Our journey to net zero

Legal & General Group Plc
Climate Transition Plan 2023

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.

Climate change is a systemic issue that will increasingly impact on both the economies and societies in which we operate; it cannot be ignored and our purpose drives us to play an active role in addressing it.

As a financial institution, we can have an impact beyond the areas of our direct control. Alongside the changes we need to make to our own business, we can support the real economy in transitioning away from greenhouse gas emissions.

Addressing climate change brings unprecedented investment opportunities, and we intend to be well positioned to realise them.

Contents

Annual report and climate report:
group.legalandgeneral.com/reports

At a glance

Invest

We will incorporate climate into how we invest our £81.6 billion of proprietary assets[1,2].

Through reducing the intensity of our financed emissions

Net zero

asset portfolio aligned with a 1.5°C 'Paris' objective, with an 18.5% reduction in GHG emission intensity by 2025, and 50% reduction in GHG emission intensity by 2030[3].

By 2030, evolve our fossil fuel policy to phase out investments in coal and oil sands[4]; and by 2025, report on progress in reducing agricultural commodity-driven[5] deforestation in our investment portfolio.

Through investing in the transition

By investing in technology and infrastructure solutions, we are supporting the transition to a low-carbon economy and managing resilience to climate risk.

Influence

We will use our influence as an asset manager with £1.2 trillion of AUM[1] to promote a 1.5°C net zero transition.

Through the products we offer our clients

70%

of AUM in alignment with net zero by 2030[6], working with clients to reach net zero by 2050 or sooner across all AUM.

From 2050 or sooner, net zero carbon on real estate equity assets under LGIM management.

Through our engagement with the real economy

Engagement with companies, governments and policymakers to support a 1.5°C net zero pathway.

Operate

We will change the way we operate to decarbonise our business.

Through our operations

42%

We will reduce our absolute scope 1 and 2 GHG emissions by 42% by 2030[7].

By 2030, our occupied offices and business travel will operate with net zero carbon.

Through the businesses we control

From 2030, all new homes delivered by our housing businesses will be enabled to operate at net zero carbon, for both regulated and unregulated energy.

1. Figures as at 31 December 2022.
2. We define proprietary assets as total investments to which shareholders are directly exposed, minus derivative assets, loans, and cash and cash equivalents.
3. From a 2019 base year.
4. Investments with more than 5% revenue exposure.
5. Focusing on palm oil, soy, beef, pulp and paper.
6. For this interim target, LGIM excludes sovereigns and derivative securities due to lack of clear industry methodologies to account for these asset classes. Please see page 16 for net zero definition.
7. This is a science-based target (SBT) approved by the Science Based Targets initiative (SBTi). 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 base year emissions are from 2021.

Senior leader statement

Alongside actions, we need transparency.

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.

Addressing climate change has long been a priority for us; it is one of our six strategic growth drivers and a key element of our vision of inclusive capitalism. Creating a greener built environment provides green jobs, and cleaner places to live and work. Decarbonising the economy represents the biggest investment opportunity of our lifetime. We are able to support the fight against climate change through the positioning of our own investments, using our influence as a large asset manager, and how we manage our own operations. Our people are passionate about making a difference to the environment. Many have joined us because they want to work for a company with the values and capability to make a positive impact, so are committed to help us deliver our climate strategy.

We have been encouraged by world leaders reaffirming their commitment to the 1.5°C 'Paris' objective, although the world needs to be moving faster to secure this outcome. The complexity of the negotiations, and the number of interconnected issues, reminds us that positive global collaboration is essential. Governments and companies from across the global economy have set climate commitments, but now the focus has to be on what is being delivered. As the Intergovernmental Panel on Climate Change (IPCC) states, without swift, drastic and collective effort 1.5°C will move out of reach[1].

We do not know exactly how the world will respond to climate change, but we do know that the changes required are profound, which will introduce more uncertainty. While the physical risks of climate change are only starting to emerge, we consider the transition risk is likely to have the greatest impact on our business. The scale of change needed is unprecedented, and whilst we do not expect it to disrupt our robust business model, it will impact how we execute our strategy and open new opportunities.

We are committed to decarbonising the assets on our balance sheet and our operations to align with 'Paris'. It is critical that actions over the next decade set us on the right path, and in this vein we have set SBTs, which have been independently validated by the SBTi as aligned with a 1.5°C objective. However, we cannot act alone. The financial services sector has a key role to play and we are active in forums such as the Net Zero Asset Owner Alliance, the Net Zero Asset Managers initiative, the UK's Transition Plan Taskforce, and Get Nature Positive.

Alongside actions, we need transparency. Our transition plan provides more details on both what we are doing now, and what we plan to do to deliver on our commitments. Given the long term and complex nature of commitments we have made, it is not yet possible to set out all of the actions required. This plan focuses on the short and medium-term milestones and actions we believe are needed to set us on a science-based path to net zero. In the spirit of transparency, we also explain the dependencies we have on our external environment; the areas we need to work through; the challenges and risks we face; and, how we will monitor and report on our progress.

We will present this plan for an advisory vote for our shareholders at our 2023 Annual General Meeting. We expect to review our plan every three years or sooner if there are material changes.

Inclusive capitalism drives us to act, and we have a strong track record of delivering on this. This transition plan focuses on how we will continue to deliver to meet our long-term climate commitments.

S. B. Gadd

Simon Gadd
Group Climate Change Director

1. ipcc.ch/report/ar6/wg1/

Transition plans

In tackling the climate crisis, transition plans are used to identify and prioritise strategies; as well as helping us to understand how investee companies are transitioning.

The global context

To minimise the most damaging consequences of climate change, governments around the world are pursuing efforts to limit the global temperature increase to no more than 1.5°C above pre-industrial levels, as part of the Paris Agreement. As the IPCC has highlighted, there are significant benefits of limiting warming to 1.5°C, when compared to 2°C[1]. To achieve that, the IPCC sets out that to stabilise temperatures, carbon dioxide (CO_2) emissions need to reduce to net zero by 2050, alongside rapid, deep and sustained reductions in other greenhouse gases (GHGs)[2]. These risks are now presented with greater conviction and certainty than ever before.

Without rapid, large-scale emissions reductions, outcomes of 1.5°C will move beyond reach. These rapid emission reductions are going to be challenging – and action is required today to enable these long-term outcomes.

Achieving net zero by 2050 requires the rapid deployment of all available clean energy technologies, such as renewable power generation, electric vehicles and energy-efficient building retrofits, alongside some form of negative emissions or carbon capture solutions. Most of the reductions in emissions through to 2030 could come from technologies already on the market today, but by 2050, almost half the reductions may have to come from technologies that are currently at the demonstration or prototype phase. Major innovation efforts, supported by the significant investment required to scale up new technologies, must take place this decade in order to bring these new technologies to market in time.

