and assess opportunities and risks.

2030

By 2030

Reduce
the carbon intensity of our real estate assets

2.1°C
Investment portfolio temperature rating for listed bonds and equities by end 2026[3]

50%
portfolio GHG emission intensity reduction[2]

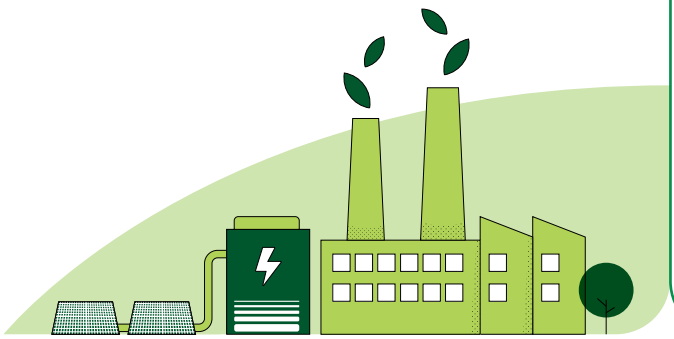
Phase out
investments in coal and oil sands and run off high-carbon assets[4]

2050

By 2050

Net zero asset portfolio in line with a 1.5°C 'Paris' objective

Neutralise
residual emissions through negative emission investments



1. We define proprietary assets as total investments to which shareholders are directly exposed, minus derivative assets, loans and cash and cash equivalents.
2. From a 2019 base year.
3. On an 'enterprise value including cash' emissions-weighted temperature score, covering portfolio scopes 1 and 2.
4. Investment with more than 5% revenue exposure by 2030.

National Trust

Our private credit business in LGIM, entered into a £25 million transaction with the National Trust, Europe's biggest conservation charity, to fund new renewable energy projects on its estates. This funding will be used to help develop hydroelectric and solar energy projects, to add to the portfolio of 140 renewable energy projects they have completed on their lands over the last 10 years. The renewable energy generated from these new projects will be used to help meet the National Trust's own energy needs, further supporting the charity in achieving their ambitious 'net zero by 2030' goal.

Invest
Our strategy

We consider our main exposures to climate change risk to be through our proprietary assets[1]. Climate change is a systemic risk to these assets, but the transition to net zero also presents significant investment opportunities. Our investment approach seeks to mitigate the risks from climate change through reducing the intensity of our financed emissions, while maximising our impact by directing our investments towards the transition. We aim to take a similar approach to nature-based risks.

Through reducing the intensity of our financed emissions

We are committed to achieving a net zero asset portfolio by 2050, in line with a 1.5°C 'Paris' objective, on our £92.5 billion of proprietary assets. We define this commitment as net zero carbon emissions by 2050, alongside rapid, deep and sustained reductions in other GHG emissions and we see this as a key component of our climate strategy. This commitment is supported by a series of interim milestones as seen on page 49. Our portfolio decarbonisation commitments drive our ambition to promote the benefits of net zero and help to mitigate our exposure to both transition and physical risks as we move to a low-carbon economy.

In the short to medium term, we prefer to focus our efforts on credible reductions to our carbon footprint across all sectors and encouraging others to do the same. In addition, our commitments around deforestation are aimed at protecting existing carbon sinks. In the long term, we expect negative emissions, such as through nature-based solutions, to play a critical role in balancing out residual emissions to achieve net zero.

Our decarbonisation approach is embedded within our investment strategy and is constructed to manage our short- and long-term responsibilities to both our shareholders and policyholders, in line with regulation. As a long-dated, bond-heavy investor, our decarbonisation approach involves:

- transitioning to lower-carbon investments through new business flows
- managing the phase-out of higher-carbon investments within legacy holdings.

We maintain a well-diversified portfolio across all sectors and we are dependent on the companies we invest in decarbonising their business. We actively monitor their actions to determine whether their plans are aligned to 1.5°C pathways, in support of our portfolio temperature rating SBT. We also engage, through LGIM, to encourage the right behaviour, while implementing investment exclusions where appropriate. Our decarbonisation approach supports the delivery of our commitments to the Science Based Targets initiative (SBTi) and Net-Zero Asset Owner Alliance (NZAOA) frameworks. Decarbonising our balance sheet is prudent risk management and it is managed through a suite of portfolio controls. We detail these controls in the risk management chapter.

Through investing in the transition

We remain committed to directing our investments to support the transition where this aligns with our risk appetite and regulatory criteria and we see a significant investment opportunity in doing so. To date, we have invested £3.3 billion in transition finance, including £1.4 billion in renewable energy, £1.2 billion in green bonds and £0.7 billion in other solutions (such as technology, infrastructure and real estate) which supports the transition and helps with our resilience to climate risk. We are committed to increasing the financing of climate solutions, while also reporting progress on investments in nature-based solutions by end 2025.

We deploy a range of investment strategies to support the transition and our approach is described across the following asset classes:

- Direct investment bonds – Private credit and infrastructure debt
- Direct investment equities – Private equity
- Property – Property/ real estate
- Traded securities – Listed bonds and equities.

Our proprietary assets

Our proprietary assets are the £92.5 billion of assets that Legal & General own and where we control the investment strategy. Our proprietary assets contain both direct and traded securities across different asset classes.

> "We are managing and deploying our balance sheet proactively as the world moves towards a lower carbon future."
>
> **Jeff Davies**
> Chief Financial Officer

Table 1. Total Group investments
Group assets analysed by investment class

	Direct investments[2] 2023 £m	Traded securities[3] 2023 £m	Total 2023 £m	Total 2022 £m
Equities	1,856	1,310	3,166	3,071
Bonds[4]	27,671	53,659	81,330	71,773
Derivative assets	–	38,019	38,019	41,978
Property	5,503	–	5,503	5,644
Loans	13	1,599	1,612	1,073
Financial investments	**35,043**	**94,587**	**129,630**	**123,539**
Cash and cash equivalents	**163**	**4,072**	**4,235**	4,834
Other assets	**2,539**	–	**2,539**	2,260
Total investments	**37,745**	**98,659**	**136,404**	**130,633**
Proprietary assets[1]	**37,569**	**54,969**	**92,538**	**82,748**

1. We define proprietary assets as total investments to which shareholders are directly exposed, minus derivative assets, loans and cash and cash equivalents.
2. Direct investments, which generally constitute an agreement with another party, represent an exposure to untraded and often less volatile asset classes. Direct investments also include physical assets, bilateral loans and private equity, but exclude hedge funds.
3. Traded securities are defined by exclusion. If an instrument is not a direct investment, then it is classed as a traded security.
4. Bonds include lifetime mortgage loans (as loans against residential property) of £5,766 million (2022: £4,844 million).

TCFD recommendation
Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning.

Invest
Our strategy continued

Private credit and infrastructure debt

Direct investment bonds

LGIM actively manages £16.3 billion of private credit investments on behalf of the Group, across corporate, infrastructure, alternative and real estate debt. This portfolio continues to prioritise origination and investment into assets which actively promote decarbonisation. The Group has invested £1.0 billion in clean energy projects, including solar and wind farms, geothermal plants, smart networks and energy storage assets. We also have £0.3 billion in debt-for-nature swaps, in line with our objective to invest in opportunities that support nature.

Our commitments to net zero have been integrated into our investment decision-making processes. The alignment of proposed investments with our climate change objectives is assessed during pre-investment due diligence and further scrutinised during the investment approval process. This includes negative screening criteria, enhanced due diligence for carbon-intensive investments and ESG assessment checklists.

Through borrower engagement we have incorporated ESG-linked credentials into the structures of £0.3 billion of investments spanning the social housing, higher education and corporate sectors. This is where funding from us must either be designated for ESG-related purposes or have criteria linked to an ESG-related target. These loan structures incentivise a borrower to achieve specific sustainability-related targets, including those related to net zero.

Due to the range and size of the portfolio, we have some exposure to fossil fuel-related assets. These exposures are regularly monitored and are constrained by carbon budgeting, our SBTs and wider corporate commitments.

We have a similar focus on our private credit allocations managed by external asset managers.

Lifetime mortgages

In addition, we have £5.8 billion of lifetime mortgage loans held within our annuity portfolio. We are actively seeking ways to enhance insight into the energy efficiency of properties going forward by including EPC ratings within property valuations. We are working with multiple third-parties to source this data and analyse it. This will enable us to develop our product to further support our climate-related goals. We also access sophisticated models that assess the flood risk associated with the underlying properties to ensure our exposure remains low, even under higher global warming scenarios.

Pemberton

LGC has a 40% equity stake in Pemberton, a €19.1 billion AUM pan-European alternative credit manager and a member of the Net Zero Asset Managers initiative (NZAMi). LGC has cornerstoned six Pemberton-managed funds with seed capital, while LGRI has also invested c.€400 million primarily through structured investment grade debt. Pemberton is a signatory of the PRI and is compliant with SFDR; its newest direct lending vintages are Article 8 compliant and each investment proposal is screened against positive and negative ESG criteria. Pemberton has also granted financial incentives for borrowers which meet carbon reduction targets or ESG key performance indicators on €7.9 billion (41%) of commitments to 74 borrowers.

Private equity: clean energy and venture capital

Direct investment equities

We invest in clean energy through LGC, supporting the transition to a low-carbon economy and capitalising on the associated commercial opportunities, accessing growth and good returns for our shareholders while also delivering environmental and social benefits. Since 2015, we have successfully invested in a wide range of early stage, growth equity companies and low-carbon infrastructure that will play an important part in the energy transition.

In 2023, LGC increased its investment and support of Kensa – the UK's leading ground source heat pump manufacturer – by a further £70 million, jointly with Octopus Energy. This will help Kensa to scale-up job creation and heat pump installation, supporting the UK's target of 600,000 heat pump installations per year by 2028. LGC has also invested in Cambridge Electric Cement, founded by three Cambridge academics, it is developing a pioneering approach to decarbonise cement production; and invested in Advanced Electric Machines, an electric vehicle motor manufacturer which does not use rare earth materials.

Venture Capital (VC) plays a critical first role in the investment ecosystem and LGC's dedicated VC programme has deployed capital into innovative companies supporting advances in sectors such as renewable energy and energy demand reduction.

Property/ real estate

Property

We have significant investments in property, managed through our LGIM Real Assets business. Our strategic approach to this asset class is covered in the operate chapter.

Urban regeneration

Our capital division's Urban Regeneration team has a strong track record investing capital across the UK. Our collaborative approach brings together capabilities and expertise from across Legal & General and through unique partnerships; working with communities, local institutions and local government to meet their funding needs and deliver social and environmental benefits. For example, our partnership with Oxford University is delivering high-quality places to live, learn and work – integrating some of the UK's leading environmental standards on carbon reduction, biodiversity, circular economy and transport.

Meanwhile, 2023 saw a major expansion of Bruntwood SciTech, securing £500 million of additional investment and welcoming the Greater Manchester Pension Fund into the specialist real estate partnership with Bruntwood SciTech. Plans for a £5 billion UK-wide real estate portfolio include ambitious net zero targets, for both new-build and retrofit.

Digital infrastructure

Society is reliant on digital infrastructure to support the economy and enable socially beneficial activities such as medical research. Our investments in assets such as data centres are helping to drive more energy efficient, low-carbon solutions in a traditionally energy-intensive sector.

Listed bonds and equities

Traded securities

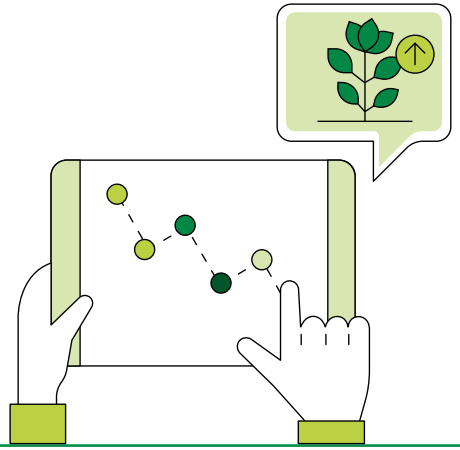
Our listed bond portfolio is primarily managed within our LGRI business and is managed and monitored against GHG emission intensity and temperature alignment metrics. We set our investment strategy, create our strategic asset allocation plan and take proactive steps where needed to be aligned to our net zero trajectory. We also have £1.2 billion of green bond investments.

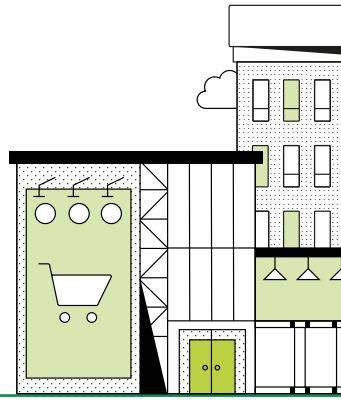
In line with our fiduciary duty to policyholders and shareholders in maintaining portfolio security and value, we maintain a well-diversified portfolio across all sectors. As such, we have some exposure to fossil fuel-related companies, but manage these the range of controls detailed in the risk management chapter.

We have invested £870 million in our listed equity and multi-asset fund portfolio in LGC, where approximately £190 million is invested through our Climate Impact Pledge portfolio, consisting of listed clean energy stocks and other companies in the renewables space. Approximately £600 million is invested in climate and wider responsible investment funds, predominantly through LGIM's Future World product range.

Influence
Our journey to net zero

We are using our influence as an asset manager with £1.2 trillion of AUM to promote a 1.5°C net zero transition.





2023

Delivering on our transition plan
Highlights

- We engaged with over 2,000 companies specifically on their approach to vital environmental issues – a significant increase on last year, primarily driven by the expansion of our Climate Impact Pledge.
- We expanded our product range, with 89% of new products launched during 2023 having ESG considerations – 24% of these are either net zero-aligned or had an existing 'Paris'-aligned benchmark.

Dependencies and outlook

Net zero is dependent upon the willingness of stakeholders to collaborate. When using our influence we are dependent on clients, occupiers of our properties and the companies we invest in to take action to support the transition to net zero.

2030

By 2030

70%
of eligible AUM to be managed in alignment with net zero[1]

55%
reduction in carbon intensity of occupier energy use across real estate equity assets[2,3]

Target net zero operational carbon
within the Sustainable Defined Contribution Property Fund

Infrastructure equity

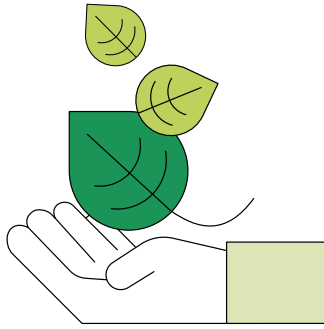
In April 2023, LGIM and NTR announced the first close of the L&G NTR Clean Power (Europe) Fund. The fund invests in a blend of onshore and offshore wind, solar and energy storage projects in Europe, across development, construction and operational stages. Our capital division was a cornerstone investor in the fund, alongside third-party capital. It plays a key role in helping us meet our commitments for both our own investments and those we manage on behalf of clients.

2050

By 2050

Net zero GHG emission intensity across all our AUM

Net zero carbon
for all LGIM real estate equity assets by 2050 (or sooner)



1. Excludes sovereigns and derivative securities until such time as agreed methodologies exist.
2. From a 2019 base year.
3. Our Real Assets strategy is detailed on page 17.

Influence
Our strategy

As the largest investment manager in the UK, with total AUM of £1.2 trillion, we are committed to using our scale and influence to contribute to the transition to a low-carbon and nature-positive economy. We are working with clients and investee companies to manage the systemic risks of climate change and nature-loss.

We are committed to net zero GHG emissions by 2050 across our managed assets. We have also set an interim target to work in partnership with clients to reach net zero alignment across 70% of eligible AUM by 2030[1]. To be considered net zero-aligned, amongst other characteristics, portfolios must set targets to achieve either a carbon intensity reduction of 50% by 2030 relative to a 2019 base year, or portfolio temperature alignment of 1.5°C by 2030.

We integrate climate change considerations across asset classes and investment management styles (such as active, index and real estate), while our investment stewardship team engage with investee companies aiming to protect clients' assets through raising market standards on sustainability.

Through the products we offer

Our investment management division, LGIM, manages responsible investment strategies across multiple asset classes and management styles.

We act as long-term stewards for our clients' assets and are focused on driving real-world change through stewardship, aiming to mitigate the exposure of their assets to the systemic risks of climate change and nature-loss, as well as other sustainability issues. We also recognise the investment opportunities inherent with the reallocation of capital that is needed to transition to net zero and have launched products to capitalise on this. As clients pursue their own transition plans, we place ourselves to best serve their needs, through our responsible investment research and approach and investment products.

Responsible investment framework

We have a fully-integrated framework for responsible investment which is detailed in the LGIM Active Ownership report[2]. The framework was updated during 2023 to take into account new investment capabilities to achieve environmental outcomes and to continue to align with clients' sustainability objectives. It now leverages the work of our dedicated engagement programme, the CIP (see page 14), by divesting from companies that are not meeting our minimum standards in specific responsible investment products[3]. Our range of products allows clients to choose from strategies that focus on decarbonisation, net zero-alignment, thematic investments in clean technologies, or prioritise engagement-led investing.

Innovative partnerships

During 2023 we launched several innovative products. We partnered with the Swedish public pension provider, AP7, to establish a climate action strategy. This active investment strategy aims to deliver tangible change while unlocking long-term shareholder value by investing in and engaging with, companies that are under-performing against the climate transition, but who have potential to achieve net zero. This strategy aims to play a part in ensuring that the market as a whole, not only climate leaders, rise to the net zero transition challenge as rapidly and effectively as possible. We leverage both our investment and stewardship capabilities through a data-driven fundamental analysis, and engagement-led investment approach, to target both attractive risk-adjusted returns and real-world outcomes.

We also partnered with NTR, a leading renewable energy specialist, to launch a fund that aims to seize the high growth opportunities present in Europe's energy transition. The L&G NTR Clean Power (Europe) Fund aims to offer exposure to a diversified portfolio of clean power infrastructure assets with attractive risk-adjusted returns and positive environmental and social impacts. Against the backdrop of technological advances, regulatory changes and the international focus on energy security this partnership offers an opportunity to be meaningfully involved in the climate transition. The fund raised €390 million in committed capital and co-investment opportunity in its first close.

Product developments

In 2023, 89% of the strategies we launched had ESG considerations and 24% of them were either net zero-aligned or had an existing 'Paris'-aligned benchmark.

Strategies with ESG considerations employ either ESG tilting, ESG exclusions, CO_2 reduction targets, or a combination of these. In 2023, we launched the L&G ESG Global Corporate Bond Index Fund which uses positive tilting for ESG criteria; and the L&G Global Brands ETF, which employs ESG exclusions, among other launches.

Net zero strategies focus on assessing a portfolio's carbon emissions intensity and temperature alignment profile during portfolio construction through our Net Zero Framework. Strategies with a 'Paris'-aligned Benchmark are designed to meet the minimum standards of the EU Paris-aligned Benchmark and include both exclusions and a decarbonisation criterion. In 2023, we expanded our fund range in both these strategies.

Supporting clients through data and insights

Monitoring and reporting on progress is also fundamental to our strategy. Clients are supported through our LGIM ESG score, our proprietary, rules-based approach to scoring companies from an ESG perspective, which since 2023 includes biodiversity, deforestation and water management considerations. The LGIM website supports clients with its insights and press releases, such as a recent white paper covering how we have updated our proprietary climate scenario modelling tool kit to assess the climate-related risk for our investments[4].

> "Recognising the potential investment opportunities and risks from climate change and providing solutions for a low-carbon transition, are part of the role of a responsible investment manager."

Michelle Scrimgeour
Chief Executive Officer, LGIM

LGIM Active ownership report
See LGIM's Active Ownership report: www.lgim.com/uk/en/responsible-investing/active-ownership/

1. Excludes sovereigns and derivative securities until such time as agreed methodologies exist.
2. See page 19 of LGIM's Active Ownership report.
3. The scope of our Responsible Investment Framework is all public markets pooled funds domiciled in or widely distributed by LGIM in the UK and Europe. Therefore, it is not applicable to segregated mandates, funds domiciled outside of the UK and Europe, or funds designed to specific client requirements that are not intended for broad distribution.
4. www.lgim.com/uk/en/insights/esg-and-long-term-themes/net-zero-2050-more-affordable-than-ever-if-we-act-now/

Influence
Our strategy continued

Through our engagement with companies, governments and policymakers
Effective stewardship tackles systemic issues that represent material risks and opportunities for clients. LGIM's stewardship activity is guided by six global stewardship themes, which it considers to be financially material and where we evaluate that as investors we can best use our influence: climate change, nature, people, health, digitisation and governance.

LGIM's campaigns are constructed around these themes, aiming to improve sustainability not just for individual companies, but across the markets our clients are invested. The different engagement levers used include: direct engagement with companies; collaborative engagement with peers and industry bodies; voting; policy and regulator engagement; public pressure; and co-filing shareholder resolutions. We follow a structured approach so it is clear when we escalate. Throughout our campaigns, from setting objectives to ranking companies and reporting regularly, we aim to be transparent about our activities not just to our clients, but also to the market more broadly.

LGIM's Climate Impact Pledge (CIP)
The CIP is a two-fold engagement programme, structured around the TCFD framework, which aims to encourage companies to tackle climate change. Companies not meeting our minimum standards may be subject to voting sanctions and some may be subject to exclusion from relevant LGIM portfolios; exclusions apply to almost £176 billion of assets[1].

The CIP assesses more than 5,000 companies across 20 climate critical sectors quantitatively on their climate credentials, using c.70 data points, before publicising the results on the LGIM website. In 2023, it identified 299 companies as qualifying for voting sanctions for failing to meet our minimum standards. LGIM also selects over 100 companies that it considers to be potential 'dial-movers', due to their size and potential to galvanise action in their sectors, for direct engagement and qualitative assessment based on sector-specific net zero guides. In June 2023, 12 companies were kept on the divestment list and two companies added. One company was removed from this list due to improvements versus minimum expectations. The annual publication of the results of LGIM's assessments and engagements increases pressure on companies to take more action on climate.

LGIM can apply further pressure by voting on and at times co-filing shareholder resolutions. For example, in 2023 it co-filed a shareholder resolution at Exxon Mobil's AGM. The resolution requested greater disclosure of asset retirement obligations, which are considered financially material to investors and linked to the climate transition.

Engagement on nature
Our approach to nature is structured across four 'sub-themes': natural capital management, deforestation, circular economy and water. These map across to the direct drivers of nature-loss that are having the greatest impact, as identified by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. Examples of strategic engagement on the sub-themes include engaging on key integration and disclosure frameworks, such as the TNFD and domestic and regional policies and regulation, such as the EU Nature Law and Global Roadmap for the Agriculture and Land-use sector.

We regularly collaborate to increase our influence. Policy engagement work includes the Investor Forum working group on water, which engages the UK government and regulators on strengthening the UK water system. Other corporate engagement work includes the Nature Action 100, Valuing Water Finance Initiative, Finance Sector Deforestation Action.

Collaborations and policy engagement
LGIM's engagement strategy for improving sustainability standards across markets includes engaging with policymakers to tackle systemic market issues. Engagement on the wider integration of climate and nature disclosures is a fundamental aspect of our approach. We are supportive of, and a 'forum member' of, the TNFD. The issuance of the TNFD framework in September 2023 involved input from academia, civil society, governments and over 1,000 market participants including LGIM. It is fundamental in enhancing understanding of nature-related impacts and dependencies.

Among other examples, LGIM is a signatory of the Business for Nature 'Make it Mandatory' campaign, calling for governments to adopt Target 15 of the Global Biodiversity Framework, requiring all large businesses and financial institutions to assess and disclose their biodiversity-related risks by 2030. We are also an active member of the collaboration on microfibres, organised by First Sentier Investors, as part of which, LGIM has been involved with encouraging governments to introduce legislation for microfibre filters on new washing machines.

In the corporate sphere, we remain active members of Climate Action 100+. Specific to the financial sector, LGIM's CEO is a member of the GFANZ Principals Group. Launched in 2021 at COP26, GFANZ describes itself as a global coalition of leading financial institutions committed to accelerating the decarbonisation of the economy. We also co-lead a workstream on index investing, which launched in 2023, aiming to help develop the next generation of net zero indices for index-investors looking to align themselves with the transition.

We believe collaboration strengthens our voice and helps investee companies and policymakers identify and address systemic market issues and encourages the acceleration of progress against global sustainability goals.

Our climate collaborations include:
- Aldersgate Group
- Better Building Partnership (BBP)
- Climate Action 100+
- Energy Transitions Commission
- FAIRR
- Get Nature Positive
- Glasgow Financial Alliance for Net Zero (GFANZ)
- Institutional Investors Group on Climate Change
- Nature Action 100
- Net Zero Asset Managers initiative (NZAMi)
- Net Zero Asset Owners Alliance (NZAOA)
- One Planet Asset Managers Initiative
- Powering Past Coal Alliance (PPCA)
- Principles for Responsible Investment (PRI)
- Science Based Targets initiative (SBTi)
- Sustainable Markets Initiative
- UK Green Building Council

1. Companies are divested from selected funds with £176.4 billion in assets under management (as at 31 December 2023), including funds in the Future World fund range, LGIM's ESG fund ranges and all auto-enrolment default funds in L&G Workplace Pensions and the L&G Mastertrust. Companies are divested up to a pre-specified tracking-error limit. If the tracking error limit is reached, holdings are reduced rather than fully divested.

Operate
Our journey to net zero

We are changing the way we operate to decarbonise our business.

2023

Delivering on our transition plan
Highlights

- Our scope 1 and 2 operational footprint has decreased 8% this year (and 29% from our 2021 base year), due to energy efficiency measures delivered and changes in our underlying businesses[1].
- Set and disclosed our science-based target for our purchased goods and services.
- Developed our operational approach to biodiversity and nature.

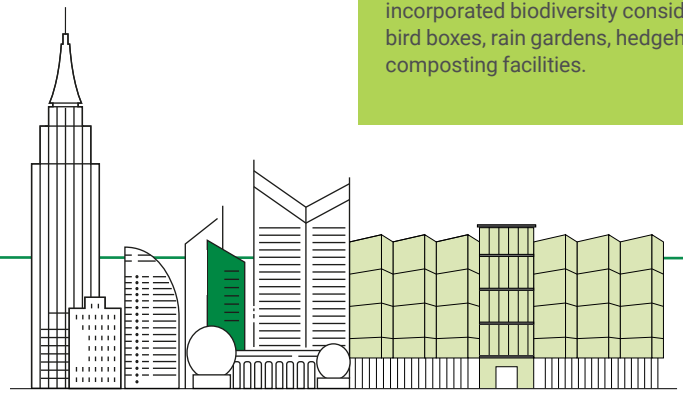
Dependencies and outlook
Our SBT requires an absolute reduction in emissions but we do not expect our pathway to net zero to be linear. Given the absolute nature of our target, if our businesses grow faster than we are able to decarbonise, we will see an increase in absolute emissions in the short term.

Net zero standards continue to emerge and we recognise our approach and definitions may need to change as industry practices and technology evolve.

The Eco Home

CALA completed its first concept for a net zero home, built with modern construction methods including a timber frame, low-carbon bricks, triple glazing and enhanced insulation. It also incorporated new technologies including solar panels, an air source heat pump, battery storage, smart lighting and an aerated shower which has wastewater heat recovery and reduces water usage. The home also incorporated biodiversity considerations including bird boxes, rain gardens, hedgehog highways and composting facilities.

2030



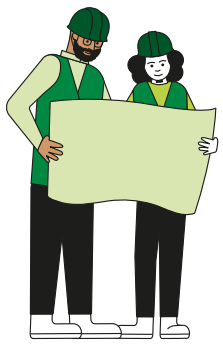
By 2030

42%

We will reduce our absolute scope 1 and 2 GHG emissions by 42% from a 2021 base year[1]

All new homes will be capable of operating at net zero carbon

Our core occupied offices (scope 1 and 2) and business travel to operate at net zero carbon emissions[2]



2050

By 2050

Net zero operational carbon footprint

Net zero carbon across our real estate equity platform

1. To account for the impact of the pandemic our 2021 base year includes estimated emissions data from our Real Assets portfolio based on 2019 data. All other base year emissions are from 2021.
2. Applies to occupied offices where we actively control the management of utilities.

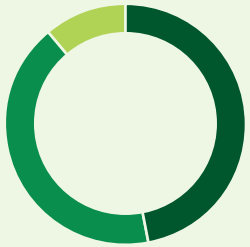
Operate
Our strategy

How we operate our business and the businesses we control is critical to the success of our climate strategy. From the office spaces our people use and the way they choose to travel to work, to the assets we manage and the homes we build – all of these activities build and shape our carbon footprint and each presents both challenges and opportunities on our journey to net zero.

Chart 1 sets out the portion of our operational scope 1 and 2 emissions that are attributable to each of our three principal contributors: our LGIM Real Assets business; our LGC housing businesses; and our core occupied offices. We are committed to a 42% reduction in our scope 1 and 2 GHG emissions by 2030, from a 2021 base year[1].

Chart 1.

Operational footprint breakdown (%)



- Real Assets
- LGC housing businesses
- Group operations

Through our operations

Our operational emissions are those where we have direct control over the actions that create the emissions. We therefore have a responsibility to shape our business strategy to build reductions into our operations, and to help stay aligned with our SBT. In addition to our SBT we have a target specifically for our offices – from 2030 our occupied offices (scope 1 and 2) will operate with net zero emissions[2].

This target drives our location strategy, which is shaping how we come together to work and collaborate in our offices and has sustainability and employee experience as key requirements.

Our biggest step to date in delivery of our location strategy was the occupation, in October 2023, of our new office in Cardiff. Previously we were a tenant in two separate offices in Cardiff, neither of which were on track to reach net zero. As part of our location strategy we have, for the first time, shaped the design and build of our workspace in central Cardiff. In designing this building, we ensured that net zero and nature-related considerations were prioritised. Below are examples of how 'Calon', our Cardiff office, will help us reduce our impact on climate and nature:

- designed to operate with a lower carbon footprint than a standard office. We have on-site solar panels, and technology which enables the building to react to its changing environment (such as blinds and a lighting system which respond automatically to light-levels, helping to ensure the most energy-efficient use of lighting)
- achieved a BREEAM 'Outstanding' rating and registered with the NABERS UK standard The kWh/m^2 will be externally assessed within the first two years of occupation
- no on-site parking (except for those with mobility requirements), cycle and shower facilities for active travellers, and conveniently positioned for public transport
- over 3,000 plants
- utilised local suppliers and products throughout.

Through our purchased goods and services

Purchasing over £700 million of goods and services from c.1,900 suppliers, is a large contributor to our scope 3 GHG emissions. It is our third largest category of scope 3 emissions, after those from our investments and our downstream leased assets and we want to ensure that we are working with suppliers who share our net zero ambition and are already taking strides to manage their carbon footprint.

In looking to achieve real-world emission reductions from our supply chain, our most pressing challenge is to gather accurate carbon data. This is a challenge for many organisations, as robust supply chain emissions data is difficult to access due to lack of capabilities in the supply chain and its fragmented landscape. A recent survey by the SBTi found that only 6% of respondents currently use supplier-specific emissions factors.

We recognise that measuring and reducing the emissions from the goods we purchase is important. Therefore, we have set a supplier engagement target which aligns with the SBTi guidance for financial institutions. We commit to ensuring that 80% of our suppliers, by spend, will set a science-based carbon reduction target by the end of 2026. It requires our suppliers to measure their footprint and set their own carbon reduction targets.

This enables us to take positive action now within our supply chain while tools and expertise are developed and data is captured. This approach follows the 'influence first' approach we take as an asset manager with our other commitments, while enabling us to build improvements across our supply chain. As we support, encourage and over time require the adoption and implementation of robust carbon reduction targets throughout our supply chain, we expect to see real-world impacts.

Our intention is to use this target as a stepping stone to gather supplier data and, when data is more widely available, set an emissions reduction target.

1. To account for the impact of the pandemic our 2021 base year includes estimated emissions data from our Real Assets portfolio based on 2019 data. All other base year emissions are from 2021.
2. This target applies to our occupied offices where we directly control the management of utilities. Noting that the detailed definition of net zero is still emerging and that an element of offsetting may be required when we have reached the emerging industry benchmarks for net zero energy performance.

Operate
Our strategy continued

Through the businesses we control
Our Real Assets business

Our Real Assets business in LGIM holds an extensive real estate portfolio. The emissions associated with managing these assets, produced from the fuels and electricity that we purchase and control as a landlord, are the largest contributor of (13,111 tonnes) to our operational footprint.

As a long-term investor, we have a responsibility to protect our clients' capital by mitigating the risk of stranded assets and increasing the long-term value of our real estate portfolios. LGIM is committed to achieving net zero carbon across the real estate equity platform by 2050 (or sooner). Under our group-wide SBTs, we have also committed to an absolute reduction in our operational footprint (scope 1 and 2) of 42%, and a 55% reduction in the carbon intensity of the scope 3 emissions associated with the energy use of our occupiers, by 2030 and from a 2019 base year. Achieving these commitments aims to future-proof our portfolios by creating better quality, better performing assets.

Our Real Estate Net Zero Carbon Roadmap laid out LGIM's strategy to transition our real estate portfolio to net zero carbon[1]. The definition of net zero buildings is still in development under the UK Net Zero Buildings Standards and in our roadmap we apply the current definition as set out by the UK Green Building Council framework[2]. This requires measuring and reducing embodied carbon, using the energy hierarchy to drive down the demand of our properties to lower energy levels, increasing renewable energy supply and only considering verified offsetting as a final step.

In 2023, we published an update to our roadmap, outlining the progress we have made to date in implementing our strategy[3]. Key updates include the continued rollout of net zero audits for new acquisitions and targeted existing assets, which identify the measures required to achieve net zero and associated costs. At the end of 2023, we had completed audits on over 150 assets in our real estate platform. Through a series of pilots, we have also developed a new Integrated Energy Solutions strategy, to support the delivery of on-site renewable energy generation, electric vehicle charging, microgrid and battery storage projects. An implementation guide has also been created to support the rollout of the strategy in 2024.

Vizta, our occupier engagement platform, has now been embedded across 80 assets. This platform supports occupiers with delivery of their decarbonisation strategies by providing them with detailed energy-use profiles and access to integrated tools and resources, including sustainability insights, live chat support and regular thought leadership pieces. We have also strengthened our ESG data strategy, focusing particularly on improving the accuracy and robustness of occupier data. This is supported by the rollout of Automatic Meter Readers, which have now been installed in more than 140 assets, an increase of approximately 75% from the previous year.

Given the significant interactions between assets and nature across the real estate value chain, we view managing biodiversity as an important element of responsible property management. For new developments, we are aligning with upcoming Biodiversity Net Gain (BNG) planning requirements. To support this, we have developed a guidance document to support design teams with the implementation of new regulations. We have also undertaken a pilot project to review how BNG can be assessed across our assets, with the intention to roll this out across the wider platform next year.

The physical impacts of climate change also present an increased risk for LGIM's real estate portfolios and increasing portfolio resilience is essential for maintaining the safe and effective operation of our assets. We work closely with physical climate risk specialists, XDI and Marsh, to embed climate risk into our investment processes. All assets have been modelled for their physical risk exposure across eight climate perils, which indicated that flood risk poses the most significant risk to our portfolios. More information on our approach is provided in the risk management chapter. We will also publish further detail on our climate risk approach later this year in alignment with the BBP Climate Change Commitment.

> "As long-term investors in the built environment, we believe we have a pivotal role to play in decarbonising portfolios on behalf of our clients and in the real economy's transition to net zero."
>
> **Bill Hughes**
> Global Head of Real Assets

1. www.lgim.com/landg-assets/lgim/real-assets/_old/responsible-investing/real-estate-net-zero-carbon-roadmap-report-retail_final.pdf
2. www.ukgbc.org/resources/net-zero-carbon-buildings-a-framework-definition/
3. www.lgimblog.com/landg-assets/lgim/_document-library/capabilities/ra-equity-net-zero-carbon-roadmap.pdf

Operate
Our strategy continued

Our housing businesses

Our housing businesses, in LGC, provide homes for all demographics, ages and tenures, helping to tackle the UK's housing crisis and support our mission of delivering positive place-based social impact.

Well-designed homes and communities can be low-carbon and sustainable, while helping to protect and restore nature. However, there are challenges to overcome for this to become business-as-usual, which our housing businesses and the wider construction industry are grappling with.

We remain firmly committed to all new homes we deliver being capable of net zero carbon in operation from 2030 and continued to make progress towards this during 2023:

- Inspired Villages Group opened the UK's first net zero (regulated) carbon retirement community, at Millfield Green, incorporating ground source heat pumps from our portfolio company Kensa
- our Suburban Build to Rent business beat its 50% target to record 80% of homes invested in being gas-free
- CALA built a high-specification 'Eco House' near Peterborough, which will be closely monitored in occupation, to learn lessons that can be implemented across the business at scale.

One of the key metrics against which we benchmark our progress is Energy Use Intensity (EUI). Having begun piloting this metric in 2022, we refined our approach in 2023. Our headline performance, which can be seen on page 54, is encouraging, but highlights that more progress is needed to reach best practice by 2030.

As buildings become more energy efficient and use lower-carbon sources of energy, the embodied carbon associated with their materials and construction becomes proportionately higher.

Previously a somewhat hidden impact, this is rising to prominence in the construction sector. We are committed to monitoring and reducing embodied carbon and 2023 is the second year in which we are reporting our performance, (see page 54), having continued to trial and refine our measurement process. Our largest housebuilder CALA has set a target of achieving the 2030 industry target for embodied carbon by 2025 and has been rolling out timber frame construction to enable this. This year CALA acquired Taylor Lane, one of the UK's leading timber frame construction specialists, to support this goal. Comparison against peers on EUI and embodied carbon can be difficult, given the lack of public reporting on these metrics by many housebuilders.

Both operational and embodied carbon are topics that continue to evolve. We are engaging with new regulation and industry initiatives that will both support and in some cases challenge us in the coming years.

There are also nature-related risks and opportunities associated with housebuilding in addition to Biodiversity Net Gain requirements (covered on page 17). For example, through our supply chain, where all our businesses have a target to source 100% of their timber from sustainable sources and through the land-use change associated with our developments.

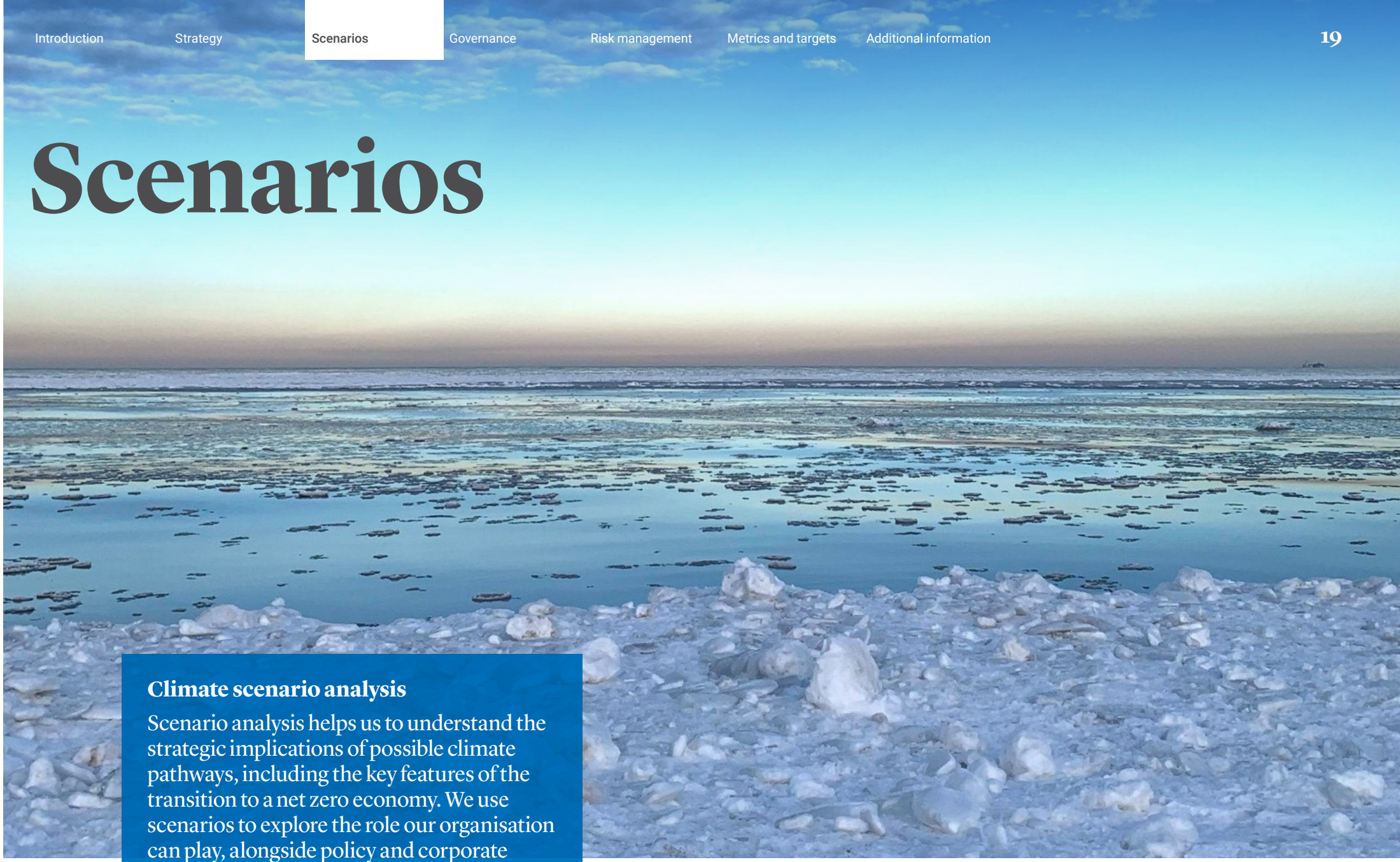
HVO fuel

Following a successful trial in one of its regions, HVO (hydrotreated vegetable oil) has now been rolled out across all CALA sites as an alternative to diesel in their construction vehicles and on-site generators.

HVO emits only a fraction of the emissions of diesel and leads to better mileage from vehicles (plus reduced maintenance). Sustainability data for 2023 suggests that emissions from site liquid fuel has now reduced by over 58% since 2021 across CALA sites as a direct result of this fuel switch.

We see HVO as a stepping stone to a more permanent alternative to on-site diesel. We will continue to utilise this carbon efficient fuel across our developments, ensuring that all purchased supplies hold appropriate sustainability certification to guarantee the source of the product. Meanwhile, we are also seeking new alternative construction technologies to help our transition away from diesel fuels.

Scenarios



Climate scenario analysis

Scenario analysis helps us to understand the strategic implications of possible climate pathways, including the key features of the transition to a net zero economy. We use scenarios to explore the role our organisation can play, alongside policy and corporate action, in mitigating climate risks and supporting opportunity.

Frozen Lake Michigan
Credit: Cherilyn Vorster
Senior Technology Delivery Manager, Chicago

Our modelling framework

Our modelling framework

We develop our own bottom-up scenarios of how energy and land systems may evolve to 2050. The 'Paris' objective set out its goal to limit global warming by 2100 to well-below 2°C, ideally 1.5°C above pre-industrial temperatures. In trying to model plausible pathways to these outcomes, we must try to capture change across energy and land systems and make difficult trade-offs between minimising the impacts from short-term policy changes and the long-term physical risks from climate change.

Our LGIM Destination@Risk toolkit 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 are putting them at risk.

The outputs of the LGIM Destination@Risk framework enable us to develop our broader strategy, including how we invest, influence and operate.

When engaging with our scenario outputs, it is important to remember that these are scenarios, not projections of the future. There is a large degree of uncertainty associated with the energy transition and the associated global temperature increase. Building our scenarios requires us to make a large number of assumptions, any of which could prove incorrect with the potential of materially invalidating all, or key parts, of our scenarios.

Below, we briefly outline the differences between our four climate scenarios on several key dimensions. For more detailed information on our scenarios, including sector case studies, please see last year's LGIM whitepaper[1].

Inaction

Approximate global warming by 2100
3-4°C

Global failure to act on climate change means emissions continue to grow at historical rates.

Below 2°C

Approximate global warming by 2100
<2°C

Immediate, ambitious policy and investment action to address climate change limits global warming to below 2°C, but warming most likely exceeds 1.5°C.

Net Zero 1.5°C

Approximate global warming by 2100
1.5°C

Immediate, highly ambitious action to address climate change leads to a reduction in emissions to net zero around 2050.

Delayed Below 2°C

Approximate global warming by 2100
<2°C

Policy and investment action to limit warming to well-below 2°C is delayed to 2030, resulting in much more disruptive change. Warming most likely exceeds 1.5°C.

LGIM Destination@Risk framework

Risk type	Transition	Physical
Objective is to understand:	How might energy and land systems transition to achieve global climate targets?	How would physical climate change affect macroeconomic output?
To do this we assess:	The least costly solution to limiting future emissions to the levels required to limit global warming to below 2°C, preferably 1.5°C.	The impact of temperature on labour productivity.
Based on:	Our bespoke energy system model, relying on: • >100 unique public and proprietary data sources • >2 million variables and assumptions including detailed energy technology costs • an open-source land use model[2].	Academic studies on the impact of climate change on labour productivity and economic output.
This produces outputs including:	• carbon prices • GHG emissions • afforestation • sector-level decarbonisation requirements • energy prices • bioenergy and food prices • change in GDP.	• change in GDP.
We first translate these to:	Country and sector-level impacts, which we can translate into changes in listed companies': • net income • balance sheet • cash flow • temperature alignment.	
Finally, we are able to evaluate:	Financial impacts on the value of individual: • sovereign bonds • corporate bonds • listed equities. We are also able to evaluate at the whole portfolio-level.	

1. www.lgim.com/uk/en/insights/esg-and-long-term-themes/net-zero-2050-more-affordable-than-ever-if-we-act-now/
2. MAgPIE – An Open Source land-use modeling framework (Version 4.4.0), www.github.com/magpiemodel/magpie

Climate pathways

Emissions and carbon prices

As shown in Chart 2, **global GHG emissions** in the Inaction scenario continue to grow, ending around 10% higher than 2020 by 2050, but must gradually fall to around 19 gigatonnes (Gt) and 6Gt in the Below 2°C and Net Zero 1.5°C scenarios, respectively. As decarbonisation in the Delayed Below 2°C scenario only begins in 2030, it must decarbonise faster and further than the Below 2°C scenario, to around 10Gt CO_2e by 2050.

To achieve these emissions reductions, global carbon prices (per tCO_2e, see Chart 3) in the Below 2°C and Net Zero 1.5°C scenarios would need to reach around USD 70 and USD 110 by 2030 and around USD 200 and USD 500 by 2050, respectively[1]. Delayed Below 2°C carbon prices do not rise until after 2030 and, as a result, must reach a much higher level by 2050 to achieve the emissions reductions required to stay on track for less than 2°C of warming by 2100.

The Delayed Below 2°C scenario remains the most economically disruptive of our climate scenarios. Due to the delay in policy action, emissions reductions need to be quicker and less cost efficient than in our immediate action scenarios. As a result, the Delayed Below 2°C pathway is over four times more costly to economic output than the Below 2°C scenario and almost twice as expensive as the Net Zero 1.5°C scenario.

Implications for the global energy mix

Fossil fuel demand continues to grow in our Inaction scenario, with both coal and natural gas each growing by around 30% over the period to 2050. Oil, on the other hand, stays roughly constant, as electric vehicles grow their market share in the transport sector even without carbon pricing. By contrast, total fossil fuel demand falls by around a third in the two Below 2°C scenarios and more than half in the Net Zero 1.5°C scenario by 2050. For both immediate action scenarios, fossil fuel demand would need to peak by 2025.

Deployment of **renewables** must accelerate considerably in our Below 2°C and Net Zero 1.5°C scenarios. Even in the Inaction scenario, where annual additions continue at similar levels to 2020, combined solar and wind capacity increases by nearly six times by 2050. By comparison, the Net Zero 1.5°C scenario would require average solar capacity additions of 450GW every year to 2050 – more than double the record 192GW added in 2022[2].

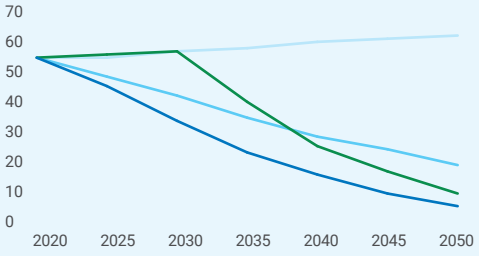
Hydrogen fulfils more than 10% of final energy demand by 2050 in the Net Zero 1.5°C and the Delayed Below 2°C scenarios and 6% in the Below 2°C scenario. It is produced from a mix of bioenergy with carbon capture and storage (BECCS), natural gas with CCS and electricity, and is primarily used to decarbonise heavy road transport and shipping.

CCS is deployed in our decarbonisation scenarios from 2030. By 2050, total carbon captured and stored per year reaches around 5Gt CO_2 in the Below 2°C scenario, 7.5Gt in the Net Zero 1.5°C scenario and nearly 9Gt in the Delayed Below 2°C scenario, around 1Gt of which is from direct air capture.

Chart 4 shows the implications of these trends for the global primary energy mix:

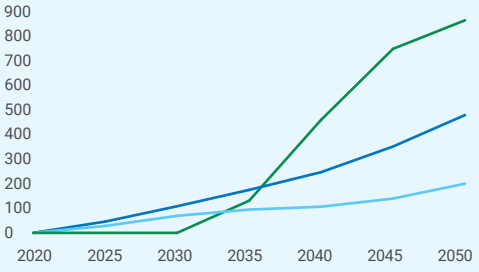
- the energy mix in the **Inaction** scenario remains relatively stable
- in the **Below 2°C** scenario, the energy system gradually moves away from coal and oil, while growing bioenergy, nuclear and renewables demand to represent more than 40% of total primary energy in 2050
- our **Net Zero 1.5°C** scenario sees the energy system immediately and rapidly tilt towards bioenergy, nuclear and renewables, which provide 60% of total primary energy by 2050
- the **Delayed Below 2°C** scenario follows the Inaction scenario until 2030. Demand for coal and oil then falls rapidly to 2050, by over two thirds and half, respectively, while demand for renewables and bioenergy grows sharply.

Chart 2[3].



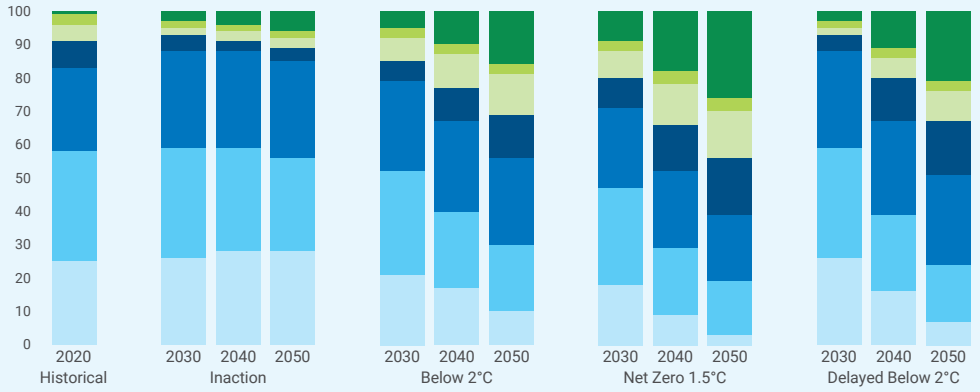
Source: LGIM Destination@Risk

Chart 3[3].



Source: LGIM Destination@Risk

Chart 4[3].



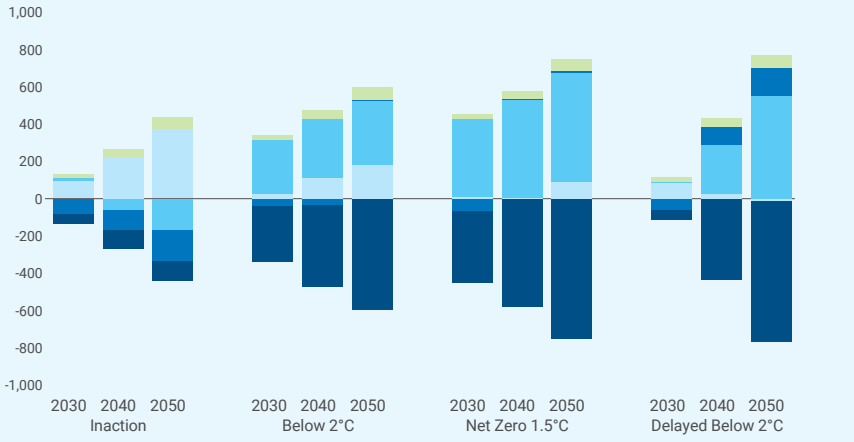
Source: LGIM Destination@Risk

1. The model sets a carbon price in each period to limit emissions to within the global carbon budget, assuming the technology options available at that time. This means the carbon price is best thought of as the cost of the last, most expensive tonne of carbon globally abated in each period. Carbon prices are quoted in constant 2020 USD.
2. www.irena.org/Publications/2023/Mar/Renewable-capacity-statistics-2023
3. 2020 data is estimated not actual.