Climate commitments are emerging in companies and governments across the globe, but this does not mean we can delay our actions. The purpose of transition plans is to explain the short to medium-term milestones an organisation will meet to achieve its commitments; including how the plan is embedded into its culture and has the necessary level of accountability. A robust and credible transition plan is key to supporting financial decision making and the orderly transition of the global economy to net zero.

The business context

We invest our customers' money with the aim of building a better society for everyone. This includes investing in clean energy, building affordable housing, and developing essential infrastructure in our towns and cities. We use society's capital for society's gain, creating positive change, as well as creating business returns for our customers and shareholders. We call it inclusive capitalism, and we do not believe we can deliver on this without addressing the climate crisis.

At Legal & General, we believe climate change is a financially material issue and we support efforts to align the global financial system with a 1.5°C pathway. We have made a strong commitment to support this agenda across the investment chain, from our engagement with companies and policymakers, through to our own investment processes and operations. In doing so, we help to protect our shareholders' and customers' returns and help create a sustainable future. By investing in long-term assets that look to reduce emissions, we are supporting decarbonisation. The scale of change needed brings an unprecedented investment opportunity – one we are well positioned to realise.

Our transition plan

This document is the first release of our transition plan, setting out how we will invest to support the transition, use our influence as a large investment manager, and how we will decarbonise our operations.

Our target of supporting a 1.5°C 'Paris' outcome sets our ambition. By having a clear ambition and by following the science, we have developed our understanding of what we must do in the short to medium-term to be in a position to deliver against our long-term aspirations. We know this means that we need to look at our full range of business activities across our value chain.

In the short to medium-term, we prefer to focus our efforts on credible reductions to our carbon footprint, rather than placing reliance on offsetting and encouraging others to do the same. However, negative emissions have a critical role to play in the long term and we expect them to form a part of our long-term strategy. We will continue to work collaboratively across the industry to find solutions for how these long-term negative emissions should be defined and funded.

Our transition plan focuses on the actions that we know we need to take in the short and medium-term to still be on track for our long-term climate commitments by 2030.

Short, medium and long term

- Our short-term horizon looks at a three-year period.
- Our medium-term horizon looks at the opportunities and risks up to 10 years, allowing us to shape the overall strategy of our business.
- Our long-term horizon looks at the opportunities and risks that we seek to understand up to 2050.

1.5°C

Governments and other organisations around the world are pursuing efforts to limit the global temperature increase to no more than 1.5°C above pre-industrial levels.

1. ipcc.ch/sr15/
2. ipcc.ch/report/ar6/wg1/

Material interdependencies

Responses to climate change cannot be made in isolation. This is a systemic challenge which demands system-wide thinking.

We know that an adequate response to the climate crisis demands a systemic response; one which takes account of the wider natural environment and of people acting collectively and individually.

Human actors and the natural world are doubly interdependent with climate change. A transition to net zero depends on people and the natural world; and the prosperity of nature and society depends on a successful transition.

We have identified three areas of material interdependency. These are set out on this page.

Climate change and the natural environment

Reducing GHG emissions remains a major area of focus for us, but action on climate change must be pursued alongside efforts to halt biodiversity loss and environmental degradation.

Nature-based solutions for climate change use the natural environment to reduce GHG emissions. Tree planting is probably the best known of these, but peatlands, mangroves, wetlands, sustainable modes of agriculture and other landscape management techniques all contribute to the response to climate change by storing carbon in organic matter.

For these solutions to be effective and reduce the risk that the carbon removals are short lived, nature-based solutions need to be mindful of the broader ecosystem. Existing carbon-rich ecosystems must be preserved if the world is to stay within its carbon budget to meet the 1.5°C target. Expanding agriculture is responsible for most of the world's tropical deforestation. This is why our climate strategy incorporates our ambition to eliminate agricultural commodity-driven deforestation[1] from our investment portfolios.

Social impact report:
group.legalandgeneral.com/reports

Supporting communities' transition

Our climate transition plan acknowledges the impact of climate goals on society and the effect societies and communities can have on the achievement of these goals. This is why we believe that a 'just transition' must be an inclusive transition.

We do not consider social and environmental good to be mutually exclusive. On the contrary, we expect our investments to deliver on both positive social and environmental impacts.

We are one of the UK's largest house builders and are investing in sustainable and affordable housing to meet the needs of our population. Growing our housing construction activity will increase our GHG emissions in the short-term. This is why we are determined to find solutions to decarbonise the property construction process, as well as provide low-carbon homes for their occupiers. We are committed that, from 2030, all new homes delivered by our housing businesses will be enabled to operate at net zero carbon. We will continue to develop our understanding of the embodied carbon of our buildings, aligning with emerging industry best practices.

Our sustainability strategy aims to create better communities in which to live and work. We want to build better communities by delivering socially and environmentally positive housing and workplaces at scale. By engaging thoughtfully with communities to meet their needs, we believe that we can create long-term economic prosperity.

Our people at the heart of our transition

Incorporating sustainability within our business is part of what we do. Changing how we invest, the products and services we offer, and how we operate, will be enacted by our people.

We insist on high standards of business and personal integrity from our people, our suppliers and those doing business with us. We seek to create an inclusive environment in which diverse kinds of people can succeed and use their varied experiences to help solve some of the biggest issues facing society. This is because we believe that we can only deliver on our ambitions if we have the right foundations for success in place internally.