Climate pathways
continued

Chart 5[1].

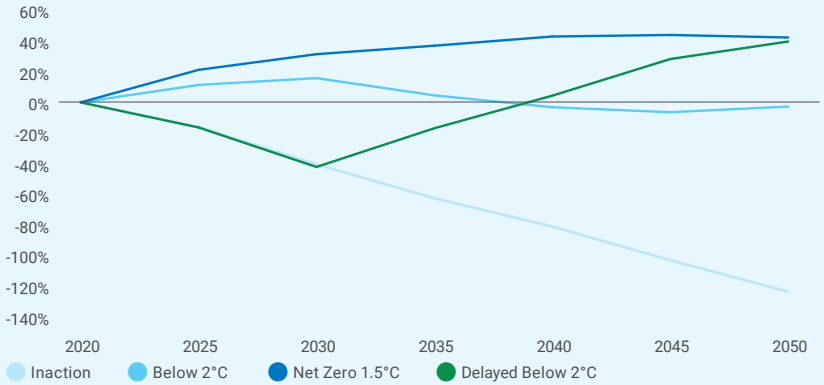
Land cover change relative to 2020 (million ha)



Source: LGIM Destination@Risk

Chart 6[1].

Reversal of changes in the Biodiversity Intactness Index from the period 2000-2020



Source: LGIM Destination@Risk

Land cover change

Chart 5 shows the global land cover change relative to 2020. Negative numbers indicate that the global area dedicated to the land use has declined since 2020, positive numbers indicate net growth in the type of land use.

- Carbon pricing creates incentives for significant **afforestation,** resulting in net forest cover growth in all decarbonisation scenarios by 2040 – compared to continued reduction in global forest cover in the Inaction scenario. Much of the net forest growth takes place on pastures and rangelands.
- Cropland growth is driven by growth in food and bioenergy demand. We assume dietary composition is unchanged across scenarios, meaning that food demand is the same across the four scenarios, even though carbon pricing makes the most emissions-intensive food products, such as beef, more expensive.
- Cropland growth is smaller in the decarbonisation scenarios relative to Inaction, as carbon pricing incentivises investments in yield-increasing technologies, due to increased competition between cropland and forestry over limited land resource. This results in higher **agricultural productivity** in our decarbonisation scenarios compared to the Inaction scenario.
- Competition for land between afforestation, crops and pasture also increases **food prices** in our decarbonisation scenarios. Overall real food expenditure would rise by 1.5% per year on average globally to 2050 in the Net Zero 1.5°C scenario relative to the Inaction scenario. In the more disruptive Delayed Below 2°C scenario, food expenditure would rise around 5.6% on average per year globally in the decade after policy action starts in 2030, relative to Inaction and stabilise thereafter.

Biodiversity

Since expanding our modelling to include the land use system, we have begun examining the impact of our climate scenarios on some nature-related variables, including biodiversity. The biodiversity intactness index (BII) provides a summary measure of the impact of human activity on the presence and abundance of species on earth. It estimates the original percentage of birds, mammals, plants, fungi, and insects that remain and their abundance in any given area, despite human impacts[2].

The global BII is currently around 80%. A BII of 90% or more indicates sufficient biodiversity for an ecosystem to be resilient and functioning. Below this, function and reliability of the ecosystem may be negatively impacted. If the BII falls below 30%, the ecosystem faces risk of collapse. The global average hides a significant degree of regional variation, with some areas at much higher risk than others. The UK for example only retains around half of its natural biodiversity, placing it in the bottom 10% of countries globally[3].

We find that global biodiversity would continue to decline in our Inaction scenario, due to cropland expansion and deforestation, at a similar rate as the last 20 years. By contrast, our decarbonisation scenarios at minimum prevent further biodiversity loss from 2020. In our Net Zero and Delayed scenarios, around 40% of the loss incurred from 2000-2020 is reversed through positive policy action. We aimed to balance climate objectives of land use change with biodiversity considerations in our scenarios, but policies could go further in reversing historic biodiversity loss.

1. 2020 data is estimated not actual.
2. Further information on the BII: www.nhm.ac.uk/our-science/data/biodiversity-indicators/about-the-biodiversity-intactness-index.html
3. www.nhm.ac.uk/discover/news/2020/september/uk-has-led-the-world-in-destroying-the-natural-environment.html

Group portfolio scenario impacts

The LGIM Destination@Risk toolkit allows us to evaluate climate risk and alignment at a company, sector and portfolio-level, by:

1. converting scenarios into company and sector-level impacts, providing financial impacts on various metrics including net income, balance sheet and cash flows – this covers both transition and physical impacts of the scenario
2. using asset valuation models to convert these company financial impacts into corporate security impacts (i.e. equity and bond valuations and bond ratings)
3. using our sovereign bond valuation model to convert corresponding country-level scenarios into sovereign bond valuations.

Scenario results are produced for the three pathways which are based on transition risks (Below 2°C, Net Zero 1.5°C and Delayed Below 2°C). We do not apply the Inaction scenario to our portfolio. We expect most of the associated impact to be driven by physical risks which tend to be highly localised and manifest further into the future and hence are more uncertain.

Bond downgrade analysis

Given the importance of bonds within our portfolio, we first consider the impacts of climate risks on the credit quality and sector breakdown of our portfolio.

We are primarily a long-dated 'buy-and-hold' bond investor, managing our portfolio to match our short- and long-term payments to retirement customers. Our balance sheet and cashflow matching is therefore more impacted by bond downgrades and defaults than movements in bond value.

The credit rating exposure of our bond portfolio is shown in Chart 7, showing that 99% of the portfolio is investment grade (rated BBB and above). Of this, BBB-rated bonds, which carry the greatest credit transition risk, comprise 32% of the portfolio and of those, the ones from the high-carbon sectors (defined as energy, utilities, materials and industrials) only comprise 9% of the bond portfolio. We would expect our holdings in high-carbon BBB-rated bonds to reduce over time as we decrease the carbon intensity of the portfolio and lower the chance of experiencing transition-driven downgrades.

While our holdings are in bespoke bond portfolios, giving us more freedom in sector selection, we have exposure to most sectors in the investment universe to maintain a well-diversified portfolio, with the modelled breakdown given in Chart 8.

For this analysis, we have directly modelled c.£29 billion (36%) of the Group's £81.3 billion of proprietary bond assets, on a line-by-line basis as of 31 December 2023.

The cumulative amount downgraded to sub-investment grade, which would have negative implications for our balance sheet, is shown in Chart 9. Note, this year, we have enhanced the model to implement basic portfolio rebalancing actions for holdings that are sub-investment grade at or after maturity, to reduce the instances where holdings are reinvested into sub-investment grade positions[1]. Migration rates are lower than when modelled with no rebalancing assumptions. Left unmanaged, cumulative downgrades to sub-investment grade by 2050 are 5%, 12% and 19%, respectively, across the three scenarios, higher than the 3%, 7% and 7%.

Chart 7.

Portfolio ratings by valuation (%)

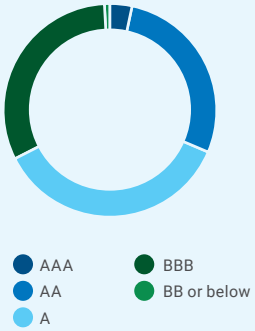


Chart 8.

Industry sector by valuation (%)

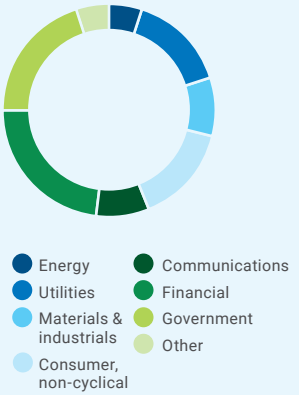
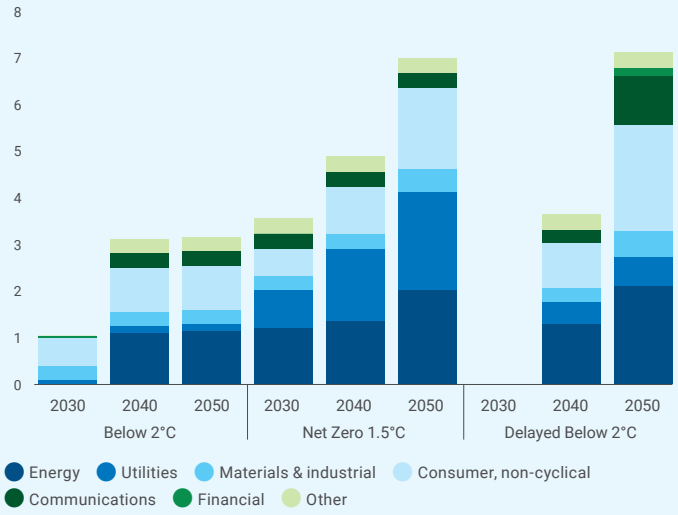


Chart 9.

Cumulative downgrades to sub-investment grade (%)



Active trading
We have modelled the impacts on our portfolio assuming no active trading beyond expected rebalancing, at or after, maturity. In reality, we would take pre-emptive management actions to avoid downgrades through our ongoing active credit risk management.

TCFD recommendation
Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

1. Our risk model is based on our year-end holdings, projecting asset impact through the period to 2050. As a 'buy-and-hold' investor, while we may hold each bond until maturity, it is highly unlikely we would reinvest in an equivalent bond where the rating falls below investment grade once the bond has matured. We have assumed no management actions are taken prior to a bond's maturity date, in relation to the current portfolio, but that we will rebalance after maturity for credit risk management purposes.

Group portfolio scenario impacts
continued

Chart 9 also shows the high-level sector breakdown of the modelled downgrades, with a large proportion arising from high-carbon sectors, as expected. The Delayed Below 2°C scenario also creates notable GDP impacts, with greater impacts across all sectors. These results show the broad sector impacts, but each sector can encompass a large range with winners and losers over different time periods. This includes, for example, some utility companies that do not survive in the Below 2°C scenario while others experience near zero risk.

We note that any impacts to 2050 are beyond the duration of most of our current portfolio. Future investments will be influenced by climate change trends and we would therefore expect to change our allocation away from the names most materially impacted under each scenario.

Data caveat
Outputs of our LGIM Destination@Risk model, which translates our scenarios into asset value risks, must be considered in the context of key modelling choices. The focus of the model is on risks to asset valuations and credit ratings given current exposure. This means the model holds both our portfolio's composition (apart from expected rebalancing at or after maturity) and company behaviour constant for the entire period to 2050, without incorporating projections of future growth or decarbonisation targets. It also means we do not assess opportunities associated with a low-carbon transition.

When it comes to emissions data, which is used for both implied temperature alignment and risk calculations, we rely on third-party data. There are still large segments of the listed company universe where we are forced to rely on estimated rather than actual emissions data, or where there is no data at all. Our modelling approach currently does not cover private companies for the same reason – there is not enough data available. We will continue to encourage companies to measure and report their emissions through our engagement activities.

Equity portfolio analysis

In addition to the bond portfolio analysis, we also model the c.£0.6 billion of our £1.3 billion proprietary traded equity portfolio on a line-by-line basis.

As for bonds, the modelling coverage is limited by the availability of data (noting our data caveat) and the unmodelled portfolio is assumed to follow the modelled portfolio in the absence of other information.

Our analysis shows 2050 impacts (assuming a static, unmanaged portfolio) of -10.7%, -18.0% and -28.6%, in the Below 2°C, Net Zero 1.5°C and Delayed Below 2°C pathways respectively, as shown in Chart 10.

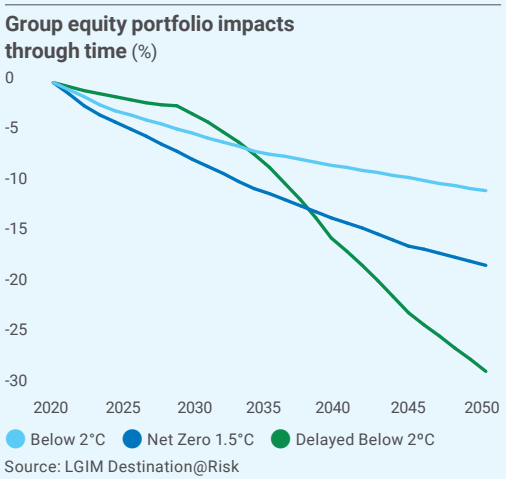
For this analysis we assume that the equity mix does not change through time. The impact by risk type demonstrates that most of the risk impact is through transition risk, over the modelled period, as expected, across the three scenarios, with physical risks muted over this modelled time period.

Our modelling of equity values is driven by company performance in each pathway and not by investor risk expectations. Our analysis shows that climate risk is not fully reflected in asset pricing and we expect some impact on prices as the risk is realised over time. A reduction in value can be expected on the most at-risk stocks and sectors (indicated by high-carbon intensity or a high-risk location). However, we would expect to avoid such impacts through our ongoing active portfolio management.

Combined portfolio valuation impacts

To complete the analysis, we combine the valuation impacts across our bond and equity portfolios, while also breaking down the impacts between physical and transitional risk drivers, with the resultant impacts shown in Tables 2 and 3. As expected, the transitional risk impacts dominate the total impact, while the total valuation impact is heavily weighted by the larger bond portfolio.

Chart 10.



Source: LGIM Destination@Risk

Table 2.
Group portfolio undiscounted 2050 portfolio value impacts – by risk

	Below 2°C	Net Zero 1.5°C	Delayed Below 2°C
Physical risk	(0.4%)	(0.4%)	(0.4%)
Transition risk	(1.1%)	(2.6%)	(4.0%)
Total	**(1.6%)**	**(3.0%)**	**(4.4%)**

Table 3.
Group portfolio undiscounted 2050 portfolio value impacts – by asset class

	Below 2°C	Net Zero 1.5°C	Delayed Below 2°C
Bonds	(1.4%)	(2.7%)	(3.9%)
Equities	(10.7%)	(18.1%)	(28.6%)
Total	**(1.6%)**	**(3.0%)**	**(4.4%)**

Group portfolio scenario impacts
continued

Deforestation
Chart 11 shows that c.15% of our holdings are with names who have been identified on the following data sources related to tracking potential deforestation risk exposures:

- SPOTT: 10 issuers
- Forest 500: over 100 issuers
- CDP Forest: over 100 issuers
- Sustainalytics: 68 issuers.

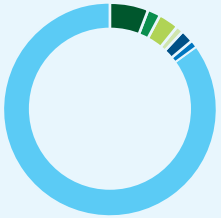
We internally score the issuers identified above, based on differing levels of deforestation management and expect our exposure to actual deforestation risks to be less than 15%. We also monitor external developments in data capabilities in this space, helping us to continue to improve our understanding of the underlying risks. It is an area of focus for us, and our existing mitigations are covered as below:

- internal risk assessment (explained above)
- LGIM Deforestation Policy and engagement (see pages 34 and 14 respectively)
- exclusions (see page 34)
- membership of the NZAOA Deforestation working group.

Nature-related dependencies and impacts
Looking wider than deforestation, Chart 12 bottom right shows that 35-50% of our holdings are currently exposed to a set of sectors considered to have material nature-related dependencies and impacts, as described in the TNFD financial sector guidance[1]. A range is provided, noting the data gaps and resultant uncertainties in mapping our exposures to the defined sectors.

Chart 11.

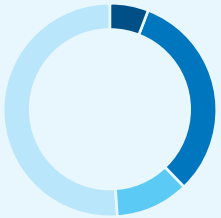
Exposure to issuers identified in datasets with potential deforestation risks



- Consumer, Non-cyclical
- Consumer, Cyclical
- Banks, Finance & Insurance (Debt)
- Communications & Technology
- Energy, Utilities & Commodities
- Other
- No exposure

Chart 12.

Portfolio exposure to sectors with material nature-related dependencies and impacts



- TNFD Sectors – Directly Mapped
- TNFD Sectors – Indirectly Mapped - Lower boun
- TNFD Sectors – Indirectly Mapped - Upper boun
- Non-TNFD sectors

Scenario risk analysis: strategic resilience
We have identified four broad mitigations to our transition risk exposure.

- Our exposure is largely through financial assets, many of which are listed, so we have significant flexibility to adapt by trading to the desired carbon position. This is the expected outcome should active engagement fail. This gives us more flexibility than businesses which have to fundamentally change their business models.
- We hold mainly investment grade bonds, which are matched against liabilities such that we are not materially exposed to price risk compared to investors who regularly trade their bond portfolios or those holding greater exposures to equities.
- We will continue to carefully manage our balance sheet and actively manage our credit portfolio. We continually analyse our credit exposures and where appropriate, seek out opportunities to improve credit quality at attractive pricing levels. We have incorporated climate considerations within our credit and market risk management and expect these to develop over time. We manage our transition risk from climate change through setting our portfolio decarbonisation targets. These pre-emptive management actions are expected to reduce the credit risk of the portfolio and are expected to reduce the impact of the credit stresses presented in these scenarios. Our decarbonisation strategy also covers our equity portfolio.
- The balance sheet is well-diversified across different sectors of the economy. Our initial assessment of our implied portfolio temperature alignment indicates that we do not have an over-weight allocation to the highest carbon intensity names within the market sectors.

We took part in the Bank of England's Biennial Exploratory Scenario on climate change exercise through 2021 and 2022, testing the resilience of the current business models of the largest banks, insurers and the financial system to climate-related risks, the results have been published here: www.bankofengland.co.uk/stress-testing/2022/results-of-the-2021-climate-biennial-exploratory-scenario

As a contributor to the Financial Resilience working group of the Climate Financial Risk Forum CFRF, we continue to evolve our climate risk assessments in line with the associated industry guidance.

1. www.tnfd.global/publication/additional-disclosure-guidance-for-financial-institutions/

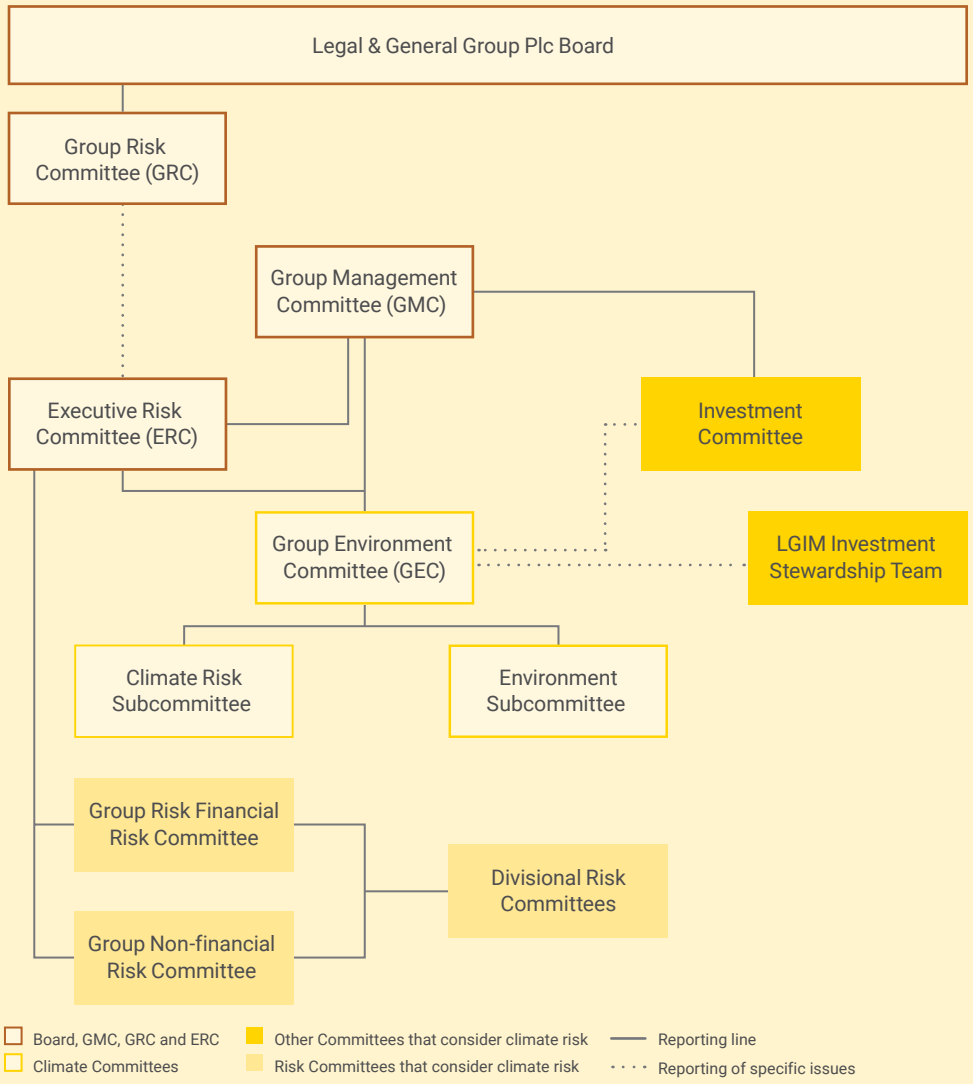
Governance

Bee on a sunflower
Credit: Will Jones
Fund Oversight Supervisor, Cardiff

Responsibility and accountability

Environmental management is central to our commercial success. Our business model works because we invest today's capital in a way which will drive benefit for decades to come. Accountability for building a sustainable business is shared across the business and supported by governance that is led by our Board.

Board oversight



Board oversight

The Group Board ('the Board') is ultimately accountable for the long-term stewardship of the group. Responding to climate change and addressing nature-loss and the opportunities and risks associated with these issues are of significant importance to the Board.

Nilufer von Bismarck, a non-executive director on the Board, has a responsibility to give specific focus to climate change and nature-loss in her role. This does not take away from the collective responsibility of the Board for oversight of environmental matters; rather it ensures climate and nature-related risks and opportunities across the Group are raised on all relevant topics discussed by the Board.

Throughout the year, responding to climate risks continued to feature as a risk on the strategic risk register and remained at the top of the Board's agenda. The Group Chief Financial Officer, Divisional CEOs and Group Chief Risk Officer discussed climate risks as part of their regular reporting to the Board, particularly in relation to the Group's risk appetite. The Board also noted the increased regulatory focus on the subject.

Approval of the Group's Climate transition plan was one of the most significant decisions the Board took during 2023 and it now receives regular updates on how the Group is progressing against the climate and nature commitments this document sets out. The Board also participated in an 'executive awareness' session on biodiversity, providing important context for how these issues might be integrated into the Group strategy.

The GRC oversees the risks associated with climate change to ensure exposures are controlled in line with the Group's risk appetite and ensures that management actions are also aligned. Alongside regular updates on the risks associated with climate change, the committee receives regular climate-specific management information.

During 2023, Carl Moxley replaced Simon Gadd as our Group Climate Director, with responsibility for coordinating the Group's response to climate change and incorporating nature and biodiversity opportunities and risks. The role has the senior manager responsibility of ensuring that an appropriate strategy is in place to understand, identify, measure, monitor, control and report the opportunities and risks from climate change in line with the risk strategy and risk appetite parameters set by the Board. The Group Climate Director also supports management in the development of appropriate processes to monitor and report exposures to the risks arising from climate change and in benefiting from strategic opportunities arising from climate change.

The Board, through the GRC, ERC and GMC, has delegated oversight of the management of environmental risks to the GEC.

TCFD recommendations
Describe the Board's oversight of climate-related risks and opportunities.

Describe management's role in assessing and managing climate-related risks and opportunities.

Group environment governance

Group Environment Committee (GEC)

The GEC met six times in 2023 in accordance with its annual plan. The GEC is chaired by the Group Climate Director with membership including: the Group CFO, Group HR Director, Group CRO, Group Corporate Affairs Director, LGRI CEO, LGC CEO, LGIM CIO and with the Head of LGIM's Investment Stewardship team in attendance. The level of seniority in its membership and attendees helps ensure that there is a single forum to provide oversight on our response to environmental issues, ensures consistency, encourages debate and demonstrates the importance we place on our response to these issues. Below we refer specifically to climate risk; this will evolve to incorporate nature and biodiversity as progress is made to embed these into our frameworks.

The Group Climate Director has responsibility for oversight of climate risk identification and management for the Group. The role of the Group HR Director and the Group Corporate Affairs Director is to ensure that the management of climate risk is consistent with the broader group of corporate policies.

The Divisional CEOs ensure climate risk is embedded within their respective divisions. They are the ultimate owners of the risk, responsible for identifying, managing and monitoring climate-related risks and opportunities within the risk appetites agreed at the GEC.

To ensure a consistent group-wide approach and to support how we are implementing our ambitious strategy, the GEC has clearly defined relationships with other Group oversight committees. These interactions are designed to ensure that management of the risks and opportunities arising from climate change is integrated across the Group's governance system and embedded into the existing risk management framework.

The role of the GEC

The GEC is responsible for providing strategic direction of the Group's environmental response, including to climate change, with reference to the Group's broader strategy. This includes:

- setting the Group strategy for managing environmental impact; including setting targets, monitoring them and reporting on performance
- providing central oversight of the Group's management of environmental impact to ensure that sustainability informs strategic planning and decision-making across all Group activities (including investments)
- overseeing that management practices are in line with the Group's risk appetite, our environment/ climate strategy and risk policy
- promoting internal awareness and understanding of environment-related risks and opportunities
- considering the transition and physical risks and opportunities associated with environment/ climate change and their potential impact on the Group's assets and liabilities, in both the short, medium and long term.

These are demonstrated in the table opposite, which sets out the key activities of the GEC during 2023. The GEC is supported by Subcommittees to review and challenge performance against tolerances and targets, one for climate risk and one for other environmental opportunities and risks. It is further supported by working groups that focus on specific regulatory requirements.

Additional entity-specific governance is in place to provide oversight for clients' investments.

LGIM, as the investment management division, is the most material division from a governance and risk management perspective. In LGIM, ESG oversight is integrated within the existing governance and oversight structure. Specific ESG oversight requirements include delivery of portfolio ESG objectives, maintenance and application of the net zero framework and the coordination of ESG programmes alongside advising the LGIM Executive Committee on responsible investing matters. We have disclosed some specific further detail on legal entity governance on page 64.

GEC key decisions and discussions during 2023

Metrics and targets	• Approved the approach to setting the Group's scope 3 category 1 (purchased goods and services) SBT. • Reviewed progress of commitments made against SBTs. • Received detailed analysis of the carbon footprint of our business travel, to support identification of ways to reduce the carbon associated with how we travel for business purposes. • Oversight of the progress of NZAOA target-setting.
Assessing our exposure	• Reviewed our risk exposure to incorporate an assessment of nature-related risks, impacts and dependencies, in line with emerging market frameworks. • Reviewed climate collaboration/ membership commitments. • Consideration of a near-term scenario analysis that we modelled.
Risk appetite	• Approved enhancements to our climate-related risk appetite and the supporting metrics and tolerances for our activity to deliver on our climate commitments. • Reviewed and approved updates to the controls in place to manage our exposure to climate and nature-based risks.
Setting our strategy	• Set climate expectations within the strategic planning process. • Completed a series of deep dives into how our divisions are delivering on their transition plans. • Approved and oversaw our first Climate transition plan.
Oversight	• Regularly monitored the Group's progress against our environmental commitments. • Monitored the Group's progress in responding to the emerging risks of climate change. • Oversaw the audit of our emissions reporting for scope 1, 2 and 3 carbon emissions.