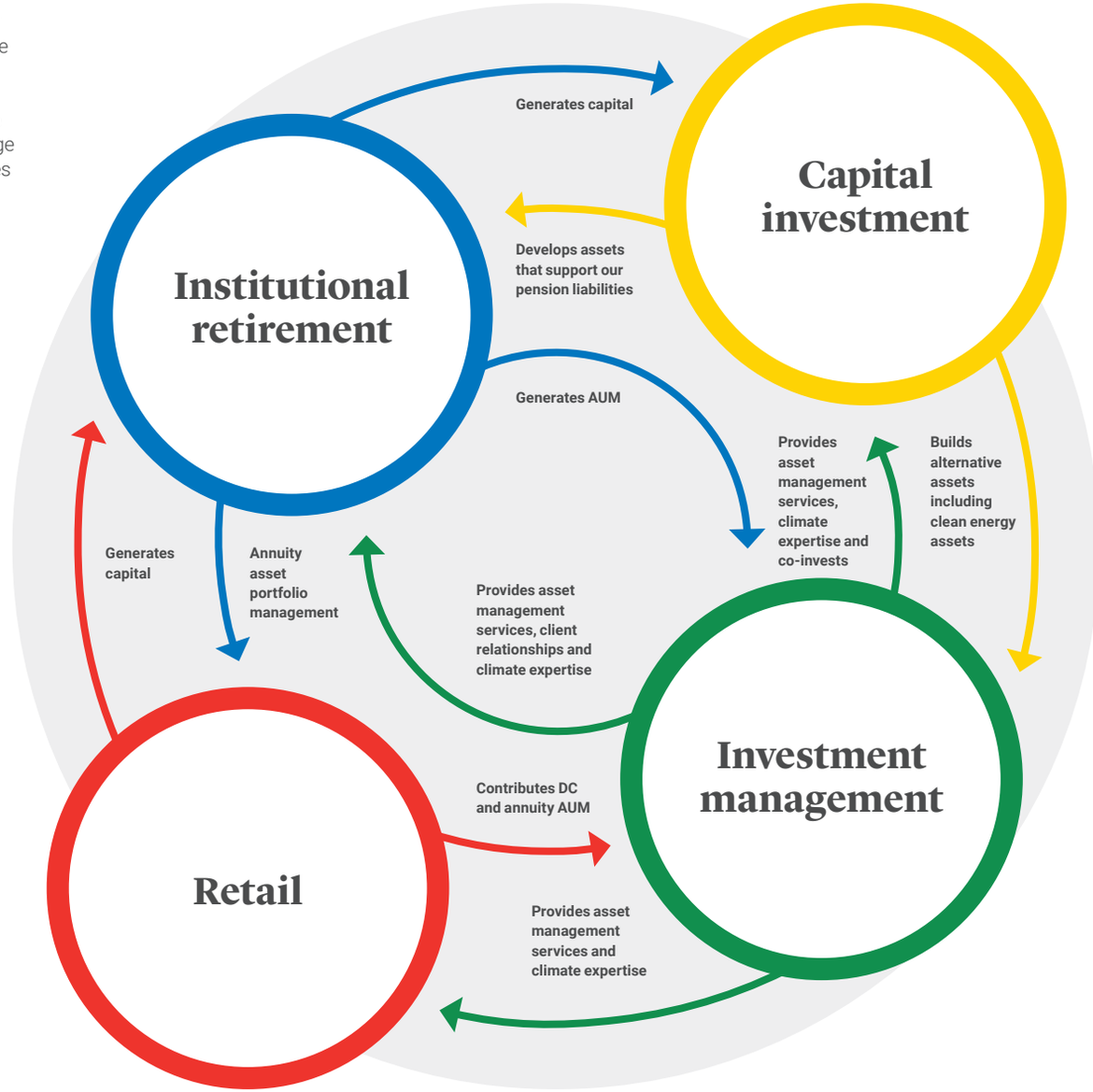
Our people contribute to our purpose in many ways: they use their judgement and experience in deciding where to place investment capital to drive social and economic value; they advise clients on responsible investing and work with regulators, investees, suppliers and others to embed climate expectations; they design and distribute financial products that create value and support net zero outcomes; they are building a new generation of housing and investing in low-carbon technologies. A range of professional support roles enable all this to happen.

We have found that employees that feel connected with our purpose are both more effective and more engaged. When leaders help make sense of how we can contribute, people act.

1. Focusing on palm oil, soy, beef, pulp and paper.

Context and strategy

Our businesses work together to deliver our strategic purpose and generate value for our shareholders, customers and communities. Climate change does not fundamentally change our business model, but it does impact on how we execute our strategy.



This page gives context to how our business model aligns with our climate strategy, demonstrating each division's strategic focus on climate change.

Our businesses	Divisional context
Institutional retirement (LGRI) Provider of institutional pension risk transfers.	Our annuity assets are managed as a single portfolio, and are targeting a net zero asset portfolio by 2050.
Investment management (LGIM) One of the world's largest asset managers and a major global investor.	LGIM have a market-leading investment stewardship team and uses its influence to promote the transition to a low-carbon economy.
Capital investment (LGC) A capital investor using the group's pension assets and shareholder capital.	LGC invests in clean energy, technology, and aims to deliver real estate that has a low impact on the environment.
Retail A leading provider of retirement and protection solutions.	Retail aims to decarbonise its annuity assets in conjunction with LGRI, and provide workplace customers with opportunities to invest in climate-friendly assets.

Context and strategy
continued

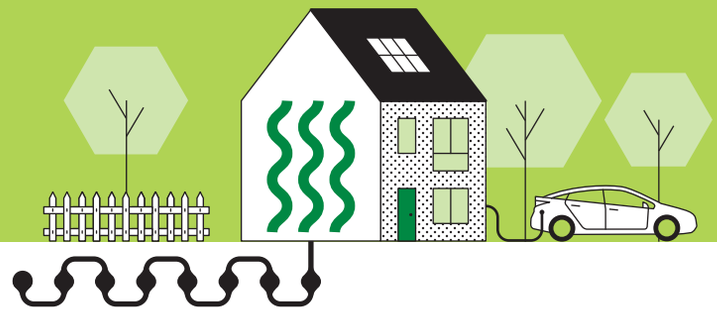
Business context

Our business
Our four operating divisions work across different business lines, delivering financial services which contribute to the long-term health of the economy and society. These four divisions work together to deploy capital where it's needed, and to ensure we meet our obligations to our clients and customers. We do this by investing in profitable, environmentally and socially beneficial ways to create value both today and tomorrow.

Addressing climate change
Scientists, policymakers, markets and regulators increasingly agree that we must limit global warming to 1.5°C to avoid potentially catastrophic impacts of climate change. This requires a transition to a low-carbon economy, which in turn creates risk management challenges but also substantial new growth opportunities, including in innovative technologies and clean energy.

Our businesses	Climate context	Our incentive to act	Our action statements	Our climate strategy
Institutional retirement (LGRI) We provide institutional pension risk transfer solutions, guaranteeing the retirement income for corporate pension scheme members.	As global finance supports the changes needed to address climate change, this creates an important shift in investment allocation and a change in the risk profile of assets over the longer term.	To match our long-term business liabilities, we have experience in investing for the long term and managing risk, which includes the impact from climate change. Our investment horizon creates opportunities to invest in clean energy infrastructure.	We are incorporating climate into how we **invest** our assets.	• Decarbonise the group's proprietary assets to align with a 1.5°C transition by 2050. • Investment in infrastructure to support the climate transition.
Investment management (LGIM) We are one of the world's largest asset managers.	If climate change is not addressed, it can present a material risk to the financial system. Investors need climate-related metrics to manage risk. Stewardship includes consideration of the impacts of investments on society and the environment, alongside the financial interests of beneficiaries and clients.	Addressing climate change enables us to attract and retain clients by supporting their needs to: • access financing opportunities in transition technologies and infrastructure • decarbonise their investment portfolios • access climate-related data and analysis tools.	We are using our **influence** as a large investment manager to promote a 1.5°C net zero transition.	• Work in partnership with our clients to set decarbonisation goals and develop investment solutions to support them. • Use our influence to promote a transition to a low-carbon economy.
Capital investment (LGC) We use the group's shareholder capital to make long-term investments in assets such as clean energy, housing, urban regeneration, and general partner and venture capital investing.	Addressing climate change presents opportunities to invest in the technology and infrastructure needed to transition away from carbon emissions, such as renewable energy sources, low-carbon homes, low-carbon heating, electrification of transport and nature-based solutions.	We are experts at investing in, and scaling up, alternative assets, as well as being a house builder. We generate attractive risk-adjusted returns on our shareholder assets by making socially and environmentally useful investments.	We are incorporating climate into how we **invest** our assets. We are changing the way we **operate** to decarbonise the businesses we control.	• Invest in clean energy technology and infrastructure. • Deliver homes and commercial properties that operate at net zero carbon and reduce embodied carbon. • Decarbonise our assets across all investment sectors.
Retail We are a leading provider of UK retail retirement and protection solutions, and US brokerage term life insurance.	Climate change is a systemic issue that will result in societal changes on an unprecedented scale. There is increasing focus on understanding how firms are incorporating climate considerations into their products and operations.	We support our customers through their financial life cycle. By expanding and deploying our financial wellbeing proposition, we can be there when it matters most to all our Retail customers, helping them secure a brighter financial future.	We are incorporating climate into how we **invest** our assets.	• Continue to review our approach to climate issues and take action, including through technology, where appropriate. • Provide our workplace customers with opportunities to invest their savings in climate-friendly assets.

Transitioning our investments



We will incorporate climate into how we invest our £81.6 billion of proprietary assets[1,2].

2022 – 2025 → **2025 – 2030** → **2030 – 2050** → **Net zero**

By 2025

18.5%
portfolio GHG emission intensity reduction[3]

Reduce
our carbon footprint through investment restrictions on new assets

Increase
financing of low carbon technology and infrastructure

Develop
nature-based solutions and our investment exclusions on deforestation[4]

By 2030

50%
portfolio GHG emission intensity reduction[3]

2.1°C
Investment portfolio temperature rating[5] (SBTi) for listed bonds and equities by end 2026

Phase out
investments in coal and oil sands[6] and run off high carbon assets

Reduce
the carbon intensity of our real estate assets

By 2050

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

Neutralise
residual emissions through negative emission investments

"Transitioning our balance sheet to align with the 1.5°C 'Paris' objective is not just the right thing to do, it represents a great investment opportunity for Legal & General."

Jeff Davies
Group Chief Financial Officer

Key risks and dependencies for transitioning our investments

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 the delivery of government policy actions.

The lack of reliable, accurate, verifiable, consistent and comparable emissions and other climate data, makes it challenging to accurately disclose or estimate metrics used to assess climate-related risks and opportunities.

1. Figures as at 31 December 2022.
2. We define proprietary assets as total investments to which shareholders are directly exposed, minus derivatives assets, loans, and cash and cash equivalents.
3. From a 2019 base year.
4. Focusing on palm oil, soy, beef, pulp and paper.
5. On an 'enterprise value plus cash' emissions-weighted temperature score, covering portfolio scopes 1 and 2.
6. Investments with more than 5% revenue exposure by 2030.

Transitioning our investments
continued

We will incorporate climate into how we invest our £81.6 billion of proprietary assets[1,2].

We consider our main exposures to climate change risk to be through our proprietary assets. These are assets to which our shareholders are directly exposed. Climate change poses risks to these assets, but we also see significant opportunities to fund the infrastructure and technology required for the transition.

Across our proprietary assets, our investment approach seeks to maximise our impact on the real economy and support the transition to a low-carbon economy. This is a key component of our overarching organisational net zero commitment.

> "Future-proofing our investment portfolio to a low-carbon world is essential for delivering our pension promises to our clients and policyholders."

Andrew Kail
Chief Executive Officer, LGRI

Through reducing the intensity of our financed emissions

We are committed to achieving a net zero asset portfolio by 2050, in line with the 1.5°C 'Paris' objective, on our proprietary assets. This is supported by the following interim milestones, to reduce our portfolio GHG emission intensity by:

- 18% by the end of 2023[3]
- 18.5% by the start of 2025[3]
- 50% by 2030[3].

We also recognise that coal's role in the current energy mix is incompatible with the 1.5°C 'Paris' objective and that it is a dwindling aspect of the energy mix. We will continue to evolve our fossil fuel policy to phase out investments in coal and oil sands by 2030[4] and report on progress for reducing agricultural commodity-driven deforestation[5] in our investment portfolios.

Through investing in the transition

By investing in technology and infrastructure climate solutions, we are supporting the transition to a low-carbon economy and mitigating our exposure to climate risk. We deploy a range of investment strategies across asset classes to support the transition. Our transitional approach is described across the following asset classes:

- private (direct) credit and infrastructure debt
- private (direct) equity and venture capital
- property/ real estate
- listed (traded) bonds and equities.

Our proprietary assets

Our proprietary assets are the £81.6 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.

Table 1.

	Direct[6] investments 2022 £m	Traded[7] securities 2022 £m	Total 2022 £m	Total 2021 £m
Equities	1,704	1,367	3,071	3,185
Bonds[8]	22,070	48,593	70,663	86,803
Derivative assets	–	41,978	41,978	13,203
Property	5,644	–	5,644	5,710
Loans	–	1,100	1,100	2,332
Financial investments	**29,418**	**93,038**	**122,456**	**111,233**
Cash and cash equivalents	56	4,777	4,833	3,596
Other assets	2,260	–	2,260	1,861
Total investments	**31,734**	**97,815**	**129,549**	**116,690**
Proprietary assets[2]	**31,678**	**49,960**	**81,638**	**97,559**

1. Figures as at 31 December 2022.
2. We define proprietary assets as total investments to which shareholders are directly exposed, minus derivative assets, loans, and cash and cash equivalents.
3. From a 2019 base year. Our climate report explains our annual target setting process in more detail.
4. Investments with more than 5% revenue exposure.
5. Focusing on palm oil, soy, beef, pulp and paper.
6. 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.
7. Traded securities are defined by exclusion. If an instrument is not a direct investment, then it is classed as a traded security.
8. Bonds include lifetime mortgage loans (as loans against residential property) of £4,844m (31 December 2021: £6,857m).

Transitioning our investments
continued

Through reducing the intensity of our financed emissions.

Objective
We are committed to a net zero asset portfolio in line with a 1.5°C 'Paris' objective, by 2050, for our £81.6 billion of proprietary assets[1].

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 overarching organisational net zero commitment.

We have set interim milestones for this commitment. This includes setting an annual portfolio decarbonisation target from our 2019 base year (2023: 18% reduction). We report our progress against this commitment in our climate report. This helps us to hold ourselves accountable and allows us to realise progress against our interim milestones and endpoint.

Our portfolio decarbonisation commitments drive our ambition to promote the benefits of net zero and help mitigate our exposure to both physical and transition risks as we move to a low-carbon economy.

Our transition approach
Our investment strategy is constructed to manage our short and long-term responsibilities to both our policyholders and our shareholders, in line with regulation. Maintaining a well-diversified portfolio across all sectors is also a key component of our strategy.

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.

However, in the long-term, we expect negative emissions to play a critical role in balancing out residual emissions to achieve net zero portfolios.