Governance Q&A

"We continue to challenge ourselves to ensure we do the right thing, for ourselves, and for future generations."

Carl Moxley
Group Climate Director

"The loss of nature, as well as climate change, impacts all of us every day... Legal & General is committed to playing its part."

Nilufer von Bismarck
Non-Executive Director, with a focus on climate

How is Legal & General's climate and nature strategy responding to global trends?

Carl: More action is needed across the world if we are to have any chance of meeting the agreed 1.5°C warming target. The window is closing and we all have a role to support the necessary change. Last year was the hottest year on record and we saw increasingly severe natural disasters, including record prevalence of flooding and wildfires in some areas.

But, there are positive global trends. We witnessed more than half of energy investment being made into clean energy, with the global deployment of solutions such as solar continuing to increase year-on-year.

Legal & General has an important role to play. We continue to invest across a broad range of transition, technology and nature-based solutions. Some recent examples through our LGC division include increasing our investment in the Kensa Group (the UK's leading ground source heat pump manufacturer and an LGC partner since 2020) by a combined £70 million, jointly with Octopus Energy, as well as others covering a huge breadth of transition technologies and enablers such as zero emissions cement, energy infrastructure and sustainable energy storage.

Nilufer: The Board is of the firm view that our climate strategy is set for the long term: lasting systemic changes are needed to deliver the transition. The Board continues to integrate the evolving opportunities and risks from the world's response to climate into our business strategy. We continue to believe there will be long-term benefits from investing our capital in seeking to address climate change. Our strategy focuses on enabling these changes, for example through deploying institutional capital into sustainable infrastructure.

What is important is for us to continue to prioritise those areas we can impact in terms of our contribution to the transition; we must continue to decarbonise in line with our public targets, continue to influence where we can, and continue to engage on climate and increasingly nature and biodiversity. No one should slow down because 1.5°C is becoming harder.

What were the key highlights in 2023 from a climate perspective and what are your plans for 2024?

Nilufer: In 2023, Legal & General continued to establish a leading voice through its stewardship team and made a number of exciting investments in the technological solutions and infrastructure required to decarbonise. Externally, COP 28 made some progress in achieving agreement to transition away from fossil fuels to achieve net zero by 2050 and to triple the world's renewable energy capacity and double its energy-efficiency by 2030. However, the actual detail of how this will be achieved now needs to be worked out, and all the time the clock continues to tick...

For 2024, Legal & General remains committed and well positioned to play an important role in decarbonising the economy. Addressing climate change is embedded in the culture and core values of the whole organisation.

Carl: The year saw us continue to make positive progress towards all of our targets, including decarbonisation of our asset portfolio and emissions associated with our business, as well as obtain significant shareholder support in favour of our inaugural transition plan. We continue to challenge ourselves to ensure we do the right thing, for ourselves, and for future generations. The next step on our journey has been to set a supplier target to ensure that 80% of our suppliers, by spend, will set a science-based carbon reduction target by the end of 2026 as well as further evolve our risk analysis and depth of understanding.

Over the course of this next year, I am keen we continue to accelerate the positive impact Legal & General can make. As a global investor, we have a vital role to play in supporting the transition and in helping to protect nature.

This is the first year you have incorporated nature into the report. Why is this?

Nilufer: The loss of nature, as well as climate change, impacts all of us every day; our customers, our shareholders, our employees, our suppliers, our regulators. Legal & General is committed to playing its part in supporting a shift in global financial flows toward nature-positive outcomes. Initially our focus, via LGIM, has been on engagement to encourage comparable disclosures that enable decision-making, as well as understanding how firms are managing their risks so we can support capital flows into the solutions, while managing our risks.

Carl: There is increasing understanding that climate change can't be addressed without addressing the wider state of nature; a transition to net zero depends on the natural world and the prosperity of nature depends on a successful transition. Neither can be addressed in isolation. Through our house building businesses and significant portfolio of commercial buildings, consideration of nature and biodiversity outcomes is important for us, along with the investment choices we make. We've already made some good progress by incorporating nature and biodiversity into our wider climate strategy and risk frameworks; and engaging with companies on these topics. We are supportive, and will adopt more widely, the TNFD over the coming years.

Risk management

Our climate change risk management

A successful transition to a low-carbon economy will be underpinned by careful risk management, with the transition involving significant levels of uncertainty. Risk management enables us to enhance our resilience and competitiveness in the face of a changing world, where uncertainties beyond 2030 increase significantly.

Maasai Mara, Kenya
Credit: Matthew Tigg
Senior Marketing Operations Manager, London

Risk management framework

We manage our business to align with the mitigation of climate change beyond the 1.5°C 'Paris' objective and to be resilient to the risks of different climate outcomes. Our key risk monitoring metrics are:

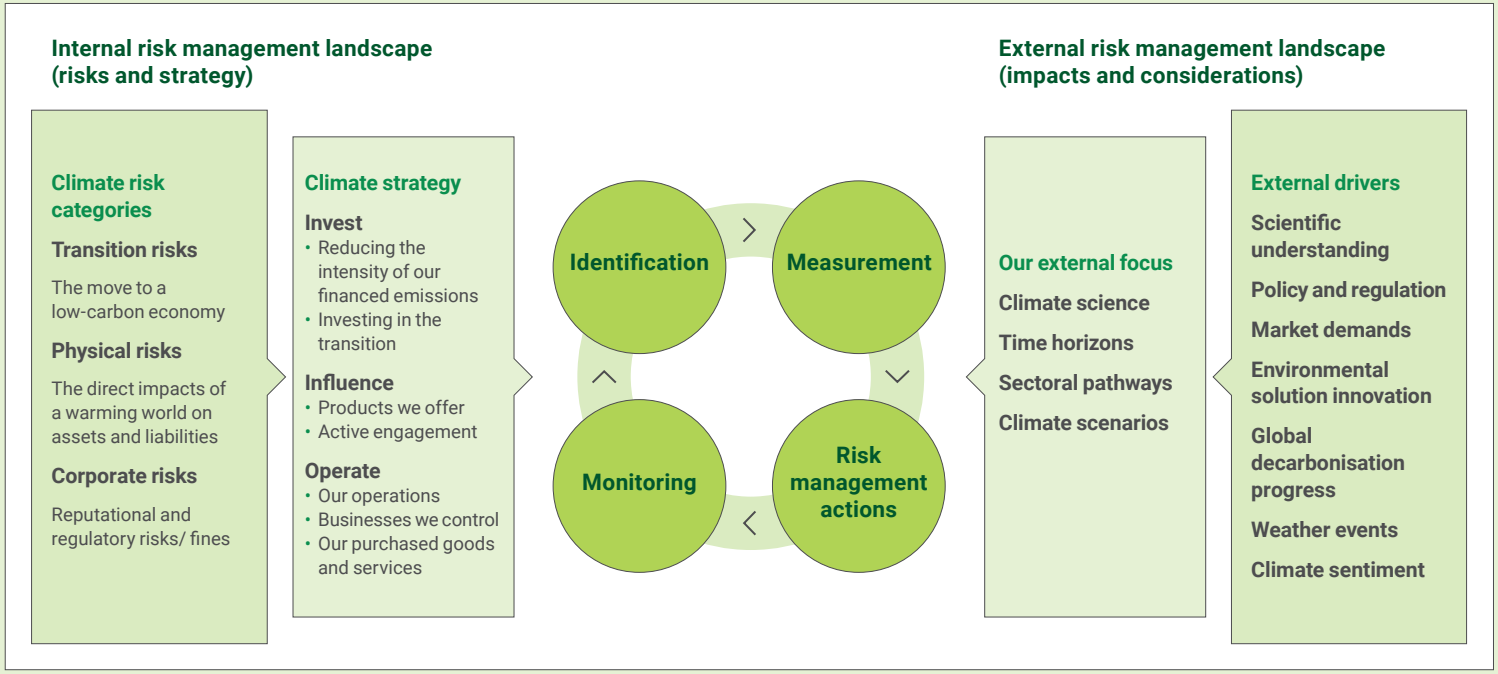
- investment portfolio economic carbon intensity
- operational footprint decarbonisation.

The risks from climate change represent another dimension of our existing risk exposures and are embedded in the way we manage these risks. Our governance structure is used to support the Group's understanding and management of these risks.

The uncertain nature of the risks from climate change and the lack of historical data to support decision-making, makes quantifying the risks more difficult than some other areas of our risk profile.

However, it is widely recognised that actions taken today will influence the likelihood of different climate outcomes and impact on future risk exposures. This, alongside climate scenario analysis, informs our risk management framework. Our scenarios chapter provides more detail about this analysis.

These scenarios incorporate a longer-term time horizon into their analysis. Informed by this analysis, we have carried out a detailed assessment of how we could expect these risks to emerge across our business model.



Our risk landscape

The risks arising from climate change that we are exposed to fall into three broad categories:

Transition risks
Impacts on asset valuation and the economy from the process of transitioning towards a low-carbon economy.

Physical risks
Impacts on asset holdings or changes to insurance liabilities as a result of more frequent and severe weather events and longer-term shifts in climate.

Corporate risks
Impacts on the Group from exposure to regulatory censure, climate-related litigation risks, or adverse customer perception of the Group. This may be through loss of franchise value, directly through fines or costs due to adverse investor sentiment resulting from poor alignment with ESG rating expectations.

Climate change risks and wider environmental risks will emerge through our current risk exposures and the relevant Group policies set out our approaches to identifying, assessing, measuring, managing and monitoring these risks.

TCFD recommendation
Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organisation's overall risk management.

Our approach to risk identification

We have integrated climate risk management into our existing risk and governance framework and have carried out a detailed assessment of how we could expect climate risk to emerge across our business model. Nature-related risks will also have an impact and we are building on our integration of climate risk to incorporate these. We regularly review our approach to climate risk identification to ensure our risk management remains appropriate and proportionate to the underlying risks. The risks from climate change and nature-loss are far-reaching, uncertain and broad-ranging. As much of our balance sheet is based on assumptions and expectations of future experience, risks can materialise through both actual change in experienced profits or losses, as well as changes in those future expectations.

Type of risk	Possible effects arising from climate change and nature-loss
From the products we write	
Longevity (for annuities)	More extreme climate events may lead to changes in life expectancy and thus impact our assumptions. These changes will emerge gradually as the effects are experienced or through increased certainty around future climate pathways and the associated health impacts.
Mortality/ morbidity (for life/ health insurance)	Similar to longevity, the impacts will emerge gradually, so our future assumptions will be impacted before there are material changes in the number of claims.
Reinsurance counterparty	While we would not expect climate change to pose significant risk to our short-term counterparty exposures it may impact long-term reinsurance counterparties, who are likely to have a similar exposure to the prudential risks as outlined under longevity and mortality/ morbidity above as well as being further exposed to the physical risks due to their property and casualty businesses. This could change our assessment of the counterparty risk.
From the investments we hold	
Market	May cause changes to asset values, asset returns and other market risk exposures, such as: • equity and property risk through asset values being exposed to a (potentially sudden) repricing to reflect transition risks to a low or carbon-neutral economy, or due to more frequent and severe weather events and longer-term shifts in climate impacting on asset values, either through actual experience or changed anticipated future experience • possible enhanced asset returns, e.g. in increased equity valuation for a firm enabling the transition to a low-carbon economy • other macroeconomic factors such as interest rates, inflation and foreign exchange rates.
Credit	May cause movements in credit spreads and credit rating transitions: • credit spread movements due to similar processes as those driving changes in the equity valuation described above • credit rating transitions due to changes in either actual or anticipated default rates.
Client funds	May impact all client funds which are exposed to risks from climate change. Note, that it is our clients who ultimately choose specific mandates and bear the risks; but we can have a positive impact by helping them to take action on climate/ environment change, via disclosure of climate metrics and assessment of the implications of climate change on their assets, or offering products with reduced exposure. Client actions can reduce our potential for positive impact.
From the environment we operate in	
Our operations	We have direct exposure to climate change through our operational carbon footprint and the supply chain that supports it. This may be through physical impacts on our operations and offices, or through transitional risks impacting on our operational processes and costs. This could impact our ability to meet our operational decarbonisation targets.
People, processes, systems and external events	As we change how we invest and operate and the products and services we offer, we must ensure we have the right skills for the future and update our systems and processes to incorporate climate change considerations. Our commitments assume governments will implement required policy changes; the firms we invest in will deliver their targets; and there will be societal change on an unprecedented scale over the next decade. • Weakness or failure in our systems and processes or the loss of key personnel could result in financial loss, customer detriment or reputational damage. • Failure by governments and other firms to deliver on their targets will impact our ability to deliver on ours.
Evolving regulation and legislation	We operate in highly-regulated markets and the regulatory approach continues to evolve. New interpretations of compliance expectations could require changes to our products or business processes. This may expose us to financial penalties, remediation costs or reputational damage.
Evolving sentiment	Sentiment is often subjective and our approach might fail to resonate with all stakeholders. This may expose us to reputational/ greenwashing risk.

Focusing on transition risk
We focus on transition risk because successful delivery of 'Paris' implies a fundamental change to the global economy in the short term. We think this is the key near-term issue and source of risk for our business, specifically for our investment portfolio. Physical risks are still important, but as our insurance liabilities are not linked to losses due to damage of any underlying asset, these risks are mostly in relation to some of our assets and our operations.

TCFD recommendation
Describe the organisation's processes for identifying and assessing climate-related risks.

Risk management approach

Materiality assessment

Our risk management approach to the financial risks arising from climate change reflects our strategy, the materiality of the exposures and how we operate. When assessing materiality, we consider both how the Group is affected by climate change, as well as the Group's own impact on the climate.

The effect of future uncertainty over climate change pathways is that the evaluation of climate-related risks and impacts has a high degree of estimation uncertainty, with a wide range of reasonable outcomes greater than our materiality for the Group's financial statements as a whole and possibly many times that amount.

Our scenario modelling enables us to assess how the impacts from climate change may emerge under a range of climate scenarios and time horizons. Given our business model, we assess the most material financial risks from the potential impact of climate change on the value and credit rating of our assets.

As detailed in the scenarios chapter, we have invested in our capability to develop possible transition pathways to differing temperature warming outcomes. The scenarios presented show potential portfolio impacts under a given scenario. They are not forecasts or predictions, nor are we saying they are equally likely. However, these scenarios do inform our understanding of transition risk, identifying sectors where the transition is likely to be more disruptive and the potential timelines associated with the shifts.

As a signatory of the PRI, we also monitor the progress of the Inevitable Policy Response (IPR) scenario work, alongside other bespoke scenarios.

Measurement

Climate transition risks are primarily measured in relation to our carbon exposures. We are committed to reducing the carbon footprint of both our operations (scope 1 and 2) and of our investment portfolio GHG emissions intensity to align with the 'Paris' 1.5°C objective.

Investment portfolio carbon

We measure the contribution of our investments to CO_2e emissions, calculating portfolio economic carbon emission intensities at both Group and divisional level.

Through our climate scenario analysis, we measure the risks to assets and liabilities. This is measured through the impacts on equity and bond valuations and credit ratings, in each scenario.

Assessment of our investment portfolio is dependent on good quality comparable cross-industry data and disclosures of climate-related metrics and impacts. This enables us to steer our investments successfully, identify and manage risks, deliver on our climate ambition of decarbonising our portfolio and comply with our own disclosure objectives. We are supportive of the need for global consistency with regards to reporting, disclosure and labelling.

Operational footprint

We measure and monitor the direct carbon emissions of all of our operational businesses. We have set SBTs covering our scope 1 and 2 operational emissions. These targets have been verified by the SBTi and we monitor progress made towards these.

Management actions

We deploy a range of management actions to manage our exposure to climate-related risks associated with our investments and operations, to meet our risk management objectives, including:

1. established framework for climate commitments
2. exclusions and high-carbon escalation
3. physical risk controls
4. review our existing tolerance framework to incorporate climate considerations
5. active engagement.

1. Established framework for climate commitments

Achieving our Group commitments will be challenging, reflecting the complexity of addressing the systemic issue of climate change. Due to the transformational nature of a successful net zero transition, strong partnerships are needed to support a common vision and long-term objectives. Our climate collaborations can be found in the strategy chapter on page 14.

Our framework accounts for all GHGs and covers scope 1, 2 and material scope 3 emissions (see page 38). Our progress and long-term goals are supported by annual and interim targets to enable regular monitoring of progress towards our commitments. These commitments are supported by our transition plan, against which progress is reviewed and publicly reported on at least annually and overseen by the GEC. Our commitments are consistent with the latest science and are credible and achievable. Our commitments are made in the expectation that governments will deliver on their own commitments and required policy actions to ensure they remain aligned to 'Paris'.

2. Exclusions and high-carbon escalation

Our risk management approach recognises the importance of engagement with investee companies. Our Investment Management Agreements (IMAs) with LGIM, have climate-specific clauses that enable us to manage our targets, including exclusions that focus on key areas of transition risk (such as coal and oil sands activity and unconventional drilling and CIP exclusions). In 2023, the IMAs were amended to enable collaborative management against climate targets. We also take account of the broader energy system within our portfolio management approach – through our high-carbon escalation process.

High-carbon escalation

Our escalation process for all proposed individual stock investments where the carbon intensity is greater than a defined threshold across relevant sectors continues to work well. This acts as an early warning system and a degree of control over the accumulation of risk through time.

Issuers continue to be assessed on a range of criteria including our assessment of the underlying transition and physical risks. Our approach recognises that oil and gas will follow different phase-down pathways, taking particular assessment of unconventional oil and gas production (such as Arctic oil) and that counterparties' own transition plans will impact on our assessment of the underlying risks.

The escalation process has had a real impact. In 2023, 12 new issuers (out of 34 considered) were added to the exclusions list, increasing the total number of exclusions through this escalation process to 26.

The escalation process is also supported by exclusions, listed below, where there is a clear incompatibility with the 1.5°C 'Paris' objective:

Climate Impact Pledge (CIP) exclusions

Our CIP calls out stocks it excludes from the Future World fund range. LGIM publicly sets out minimum standards, which if not met, may translate into firm-wide voting sanctions and divestment consequences for the funds adopting the CIP exclusions. These additional exclusions are applied to the Group's proprietary assets managed by LGIM.

We typically engage with a company for 12 months. If we still have concerns about the company's actions or strategy, the relevant business and asset managers agree a course of action. Companies in the current CIP exclusion list are added to the Group's own investment exclusion list, helping to drive change in the market by supporting our engagement with the use of the Group's own balance sheet capital. This list is reviewed annually. The rule applied to an excluded stock for these assets is 'Do not buy'.

Risk management approach
continued

Coal and oil sands policy

Where we (via LGIM) invest on behalf of others[1]	Where we have direct investment control
Legal & General Investment Management (Holdings) Limited and its subsidiaries will exclude from investments those companies that are involved in the mining and extraction of thermal coal as set out below.	
Coal mining	
Screening will be carried out and exclusions will be applied to those companies that generate **20% or more** of their revenues from coal mining and extraction.	• **No new investments** in issuers with more than **15%** revenue exposure[2]. Exclusion trigger is expected to decrease to 5% by 2030 with the intention to **phase-out legacy investments** in issuers with more than 5% revenue exposure by 2030[3]. • **No investments** in new coal mining and no further investment in companies that are investing in new coal capacity[3].
Coal power generation	
Screening will be carried out and exclusions will be applied to those companies that generate **20% or more** of revenues from coal-fired power generation. We retain the ability to invest where a company has set out a clear 'Paris'-aligned plan to phase-out coal by 2030 in OECD countries and by 2040 in non-OECD countries. We retain the ability to fund specific issuing entities, where a company has non-coal subsidiaries.	• **No new investments** in issuers with more than **20%** revenue exposure. • Exclusion trigger is expected to decrease to **5% by 2030** with the intention to **phase-out legacy investments** with more than 5% revenue exposure by 2030[3]. • No new investments in companies with over **10GW** absolute coal capacity[2]. • **No new investments** in new coal plants and no further investment in companies that are investing in new coal capacity[3].
Oil sands	
Screening will be carried out and exclusions will be applied to those companies that derive **more than 20%** of revenues from oil sands (sand and rock material that contains crude bitumen).	• **No new investments** in issuers with more than **5%** revenue exposure.

We will continue to evolve our approach to investment restrictions on coal, setting our trajectory towards phase-out investments in coal by 2030 and ceasing investments in companies that generate 5% or more of revenues from coal and are investing in new coal capacity[4].

Coal and oil sands activity
We recognise that coal's role in the current energy mix is incompatible with the 1.5°C 'Paris' objective, which is why our fossil fuel policy focuses on this sector. We continue to evolve our coal and oil sands policy, with the current details set out opposite.

Building on LGIM's coal policy, we have investment exclusions on those companies that have a material proportion of their revenue from the mining and extraction of thermal coal, from coal-based energy production, or from oil sands. Within our own balance sheet, we are targeting exiting the existing financing of companies involved in coal mining or coal power generation by 2030[4].

Given the historical role of coal in the global energy system and the size of our investment portfolio, we have c.£3.2 billion of exposure to companies, mostly utility companies, within our proprietary assets, which report that some aspect of their revenue is linked to coal. Where coal-related activity makes up more than 10% of the relevant company's revenue, this reduces to c.£0.6 billion. Our retirement businesses partially sold down their legacy exposures to issuers with 10% or more of their revenue linked to coal, reducing this by c.£0.6 billion over 2023. We do not have any significant exposures to oil sands.

Direct investments in energy infrastructure projects
We will not invest in new oil, gas and associated energy infrastructure projects, which are not aligned with a 1.5°C scenario pathway in line with the NZAOA oil and gas position[5].

Deforestation
We have developed and will continue to evolve our investment deforestation policies. We have in place exclusions in relation to violators of the UN Global Compact standards which include deforestation controversies and we maintain exclusions of names called out as engagement laggards through the CIP, where an insufficient zero deforestation policy, amongst other climate considerations, has led to an exclusion restriction. We will continue to leverage the activities of LGIM's stewardship and engagement approach as set out in the LGIM deforestation policy[6] to engage on this topic.

3. Physical risk controls
Where specific investments pose an unacceptable exposure to physical risk we deploy tools such as physical risk modelling, categorisation of exposures, incorporation into the underwriting process and clear exposure limits. We have developed and will continue to evolve our approach for limiting exposure to physical risks across the different geographies in which the Group is active.

4. Review our existing tolerance framework to incorporate climate considerations
The risks from climate change represent another dimension of our existing risk exposures. To ensure that these considerations are integrated across the Group's governance system, our existing framework is regularly reviewed and updated. For example we now also extend our fossil fuel exclusion policy into relevant new contractual documentation for reinsurance transactions.

5. Active engagement
Alongside close monitoring of the political and regulatory landscape, an important part of our strategy remains to engage with policymakers, regulators and investee companies in support of climate action. This benefits our own stakeholders, the wider market and society. This is actively pursued by LGIM on the Group's behalf, with climate change continuing to be a key topic of engagement.

1. www.lgim.com/landg-assets/lgim/_document-library/capabilities/lgimh-coal-policy.pdf
2. This is tracked via relevant third-party data with differing reliability – an area which remains challenging for asset owners.
3. Aligned with SBTi and NZAOA coal phase-out expectations.
4. www.unepfi.org/wordpress/wp-content/uploads/2020/11/Net-Zero-Asset-Owner-Alliance-Thermal-Coal-Position.pdf
5. www.unepfi.org/wordpress/wp-content/uploads/2023/03/NZAOA-Position-on-the-Oil-and-Gas-Sector.pdf
6. www.lgim.com/landg-assets/lgim/_document-library/esg/lgims-deforestation-policy---0823-update_v0.4.pdf

Risk management approach
continued

Climate Impact Pledge (CIP)
Through LGIM's dedicated engagement programme, the CIP, we continue to be committed to helping companies step-up on their climate change and nature-related commitments, build resilient strategies for this transition period and succeed in the low-carbon world. Launched in 2016 in response to the 'Paris' Agreement, we have expanded the coverage to include 20 'climate critical' sectors, with voting and potential divestment sanctions for the companies that do not meet our minimum standards.

Given the important connections between climate change and nature, the CIP also incorporates expectations around biodiversity and, for relevant sectors, deforestation. We discuss how this forms a part of our strategy on page 14, and disclose our metrics on page 42.

Our targeted approach, using voting and investment sanctions to encourage companies to step up on sustainability, has contributed to companies making improvements to their climate targets and strategies. This has significant risk management benefits.

Global research and engagement groups (GREGs)
During 2023, work continued within the GREGs, which bring together our experts from our investment and stewardship teams, to research and identify the challenges and opportunities across sectors and asset classes stemming from key sustainability issues, including climate change.

TCFD recommendation
Describe the organisation's processes for managing climate-related risks.

Monitoring
Monitoring and updating our measurements and management actions over time is a critical activity enabling the risk management framework to adequately capture the extended time horizons associated with climate risks. Our understanding of the risks from climate change and the actions that are needed to mitigate it, are based on science. This continues to evolve. The actions that the world is taking will to some extent inform the actions that we can take. Climate reporting is an evolving process and remains a 'best endeavours' analysis. Through our own work, we continue to progress in our understanding and quantification of climate risk, but we believe we are still early in our development. This is more significant when we consider nature risk.

While convergence has increased over 2023, it is still not yet completely clear where the financial sector will fully align on metrics, calculation methodology, time frame and scenario definition. While we monitor and disclose our metrics, the underlying methodologies evolve, reflecting the availability and quality of data, regulatory expectations and emerging industry practices.

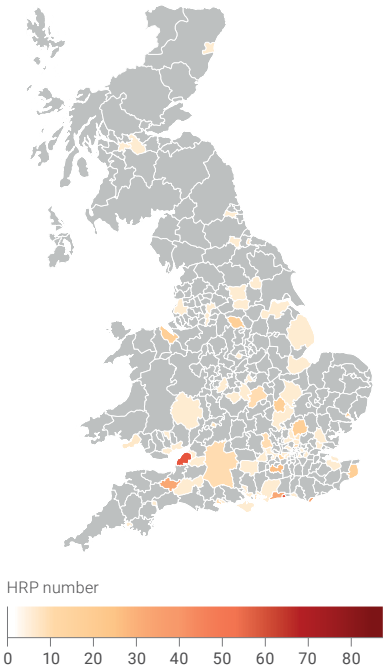
Our business entity-level risk management
Group-level climate risk management is cascaded down to all our businesses via the divisional committee structures. Where appropriate the senior leaders from the divisions are members of the GEC, ensuring adequate oversight at this level. LGIM, as the investment management division, is the most material division from a governance and risk management perspective. Our Workplace and Retail Savings businesses and retirement businesses engage with LGIM as their primary asset manager, to obtain climate data and to conduct scenario analysis. This information is an integral part of their risk management process and an area in which our individual businesses expect to continue to develop their understanding of over time. Specific further entity-level disclosures are on page 64.

Flood risk analysis

Flood risk has always been embedded in our investment strategy and is a key component of our standard due diligence process of all property acquisitions through LGIM Real Assets. However, over the last few years we have worked with physical climate risk experts, XDI and Marsh, to understand how our climate risk exposure may change in the future under different warming scenarios. An assessment of eight different climate hazards has demonstrated that flood risk is the most significant physical climate hazard for our UK-based real estate portfolios, both now and in the future[1].

In 2022, all real estate equity assets were included in a high-level, forward-looking flood risk assessment process. The granularity of this analysis was enhanced by using Unique Property Reference Numbers (UPRNs), enabling analysis of assets at the individual building level. A preliminary risk scan identified those assets requiring further review and in 2023, asset specific information, including building age, floor height and, crucially, any existing flood adaptation measures, was captured across higher risk assets. This additional detail will allow us to develop more targeted adaptation strategies for assets which are still deemed to be at risk.

Distribution of high risk properties (HRP[2,3])
2050



1. Eight climate hazards assessed are: river flood; surface water flood; coastal inundation; extreme wind; wild fire; freeze thaw; soil movement; extreme heat.
2. A high risk property (HRP), is considered as a UPRN with a Value-at-Risk percentage over 1%, a relative metric derived from the replacement cost of a representative asset.
3. This data covers real estate equity properties in the portfolio as at Q3 2023 and uses a Representative Concentration Pathway (RCP) 8.5 'business as usual' scenario by the IPCC.

Metrics and targets

Measuring our progress

Our climate and nature-related metrics and targets support the development of consistent and comparable information over time and between market participants. These disclosures also enhance transparency and accountability for our climate actions, as well as demonstrating performance against our longer-term commitments.

Glacier National Park, USA
Credit: Alice Measom
Talent Acquisition Specialist, Chicago

Metrics and targets summary

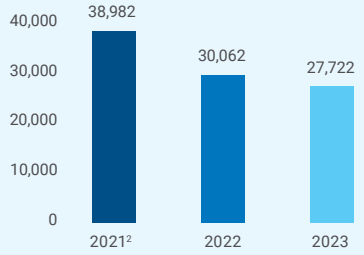
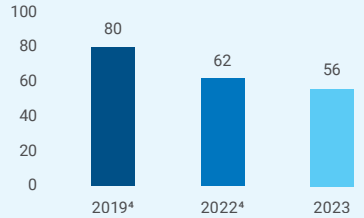
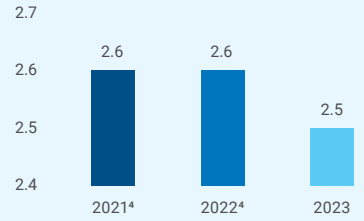
This chapter focuses on the key metrics we use to measure our progress against our climate commitments. These are integral to our business strategy and risk management framework.

We continue to disclose metrics for our key operational commitments and targets which cover wider environmental issues (such as waste and water management). We have considered how we can best measure our nature-related impacts and dependencies, but note that there is still a significant amount of work required throughout our sector, to properly understand and quantify these issues.

Scope 1: direct GHG emissions.
Scope 2: indirect GHG emissions from consumption of purchased electricity, heat or steam.
Scope 3: other indirect emissions not covered in scope 2 that occur in the value chain of the reporting company.

TCFD recommendations
Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.

Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.

Metric	Meaning	Target	Progress against our base year
Operational carbon footprint	This covers the operations we directly control, such as the energy in our occupied offices, the energy from our landlord activities and our housebuilding, as well as the construction of new homes[1].	• Net zero by 2050. • We will reduce our absolute scope 1 and 2 GHG emissions by 42% by 2030 from our 2021 base year[2]. • Occupied offices and business travel operating with net zero emissions from 2030[1]. • Enable all new homes we build from 2030 to be capable of operating with net zero carbon emissions.	**Operational carbon footprint** (tCO_2e) 
GHG emissions intensity of our investments	This is made up of our ownership share of the emissions related to the assets we invest in within the Group proprietary asset portfolio, as explained on page 10. It includes equities and bonds, but not cash, derivatives, or any assets already covered in our operational footprint. It is measured per unit of investment.	• Net zero asset portfolio, in line with a 1.5°C 'Paris' objective by 2050. • By 2030, reduce portfolio GHG emission intensity by 50%[3]. • By start of 2025, reduce portfolio GHG emission intensity by 18.5%[3]. • By end of 2023, reduce portfolio GHG emission intensity by 18%[3]. • More granular SBTs on page 40.	**Investment portfolio GHG emission intensity** ($tCO_2e/£m$) 
Implied portfolio temperature alignment	This measures the implied warming potential of the Group investment portfolio aggregated from its individual components, as calculated in line with LGIM's methodology.	• Please see our portfolio temperature rating SBTs on page 41 for related targets.	**Implied portfolio temperature alignment** (°C) 

1. Applies to occupied offices where we actively control the management of utilities.
2. This is our 2021 SBT base year which includes our LGIM Real Assets 2019 data to account for the impact of the pandemic.
3. From a 2019 base year.
4. Metrics have been re-baselined through a combination of methodology and data sourcing changes. Figures from the 2022 report, with an associated impact assessment, are provided in the appendix.

Operational carbon footprint

Methodology

Our operational carbon footprint is comprised of the annual carbon emissions of the whole Group, including our subsidiaries and joint ventures[1]. We apply the operational control approach, we include all operations which we directly control, such as the energy from our core occupied offices (applies to occupied offices where we actively control the management of utilities), landlord activities, as well as the construction of new homes within our housing businesses and joint ventures[1]. The emissions data reported in Table 4 is aligned to the Group's financial reporting period unless otherwise stated[2]. Please refer to our Basis of Preparation on pages 56 to 57 for details of how we collate GHG data for our operational carbon footprint.

Reporting framework
In calculating our footprint we have reported on the emission sources required under the Companies Act 2006 (Strategic report and Directors' report) Regulations 2013 and have followed the requirements of the Streamlined Energy and Carbon Reporting (SECR) framework.

The GHG emissions data is reported in line with the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard 'operational control' method and emissions factors for fuels and electricity are published at: www.ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf

TCFD recommendation
Disclose scope 1, scope 2 and, if appropriate, scope 3 GHG emissions and the related risks.

Progress in 2023

Our operational scope 1 and 2 (location) carbon footprint has decreased by 8% from 2022. This is an absolute reduction and as outlined below is due to changes in our operational businesses as well as energy efficiency measures delivered.

Occupied offices

During 2023 we began implementation of our new location strategy, which we are shaping to align with our transition plan. The most impactful action in 2023 was the occupation of our new office in Cardiff where we have aligned with the latest UKGBC guidance and are aiming for a 5 stars NABERS rating and have achieved BREEAM 'Outstanding'.

As anticipated our business travel increased in 2023 and we are working with our travel providers to identify longer-term solutions to help us achieve our 2030 ambition, noting that we expect our 2024 business travel to increase in the short term.

Real Assets

Our real estate portfolio's scope 1 and 2 emissions has decreased by 20% (from 2022), due to changes in the composition of funds across the platform and the implementation of energy and carbon reduction programmes for all assets that we manage, as well as ongoing engagement with our occupiers to help drive energy reductions.

LGC

Our LGC footprint has increased by 10% from last year. This is a lower increase than we modelled in setting our SBTs, and we expect our LGC footprint to increase in the short term, due to planned growth of our housing businesses.

The movement this year was driven by the slowing down of our Modular Homes business, and the successful roll-out of HVO by our largest house builder, keeping the increase less than anticipated. This was offset by the inclusion of Ancora's emissions and our housing businesses' growth.

Table 4. GHG emissions data

In reporting our operational carbon footprint, we have sought independent limited assurance from Deloitte over the 2023 metrics identified below with a *. Deloitte's assurance statement is available on pages 51 to 52.

Emissions source[2]	tCO_2e 2021[3]	tCO_2e 2022	tCO_2e 2023[4,5]
Scope 1 and 2 (location)	38,982	30,062*	27,722*
Scope 1	15,559	12,506*	10,158*
– UK	15,534	12,408	9,452
– International	25	98	706
Scope 2 – location	23,423	17,556*	17,564*
– UK	22,604	16,649	14,349
– International	819	907	3,215
Scope 2 – market	2,432	2,586*	4,215*
– UK	1,613	1,679	1,000
– International	819	907	3,215
Fugitive emissions (included in scope 1)	127	293	216
Scope 3[6]			
Category 3: Fuel and energy-related activities	8,607	8,301	7,325
Category 5: Waste	486	400	483
Category 6: Business travel	2,070	5,467*	7,631*
Category 7: Employee commuting (home working)	3,025	4,739*	4,568*
Category 8: Upstream leased assets (serviced offices)	371	306*	304*
Category 13: Downstream leased assets[7]	0.4m	–	0.3m
Category 15: Investments[7]	6.2m	5.0m	5.0m
Scope 1 and 2 intensity ratio			
tCO_2e emissions per employee	3.6	2.6	2.3

1. Joint ventures are included in our footprint where we are the majority shareholder, or have operational control.
2. Please refer to our Basis of Preparation on pages 56 to 57 for details of how we collate out GHG data for our operational carbon footprint.
3. This is our 2021 SBT baseline which includes our LGIM Real Assets 2019 data to account for the impact of the pandemic.
4. We purchased Taylor Lane, a timber frame construction specialist in H2 2023, due to limited access to robust datasets this has been excluded from our 2023 footprint and will be included from 2024. Noting, this does not have a material impact on our overall footprint.
5. Deloitte have provided independent limited assurance in accordance with the International Standard for Assurance Engagements 3000 ('ISAE 3000') and Assurance Engagements on Greenhouse Gas Statements ('ISAE 3410') over the selected metrics identified with a *. Deloitte's full unqualified assurance opinion, which includes details of the selected metrics assured, can be found on pages 51 to 52.
6. See our scope 3 coverage on page 59.
7. Our 2021 and 2022 metrics have been rebaselined through a combination of methodology and data sourcing changes. Figures from the 2022 report are provided in the additional information chapter.

GHG emissions intensity of our investments

Our financed emissions, generated within our investment portfolios and classified as scope 3 – (category 15 (investments)), creates the largest contribution to our carbon footprint. We have implemented targets that support our commitment to align with a 1.5°C 'Paris' objective.

Methodology and data approach

Our primary metric is the GHG economic emissions intensity of our portfolio of Group proprietary assets. This is the total of all the GHG produced by our share of the organisations that we invest in, per unit of investment, and is reported using CO_2e emissions data. There are three components to this metric:

1. the scope 1 and 2 GHG emissions, CO_2e, in tonnes for each entity in which we are invested
2. a unit of value to normalise the emissions by the underlying size of the entity we are investing in, measured per £ million (£m). For our primary metric we use:
   - EVIC for corporate issuers
   - sovereign capital stock for sovereigns
   - market valuation for each real asset investment
3. the size of our holding in the entity.

The investment portfolio emissions intensity is then calculated by weighting the normalised emissions (tonnes of CO_2e emissions per £m normaliser entity value as defined above) by the size of our investment and aggregating all holdings in our investment. We have applied the emissions data equally to equities and bonds as they are both used by corporates to raise capital and fund the business. Please refer to pages 58 to 63 for further detail on the methodology, including the data sourcing and application of the underlying data used in these metrics. The Partnership of Carbon Accounting Financials (PCAF) Data Quality score is also provided as a summary metric around the use of proxy data.

Progress in 2023

Table 5 shows the end 2023 Group investment portfolio GHG emission intensity score of 56 tCO_2e/£m invested (-9% in 2023; and -30% from the 2019 base year). When applied to the £90.0 billion of assets in this analysis, this gives an absolute footprint of 5.0 million tCO_2e emissions (2022: 5.0 million tCO_2e)[1,2].

Within the annual movement in 2023, 12% is attributed to the change in updated portfolio emissions (from updated company emissions disclosures, and from trading activity) by holding EVIC constant, as shown in the table to the right. This movement is in part due to small sector allocation updates and associated trading through the year within the high emission sectors, taking us further beyond our projected pathway.

A partial reversal of this movement is then attributed to changes in the EVIC of the investments in 2023, illustrating the impact that market movements can have on economic emission intensity metrics.

Tables 6 and 7 show the large contribution to the overall score from bonds in the utility sector.

Use of proxy data
Where third-party data is not available, we have adopted several proxy approaches with the aim of filling the coverage gap. For some key asset classes, asset class-specific approaches are employed, while for others that are not covered in our datasets, we use sector-based proxies. Proxy approaches are used for the following other asset classes: real assets, lifetime mortgages, private debt and private equity. See the additional information chapter for further detail on the data and material proxy methodologies utilised.

Table 5. Group investment portfolio GHG emission intensities

	tCO_2e/£m		
Measure	**2022[1,2]**	**2023 (constant EVIC)**	**2023**
Investment portfolio economic carbon intensity	**62**	**54**	**56**
Reduction from 2022 – actual (%)		**(12)**	**(9)**
Reduction from 2019 – actual (%)	**(23)**	**(32)**	**(30)**
Reduction from 2019 – target (%)		**(18)**	
PCAF Data Quality Score			2.5
Investment portfolio economic carbon intensity ex sovereigns	59		52
Investment portfolio weighted average carbon intensity (WACI) (tCO_2/USD million revenues)	151		127

Table 6. Portfolio GHG emission intensities breakdown by asset class

Score breakdown	By value (%)	Standalone emissions intensity	By emissions intensity contribution (%)	PCAF data quality
Bond	90	60	97	2.5
Property	9	16	2	2.6
Equity	1	31	1	2.7
Total	100	56	100	2.5

Table 7. Portfolio GHG emission intensities breakdown by sector

Score breakdown	By value (%)	Standalone emissions intensity	By emissions intensity contribution (%)	PCAF data quality
Utilities	12	200	40	2.5
Energy	4	209	16	2.5
Materials	1	251	4	2.1
Industrials	6	62	7	2.7
Government	11	89	16	1.4
Other	66	13	16	2.7
Total	100	56	100	2.5

1. This relates to the investments within the £90.0 billion of Group proprietary assets qualifying as scope 3 investment emissions. The emissions for the additional £2.5 billion of operating assets are captured in the operational footprint.
2. Metrics have been rebaselined through a combination of methodology and data sourcing changes. Figures from the 2022 report, with an associated impact assessment, are provided in the appendix.

GHG emissions intensity of our investments
continued

Mid- and long-term trajectories

While we remain ahead of our year end 2023 target reduction from 2019, we may still see further volatility from changes in the global economy, as explained below. We remain focused on our long-term decarbonisation targets and the interim milestones, including our end 2024 target shown on Chart 13.

In any one period, the portfolio GHG emissions intensity is impacted by changes in the following:

- organic changes in the emissions from the entities we invest in (noting that the available data generally relates to emissions for the previous year for corporate issuers, with greater lags for sovereign emission data)
- the underlying size/ revenues of the company or corresponding sovereign metric
- the market value of our holdings
- changes in methodology.

Changes in the emissions coming from our investments and our investment activity are key to decarbonising our portfolios in the medium and longer term. However in the short term, factors outside of our control, such as the carbon outcomes of the entity, market movements, and the lag in the reporting of the underlying emission data, have the potential to create significant volatility in the calculated metrics. We try to identify the underlying trends through techniques such as holding the company size constant over the reporting year, as seen in Chart 13.

Changes in methodology are, and will be, addressed through considering results on an unchanged basis, as well as using estimates where actual data is not available. Further detail is given in the additional information chapter.

Science-based targets (SBTs)

Last year we announced our SBTs which have been independently validated by the SBTi.

In line with this commitment, we have started to track the associated physical carbon intensity metrics, whereby the emissions are normalised by a measure of physical output, for certain asset class and sector subsets of the portfolio, in line with SBTi requirements[1].

Our performance to date within our electricity generation project finance and real estate equity investment portfolios is given in Table 8.

Our associated Portfolio Temperature Rating targets are given on page 41.

Chart 13.

Group investment portfolio target decarbonisation pathway

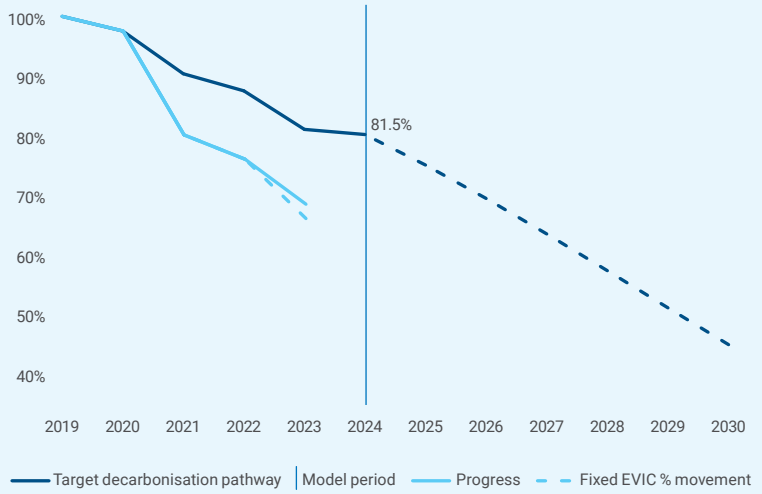


Table 8. SBTs – emission-based

Metric	Aggregation approach	2019 base year	2021 base year	2023	Target
We commit to maintain the emissions intensity of our electricity generation project finance portfolio, within our shareholder investments, at or below 60 $KgCO_2e/kWh$ from 2021 through 2030 and only finance 1.5°C aligned electricity generation projects.	$KgCO_2e/kWh$	n/a	60	60	60
We commit to reduce our real estate investment portfolio GHG emissions by 58% per square metre by 2030 from a 2019 base year.	tCO_2e/m^2	0.058	n/a	0.050	0.024
We commit to reduce our downstream leased asset GHG emissions by 55% per square metre by 2030 from a 2019 base year.	tCO_2e/m^2	0.055	n/a	0.047	0.02

1. www.sciencebasedtargets.org/resources/files/Financial-Sector-Science-Based-Targets-Guidance.pdf

Implied portfolio temperature alignment

Methodology

To complement the portfolio GHG emission intensity metrics, Legal & General uses an implied portfolio temperature alignment metric to measure and manage investment impact. This alignment metric measures and provides a score for the implied warming potential of a company (or aggregate portfolio).

The implied temperature alignment metric describes the climate transition pathway (temperature scenario) each company is expected to align to, based on both historical decarbonisation trends and targets the company has set. It reflects the direct link between global carbon emissions and the likely severity of global warming and allows investors to measure their impact on climate change and evaluate their performance relative to SBTs.

There are three key steps to the calculation of implied temperature alignment:

1. project a company's carbon emission pathway to 2030
2. project relevant science-based sector emission targets using decarbonisation pathways from climate scenarios
3. rate companies' implied temperature alignment by assessing carbon intensity against science-based sector targets.

For most companies, implied temperature alignment is calculated on the basis of scope 1 and 2 emissions. Scope 3 emissions estimates are included for financials, and oil and gas companies, using an LGIM methodology which is consistent across issuers. Midstream companies' alignments use a qualitative scoring methodology, noting business models with differing ownership structures. Electric utilities are assessed on their projected energy mix and the GHG emissions per unit of electricity (tCO_2e/MWh) relative to regional benchmarks. For sovereign bonds, we incorporate Climate Action Tracker country-level assessments, country-level decarbonisation targets and historical carbon data to calculate sovereign alignment scores which can be compared directly to corporate alignments[1].

Our implied temperature alignment methodology covers listed equities, corporate bonds, sovereign bonds and quasi-sovereign bonds. It does not cover real estate, alternatives or private equity due to data availability.

LGIM alignment scores are constructed to follow TCFD recommendations and are a quantitative expression of LGIM modelling and assumptions around the energy transition.

We note that there are numerous portfolio temperature metrics in development across the industry and advise caution in comparing scores across different methodologies at this stage. This includes aggregation methodologies which are described further within the additional information chapter. We particularly note the portfolio temperature rating (PTR) metric methodology developed by the SBTi which we have calculated for our SBT suite described below.

A key distinction between the LGIM and SBTi methodologies relates to assessing the credibility of published targets. Temperature alignment scores are subject to an internal assessment whereas the SBTi PTR scores directly applies published ambitions.

Science-based targets

In line with this commitment to our validated SBTs, we have started to track the associated PTR scores, which scores companies in relation to their published targets in line with SBTi requirements.

Our performance to date is provided in Table 9, noting we have further to go in achieving our targets across both metrics.

Progress in 2023

We have analysed c.£35 billion of listed assets (including government bonds), out of our £92.5 billion of Group proprietary assets, where we have the relevant data. Our updated scores are shown in Chart 14.

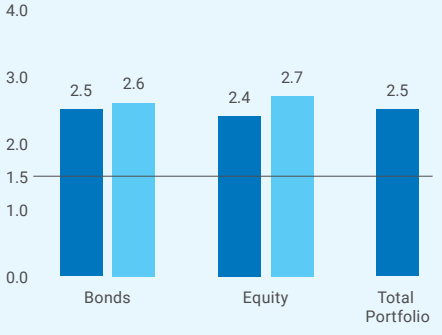
We can judge progress on the implied warming potential of our portfolio by comparing to well-known indices which serve as a proxy for 'the world as it is'. For bonds, we compare to the Barclays Agg 1% index (with 92% coverage), while we use MSCI World for equities (99% coverage).

This gives us a sense of where we are compared to both a net zero (1.5°C) objective and through the use of a benchmark, to the temperature alignment of the broader investment universe.

This means that on this portion of our assets we are more highly weighted in stocks transitioning more quickly than the average in the relevant sector of the chosen index.

Chart 14.

2023 implied portfolio temperature alignment (°C)
c.£35bn of bonds and listed equity



Source: LGIM Destination@Risk

Table 9. Science-based targets – Portfolio Temperature Rating

Metric	Aggregation approach	Scope	2021 base year	2023	Target
We commit to align the (SBTi-defined) portfolio temperature rating score for our listed equity, corporate bonds and corporate loans portfolio, within our shareholder owned investments, as follows:	°C (ECOTS[2] aggregation)				
• From 2.4°C at end 2021 to 2.1°C by end 2026, covering portfolio company scopes 1 and 2		1 and 2	2.4	2.4	2.1
• From 2.9°C at end 2021 to 2.5°C by end 2026, covering portfolio company scopes 1, 2 and 3.		1, 2 and 3	2.9	2.7	2.5

1. www.climateactiontracker.org/
2. ECOTS: Enterprise value including cash emissions weighted temperature score.

Engagement and remuneration

Engagement

Engagement
We use our influence as an investment manager to support the transition to a low-carbon economy and nature-positive world. We do this through active engagement, or as we term it 'engagement with consequences'. Our metrics demonstrate impact when viewed as part of our wider engagement strategy.

Transparency
We publish our assessment of companies against our expectations:

- LGIM ESG Score rates c.17,000 companies
- LGIM CIP Score rates over 5,000 companies.

We publish our policies, our latest views and our expectations of companies on the LGIM website and blog.

Engagement
Company engagement:

- we undertook over 2,000 engagements with companies on environmental topics in 2023
- under our CIP, we conducted in-depth engagement with 105 companies across 20 'climate-critical' sectors[1].

In 2023, we engaged with over 1,500 companies within the quantitative stream of our CIP.

Measuring progress
Climate Impact Pledge[1]:

- we reinstated one company which had been on our divestment list, following improvement versus our minimum expectations[2]
- of the 105 'dial mover' companies for direct engagement under our CIP campaign, 41% disclosed a net zero commitment or target[1].

We co-filed three shareholder resolutions in 2023, two of which were related to climate change.

Escalation
Under our CIP, 299 companies out of the CIP universe were identified by our quantitative assessment as being subject to voting sanctions for not meeting our minimum standards[1].

2023 was the first year we applied specific voting sanctions to companies in deforestation-critical sectors that did not have a deforestation policy or programme in place. We applied voting sanctions to over 100 companies under this initiative.

Remuneration

Beginning in 2021, we set climate-related targets in our executive directors' remuneration.

Annual variable pay (AVP)

Purpose
AVP incentivises and rewards the achievement of annual financial performance and delivery of strategic priorities. 50% of AVP is received in cash and 50% of the AVP award is deferred into restricted shares for a further three years, reinforcing retention and alignment with shareholders.

Climate considerations
30% of AVP is based upon the achievement of strategic objectives, which includes ESG. For 2023, environmental performance measures are aligned to our key commitments in our 2022 climate report. This includes progress on portfolio carbon emissions intensity reduction and delivery of our operational emissions SBT in line with annual and interim milestones.

Performance share plan (PSP)

Purpose
The PSP provides a direct and transparent link between executive pay and the delivery of shareholder returns over the longer term. The PSP is a conditional award of shares, subject to a performance period of no less than three years and a holding period such that no awards are released before five years from the grant.

Climate considerations
The Remuneration Committee assesses the formulaic vesting outcome and may adjust the level of vesting downwards considering a range of factors including overall Group performance, risk management, progress against our 2023 environmental commitments and other capital and solvency measures. The vesting level of PSP awards may be adjusted downwards by up to 100% if outcomes are deemed insufficient.

Changes have been made for the 2024 PSP award, whereby vesting of 20% of the PSP will be subject to how the business has performed against its climate commitments. More details are provided in our Annual report and accounts and will be provided in our 2024 Climate and nature report.

1. As at June 2023.
2. Companies are divested from selected funds with £176 billion in AUM (as at 31 December 2023), including funds in the Future World fund range, LGIM's ESG fund ranges and all auto-enrolment default funds in L&G Workplace Pensions and the L&G Mastertrust. Companies are divested up to a pre-specified tracking-error limit. If the tracking error limit is reached, holdings are reduced rather than fully divested.

LGIM Active Ownership report
See LGIM's Active Ownership report:
www.lgim.com/uk/en/responsible-investing/active-ownership/

Our operational targets and commitments

The way in which we operate our businesses has the potential to create both environmental impacts and opportunities. To help ensure that we continue to drive environmental improvements through our operations and to support our long-term approach to managing climate and nature risks, we have developed a suite of environmental targets and commitments which are outlined opposite. We believe these strategic themes are material to our operations and will help shape our response to the risks and opportunities in the short, medium and long term.