We have embedded our decarbonisation approach within our investment strategy. As a long-dated investor, particularly in bond investments, our decarbonisation approach involves:

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

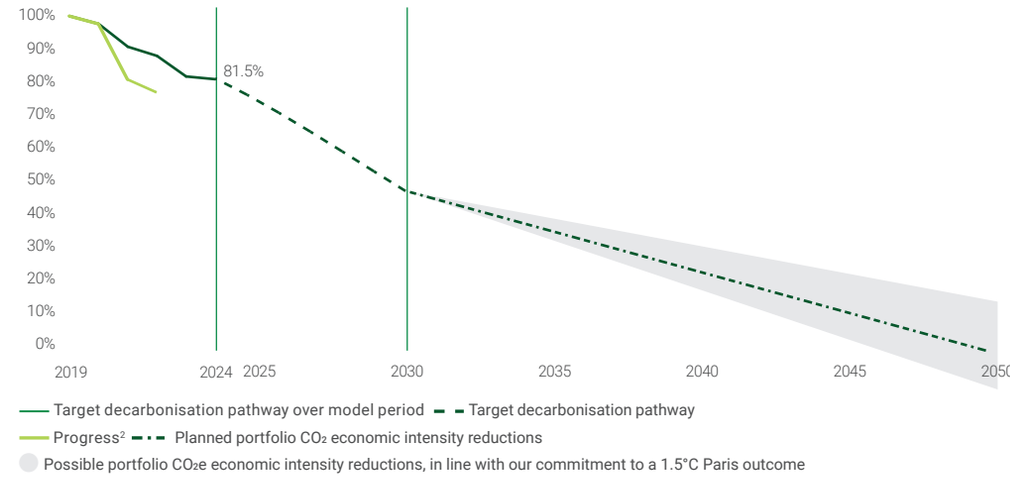
We are dependent on the companies we invest in decarbonising their business. We actively monitor their actions to determine whether their plans are aligned to 1.5°C pathways, and engage actively to encourage the right behaviour. Our portfolio decarbonisation is managed through a suite of portfolio controls:

1. Portfolio measurement, projections and targets
2. Active engagement
3. High-carbon escalation
4. Exclusions (no new investments).

Our decarbonisation approach supports the delivery of our commitments to the SBTi and Net Zero Asset Owner Alliance (NZAOA) frameworks, including adopting more granular targets on electricity generation project finance and real estate exposures within our SBTs.

Chart 1.

Group investment portfolio target decarbonisation pathway



1. Portfolio measurement, projections and targets
We measure the contribution of our investments to global GHG emissions using carbon dioxide equivalent (CO_2e) emissions metrics. We have set reduction targets to align with the 1.5°C 'Paris' objective. We calculate both portfolio carbon emission intensities and implied portfolio temperature alignment, assessing sector and company transition pathways, and have committed to interim targets across our portfolios.

We make use of LGIM's Implied Portfolio Temperature Alignment metric to understand the direction of travel of each company in our portfolio. This informs our engagement strategy and feeds into our issuer selection and exclusion decisions described below.

Our progress and long-term goals are supported by short and medium-term targets, allowing regular monitoring of progress towards the commitment.

We have also set a series of more granular portfolio targets as approved by the SBTi, and in line with the NZAOA protocols, against which we report progress within our climate report. There are numerous temperature alignment methodologies in use across the industry, and we also make use of the Portfolio Temperature Rating (PTR) metric developed by the SBTi within our SBT suite.

We continue to enhance our tools and metrics and climate reporting remains an evolving analysis.

1. Figures as at 31 December 2022.
2. Explanation of our progress to date versus the plan is explained within our climate report.

Transitioning our investments
continued

Current high-carbon exposures

As with all well-diversified portfolios, we are exposed to carbon intensive sectors. At 31 December 2022, weighted by value, 31% of the portfolio is exposed to the high carbon sectors: utilities, energy, materials and industrials. When weighted by carbon intensity, we can see that these sectors represent 78% of our portfolio.

Chart 2.

Sectors – market values %

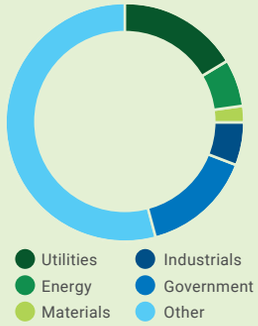
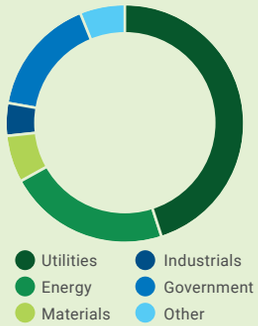


Chart 3.

Sectors – carbon footprint %



2. Active engagement

Our portfolio emissions directly relate to the carbon footprint of our investee companies and counterparties. An important aspect of our decarbonisation strategy is through active engagement across the economic landscape, and specifically investee companies, to influence sector and economy-wide decarbonisation.

Alongside close monitoring of the political and regulatory landscape, we will continue to engage with policymakers, regulators and investee companies in support of climate action. This benefits our own stakeholders, the wider market and society. While there are challenges in measuring the impact of our engagement, our strategy is based on active engagement with consequences. This is pursued by our investment management business on the group's behalf, with climate change being one of the leading topics in our engagement via our Investment Stewardship team during 2022. More information on our engagement approach is given in the influence chapter of this plan.

3. High-carbon escalation

While active engagement is designed to drive economy-wide and investee-level decarbonisation, we also apply further governance on our active portfolio management approach to accelerate the portfolio's decarbonisation trajectory, building on LGIM's existing active fund management capability.

First established in 2019, we run an annual process through our climate governance structure (see pages 29 – 30) to escalate all proposed individual stock investments where the carbon intensity (emissions and/ or reserves) is greater than a defined threshold across the high-carbon sectors. Investments which trigger the high-carbon escalation process are primarily oil, gas or utility companies. This gives us an early warning system and a degree of control over the accumulation of carbon risk through time.

The escalation process has had a real impact. In 2022, 12 new issuers (out of a total of 36 considered) were added to the exclusion list, due to their high-carbon emissions and the lack of ambition in their climate commitments, with associated high temperature rating scores. Our assessment showed these companies to have underlying transition risk that is above our threshold. Results of the escalation process are overseen by the Group Environment Committee. We prefer this company-specific analysis, over a blanket exclusion of sectors approach.

4. Exclusions (no new investments)

Within the wider set of ESG-related exclusions, and building on our high-carbon escalation approach, the group's proprietary assets have climate-specific exclusions embedded. These exclusions continue to evolve, and currently focus on key areas of carbon-intensive activities: coal and oil sands activity[1], deforestation activity, and exclusions called out by LGIM's Climate Impact Pledge (further detail on page 19).

The group's exclusions policy is disclosed in our climate report and we will continue to disclose how we strengthen our commitments through that report.

Monitoring and reporting

The metrics for reducing our financed emissions, as referenced earlier, are:

- portfolio carbon emission intensities
- temperature alignment metrics.