The energy we use

Strategic commitment

We will reduce our energy usage in line with our journey to net zero and source energy from renewable sources.

Target

By 2025, we will purchase 100% of directly procured electricity group-wide from renewable sources.

We will reduce absolute scope 1 and 2 GHG emissions by 42% by 2030 from a 2021 base year.

From 2030, our occupied offices (scope 1 and 2 will operate with net zero carbon emissions[1].

Progress in 2023

Our scope 1 and 2 emissions reduced by 29% from our 2021 base year for our SBT[2].

Our occupied offices generated 2,906 tCO_2e.

We procured 82% of our electricity from renewable sources.

The way we travel

Strategic commitment

We will use hybrid working practices and technology to actively reduce the business miles we travel in line with our commitment to net zero.

Target

From 2030, our group-wide business travel will generate net zero GHG emissions.

Progress in 2023

Business travel generated 7,631 tCO_2e.

We introduced new controls in our travel booking policy to enable employees to make informed carbon choices when booking travel. We will continue to seek ways to reduce the carbon associated with how our people travel for business purposes. Noting, we expect our absolute emissions from business travel to increase in 2024, as we grow our business.

Natural resources

Strategic commitment

We will protect the natural resources we use through the implementation of sustainable procurement principles throughout our supply chain.

Target

By end of 2023, we will set a scope 3 category 1 (purchased goods and services) SBT, aligned with our net zero ambition[1].

By end of 2026, 80% of our suppliers, by spend, will set a science-based carbon reduction target.

Progress in 2023

We set our SBT for purchased goods and services, listed above and explained in further detail on page 16.

We engaged with the top 30 suppliers from our supply chain to better understand their carbon footprints and how we can work together to improve efficiencies.

1. Applies to occupied offices where we actively control the management of utilities.
2. To account for the impact of the pandemic our 2021 base year includes estimated emissions data from our Real Assets portfolio based on 2019 data. All other base year emissions are from 2021.

Our operational targets and commitments
continued

Water resources

Strategic commitment

We will protect and minimise the use of water resources in the spaces we create and occupy.

Target

From 2022, new LGC housing developments submitted for outline planning permission will target 110 litres of water per person per day (lpppd), moving to 105 lpppd by 2023, in areas of water stress.

By 2030, our core occupied offices will consume a maximum of 22 lpppd in line with the Real Estate Environmental Benchmark (REEB)[1].

Zero water pollution incidents.

Progress in 2023

Zero water pollution incidents reported.

Our occupied offices achieved 33 lpppd (2022: 36 lpppd)[1]. IVG exceeded its target achieving 100 lpppd. CALA significantly improved its result, achieving 109 lpppd, meeting local planning requirements. CALA has improved the design of new homes and is testing more water-efficient appliances in its Eco Home project aiming to learn lessons to apply across all projects in the future.

Circular economy

Strategic commitment

We aim to minimise and design out waste through the careful implementation of the principles of the circular economy.

Target

By 2025, we will divert 100% of waste from landfill in all offices and LGC development projects where we are responsible for waste management.

By 2025, we will reduce overall waste volumes per core occupied office by 20% from a 2019 base year[1].

Progress in 2023

99% of waste diverted from landfill.

Occupied offices' waste reduced by 61% from the 2019 base year.

Biodiversity

Strategic commitment

We are committed to creating diverse and valuable natural spaces and achieving overall net biodiversity gains. We are also committed to understanding and positively shaping the biodiversity impacts of the investments we make.

Target

In 2023, we will develop our biodiversity strategy, focusing on impacts and opportunities on development sites within our housing and Real Assets businesses.

By 2025, we will report on milestones to reduce agricultural commodity-driven deforestation related to our investments and increase our investment in nature-based solutions[2].

Progress in 2023

Our strategic approach to nature and biodiversity was approved by the GEC.

We have extended the scope of our reporting to include nature and will continue to shape our approach to nature-related risks and opportunities in the coming year.

1. Applies to occupied offices where we actively control the management of utilities.
2. Focusing on palm oil, soy, beef, pulp and paper.

Additional information

Giraffe
Credit: Jonathan Ponsie
Scrum Master, London

Our impacts, risks and opportunities assessment

During 2023, we undertook a review of our sustainability impacts, risks and opportunities to ascertain the most material topics for the Group and to assess the fitness of our various strategies in response to them.

We considered that nine topics were of a 'high to very high' relevance to us, both because they have a high degree of impact on us and because we have a high potential to impact on how these issues unfold These themes are:

- climate change mitigation
- biodiversity and ecosystem loss
- transparency of reporting
- accessible and affordable housing
- financial inclusion
- infrastructure and real estate
- health and wellbeing
- corporate culture
- diversity and inclusion.

Our analysis concluded that we have an appropriate awareness and coverage of topics in our various sustainability and related strategies. There are some gaps which are either the result of evolving thinking or instances where we are still working towards developing our view. There are some topics where additional focus could drive additional benefit to the business and our stakeholders.

Our Climate and nature report focuses primarily on the environmental themes that were captured within this assessment. This aligns with the work the business has done on these topics, following the release of both the ISSB standards and TNFD recommendations during 2023. We have included a TNFD index on page 48 which sets out in more detail the work we have done to engage with this global framework for nature.

1 Taxonomy definition

We defined a taxonomy of 201 sustainability topics, grouped into 59 themes and 11 mega-themes across environmental, social and governance groupings. For the purposes of this exercise we took 'sustainability topics' to mean themes which originate outside the Group; can be classified as environmental, social or governance concerns; and whose meanings have a high degree of interoperability across industries and sectors of the economy.

Our long-list was informed by external standards including (but not limited to) the United Nations' Sustainable Development Goals; the PRI; the Global Reporting Index; the Sustainability Accounting Standards Board framework; and the European Union's Corporate and Sustainability Reporting Directive and its supporting standards.

2 Assessment of topic relevance and materiality to the Group

Having long-listed the topics, we next assessed their relevance to the Group, using the following methodology:

- an assessment of the topic's ability to impact the Group's revenue, cost of capital and valuation (including an assessment of reputational risk) over the short, medium and long term
- consideration of whether the topic is systemically important or poses a systemic risk
- a view of the Group's capacity to impact the unfolding of, or its dependency on the unfolding of, the topic – the assessment of impacts, risks and opportunities was informed by our business model and strategic purpose
- a summary judgment on the overall importance of the topic to the Group.

3 Assessment of the fitness of our strategic approach

Having assessed the relevance of the topics, we took a view on the extent to which our existing sustainability and related strategies adequately addressed the most relevant topics.

4 Governance reviews

The findings were subject to scrutiny and approval by the GEC in the first quarter of 2024.

Summary disclosure against TCFD recommendations

We have continued to disclose in line with the recommendations of the TCFD, in compliance with the FCA Listing Rule 9.8.6R(8). The table below gives a summary of how and where we have addressed the TCFD recommendations in this report. This standalone document provides us with the space we require to provide sufficient detail of our exposure to and approach to addressing, climate-related issues, as we do with our detailed disclosures on risk, tax and social issues. We also disclose this index in our Annual report and accounts to signpost readers to our climate-related disclosures. In response to FCA guidance 9.8.6FG, we also produced a stand-alone Climate transition plan in April 2023. This was subsequently approved at our AGM in May 2023. Our plan sets out our role in aligning our company with a 1.5°C net zero outcome, consistent with the UK government's targets.

Strategy	**Further details are disclosed on pages 6 to 18.**
Climate-related risks and opportunities	Our climate-related risks and opportunities are on page 8. We have integrated climate risk management into our overall risk management framework and are well placed to play a role in the decarbonisation of the economy.
Impact on our businesses, strategy and financial planning	Addressing climate change is one of our six strategic growth drivers and we have built a three-pillar approach around: how we invest our assets, how we influence as an asset manager and how our businesses operate. Our business model is not expected to be significantly disrupted by climate change, however it does impact on how we execute our strategy. Our climate strategy is on pages 6 to 18 and our more detailed Climate transition plan is available on our website. We also disclose results of our scenario analysis, which quantifies potential impacts of different climate scenarios on pages 19 to 25. Our proprietary model on climate change is used to quantify the potential impacts of climate change on our portfolio.
Resilience based on scenarios, including a 2°C or lower scenario	Our climate scenario analysis helps us to identify and quantify the sources and magnitude of potential climate-related risks that will emerge as the world transitions to a low-carbon economy. These scenarios, including a 2°C or lower scenario, are covered on pages 19 to 25.
Governance	**Further details are disclosed on pages 26 to 29.**
The Board's role in oversight	The Board is accountable for the long-term stewardship of the Group. It has delegated oversight of the management of climate-related risks to the GEC. The structure, roles and responsibilities and key decisions and discussions, are on pages 27 to 28.
Management's role in assessing risks and opportunities	Our Group Climate Director chairs the GEC and we set out some of our senior managers' responsibilities through the committees and overall risk and governance framework on pages 27 to 28. Climate-related targets are included in executive directors' remuneration and this is detailed on page 42.
Risk management	**Further details are disclosed on pages 30 to 35.**
Processes for identifying and assessing climate-related risks	Climate risk management has been integrated into our risk and governance framework, as seen on pages 31 to 32. We also use scenario analysis to carry out a detailed assessment of the potential impacts from climate risk.
Processes for managing climate-related risks	Our range of actions in meeting our climate risk management objectives are set out on pages 33 to 35. These include our active engagement, exclusion policy and high-carbon escalation process.
How we integrate these risks into our overall risk management	The Group's climate governance has been designed to ensure that the management of the financial risks from climate change are integrated across the whole governance system and embedded into the existing risk management framework.
Metrics and targets	**Further details are disclosed on pages 36 to 44.**
Internal metrics	Our metrics support our commitment to align with the 1.5°C 'Paris' objective. We focus on our investment portfolio economic carbon intensity, implied portfolio temperature alignment and operational carbon footprint. We also measure our engagement with investee companies. Further details are in the metrics and targets chapter on pages 36 to 44.
GHG emissions	Our scope 1 and 2 (location) operational emissions were 27,722 tCO_2e. Our scope 3 non-investment emissions (fuel and energy-related activities, waste, business travel, working from home and serviced offices) were 20,316 tCO_2e. Our scope 3 downstream leased assets were 0.3 million tCO_2e. Our scope 3 investment emissions were 5.0 million tCO_2e.
Targets	We have set our climate targets across our three pillar climate strategy to align with the 'Paris' 1.5°C objective. A detailed list of our climate commitments is set out on pages 49 to 50.

Summary disclosure against the four pillars of TNFD

Below is a summary of how this report aligns with the four pillars of the Taskforce for Nature-related Disclosures' (TNFD) recommendations. We are using this global framework to improve our understanding of our nature-related impacts and dependencies and are intending to adopt the recommendations of the TNFD more widely over future iterations of our reporting. This aligns with our initial approach to climate-related disclosures.

TNFD pillar	Summary of our current disclosures
Strategy	While addressing climate change is our priority, we recognise that climate change and nature are interdependent – we cannot address one without the other. Our nature-related strategy builds on this interaction, expanding our response to climate change beyond GHG emissions. We are using our existing approach to climate change to help us identify our nature-related impacts, dependencies, risks and opportunities. Our business model is not expected to be significantly disrupted by nature-related impacts, dependencies, risks and opportunities, however it impacts how we execute our strategy. As a large financial institution we are exposed to nature through our investments, in particular our investments in real assets. We also have a direct interface with nature through our operations. As with climate change, we recognise our scale gives us an important opportunity to engage on these topics with the real economy. These aspects of our strategy are described on pages 6 to 18. Nature-based scenarios are still an emerging area – our climate scenario modelling incorporates land use modelling and we have begun to examine the impact of our climate scenarios on some nature-related variables, including biodiversity as described on (pages 22 and 25). We continue to stay abreast of emerging methodologies and practices on scenario modelling and our wider nature-related risk management and strategy.
Governance	The Board is accountable for the long-term stewardship of the Group. It has delegated oversight of the management of environmental risks to the GEC. The GEC is chaired by our Group Climate Director. We set out the roles and responsibilities of the GEC and the Group Climate Director, as well as key decisions and discussions, in the governance chapter (page 28). We explain the link between remuneration and progress against climate commitments (page 42).
Risk management	We are developing our climate risk management and governance framework to incorporate nature-related impacts, dependencies, risks and opportunities (pages 31 to 32). These include embedding biodiversity and deforestation considerations within our active engagement and high-carbon escalation process. This approach builds on the Group's climate governance which has been designed to ensure that the management of these risks is integrated across the whole governance system and embedded into the existing risk management framework. We also include land-use assumptions within our climate scenario analysis.
Metrics and targets	We continue to develop our approach to metrics. Key metrics across our three pillars include: our investment portfolio's exposure to sectors with nature-related dependencies (page 25); our numbers of nature-specific engagements (page 42); and, the reduction of waste from our occupied offices (pages 43 to 44).

Commitments in detail

Our journey to net zero (pages 9, 12 and 15) shows some of the key milestones for us to deliver as part of our Climate transition plan to achieve net zero by 2050. It also demonstrates some of our achievements during the year.

These pages supplement our journey to net zero with our detailed commitments, as well as their interim milestones. These more granular pages focus on 'what' we plan to achieve, with the earlier narrative in this report setting out the 'how'.

Below, as a matter of full transparency, we have drawn out the commitments we disclosed last year that we said would be completed during 2023.

Our commitments to be delivered during 2023

Commitment	By	Update
By the end of 2023 reduce portfolio GHG emission intensity by 18%[1].	2023	We have reduced our intensity score by -9% from end 2022 and -30% from the end 2019 base year, in part from active trading decisions in 2023. This leaves us well-positioned to meet our first interim target by 2025.
We will disclose deforestation risk and mitigation activities in our portfolio as part of our year end 2023 publications.	2023	On page 25 we disclose our exposure to names identified on data sources calling out deforestation exposures, alongside our mitigation activities.
LGIM will publish its approach to climate resilience across the real estate business in line with the BBP Climate Change Commitment.	2023	We published an update to our net zero carbon roadmap in 2023 and will publish our climate resilience approach in 2024, in line with the commitment's requirement.

Invest

How we invest our £92.5 billion of proprietary assets

Commitment	By	Milestones (where relevant)	By
We are targeting a net zero asset portfolio by 2050, in line with a 1.5°C 'Paris' objective and continue to evolve our interim targets against this objective.	2050	We will reduce portfolio GHG emission intensity by 18.5%[1] and increase financing of low carbon technology and infrastructure.	2025
		We will reduce portfolio GHG emission intensity by 50%[1] and increase financing of low-carbon technology and infrastructure.	2030
We have set SBTs in accordance with the SBTi.	2030	Align the (SBTi-defined) portfolio temperature score for our listed equity, corporate bonds and corporate loans portfolio, within our shareholder investments as follows: • from 2.4°C at end 2021 to 2.1°C by end 2026, covering portfolio company scopes 1 and 2 • from 2.9°C at end 2021 to 2.5°C by end 2026, covering portfolio company scopes 1, 2 and 3.	2026
		Further asset class and sector-specific targets (covering real estate and electricity generation project finance portfolios summarised on page 40).	2030
We will continue to evolve our thermal coal exclusion criteria, phasing out investment-related coal and oil sands exposures by 2030[2].	2030	Coal exclusions are in place, including avoiding investment in new coal mining, plant or business operations.	Active
We will report progress on the milestones to reduce agricultural[3] commodity-driven deforestation in our investment portfolios and we will increase investment in nature-based solutions.	2025	We will report progress on investment in nature-based solutions and defining associated financing criteria.	2025

1. From a 2019 base year.
2. Investment with more than 5% revenue exposure by 2030.
3. Focusing on palm oil, soy, beef and leather, pulp and paper.

Climate transition plan:
group.legalandgeneral.com/ClimateTransitionPlan2023

Commitments in detail
continued

Influence

How we influence as one of the world's largest asset managers with £1.2 trillion of AUM

Commitment	By	Milestones (where relevant)	By
LGIM is committed to work in partnership with our clients to reach net zero GHG emissions by 2050 or sooner across all AUM.	2050	In partnership with clients, LGIM will target 70% of AUM to be managed in alignment with net zero[1].	2030
LGIM is committed to achieving net zero carbon for all of its real estate equity assets by 2050 or sooner.	2050	LGIM will target net zero operational carbon within the Sustainable Defined Contribution Property Fund by 2030.	2030
		LGIM will target the removal of fossil fuels within areas of commercial property we control by 2030. In isolated instances where this is not possible, LGIM commits to publishing a list of affected assets and a roadmap to removing fossil fuels subsequent to 2030.	2030
We have set an SBT-aligned target to reduce LGIM's downstream leased real estate portfolio GHG emissions per square metre by 55% by 2030 from a 2019 base year.	2030		
LGIM will report progress on the milestones to reduce agricultural commodity-driven deforestation in our investment portfolios through successful company engagement[2].	2025		

Operate

How our businesses operate

Commitment	By	Milestones (where relevant)	By
We have set SBTs to reduce absolute scope 1 and 2 GHG emissions by 42% by 2030 from a 2021 base year[3].	2030		
We commit to ensuring that 80% of our suppliers, by spend, will set a science-based carbon reduction target.	2026		
All new homes delivered from 2030 will be enabled to operate at net zero carbon, both regulated and unregulated energy.	2030		
From 2030, our operational footprint (occupied offices and business travel[4]) will operate with net zero carbon emissions.	2030		
All homes delivered by CALA will be designed to meet the LETI and RIBA 2030 target for embodied carbon standards from 2025[5].	2025		
Net zero operational carbon footprint.	2050		

1. Excludes sovereigns and derivative securities until such time as agreed methodologies exist.
2. Focusing on palm oil, soy, beef and leather, pulp and paper.
3. To account for the impact of the pandemic, our 2021 base year includes estimated emissions data from our managed Real Assets portfolio based on 2019 data, all other baseline emissions are from 2021.
4. Applies to occupied offices where we actively control the management of utilities.
5. LETI 2030 target: <300kgCO_2/m² Upfront carbon A1-5, excl sequestration. RIBA 2030 target: <625kgCO_2/m² embodied carbon A1-5, B1-5, C1-4, incl sequestration.

Deloitte assurance opinion

Independent limited Assurance Report to the Directors of Legal & General Group Plc

Independent limited Assurance Report by Deloitte LLP to the Directors of Legal & General Group Plc on selected Environmental, Social and Governance ("ESG") metrics (the "Selected Information") within the Climate and Nature Report of Legal & General Group Plc for the reporting year ended 31 December 2023.

Our assurance conclusion

Based on our procedures described in this report, and evidence we have obtained, nothing has come to our attention that causes us to believe that the Selected Information for the year ended 31 December 2023, as listed below and indicated with a * in the Climate and Nature Report of Legal & General Group Plc has not been prepared, in all material respects, in accordance with the Applicable Criteria defined by the directors.

Scope of our work

Legal & General Group Plc has engaged us to perform an independent limited assurance engagement in accordance with the International Standard on Assurance Engagements 3000 (Revised) Assurance Engagements Other than Audits or Reviews of Historical Financial Information ("ISAE 3000 (Revised)"), International Standard on Assurance Engagements 3410 Assurance Engagements on Greenhouse Gas Statements 3410 ("ISAE 3410") issued by the International Auditing and Assurance Standards Board ("IAASB") and our agreed terms of engagement.

The Selected Information in scope of our engagement for the year ended 31 December 2023, as indicated with a * in the Climate and Nature Report, is as follows:

Selected Information	Reported amount
Scope 1 emissions (tonnes CO2e)	10,158
Location based Scope 2 emissions (tonnes CO2e)	17,564
Market based Scope 2 emissions (tonnes CO2e)	4,215
Scope 3 emissions categories– Category 6: Business travel (tonnes CO2e)	7,631
Scope 3 emissions categories – Category 7: Homeworking (excluding employee commuting) (tonnes CO2e)	4,568
Scope 3 emissions categories – Category 8: Serviced offices (excluding upstream leased assets) (tonnes CO2e)	304

The Selected Information, as listed in the above table, needs to be read and understood together with the Applicable Criteria: group.legalandgeneral.com/reports.

Inherent limitations of the Selected Information

We obtained limited assurance over the preparation of the Selected Information in accordance with the Applicable Criteria. Inherent limitations exist in all assurance engagements.

Any internal control structure, no matter how effective, cannot eliminate the possibility that fraud, errors or irregularities may occur and remain undetected and because we use selective testing in our engagement, we cannot guarantee that errors or irregularities, if present, will be detected.

The self-defined Applicable Criteria, the nature of the Selected Information, and absence of consistent external standards allow for different, but acceptable, measurement methodologies to be adopted which may result in variances between entities. The adopted measurement methodologies may also impact comparability of the Selected Information reported by different organisations and from year to year within an organisation as methodologies develop.

Directors' responsibilities

The Directors are responsible for:

- selecting and establishing the Applicable Criteria.
- preparing, measuring, presenting and reporting the Selected Information in accordance with the Basis of Preparation. • Publishing the Applicable Criteria publicly in advance of, or at the same time as, the publication of the Selected Information.
- designing, implementing, and maintaining internal processes and controls over information relevant to the preparation of the Selected Information to ensure that they are free from material misstatement, including whether due to fraud or error.
- providing sufficient access and making available all necessary records, correspondence, information and explanations to allow the successful completion of our limited assurance engagement.

Our responsibilities

We are responsible for:

- planning and performing procedures to obtain sufficient appropriate evidence in order to express an independent limited assurance conclusion on the Selected Information.
- communicating matters that may be relevant to the Selected Information to the appropriate party including identified or suspected non-compliance with laws and regulations, fraud or suspected fraud, and bias in the preparation of the Selected Information.
- reporting our conclusion in the form of an independent limited Assurance Report to the Directors of Legal & General Group Plc.

Our independence and competence

In conducting our engagement, we complied with the independence and other ethical requirements of the ICAEW Code of Ethics. The ICAEW Code is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

We applied the International Standard on Quality Management (UK) 1 ("ISQM (UK) 1") issued by the Financial Reporting Council. Accordingly, we maintained a comprehensive system of quality management including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Deloitte assurance opinion
continued

Key procedures performed

We are required to plan and perform our work to address the areas where we have identified that a material misstatement in respect of the Selected Information is likely to arise. The procedures we performed were based on our professional judgment. In carrying out our limited assurance engagement in respect of the Selected Information, we performed the following procedures:

- performed an assessment of the Applicable Criteria (the benchmarks used to measure or evaluate the underlying information) to determine whether they are suitable for the engagement circumstances.
- performed analytical review procedures to understand the underlying subject matter and identify areas where a material misstatement of the Selected Information is likely to arise.
- through inquiries of management, obtained an understanding of the Company, its environment, processes and information systems relevant to the preparation of the Selected Information sufficient to identify and further assess risks of material misstatement in the Selected Information, and provide a basis for designing and performing procedures to respond to assessed risks and to obtain limited assurance to support a conclusion.
- through inquiries of management, obtained an understanding of internal controls relevant to the Selected Information, the quantification process and data used in preparing the Selected Information, the methodology for gathering qualitative information, and the process for preparing and reporting the Selected Information. We have not evaluated the design of particular internal control activities, obtained evidence about their implementation or tested their operating effectiveness.
- inspected documents relating to the Selected Information, including board committee minutes to understand the level of management awareness and oversight of the Selected Information.
- performed procedures over the Selected Information, including recalculation of relevant formulae used in manual calculations and assessment whether the data has been appropriately consolidated.
- performed procedures over underlying data on a statistical sample basis to assess whether the data has been collected and reported in accordance with the Applicable Criteria, including verifying to source documentation.
- performed procedures over the Selected Information including assessing management's assumptions and estimates.
- accumulated misstatements and control deficiencies identified, assessing whether material.
- read the narrative accompanying the Selected Information with regard to the Applicable Criteria and for consistency with our findings.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

Use of our report

This report is made solely to the Directors of Legal & General Group Plc in accordance with ISAE 3000 (Revised), ISAE 3410 and our agreed terms of engagement. Our work has been undertaken so that we might state to the Directors of Legal & General Group Plc those matters we have agreed to state to them in this report and for no other purpose.

Without assuming or accepting any responsibility or liability in respect of this report to any party other than Legal & General Group Plc and the Directors of Legal & General Group Plc, we acknowledge that the Directors of Legal & General Group Plc may choose to make this report publicly available for others wishing to have access to it, which does not and will not affect or extend for any purpose or on any basis our responsibilities. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than Legal & General Group Plc and the Directors of Legal & General Group Plc as a body, for our work, for this report, or for the conclusions we have formed.

Deloitte LLP
London
5 March 2024

Metrics dashboard

Invest

As we continue to build our understanding of our climate and nature-related opportunities and risks, we are improving our quantification of our opportunities and risks in relation to both our investments and our operations. These metrics are sourced from organisations such as the ISSB and NZAOA.

We focus on the primary metrics in the metrics and targets chapter of this report, but the tables on these pages provide a full metric dashboard as at 31 December 2023.

The tables compare the current year metric with both the prior year and the base year, where available. This provides useful context as to the trajectory of our emissions.

We endeavour to continue to build on these metrics over future iterations of our reporting, particularly as we see methodologies on nature-related metrics improve.