We will report under these metrics annually, in our climate report, as part of meeting the metrics and targets recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

Outlook and dependencies

Our assessment of our investment portfolio is dependent on good quality, comparable cross-industry disclosures of climate-related metrics and financial impacts. The availability of high quality and comparable data – gathered across jurisdictions and from both the public and private markets – is key for our business. This enables us to identify and manage risks, and steer our investments to deliver on our climate ambition of decarbonising the asset portfolio, whilst meeting our disclosure objective.

Our portfolio decarbonisation approach and performance is currently aligned with our planned reduction trajectory. However, our well-diversified portfolio is reliant on the delivery of government policy actions and the climate-reduction targets of the firms we invest in to achieve our portfolio ambitions. This reiterates the importance of an economy-wide decarbonisation and we need companies to both set targets and disclose their progress against these, including developing transition plans (a key topic of our engagement),

We actively manage our portfolio and our decarbonisation approach is expected to include some frictional costs as we reposition our portfolio. We expect these to be managed as part of our existing portfolio management process. For example, our retirement businesses sold down their legacy exposures to issuers with more than 30% revenue linked to coal by the end of 2021[1], with costs included within our investment variance.

Our approach is reviewed at least annually, and we note our fiduciary duty to policyholders and shareholders in maintaining portfolio security and value, and to the wider economic environment and outlook. While our strategy is to drive change through engagement with the real economy, we will divest when necessary, particularly where the controls above are proving insufficient in achieving our objectives.

1. Tracking absolute coal capacity and production metrics as well as expansion plans of companies is subject to datasets available on the market with varying quality and reliability and it is challenging for asset owners presently.

Transitioning our investments
continued

Through investing in the transition.

Objective
We are committed to directing our investments to support the transition across our asset portfolio. We see a significant investment opportunity within the transition. By investing in technology and infrastructure climate solutions, we are also supporting the transition to a low-carbon economy and mitigating our exposure to climate risk.

In line with this objective, we are committed to increasing financing of low-carbon technology and infrastructure, while also reporting progress on investments in nature-based solutions by 2025.

Our transition approach
We invest across a range of asset classes, each with considered strategies to support the transition to net zero. We do not consider social and environmental good to be mutually exclusive. While we describe our investment strategy for investing in the transition, sustainable investments incorporate broader social and environmental considerations. We describe below our approach for our:

1. Private (direct) credit and infrastructure debt
2. Private (direct) equity
3. Property/ real estate
4. Listed (traded) bonds and equities.

1. Private credit and infrastructure debt
As at 31 December 2022, LGIM actively managed c.£14 billion of private credit investments on behalf of the group, across corporate, infrastructure, alternative and real estate debt.

With a focus on the transition, the annuity portfolio continues to prioritise origination and investment into assets which actively promote decarbonisation. The group has invested more than £1 billion in clean energy projects, including solar and wind farms, geothermal plants, smart networks and energy storage assets.

Due to the nature and size of the annuity 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.

Investment due diligence
We integrate our commitment to support a low-carbon economy and society into our investment decision-making processes. Our due diligence on new investments includes an assessment of the proposed investment against our climate change objectives, including both quantitative and qualitative ESG indicators. This is scrutinised at our investment committees, considering both the risks and opportunities within each asset.

Borrower engagement
Increased engagement with borrowers pre- and post-investment is being used to improve disclosure and drive more positive outcomes across the portfolio. This includes working with borrowers to incorporate ESG into deal structures, such as the development of sustainability-linked loan structures and the incorporation of ESG reporting covenants. Sustainability-linked loan structures incentivise a borrower to achieve specific sustainability-related targets and have been used across several sectors, including to support housing associations with their net zero transition.

Pemberton
LGC has a 40% equity stake in Pemberton, a €16.5 billion pan-European alternative credit manager and a member of the Net Zero Asset Managers initiative (NZAMi). LGC also has growth capital invested into five Pemberton-managed funds as seed capital, with LGRI also invested in private credit funds. Of c.€17.4 billion deployed assets under management, over €6.1 billion is ESG-linked lending (as at 31 December 2022), with 41 investments in 2022 that incorporated financial incentives for borrowers to meet carbon-reduction targets.

ImpactA

This year, LGC invested in ImpactA, a women-led impact investment advisory firm. Legal & General will support ImpactA's growth ambitions investing in its strategy to deploy capital into sustainable infrastructure projects in emerging markets.

ImpactA's strategy is to deliver impact at three levels: opening the door to more female representation in asset management, emerging markets and infrastructure finance; addressing market failures to bridge gaps in the capital structure in critical emerging markets' infrastructure financing; and, directly impacting lives in emerging markets by enabling the delivery of climate mitigation and adaptation infrastructure.

In alignment with our sustainability goals to create positive environmental and socio-economic impact, ImpactA's focus on emerging markets seeks to bridge funding gaps in transformational infrastructure projects and unlock critical investment to drive climate transition and reduce inequalities in emerging markets.

Transitioning our investments
continued

2. Private equity: clean energy and venture capital

LGC invests in clean energy, supporting the drive to a low-carbon economy and capitalising on the associated commercial opportunities. Since 2015, we have successfully invested in a diverse portfolio of businesses in key sectors of the energy transition, covering early stage, growth equity, start-up investments; and delivery of mature, proven low-carbon assets and infrastructure at scale.

We select partners to help identify areas where technology, business models, or solutions require further development or capital to achieve scale. We carefully review their efficacy in the energy system, technical reliability, environmental benefits, and the sustainability of their business model. We also consider whether in the medium to long-term, they have potential to achieve scale and deliver associated assets and infrastructure capable of generating reliable yield income and returns suitable for our clients.

During 2022, for example, we increased our financing of Kensa Group (ground source heat pump manufacturer and installer); led a funding round for Brill Power (battery management systems), and co-led a funding round for Rovco and Vaarst (subsea robotics for the offshore sector).

LGC's venture capital programmes are supporting business leaders and companies striving to advance technological solutions that may help to solve both environmental and socio-economic challenges. LGC has backed a wide range of innovations including Onto, an electric car subscription service, playing a vital role in accelerating the transition to electric vehicles.

3. Property/ real estate: annuity property and lifetime mortgage assets

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.

In addition, we have c.£4.8 billion[1] of lifetime mortgage loans held within our annuity portfolio. We are conscious of the need for improving the energy efficiency of residential properties in order to achieve the UK's climate targets. We have piloted offering free home Energy Performance Certificates to borrowers which include recommendations for improving energy efficiency. We continue to explore product innovation to improve the energy efficiency of residential properties and support our collective journey to net zero emissions.

Urban regeneration

LGC's level of influence over assets varies across its real estate portfolio, depending on the nature of investment or equity stake. A shared ambition on sustainability and net zero is core to a number of strategic partnerships, including with Bruntwood SciTech and Oxford University, with whom we are collaborating to deliver high quality, sustainable places to live and work.

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.

4. Listed bonds and equities

Our listed bond portfolio is primarily managed within our LGRI business and is monitored against temperature alignment metrics as mentioned on page 10.

Within LGC's listed portfolio, we invest £1.4 billion[1] in listed equities and multi-asset funds. Approximately £230 million[1] of LGC's listed equity investments are invested in our Climate Impact Pledge portfolio. This portfolio invests in listed clean energy stocks and other companies in the renewables space, which we estimate contributes a total carbon avoidance impact of around 90,000 tonnes of CO_2e (c.370 tonnes per £1 million). This also complements LGC's clean energy strategy by investing across the clean energy value chain. A further £720 million[1] is invested in climate and ESG-aware funds, predominantly through LGIM's Future World product range.

Monitoring and reporting

The metrics around transition opportunities and risks continue to evolve. While our current focus is on total invested in low-carbon technology and infrastructure, we are developing ways to measure the climate impact of our investments, which may include consideration of avoided emissions on an investment case-by-case basis.

We will report under these metrics annually, in our climate report, as part of meeting the metrics and targets recommendations of the Task Force on Climate-related Financial Disclosures.

Outlook and dependencies

We continue to seek investment opportunities which will further support decarbonisation of the real economy, particularly in real estate and infrastructure, within our strategic asset allocation.

Our performance against transition investment metrics, including investments in renewable technology and infrastructure, is impacted by the availability of assets with a suitable risk return profile appropriate for our risk appetite requirements. The faster the economy transitions, the wider we expect our investment universe to be.

Recently announced UK regulatory changes through Solvency II reform should increase the opportunity set for the UK insurance sector, including allowing a further range of low-carbon solutions, although this is dependent on the efficient implementation of the reform.

1. Figures as at 31 December 2022.

Using our influence

We will use our influence as an asset manager with £1.2 trillion of AUM[1] to promote a 1.5°C net zero transition.

2022 – 2025 → **2025 – 2030** → **2030 – 2050** → **Net zero**

By 2025

Engage
with investee companies on transition priorities

Collaborate
with clients, policymakers and industry

Voting
sanctions for all relevant companies not meeting minimum expectations

Reduce
deforestation in our investment portfolios through successful company engagement

Disclose
fund-level net zero information

By 2030

70%
of AUM to be managed in alignment with net zero[2]

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

Target removal of fossil fuels
within areas of commercial property we control

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)

> "The choice is not between divestment and acquiescence, but between inaction and action – and inaction is not an option."

Michelle Scrimgeour
Chief Executive Officer, LGIM

Engagement and collaboration
Collaborating with like-minded investors and stakeholders is fundamental to an effective engagement process. Our climate governance framework seeks to ensure that the commitments and actions of our divisions support our climate objectives.

Key risks and dependencies to using our influence
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 taking action to support net zero.

1. Figures as at 31 December 2022.
2. For this interim target, LGIM excludes sovereigns and derivative securities due to lack of clear industry methodologies to account for these asset classes. Please see page 16 for net zero definition.

Using our influence
continued

We will use our influence as a large investor managing £1.2 trillion of assets[1] to promote a 1.5°C net zero transition.

Responsible investing is at the very heart of our business. We strive to effect positive change in the companies and assets in which we invest, and for society as a whole.

As one of the UK's largest investors, we are committed to using our scale and influence to raise standards on climate change across the markets in which our clients are invested, and to encourage companies to improve their management of climate-related risks and opportunities.

Across both public and private assets, LGIM has, on behalf of the group, established a fully integrated framework for responsible investing. This is based on collaborative, active research across asset classes and engagement with consequences.

Through the products we offer our clients
We integrate climate change across asset classes and product areas.

In line with our commitment to the NZAMi to work with our clients to reach net zero by 2050 or sooner across all AUM, we have set an interim target of 70% of eligible AUM[2] to be managed in alignment with net zero by 2030.

Through our engagement with the real economy
Our Investment Stewardship team's purpose is to protect clients' assets through raising market ESG standards and best practice.

We believe that real change is achieved by being an engaged and active owner, and our Investment Stewardship team focuses on client outcomes and broader societal and environmental impacts in its engagements with companies and policymakers.

Assets under management

LGIM is one of the world's leading asset managers, managing assets for internal and external clients. We are the market leader in providing investment solutions for UK pension scheme clients. We are leveraging opportunities that complement our existing core capabilities, whilst innovating and creating further solutions for our clients.

Table 2.

	2022 £m	2021 £m
Index A diversified range of pooled index funds, providing a wide choice and the ability to pursue specific benchmarks efficiently. In addition, segregated solutions are offered to institutional clients providing large scale customisation against established market capitalisation weighted and alternative indices.	444.7	502.4
Active strategies A range of pooled and segregated active fixed-income funds. The LGIM liquidity funds offer institutional investors a solution for their cash management requirements across a range of core currencies. The liquidity funds aim to deliver competitive returns with a high level of diversification, whilst focusing on capital preservation through portfolios of high quality, liquid assets.	156.8	198.8
Multi asset Multi-asset funds for retail and institutional clients, built using our expertise in asset allocation which is informed by an in-house research capability. The underlying asset classes may be managed on an active or passive basis within LGIM.	73.9	78.0
Solutions A range of pooled and bespoke solutions to help de-risk defined benefit pension schemes. These solutions will usually combine active or passive underlying portfolios with derivative overlays designed to meet clients' specific requirements.	485.9	605.1
Real assets A range of pooled funds, segregated accounts and joint ventures investing on behalf of UK and overseas investors across real estate and infrastructure equity, and corporate, infrastructure, alternative and real estate debt. The business has specialist teams of fund and asset managers and an in-house research team.	34.4	37.2
Total assets under management	**1,195.7**	**1,421.5**

1. Figures as at 31 December 2022.
2. For this interim target, LGIM excludes sovereigns and derivative securities due to lack of clear industry methodologies to account for these asset classes.

Using our influence
continued

Through the products we offer our clients.

Objective
LGIM is committed to working in partnership with our clients to reach net zero GHG emissions by 2050 or sooner across all AUM.

In line with our commitment to the NZAMi, we have set an interim 2030 target of 70% of eligible AUM[1] to be managed in alignment with net zero.

Our transition approach
Our climate-related work is integrated across asset classes and management styles (active and index) as we aim to benefit the widest set of stakeholders through an end-to-end process. We have an independent investment stewardship function and all our investment professionals are empowered to implement positive change.

Our targets were developed using a top-down approach, whereby we forecast the proportion of clients, by region and client type, that we expect to adopt net zero strategies by 2030. We will be reviewing our target every two years, taking into account developments across our client base and the markets in which we operate.