Table 10. Additional investment metrics

Metric category	Metric	Metric measurement[1]	2019 (Rebased)[2]	2021 (Rebased)[2]	2022 (Rebased)[2]	2023
Proprietary asset exposure	Portfolio value	£bn	83,700	95,698	80,488	89,999
	Renewable energy investments	£bn	1.4	1.4	1.3	1.4
	Transition finance investments	£bn	–	–	–	3.3
	Direct fossil fuel exposure[3]	£bn	–	–	1.0	1.2
Scope 3 investments (proprietary assets) – financed emissions	Investment portfolio economic GHG emissions intensity (EVIC)	tCO_2e/£m EVIC	80 (94)	65 (76)	62 (73)	56
	Investment portfolio economic GHG emissions intensity (2019 reduction)	%	–	(19)	(23)	(30)
	Investment portfolio economic GHG emissions intensity (static EVIC)	tCO_2e/£m EVIC	–	–	–	54
	Investment portfolio economic GHG emissions intensity (2019 reduction)	%	–	–	–	(32)
	Investment portfolio economic GHG emissions intensity ex-sovereigns (dynamic EVIC)	tCO_2e/£m EVIC	– 	61 (73)	59 (71)	52
	Investment portfolio economic GHG emissions intensity (corporate bonds and equities, real estate and infrastructure) – NZAOA target metric	tCO_2e/£m EVIC	(97)	–	(77)	To be reported in 2024
	Investment portfolio weighted average carbon intensity (WACI)	tCO_2e/USD million revenues	– 	169 (172)	151 (154)	127
	Investment portfolio GHG emissions	Million tCO_2e	6.7 (7.9)	6.2 (7.3)	5.0 (5.8)	5.0
Scope 3 investments (proprietary assets) – physical intensity emissions	Real estate investment portfolio physical carbon emissions intensity	tCO_2e/m^2	0.058	0.054	0.050	0.050
	Electricity generation project finance portfolio physical carbon emissions intensity	tCO_2e/m^2	–	60	–	60
Scope 3 investments (LGIM-wide) – financed emissions	AUM economic GHG emissions intensity (EVIC)[4]	tCO_2e/£m EVIC	–	–	–	88
Scope 3 category 13 – physical intensity emissions	Downstream leased assets physical carbon emissions intensity	tCO_2e/m^2	0.055	0.051	–	0.047
Scope 3 investments (proprietary assets) – temperature portfolio alignment	Implied portfolio temperature alignment – internal methodology	°C (ROTS aggregation[5])	–	2.6 (2.7)	2.6 (2.7)	2.5
Scope 3 investments (proprietary assets) – temperature portfolio	Portfolio temperature rating – SBTi methodology – scope 1 and 2 – scope 1, 2 and 3	°C (ECOTS aggregation[6])		2.4 2.9		2.4 2.7

1. For each year's calculations the emissions and revenues data refers to the most recently available reported carbon footprint scores and revenue information (which generally contains a one-year lag for listed equity and debt, and two-year-lag for sovereigns). For example, the emissions (tCO_2e) and revenue data would generally refer to 2022 for the 2023 metric suite column.
2. Metrics have been rebaselined through a combination of methodology and data sourcing changes. Figures from the 2022 report provided in brackets.
3. Direct private investments in fossil fuel-related projects and companies.
4. Covering £0.8 trillion of listed bonds and equities.
5. ROTS: Revenue owned emissions weighted temperature score.
6. ECOTS: Enterprise value including cash emissions weighted temperature score.

Metrics dashboard

Operate

Table 11. Additional operational metrics (carbon)

Metric category	Metric[1]	Metric measurement	2021[2]	2022	2023[3,4]
Scope 1	Total scope 1	tCO_2e	15,559	12,506	10,158*
	Occupied office gas usage	tCO_2e	872	509	523
	Gas usage from landlord activities	tCO_2e	7,175	6,068	5,385
	Construction activities	tCO_2e	7,512	5,929	4,250
Scope 2 (location-based)	Total scope 2 location	tCO_2e	23,423	17,556	17,564*
	Occupied office electricity usage UK	tCO_2e	3,964	2,393	2,383
	Electricity usage from landlord activities	tCO_2e	17,827	13,071	13,590
	Construction activities	tCO_2e	1,632	2,092	1,591
Scope 2 (market-based)	Total scope 2 market	tCO_2e	2,432	2,586	4,215*
	Percentage of electricity purchased from a renewable source	% of total	87	86	82
MWh	Total electricity	MWh	93,743	87,878	79,100
	Total gas	MWh	56,907	47,910	42,853
	Total on-site fuel from our house building businesses	MWh	18,118	16,112	16,795
Scope 3 – operational	Category 6 – business travel	tCO_2e	2,070	5,467	7,631*
	Category 7 – home working	tCO_2e	3,025	4,739	4,568*
	Category 8 – serviced offices	tCO_2e	371	306	304*

			Business	2023
Embodied Carbon	$kgCO_2e/m^2$	Building lifecycle stages A1-A5, B1-B5, C1-C4 including sequestration	CALA	538
			IVG	600
			LGAH	632[5]
			Modular	n/a
			SBTR	779[6]
EUI	$kWh/m^2/year$	Building's operational energy use (lifecycle stage B6), not including on-site renewables	CALA	90
			IVG	61
			LGAH	112[6]
			Modular	–
			SBTR	107[6]

Table 12. Additional operational metrics (non-carbon)

Metric category	Metric[1]	Metric measurement	2021	2022	2023[3]
Water	Core occupied office water consumption	lpppd	–	36	33
	Water efficiency of IVG housing developments in water stressed areas	lpppd	–	100	100
	Water efficiency of CALA housing developments in water stressed areas	lpppd	–	122[7]	109
	Water pollution incidents	Number of water pollution prosecutions	0	0	0
Waste	Total waste	Tonnes	37,920	36,613	38,906
	Waste from occupied offices	Tonnes	433	599	514
	Waste from house building construction sites controlled by LGC	Tonnes	37,487	36,014	38,392
	Total waste sent to landfill	% of total waste	1.4	<1	<1

			Business	2023
Certified Timber Procurement	% of FSC or PEFC certified timber	% of timber used within our developments that has been procured from sustainable sources	CALA	100
			IVG	100
			LGAH	100
			Modular	100
			SBTR	100
BNG[8]	% of new planning applications undertaking BNG assessment	Number of sites that have undertaken a BNG assessment as part of the development planning application process as a percentage of the total number of planning applications submitted	CALA	63
			IVG	100

1. Please refer to our Basis of Preparation (pages 56 to 57) for details of how we collate our GHG data for our operational carbon footprint.
2. This is our 2021 SBT base year which includes our LGIM Real Assets 2019 data to account for the impact of the pandemic.
3. We purchased Taylor Lane, a timber frame construction specialist in 2023, due to limited access to robust data sets this has been excluded from our 2023 footprint and will be included from 2024. Noting this does not have a material impact on our overall footprint.
4. Deloitte have provided independent limited assurance in accordance with the International Standard for Assurance Engagements 3000 ('ISAE 3000') and Assurance Engagements on Greenhouse Gas Statements ('ISAE 3410') over the selected metrics identified with a *. Deloitte's full unqualified assurance opinion, which includes details of the selected metrics assured, can be found on pages 51 to 52.
5. Data available from two developer partners. May not be representative of all sites.
6. Data from developer partners.
7. Measured at practical completion, not at planning application.
8. Other housing businesses not directly responsible for new planning applications or construction sites in 2023.

Investment portfolio metrics detail

Investment portfolio GHG emissions intensity

Rebasing approach

The impact of the rebasing activities that have been carried out this year are highlighted in Table 13, where we show their impacts on the equivalent metric as used for the production of last year's climate report. This enables us to compare our 2023 metrics with those from 2022 on a comparable basis.

This rebasing activity has included the upgrade of our measurement methodology, in particular relation to private credit assets. This year we have further refined our proxy approach, including linking into the PCAF database where necessary and available. Further detail on our proxy approaches are provided in the Basis of Preparation on pages 58 to 63.

The table shows the impact of stepping through these changes. This year's modelling upgrade decreased both the economic GHG emission intensity and the associated revenue-based measure. We have used these updated, rebased numbers as the starting point for determining the change in GHG emission intensity during 2023.

Tables 14 and 15 then breakdown the end 2023 absolute portfolio GHG emissions by asset class and sector.

Portfolio temperature alignment

Aggregation of implied temperature alignment at a portfolio level

We have adopted two methods for aggregating temperature alignment scores of individual securities into portfolio level metrics.

For the LGIM Implied Temperature Alignment metric, we have aligned to the SBTi 'Revenue owned emissions weighted temperature score (ROTS)' portfolio weighting option, which expresses portfolio alignment on a (revenue-intensity-based) carbon weighted basis[1].

This approach aligns with LGIM's default approach and supports the measurement and management of investment impact.

Portfolio alignment
= ∑ position value x security temperature alignment x security revenue-based carbon intensity (WACI)/

∑ Position value x security revenue-based carbon intensity (WACI)

For the SBTi Portfolio Temperature Rating (PTR) metric, we have aligned to the SBTi 'Enterprise value and cash owned emissions weighted temperature score (ECOTS)'[1] portfolio weighting option, which expresses portfolio alignment on a (EVIC-intensity-based) carbon weighted basis.

This approach aligns with our primary economic emissions intensity metric to support consistency across our target metrics.

Portfolio alignment
= ∑ position value x security temperature alignment x security EVIC-based economic carbon intensity/

∑ Position value x security EVIC-based economic carbon intensity

We rely on third-parties for our emissions and target data; where third-party data is not available, we use proxies for these emissions on a best endeavours basis.

Table 13. Group investment portfolio GHG emission intensity

	$tCO_2e/£m$		
Measure	**2022 Climate report**	**Impact of private credit approach changes and other minor corrections**	**2022 restatement**
	2022	**2022**	**2022 (rebased)**
Investment portfolio economic carbon intensity	**73**	**(11)**	**62**
% reduction from 2019 base year	**(23)**	**–**	**–**
Investment portfolio economic carbon intensity ex sovereigns	71	(12)	59
Investment portfolio weighted average carbon intensity (WACI) (tCO_2e/USD million revenues)	154	(3)	151

Table 14. Portfolio GHG emissions by asset class

2023 emissions	**GHG emissions (million tCO_2e)**
Bond	**4.9**
Property	**0.1**
Equity	**0.0**
Total	**5.0**

Table 15. Portfolio GHG emissions breakdown by sector

2023 emissions	**GHG emissions (million tCO_2e)**
Utilities	**2.1**
Energy	**0.8**
Materials	**0.2**
Industrials	**0.4**
Government	**0.8**
Other	**0.8**
Total	**5.0**

1. www.sciencebasedtargets.org/resources/files/Financial-Sector-Science-Based-Targets-Guidance.pdf

Scope 1 and 2 emissions
Basis of preparation

Background
As a supporter of the Financial Stability Board's (FSB) TCFD, we commit to disclosing climate-related financial information through an annual climate report, which aligns to TCFD recommendations and is supplementary to the Annual report and accounts.

These disclosures will report the emission sources required under the Companies Act 2006 (Strategic report and Directors' report) Regulations 2013 and will follow the requirements of the SECR framework. The GHG emissions data will be reported in line with the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard.

Introduction
This basis of preparation document sets out how Legal & General prepares its reporting for scope 1, scope 2 (location-based) and scope 2 (market-based) GHG emissions.

It is the responsibility of Legal & General management to ensure that appropriate internal procedures are in place to report GHG emissions performance data, in all material respects, as set out in this document. These procedures ensure that:

- the reported information reflects Legal & General's performance
- the data is meaningful and is consistent with the stated definitions and scope
- any specific exclusions are stated clearly and explained
- any assumptions made, as well as the accounting and calculation methods are clearly described
- the level of transparency is sufficient to enable users to have confidence in the integrity of Legal & General's reporting.

Scope
Legal & General discloses its scope 1 and 2 carbon emissions for the whole of Legal & General Group, its subsidiaries and joint ventures.

Legal & General apply the operational control methodology as set out in the Greenhouse Gas Protocol (i.e. Legal & General include all operations directly controlled, such as the energy from the offices Legal & General occupy), Legal & General landlord activities, including property under Legal & General's control until point of occupation/ sale and void properties under Legal & General control, as well as the construction of new homes within Legal & General's housing business and joint ventures[2].

The carbon emissions data that is reported is aligned with the Group's financial reporting year, 1 January to 31 December, unless otherwise stated, noting that LGIM Real Assets data is reported annually from 1 December to 30 November.

Legal & General include newly acquired businesses as soon as the appropriate processes and systems are implemented to enable consistent data collation and Legal & General group-level consolidation[3].

The results of disposed businesses are included up to the date of disposal.

Base year emissions data from 2021 is included to help demonstrate an emissions trajectory. Our 2021 base year is our SBTi approved base year. This includes our LGIM Real Assets 2019 data to account for the impact of the pandemic, all other data is 2021.

Reporting standards
Legal & General's reporting disclosures follow the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard (GHG Protocol), and the UK Government's SECR requirements[4]. In line with these reporting standards Legal & General disclose scope 1 and scope 2 carbon emissions.

Scope 1: Direct carbon emissions occur from sources that are owned or controlled by Legal & General, for example, emissions from combustion in owned or controlled boilers and directly owned vehicles.

Scope 2: Indirect carbon emissions from the generation of purchased electricity and district heating. Legal & General report scope 2 emissions in accordance with GHG Protocol guidance:

a. Location-based: the carbon emissions from purchased (power) are calculated using the national grid average emission conversion factors in the countries Legal & General operate within
b. Market-based: all electricity purchased is converted to carbon emissions using factors from contractual instruments which Legal & General has purchased or entered into.

Please note that scope 1 and 2 data has been subject to independent limited assurance by Deloitte and their assurance opinion can be found on pages 51 to 52 of this report.

Data collection
In building Legal & General's scope 1 and 2 carbon emissions footprint, internal carbon reporting procedures are followed to capture and collate data.

Data owners, data type and frequency are outlined in an internal data dictionary which is used to track data collection throughout the annual reporting period.

Data is collected across the business and aggregated to provide a group-wide carbon footprint. All underlying data is collated by each business using consistent methods of collection, for example half-hourly meter readings, utility bills and physical meter readings.

Legal & General's approach is to use actual data where it is practical and feasible to do so. In some instances, it may be necessary to use estimated data or extrapolated data that is based on data from other parts of the business or industry benchmarks.

For example, we have internal procedures for the use of estimates where we do not have access to metered or invoiced data within the period

Legal & General use the following industry benchmarks: CIBSE TM46 and REEB.

Legal & General utilise a range of data sources which are outlined on the following page.

1. Joint ventures are included in the footprint where Legal & General are the majority shareholder or have operational control.
2. Includes offices Legal & General occupy where Legal & General actively control the management of utilities.
3. We purchased Taylor Lane, a timber frame construction specialist in H2 2023, due to limited access to robust data sets this has been excluded from our 2023.
4. The Greenhouse Gas Protocol Corporate Reporting standard: www.ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf
5. www.gov.uk/government/publications/environmental-reporting-guidelines-including-mandatory-greenhouse-gas-emissions-reporting-guidance

Scope 1 and 2 emissions
continued

Scope 1 carbon emissions:
- purchased fuels: invoices and expenses system for construction site and on-site generator fuels and vehicle fuels
- gas purchased: meter readings, energy contractor reports, invoices and estimates based on relevant industry benchmarks, such as CIBSE TM46
- self-generated electricity: meter readings.

Scope 2 carbon emissions:
- electricity purchased: meter readings, energy contractor reports, invoices and estimates based on relevant industry benchmarks, such as REEB
- district heating: energy contractor reports.

Fugitive emissions (included within scope 1):
- invoices and engineering reports for F-gas additions and regulatory 'F-gas' registers.

The data is subject to review and approval by each business before being submitted for aggregation at the Legal & General group-level. Following submission, it is further reviewed by the Group environment team to confirm the accuracy and reliability of the data submitted and conversion factors applied. Queries are raised with data owners to address anomalies.

As stated above, scope 1 and 2 data is subject to independent limited assurance by Deloitte, as well as internal legal review prior to publication. Checks are also undertaken at the half and full year period at a group-level, and data is shared with the GEC prior to inclusion in annual disclosures.

GHG emissions conversion factors
- Legal & General's carbon emissions are calculated using current and publicly available emission conversion factors. Consumption data, such as kWh or litres of fuel, is converted into tCO_2e.

The primary source of Legal & General's emission conversion factors are:

- the Department for Energy Security and Net Zero (DESNZ)
- for international operations in the US, The United States Environmental Protection Agency (EPA).

The DESNZ conversion factors are updated halfway through the year and Legal & General apply the relevant conversion factor to each associated period[1].

For scope 2 market-based methodology, the carbon emissions are determined by contractual instruments which Legal & General has purchased or entered into such as Renewable Energy Guarantees of Origin ('REGO'), power purchasing agreements and utility contracts and therefore has a greenhouse gas emission factor of zero. There is a period for which electricity purchased on a renewable tariff cannot be evidenced as REGO-backed, because the REGO and Legal & General reporting periods do not align; therefore, REGO certificates allocated in a given year may not cover all electricity consumption within that reporting period. In this instance, a reasonable assumption is made for those months of consumption, that the electricity consumed is on a renewable tariff, as it is within the same contract period. Where REGO certificates are unavailable at the date of reporting, but the corresponding supplier contractual commitment is for 100% of the supply to be REGO backed, the relevant usage is reported as REGO-backed.

Exclusions
Legal & General apply exclusions in accordance with the GHG Protocol and the UK Government's guidance on SECR requirements.

Legal & General's primary exclusions are joint ventures where Legal & General are not the majority shareholder or do not have operational control.

We purchased Taylor Lane, a timber frame construction specialist in H2 2023. Due to limited access to robust data sets this has been excluded from our 2023 footprint and will be included from 2024. This does not have a material impact on our overall footprint.

Restatement of reported data
Legal & General's expectation is that all data is reported accurately and completely. However, given the complexities associated with some of the data, including the use of estimates, there can be instances where it may be necessary to amend data reported in prior years, due to the availability of higher quality data or a change in the data collating processes.

Where Legal & General believe there is a material impact on previously reported data, the data will be restated along with an explanatory note[2].

1. Real Assets businesses apply the year-end conversion factor to the 12 month period of collated data, noting that this business reports data from 1 December to 30 November.
2. Either a change of 5% or more from the original stated data or where there is a material impact from the operational business.

Scope 3 emissions
Basis of preparation

Background

As a supporter of the FSB's TCFD, Legal & General commit to disclosing climate-related financial information through an annual climate report which aligns to TCFD recommendations and is supplementary to its Annual report and accounts.

In line with the UK SECR, Legal & General's GHG information is set out in its Annual report and accounts and its accompanying Climate and nature report, both published in March.

Introduction

This basis of preparation document sets out how Legal & General prepares its GHG emissions reporting for the following scope 3 categories:

- category 3: Fuel and energy-related activities
- category 5: Waste
- category 6: Business travel
- category 7: Employee commuting (home working)
- category 8: Upstream leased assets
- category 13: Downstream leased assets
- category 15: Investments.

It is the responsibility of Legal & General management to ensure that appropriate internal procedures are in place to report GHG emissions performance data, in all material respects, as set out in this document.

These procedures ensure that:

- the reported information reflects Legal & General's performance
- the data is meaningful and is consistent with the stated definitions and scope
- any specific exclusions are stated clearly and explained
- any assumptions made, as well as accounting and calculation methods are clearly described
- the level of transparency is sufficient to enable users to have confidence in the integrity of Legal & General's reporting.

Scope

Legal & General discloses its scope 3 carbon emissions (categories 3, 5, 6, 7, 8, 13 and 15) for the whole of Legal & General Group, its subsidiaries and joint ventures Legal & General follows the Greenhouse Gas Protocol Corporate Value Chain (scope 3) Accounting and Reporting Standard[1,2].

The carbon emissions data reported is aligned with the Group's financial reporting year, 1 January to 31 December for categories 5, 6, 7, 8, and 13[3,4]. category 3 is based on scope 1 and 2 data, category 15 is based on January to December of the previous year for corporate investments and two years for sovereign investments, due to the availability of carbon data reporting. Category 13 and 15 emissions are based on the investment holdings as at 31 December (end of reporting year).

Legal & General include newly acquired businesses as soon as the appropriate processes and systems are implemented to enable consistent data collation and Legal & General group-level consolidation[5]. The results of disposed businesses are included up to the date of disposal.

Where available base year data is included, for example from 2021, to help demonstrate Legal & General's emissions trajectory.

The table on the following page outlines Legal & General's assessment of materiality for all categories of scope 3 emissions.

1. Joint ventures are included in the footprint where Legal & General are the majority shareholder, or have operational control.
2. Category 15 emissions relate to our shareholder investments, which are defined as total investments to which shareholders are directly exposed, and do not cover our policyholder and external client investments.
3. Business travel data is based on business mileage expenses claimed from 1 January to 31 December, rather than actual miles travelled in calendar year. As the engine sizes from employee expenses claims are based on internal thresholds and not directly aligned with BEIS engine size thresholds, Legal & General take a prudent approach in applying the higher of BEIS conversion factors for the engine size per employee expenses claims.
4. LGIM Real Assets data reported annually from 1 December to 30 November.
5. We purchased Taylor Lane, a timber frame construction specialist in H2 2023, due to limited access to robust data sets this has been excluded from our 2023 footprint and will be included from 2024. Noting this does not have a material impact on our overall footprint.

Scope 3 emissions
continued

Scope 3 coverage

Category	Scope/ description	Description of materiality and our current approach	Key business relevance	Associated target/ commitment
Category 1	Purchased goods and services	Relevant to our organisation. We continue to work closely with our supply chain and have set a mid-term SBT.	Group-wide	We commit to ensuring that 80% of our suppliers, by spend, will set a science-based carbon reduction target by the end of 2026[1].
Category 2	Capital goods	Relevant to our organisation. We continue to develop standardised processes for data collection, with the most material data for LGC collected and disclosed on an intensity basis.	LGIM Real Assets and LGC	We are committed to reducing the embodied carbon of our homes and real estate investments.
Category 3	Fuel and energy-related activities	Relevant to our organisation. Data collated and disclosed for 2023.	Group-wide	100% of our energy to be purchased from a renewable source.
Category 4	Upstream transportation and distribution	Relevant to our organisation. Included in category 1. Data will be collated and disclosed from 2024 relevant to CALA (Taylor Lane).	Group-wide	–
Category 5	Waste generated in operations	Relevant to our organisation. Data collated and disclosed for 2023.	LGC and core occupied offices	We will divert 100% of waste from landfill by 2025 in all offices and LGC development projects where we are responsible for waste management.
Category 6	Business travel	Relevant to our organisation. Data collated and disclosed for 2023.	Group-wide	From 2030, our group-wide business travel will generate net zero emissions.
Category 7	Employee commuting (home working)	Relevant to our organisation. Data collated and disclosed for 2023.	Group-wide	–
Category 8	Upstream leased assets	Relevant to our organisation. Data collated and disclosed for 2023.	Group-wide	Our net zero ambition is shaping our future location strategy.
Category 9	Downstream transportation and distribution	Relevant to our organisation in 2023 but will not be going forward due to the closure of our Modular Homes business.	Legal & General Modular Homes	–
Category 10	Processing of sold products	Not relevant to our organisation.	n/a	n/a
Category 11	Use of sold products	Relevant to our organisation. We are developing standardised processes to capture this data and will disclose in future years. Refer to energy use intensity for our housing businesses.	LGIM Real Assets and LGC	All new homes we deliver, from 2030, will be enabled to operate at net zero carbon emissions.
Category 12	End of life treatment of sold products	Relevant to our organisation. We are developing standardised processes to capture this data and will disclose in future years.	LGIM Real Assets and LGC	–
Category 13	Downstream leased assets	Relevant to our organisation. Data collated and disclosed for 2023.	LGIM Real Assets and LGC	Legal & General commits to reduce our downstream leased asset GHG emissions by 55% per square meter by 2030 from a 2019 base year.
Category 14	Franchises	Not relevant to our organisation.	n/a	–
Category 15	Investments	Relevant to our organisation. Data collated and disclosed for 2023.	Group proprietary assets	By 2030, reduce portfolio GHG emission intensity by 50% (from a 2019 base year) and increase financing of low-carbon technology and infrastructure.

1. We define a target as science-based if it is aligned to SBTi criteria i.e. is a mid-term reduction target with enough ambition to align with the global net zero trajectory. We would expect this to be between 40-50% reduction depending on the base year.

Scope 3 emissions
continued

Reporting standards for scope 3 categories

Legal & General follow the Greenhouse Gas Protocol Corporate Value Chain (scope 3) Accounting and Reporting Standard for reporting scope 3 emissions:

Category 3: Fuel and energy-related activities
Extraction, production, and transportation of fuels and energy purchased or acquired by the reporting company in the reporting year, not already accounted for in scope 1 or scope 2.

Category 5: Waste
Disposal and treatment of waste generated in operations in the reporting year (in facilities not owned or controlled by Legal & General).

Category 6: Business travel
Transportation of employees for business-related activities during the reporting year (in vehicles not owned or operated by the reporting company)

Category 7: Employee commuting
Department for Energy Security and Net Zero (DESNZ) guidance and conversion factors to account for home working. Please note this methodology does not include a calculation for employee commuting.

Category 8: Upstream leased assets
Operation of assets leased by Legal & General (lessee) in the reporting year and not included in scope 1 and scope 2 as reported by Legal & General.

Category 13: Downstream leased assets
Operation of assets owned by the reporting company (lessor) and leased to other entities in the reporting year, not included in scope 1 and scope 2 – reported by lessor.

Category 15: Investments
Operation of investments (including equity, debt and property investments and project finance) in the reporting year, not included in scope 1 or scope 2.

Please note that scope 3 categories 6, 7 and 8 data has been subject to independent limited assurance by Deloitte and their assurance opinion can be found on pages 51 to 52 of this report.

Data collection

In building Legal & General's scope 3 emissions data, internal procedures are implemented to capture and collate data. Data owners, data type and frequency are outlined in an internal data dictionary which is used to track data collection throughout the annual reporting period. Data is collected across the business and aggregated to provide a group-wide carbon footprint. All underlying data is collated by each business or at a group-level using recognised data collection methods, for example supplier reports or expenses data.

Legal & General's approach is to use actual data where it is practical and feasible to do so. In some instances, it may be necessary to use estimated data or extrapolated data that is based on data from other parts of the business or industry benchmarks. For example, Legal & General use the DESNZ guidance and metrics to account for carbon emissions from employees working from home.

Scope 3 data is subject to review and approval by each business before being submitted for aggregation at the Legal & General group-level. Following submission, it is further reviewed by the Group environment team to confirm the accuracy and reliability of the data submitted and conversion factors applied. Queries are raised with data owners to address anomalies.

Scope 3 categories 6, 7 and 8 data is subject to independent limited assurance by Deloitte. All scope 3 data is subject to internal legal review prior to publication. Checks are also undertaken at the half and full year at a Group-level and data is shared with the GEC prior to inclusion in annual disclosures.

Legal & General utilise a range of data sources in the measurement of scope 3 emissions, which are outlined below.

Category 3: Fuel and energy-related activities:
DESNZ guidance and conversion factors are applied to the data collected for the annual scope 1 and 2 footprint.

Category 5: Waste
- calculated based on data collected by business areas broken down, as a minimum, to the following disposal routes:
  - Recycling
  - Energy from waste
  - Composting
  - Landfill
- data is subject to review and approval by each business before being submitted for aggregation at the Legal & General group-level. Following submission, it is further reviewed by the Group environment team and conversion factors applied by waste type. Queries are raised with data owners to address anomalies.

Category 6: Business travel:
- data is collected on the following modes of business travel: road-based mileage; air travel distance; rail travel distance
- where possible distance (miles or kilometres) are used. A distance-based method involves determining the distance and mode of business travel, then applying the appropriate emission factor for the mode used
- the following data is collected:
  - type of travel (for example emissions factors vary by distance and class of travel)
  - specific types and size of vehicles used for travel (since transportation emission factors vary by vehicle types) from transport providers
  - the specific passenger vehicle type and fuel used (since transportation emission factors vary by fuel types).
- where distance data is not available a spend-based method is used. This involves determining the amount of money spent on each mode of business travel transport and applying a primary conversion factor to convert to distance and then a standard conversion factor to determine emissions[1]
- third-party travel booking providers, as part of contractual agreements, provide travel data on journeys undertaken
- information is collated from central and businesses expenses systems
- data is collated at group-level following a review by the Group environment team and conversion factors applied. Queries are raised with data owners to address anomalies.

Category 7: Employee commuting (homeworking)
- the DESNZ guidance and conversion factors are used to calculate homeworking emissions for employees[2]. Energy use from office equipment and home heating, which would not have occurred in an office-working scenario is accounted for
- assessment of homeworking is based on UK regions, as the majority of employees are located in the UK and there are currently no emissions factors for homeworking in other countries. Therefore, all employee home working emissions are calculated using the UK emissions factors.

1. UK Government guidance and conversion factors are applied.
2. Employees defined as Full-Time Employee equivalent (annual average).

Scope 3 emissions
continued

Please note, Legal & General do not currently collate information on employee commuting, although we do collate the carbon from shuttle buses provided by Legal & General. This is captured within scope 3 Category 6.

Category 8: Upstream leased assets

- an average data method is used to estimate emissions from leased buildings. This means estimating emissions for each leased asset, based on average data, such as average emissions per asset type or floor space
- this method has been selected because purchase records, electricity bills, or meter readings of fuel or energy use are not available or applicable
- the following information is used:
  - floor space of each leased building (where not available average head counts are used and the following calculation applied to determine floor space headcount x $7m^2$ = total m^2 [1])
  - the BBP REEB are used to calculate gas (kwh) and electricity (kwh)
  - appropriate DESNZ emissions factors are then applied.

Category 13: Downstream leased assets

Where we do not manage our properties, our occupiers provide utility data, or we use benchmark data-based upon property type and floor area. We use the following benchmark data sources:

- Global Real Estate Sustainability Benchmarking (GRESB) occupier data collection. As part of our occupier liaison processes, we currently receive operational data from a proportion of our occupiers.
- industry standard benchmarks: Chartered Institute of Building Services Engineers (CIBSE) and BBP REEB. Energy (and carbon) benchmarks for various types of property have been published in the UK for over 20 years, originating from the government-funded Energy Efficiency Best Practice Programme (EEBPP). The most recent update to these benchmarks was undertaken by CIBSE in 2008
- in addition, the BBP has established more recent benchmarks for particular types of commercial buildings, predominantly offices and shopping centres. REEB 2020 office benchmark was used for this analysis.

By using a combination of these benchmarks, we establish an estimate of the carbon emissions associated with our direct property investments and also identify which property sectors are, on average, most intensive in terms of carbon emissions.

Conversion factors

Legal & General's carbon emissions are calculated using publicly available emission conversion factors. Consumption data, such as kWh or litres of fuel, is converted into tonnes of CO_2e. The primary source of Legal & General's emission conversion factors is the Department for Energy Security and Net Zero (DESNZ)[2]. The DESNZ conversion factors are also applied to travel and serviced offices within international countries.

Exclusions

Legal & General apply exclusions in accordance with the GHG Protocol and the UK Government's guidance on SECR requirements.

Legal & General's primary exclusions are joint ventures where Legal & General are not the majority shareholder or do not have operational control.

In some instances where it has not been possible to obtain relevant data or Legal & General are not able to apply an appropriate and valid estimation, Legal & General have excluded that from our reporting until it can be appropriately measured[4].

Restatement of reported data

Legal & General's expectation is that all data is reported accurately and completely. However, given the complexities associated with some of the data, including the use of estimates, there can be instances where it may be necessary to amend data reported in prior years, due to the availability of higher quality data or a change in the data collating processes.

Where Legal & General believe there is a material impact on previously reported data, the data will be restated along with an explanatory note[3].

Category 15: Investments

Legal & General's category 15 data is made up of Legal & General ownership share of the financed emissions related to Legal & General's on-balance-sheet proprietary asset portfolio (referred to as 'Group proprietary assets'). It includes bonds, equities, and investment property, but excludes cash, derivatives, or any assets already covered in our operational footprint.

Legal & General's primary metric is the GHG economic emissions intensity of the portfolio of Group proprietary assets. This is the total of all the GHG produced by our share of the companies and corporations that we invest in, per unit of investment, and is reported using carbon dioxide equivalent (CO_2e) emission data. There are three components to this metric:

- the GHG emissions, CO_2e, in tonnes for each entity in which we are invested arising from the underlying scope 1 and scope 2 emissions directly connected with its operations
- a unit of value to normalise the emissions by the underlying size of the entity we are investing in measured in £m. For our primary metric we use:
  - EVIC for corporate issuers
  - sovereign capital stock for sovereigns
  - market valuation for each real asset investment
- the size of our holding in the entity.

The investment portfolio emissions intensity is then calculated by weighting the normalised emissions (tonnes of CO_2e emissions per £m normaliser entity value as defined above) by the size of our investment and aggregating all holdings in our investment portfolio.

Where third-party data is not available, we have adopted several proxy approaches with the aim of filling the coverage gap. For some key asset classes, asset class-specific approaches are employed, while for others that are not covered in our datasets, we use sector-based proxies. Proxy approaches are used for the following other asset classes: real assets, lifetime mortgages, private debt and private equity.

Our calculation methodology for our primary economic carbon intensity metric aligns with (unless stated):

- PCAF stock emission intensity methodologies (that is to say using EVIC as the stock emission intensity normaliser), where available. Known deviations from the PCAF methodologies are stated below
- TCFD's carbon footprint portfolio weighting methodology (that is to say stock intensities are weighted by portfolio value).

This year, we have also broken the portfolio score down by asset class and industry sector within this report, in line with PCAF guidance.

1. $7m^2$ is sourced from the UK Government Employment Densities Guide 2010, which Legal & General use for space planning purposes.
2. The UK Government conversion factors are updated halfway through the year and Legal & General apply the conversion factor for the year-end period to the full years data.
3. Either a change of 5% or more from the original stated data or where there is a material impact from the operational business.
4. We purchased Taylor Lane, a timber frame construction specialist in H2 2023, due to limited access to robust data sets this has been excluded from our 2023 footprint and will be included from 2024. Noting this does not have a material impact on our overall footprint.

Scope 3 emissions
continued

Note, for each years' calculations the emissions and revenues data refer to the most recently available reported carbon footprint scores and revenue information (which generally contains a one-year lag for listed equity and debt, and two-year lag for sovereigns). For example, the emissions (tCO_2e) and revenue data would generally refer to 2022 for the 2023 metric.

PCAF data quality assessment

From 2023 onwards, Legal & General has implemented the PCAF data hierarchy system and will disclose the portfolio data quality scores[1].

The resulting data coverage in relation to the investment portfolio emissions intensity is disclosed within this report accordingly.

Known data limitations

When it comes to emissions data, we rely on third-party databases (such as Institutional Shareholder Services, ISS) and the associated data is subject to the each providers' quality considerations.

The use of portfolio sector averages is used in some cases where emissions date does not exist. This sector mapping is currently carried out at 'BICS legacy level 1', as a pragmatic approach on the grounds of current modelling capacity and data availability. This may present a limitation as issuers of holdings could have multiple industry sectors, or the holdings could be the most relevant to an unlisted subsidiary of a listed parent of multiple sectors.

Known deviations from the PCAF methodologies

We note the following key deviations in Legal & General financed emissions from requirements in PCAF standards.

- we do not currently include the scope 3 emissions of our investee companies, primarily due to the challenges of producing meaningfully comparable data across the highly diverse set of industries in which we invest
- we use total capital stock as the stock emission intensity normaliser for sovereign bonds within our full portfolio calculation, as opposed to adjusted GDP, as the economically more comparable normaliser to EVIC used for other asset classes.

Consideration of scope 3 category 13 and category 15 assets

There is a portfolio of properties where LGIM Real Assets acts as the landlord whilst LGRI takes direct ownership. The investment portfolio emissions and related financed emissions intensity arising from such property holdings are reported as scope 3 Category 15, and not as scope 3 Category 13, avoiding duplication in reported metrics.

To note, the physical carbon intensity (tCO_2e/m^2) for this property portfolio is reported within both scope 3 Category 13 and Category 15 calculations.

Scope 3 investment portfolio carbon footprint: underlying data approach

ISS data provides a coverage of £26.8 billion of our corporate portfolio, and £7.9 billion of our sovereign portfolio (c.39% direct coverage of 2023 portfolio). The following categories cover the approach to each asset class, including the techniques we apply to estimate and proxy carbon emissions in the absence of third-party emissions data.

Corporate credit and listed equity

The carbon footprint calculation for this asset class is purely data-driven, using our predominant data providers as follows:

- ISS is LGIM's primary carbon data platform
- corporate normaliser data:
  - 'EVIC' scores, used to normalise the emission scores within the Investment portfolio economic carbon intensity calculation, are provided by Refinitv
  - 'revenue' scores, used to normalise the emission scores within the investment portfolio WACI calculation, are provided by ISS
- carbon emissions and revenue data have a one-year lag.

Sovereigns

For government bonds we also follow a data-driven approach, as follows:

- production based GHGs (ISS): GHGs within the country border per calendar year is the numerator
- divisor: total capital stock per calendar year (IMF) used for the economic intensity calculation – tCO_2e/£m invested (broadly comparable to tCO_2e/£m EVIC for corporate bonds)
- GDP per calendar year (ISS) used for the revenue-based calculation – tCO_2e/£m GDP (broadly comparable to tCO_2e/£m revenue for corporate bonds)
- government carbon emissions data has a two-year lag.

Unscored credit and equity (both listed and unlisted)

We utilise a selection of methodologies, in the order of preference/ availability, for these holdings depending on their exposure and type:

1. sourcing directly from companies' annual or sustainability reports with reference to the PCAF guidance
2. based on third-party datasets such as ISS, IPCC or PCAF database
3. mapping to listed parent company with carbon disclosure
4. mapping to a suitable stock proxy in the ISS database
5. assigning a scored portfolio sector average, based on the BICS.

Property

The carbon analysis of our property portfolio is based on a number of sources. Where we are responsible for the utility procurement, operation and management of our properties, through our managing agents, we obtain energy and environmental data directly from site utility meters or from utility suppliers. Where we do not manage our properties, our occupiers provide utility data, or we use benchmark data based upon property type and floor area. We use the following benchmark data sources:

- offices and shopping centre: BBP's REEB[2]
- all other property types: Chartered Institute of Building Services Engineers ('CIBSE')[3]

By using a combination of these benchmarks, we establish an estimate of the carbon emissions associated with our direct property investments and also identify which property sectors are, on average, most intensive in terms of carbon emissions.

1. www.carbonaccountingfinancials.com/files/downloads/PCAF-Global-GHG-Standard.pdf
2. www.betterbuildingspartnership.co.uk/our-priorities/measuring-reporting/real-estate-environmental-benchmark
3. www.documents.pub/document/cibse-tm-46-energy-benchmarks

Scope 3 emissions
continued

For commercial property, our operational footprint (scope 1 and 2) includes assets that are owned and managed in connection with our businesses. This includes all assets we occupy where we procure energy but also includes assets owned and managed by us, i.e. where we procure energy on behalf of external occupiers. The Group scope 3 calculation additionally brings in the emissions associated with occupier energy use.

LTMs
Our approach to LTMs is based on an analysis of the lending by purpose and is mapped to the portfolio sector average for the 'consumer non-cyclical' industry.

Other assets
We have assumed that no emissions apply to the cash and derivative exposures.

Data quality calculation detail
Data source
Third-party data sources are available to provide underlying data sources of the financed emissions intensity. In addition, ISS provides the data collection approach that we can use to determine PCAF data quality score for companies, which have been calculated for the first time this year. The database includes a brief description relating to the quoted source of carbon emissions data, including 'Sustainability or Annual Reports', 'UNFCCC' and 'CDP'. This enables us to derive an approach combining the carbon proxy approach as well as the (ISS) carbon data source description.

Data quality score assignment
The data quality scoring approach is set up for compliance with PCAF data quality scoring system on best endeavour basis. See below table for the PCAF data quality score card.

Table 14. General data quality scorecard

Certain (5-10% error margin in estimations)	Score 1	Audited GHG emissions data or actual primary energy data
	Score 2	Non-audited GHG emissions data or other primary data
	Score 3	Average data that is peer/ (sub)-sector specific
	Score 4	Proxy data on the basis of region or country
Uncertain (40-50% error margin in estimations)	Score 5	Estimated data with very limited support

ISS/ carbon data source description	Legal & General carbon proxying approach	PCAF Score assigned	Reason for score
CDP	ISS-based (corporate holdings)	2	ISS company carbon data sourced from CDP disclosure
Sustainability or Annual Reports	ISS-based (corporate holdings)	2	ISS company carbon data sourced from sustainability or annual reports
UNFCCC[1]	ISS-based (sovereign bonds)	1	ISS sovereign carbon data sourced from UNFCCC
Other Reported	ISS-based (corporate holdings)	2	ISS company carbon data sourced from other reported source
CAIT[2]	ISS-based (sovereign bonds)	2	ISS sovereign carbon data sourced from CAIT
CDP	Industry sector average score mapped with BICS level 1	3	ISS company/ sovereign carbon data available but no EVIC data available hence industry sector average score used
Sustainability or Annual Reports			
Other Reported			
Modelled Emissions			
CAIT			
NULL			No match found in carbon dataset hence industry proxy set as final footprint score
Modelled Emissions	ISS-based (corporate holdings)	3	ISS company carbon data based on modelled emissions
NULL	Investment Cash Proxy	5	Investment cash-like items with carbon intensity score proxied on Legal & General liquidity fund average score
NULL	Manual Proxy	1 to 5	Score manually sourced from multiple data sources hence data quality score allocated in line with the rest of this table
NULL	Not Scored	5	No match found in carbon dataset, no manual proxy applied and no BICS sector found hence holdings remain unscored
Actual building energy consumption and supplier-specific emission factors	Property	1	Collected directly from landlords or occupiers[3]
Offices and shopping centre: BBP's REEB. All other property types: CIBSE	Property	4	Apply to benchmark scores dependent on building type and floor area[3]

1. www.unfccc.int/topics/mitigation/resources/registry-and-data/ghg-data-from-unfccc
2. www.wri.org/data/climate-watch-cait-country-greenhouse-gas-emissions-data
3. Based on PCAF data quality score table for Commercial Real Estate, see: www.carbonaccountingfinancials.com/files/downloads/PCAF-Global-GHG-Standard.pdf

Entity-level disclosures

There are specific entity-level disclosure requirements, both for the US and UK. For the UK these include the new rules and guidance introduced by the FCA for asset managers and certain FCA-regulated asset owners to make mandatory disclosures consistent with TCFD recommendations. Our Workplace and Retail Savings business areas sit within our Retail division and have entities that fall within scope of the regulations. While we typically manage our response to climate change at a group-level, below are disclosures relevant to specific legal entities including Legal & General Assurance Society Ltd (LGAS) our insurance entity, Legal & General Portfolio Management Services Limited (PMS) our investment entity and Legal & General America (LGA) our insurance entity in the US. Below sets out which legal entities our business units conduct their activities via:

Workplace
The business area that provides product management and governance support for workplace members and conducts its activities via LGAS and PMS.

Retail Savings
The business area that provides product management and governance support for our retail policyholders in ISA and individual pension products and conducts its activities via LGAS and PMS.

Strategy

Our Workplace business uses LGIM as its primary asset manager, making day-to-day investment decisions in relation to funds. Workplace shares LGIM's core investment beliefs relating to climate change, including where LGIM applies a consistent approach to voting and engagement, pursuing innovation in tackling climate change, modelling energy transition, and targeted engagements. Our Workplace business supports LGIM's short- and long-term targets, and both LGIM and Workplace have published net zero targets for 2050, for the key standard default investment options. Both businesses work together, to utilise relevant expertise and ensure their investment principles remain aligned. When setting commitments, Workplace uses time horizons as defined by LGIM and Legal & General Group climate risk structures.

Scenario analysis is conducted at an asset class level for internal LGIM funds, by LGIM as the primary asset manager.

Initial Entity and Product level reports were successfully produced by 30 June 2023, and we envisage that the Workplace and Personal Investing approach to measuring and assessing climate risk will continue to evolve.

The Workplace business publishes a Statement of Investment Principles for its products, the Group Stakeholder and WorkSave Pension Plan. These Principles have been updated to reflect TCFD.

Governance

For our UK legal entities, the Boards of our insurance entity, LGAS, and our investment entity, PMS, formally delegate the oversight of TCFD products (unit-linked funds and pre-set investment portfolios) to the Fund Risk Oversight Committee (FROC), which meets at least quarterly. This delegation includes climate reporting responsibilities. Climate metrics now form a new element of governance for the FROC. Climate risk is reported up to the LGAS and PMS Boards at least annually.

As the insurer, LGAS has the ultimate responsibility for funds made available across Workplace products. However, trustees of trust-based pension arrangements remain responsible for ongoing investment governance for the funds they make available to their members.

Climate risk is an increasingly important factor in governance of the house default investment options (in the triennial reviews conducted by the Workplace business).

LGA, aligns its climate risk strategy to that of its parent, the Group. Climate risks, both physical and transition risks, are most relevant to LGA's investment strategy and a framework has been developed to identify and escalate these risks.

Risk management

For our UK legal entities, group-level climate risk management is cascaded down to all of our businesses. Our Workplace and Retail Savings businesses engage with LGIM as their primary asset manager, to obtain climate data and to conduct scenario analysis within product level reports. This information is an integral part of their climate risk management process and an area our individual businesses expect to develop their understanding of over time.

For Workplace and Retail Savings businesses, the setting of commitments and targets, Exclusions Policy, CIP and Active Ownership policies are managed by the primary asset manager, LGIM. Reliance is placed on group-level committees to advise on the climate risk of business in relation to legal, technology, market, reputational and physical risks, for ongoing management of LGIM funds.

As providers of unit-linked pension funds, our Workplace and Retail Savings businesses are not a direct shareholder in any investee companies, and instead invests in underlying funds which in turn will invest into other funds or hold securities such as company shares.

For the US, LGA leverages the Group's risk management framework and has its own Climate Risk Committee which has been a sub-committee of the LGA Board since May 2023. The primary role of the LGA Climate Risk Committee is to ensure that adequate governance and oversight is in place for the assessment and management of the financial risks associated with climate change. The LGA Climate Risk Committee includes LGA executive sponsorship and representatives from both the Protection and Pension Risk Transfer businesses. A non-executive director of the LGA Board and a representative from the Group Climate team serve on this committee in an advisory capacity.

Metrics and targets

For our UK legal entities, initial entity and product-level reports were successfully produced by 30 June 2023. Product-level reports cover in-scope funds and lifestyle profiles. The reports can be found at: www.legalandgeneral.com/workplace-dc/tcfd/. We envisage that the Workplace and Retail Savings approach to climate risk will continue to evolve.

In the first year of reporting Workplace did not provide separate TCFD product-level reports for funds managed by external fund managers. As data methodologies mature and become consistent and as Sustainability Disclosure Requirements mandate further disclosure, it is expected that this area will develop and enable greater transparency. TCFD metrics are now used as a quantitative measure of climate risk to support some governance decisions, for example, when assessing funds in light of new anti-greenwashing rules, and as an element within the recent Workplace house default triennial review.

For LGA, metrics are aligned to those used by Group and LGA provides relevant information to group to enable measurement and management of its overall performance with respect to these metrics.

Cautionary statement

The metrics, particularly targets, projections, forecasts and other forward-looking metrics used in this report should be treated with caution, in particular given the uncertainty around the evolution and impact of climate change and around broader factors, such as impacts and dependencies on nature.

These metrics include but are not limited to estimates of historical emissions and of historical climate change and forward-looking climate and nature-related metrics and estimated climate and nature-related projections and forecasts.

1. The topics addressed in this report such as climate change, impacts and dependencies on nature and associated risks cannot be evaluated in the same way as more conventional financial risks. Primary reasons for this include:
   - their unprecedented nature and complexity; the fact that projections of climate change and temperature and impacts on nature are long term as scenarios that play out over at least several decades and are therefore inherently more uncertain
   - understanding about how different climate and nature-related risks could interact continues to evolve
   - climate-related and nature-related risks may also interact with non climate-related risks and vulnerabilities and compound impacts in ways not currently anticipated
   - climate change, and impacts on nature and biodiversity-loss, and their related risks may be irreversible if certain limits are exceeded
   - because the physical and transition risks are novel, they differ from the perspective of conventional risk identification, measurement and management (which generally focus on extreme events with a basis in prior experience) and the outcomes are thus more uncertain.

This leads to significant uncertainties, assumptions and judgements underlying the metrics included in this report that limit the extent to which they can be relied on.

2. The lack of reliable, accurate, verifiable, consistent and comparable data relating to climate and nature makes it challenging to accurately disclose or estimate metrics used to assess associated risk and opportunities. In particular:
   - finding the sources for relevant required data remains a challenge as does validating and standardising that data
   - metrics and data, the models and supporting scenarios included in this report and the measurement technologies, analytical methodologies and services that support them, continue to develop.

3. There is a lack of standardisation, transparency and comparability of disclosure with many diverging disclosure frameworks and methodologies for calculating climate and nature-related metrics, in particular, leading to metric estimates that are not directly comparable. These differences are compounded by a lack of international coordination on data and methodology standards. Even where methodologies are publicly described, differences across data providers can still make resulting disclosures difficult to compare for investors and others evaluating climate exposure across their holdings. In addition, the methodologies for estimating and calculating GHG emissions or emission intensities and other climate-related metrics vary widely in their approaches. This could lead to under or over estimation of implied temperature rises and the attendant climate risks.

4. Metrics included in this report may require many methodological choices, estimates, judgements and assumptions about climate change, impact on nature, policies, technologies and other matters that are uncertain or not yet known.

5. Any material change in these variables may cause the assumptions and therefore, the metrics and data based on those assumptions, to be incorrect.

6. Climate scenarios are not forecasts; rather they are projections of alternative plausible futures that are designed to build an understanding of the nature and size of changes that may occur in the future. They do not reflect all possible future pathways and, given their long-term nature, are inherently uncertain. These points will also remain relevant, as we start to expand our analysis to cover nature-related variables. In particular:
   - these scenarios and the models that analyse them have limitations that are sensitive to key assumptions and parameters
   - these scenarios cannot capture all of the effects of climate and nature-related policy and technology-driven outcomes
   - scientific understanding of climate change and impacts and dependencies on nature continues to develop
   - models cannot fully capture the range of societal changes that could result from climate change and from nature-related issues
   - over-reliance on a limited number of the same prescribed models or scenarios may amplify systemic climate-related and nature-related risks.

7. This report and the information contained within it is unaudited[1]. Further development of accounting and/ or reporting standards could materially impact the metrics, data points and targets contained in this report. As standards and practices continue to evolve, it may mean subsequent reports do not allow a reader to compare metrics, data points or targets from one reporting period to another on a direct like-for-like basis. In addition, the Group's climate risk capabilities and net zero transition strategy and plan and approach towards nature-related issues remain under development and the data underlying these and market practice in relation to the disclosures made in this report will evolve over time. As a result, certain of such disclosures are likely to be amended, updated, recalculated and restated in future reports.

1. This is with the exception of scope 1, scope 2, and scope 3 (categories 6, 7 and 8) metrics, which have been subject to independent limited assurance by Deloitte (see pages 51 to 52).

Cautionary statement
continued

8. Any opinions or views of third-parties expressed in this report are those of the third-parties identified and not of the Group, its affiliates, directors, officers, employees or agents. By incorporating or referring to opinions and views of third-parties, the Group is not, in any way, endorsing or supporting such opinions or views.

9. While all reasonable care has been taken in preparing this report, neither the Group nor any of its affiliates, directors, officers, employees or agents make any representation or warranty as to its quality, accuracy or completeness and they accept no responsibility or liability for the contents of this material, including any errors of fact, omission or opinion expressed. Some of the information that appears in this report may have been obtained from public and other sources and, while the Group believes such information is reliable, it has not been independently verified by the Group and no representation or warranty is made by the Group as to its quality, completeness, accuracy, fitness for a particular purpose or non-infringement of such information.

10. This report contains forward-looking statements and metrics, such as targets, climate scenarios and emissions intensity pathways, estimated climate and nature-related projections and forecasts. Words or phrases such as 'anticipate', 'effort', 'estimate', 'believe', 'budget', 'continue', 'could', 'expect', 'forecast', 'goal', 'guidance', 'intend', 'may', 'objective', 'outlook', 'plan', 'potential', 'predict', 'projection', 'seek', 'should', 'target', 'will', 'would' or similar expressions that convey the prospective nature of events or outcomes generally indicate forward-looking statements.

The many significant uncertainties, assumptions, judgements, opinions, estimates, forecasts and certain non-historical data underlying forward-looking metrics (such as carbon and other emissions metrics) and metrics to assess climate-related or nature-related risk and opportunity outside of carbon exposure may limit the extent to which these climate-related or nature-related metrics are used to better understand risk and evaluate progress towards established strategies, targets, objectives and commitments and could cause actual results, performance or events to differ materially from those expressed or implied in such statements. Any opinions and estimates should be regarded as indicative, preliminary and for illustrative purposes only. The expected and actual outcomes may differ from those set out in this report. It is possible that the assumptions drawn and the judgements exercised may subsequently turn out to be inaccurate. The judgements and data presented in this report are not a substitute for judgements and analysis made independently by the reader.

The statements in this report are based on current plans, expectations, estimates, targets and projections and are subject to significant uncertainties and risks and can be affected by other factors which may result in the Group being unable to achieve the current plans, expectations, estimates, targets or projections. Accordingly, undue reliance should not be placed on these statements.

Factors which may cause actual results, performance or events to differ materially from those expressed or implied in the forward-looking statements include (but are not limited to):

- changes in environmental, social or physical risks
- legislative, regulatory and policy developments, including those addressing climate change or impacts on nature and the way in which and speed at which those developments take place
- the development of standards and interpretations, including evolving practices in ESG and climate reporting
- the ability of the Group, with government and other stakeholders, to mitigate the effects of climate change and impacts on nature effectively
- the delivery of policy actions and achievement of climate reduction targets and any nature-related targets by companies in which the Group invests and in the wider economy.

Please see the Group's latest Annual report and accounts for further details of risks, uncertainties and other factors relevant to the business.

Any forward-looking statements made by or on behalf of the Group speak only as of the date they are made and, unless legally required, the Group assumes no obligation to publicly update or revise any forward-looking statement, whether as a result of new information or for any other reason.

11. The information, statements and opinions contained in this report do not constitute an offer to sell or buy or the solicitation of an offer to sell or buy any securities or financial instruments nor do they constitute any advice or recommendation with respect to such securities or other financial instruments or any other matter.