We see meeting our climate commitments, and mitigating the global systemic risk posed by climate change, as essential to how we operate as a business and an important aspect of our role as fiduciaries of our clients' assets. We do this through:

1. LGIM's net zero framework
2. Client engagement
3. Monitoring and reporting.

1. LGIM's net zero framework
LGIM's net zero framework sets out requirements for a fund or portfolio to be considered net zero-aligned. It incorporates recommendations from the Paris-Aligned Investment Initiative's Net Zero Investment Framework, the UN NZAOA and the SBTi guidance, components of which are a reduction of at least 50% in carbon intensity by 2030 relative to a 2019 baseline[2], and portfolio temperature alignment of 1.5°C by 2030[3]. We are now integrating LGIM's net zero alignment definition into the development of products across a number of fund launches and amendments of existing strategies. Engagement is an important component of our framework; for a fund to meet our net zero standards, we require engagement with issuers on net zero such that at least 50% of portfolio emissions has either an SBT, or has been engaged with in relation to climate change.

Our investment management division has also built, and is developing, other tools to allow net zero considerations to be incorporated into other types of strategy. Examples include LGIM's ESG score, LGIM's CIP, and our UN SDG alignment methodology.

2. Client engagement
LGIM regularly engages with both clients and investee companies on climate change. This engagement includes annual sustainability summits, reporting and publications such as our active ownership report, blogs, specific client meetings and fund-level reporting. This engagement provides clients with the information they need to make informed decisions around investing for the climate, which over time we see as key to meeting our AUM climate commitments.

We are also working with clients as part of our ongoing product development. One example is designing bespoke net zero index strategies that incorporate our net zero framework and that can also be constructed to meet additional requirements, such as the EU Technical Expert Group definitions of 'Paris-aligned' or 'Climate Transition' benchmarks.

3. Monitoring and reporting
LGIM reports fund-level net zero information on a quarterly basis which is publicly accessible via the LGIM Fund Centre. This reporting includes a range of climate-related data and is subject to meaningful portfolio coverage and outcomes.

Information in the reports can include:

- LGIM's Implied Temperature Alignment
- weighted average carbon intensity (WACI)
- green revenues.

We intend to use a range of metrics to measure our impact, including the:

- percentage of responsible investing pooled fund launch and amendment activity across public and private assets that align to LGIM's net zero framework
- percentage of funds for which ESG client reporting is available
- percentage of LGIM's financed emissions in CIP sectors engaged with or that have an SBT at company and portfolio levels
- percentage and absolute number of all relevant public policy engagements that support net zero
- percentage of net zero-aligned AUM for all funds.

Outlook and dependencies
We have publicly committed to working with our clients on decarbonisation goals and to increase the number of assets covered by net zero targets. This means providing low-carbon solutions across the asset classes to support the gradual decarbonisation of clients' portfolios.

Some clients and regions are further ahead than others in their consideration of climate as a financial risk and the speed of uptake of climate and net zero strategies will vary. Only a minority of companies today are on track for net zero – meaning that for most diversified investors, the focus is not whether the portfolio is net zero today, but how to devise strategies that effect long-term change in the market.

The regulatory environment also has an important role to play in providing a supportive environment for asset owners to commit to and deliver on net zero, and we continue to engage with policymakers and regulators on this.

1. For this interim target, LGIM excludes sovereigns and derivative securities due to lack of clear industry methodologies to account for these asset classes.
2. Relative to fund or reference index. For funds launched at later dates the 50% reduction can be prorated over the remaining time to 2030. Carbon intensity is to be calculated as carbon emissions divided by revenue or enterprise value including cash (EVIC). As part of our monitoring, we will seek to address any reductions in emissions intensity resulting from inflation or asset price increases.
3. In certain funds (for example, actively managed funds) it is possible that changes of asset allocation (for example, switching from financials to utilities) may result in an increase in carbon footprint, even if the chosen securities represent the best in class from a climate perspective. That is why we are proposing the use of 1.5°C temperature alignment (which means that the average expected rate of decarbonisation of the fund in 2030 is on track for a net zero trajectory by 2050).

Using our influence
continued

Net zero carbon on real estate equity[1].

Objective
At 31 December 2022, our LGIM Real Assets business is responsible for £20 billion of real estate equity AUM in the UK, across 22 funds[2].

For these funds we have committed to achieve net zero carbon by 2050 (or sooner)[1] under the Better Buildings Partnership (BBP) Climate Change Commitment[3].

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. The primary objective of our commitment, and the interim milestones, is to future-proof our portfolios.

Delivering on our commitment will support the business in minimising transition risks, such as the impact on asset valuations through stranding risk. It also demonstrates that we understand and are responding to emerging climate-related risks and are delivering resilient portfolios.

Our transition approach
Our real estate net zero roadmap[4] sets out our implementation plan. This involves measuring and reducing embodied carbon, using the energy hierarchy to reduce operational energy demand to 'Paris-proof' energy intensity levels[5], increasing renewable energy supply and only considering verified offsetting as the final step. As with all our commitments, improving data quality and coverage is an essential component of reaching net zero.

Our key short and medium-term initiatives to support our commitments are:

1. Establishing near-term targets
2. Net zero carbon audits
3. Occupier engagement
4. Supporting net zero-aligned capital flows

1. Establishing near-term targets
We have set carbon reduction SBTs on our absolute scope 1 and 2 emissions of 42% by 2030 compared with a 2019 base year[6] and a 55% reduction in carbon intensity across scope 3 emissions associated with occupier energy use. Further details of our transition plan for our reduction targets for scope 1 and 2 emissions can be found in our operate chapter.

At an asset level, we also have embodied and operational carbon targets to ensure that all new developments and major refurbishments are completed in line with industry best practice and net zero objectives.

2. Net zero carbon audits
Net zero carbon audits are required for new acquisitions and targeted existing assets. They identify measures required to achieve net zero and detail feasibility, costs and timelines. Findings are then incorporated into asset sustainability plans and may include the introduction of measures such as lighting upgrades, removal of gas boilers and the introduction of on-site renewables into management plans.

3. Occupier engagement
Collaborating with occupiers will be essential to meeting our shared carbon goals. An engagement programme is being rolled out to support this and includes data coverage improvements through the installation of sub metering, net zero collaboration projects and enhanced net zero clauses in our leases. This is supported by the launch of our new occupier engagement platform, Vizta.

4. Supporting net zero-aligned capital flows
To support net zero-aligned capital flows we launched the Sustainable Defined Contribution Property Fund in 2021, which aims to achieve operational net zero by 2030.

Across all funds, we plan to scale up these initiatives to support our 2030 commitments, as well as deploying new initiatives such as:

- exploring on-site renewable energy systems
- targeting the removal of at least 75% of gas use across landlord controlled areas by 2030
- developing a net zero supply chain strategy for goods and services.

Outlook and dependencies
Our progress against our climate commitments is dependent on occupiers' willingness to collaborate, as they play a central role in how efficiently buildings are used, irrespective of how well they have been constructed. While we will continue to use our influence to support these changes, we remain dependent on the actions taken by occupiers and wider society in implementing change.

There will be costs involved in transitioning our real estate equity portfolios. We believe that these shorter-term costs will be balanced by the reduction in the medium to long-term risk of stranded assets and obsolescence. Managing these costs is part of our long-term strategy of future-proofing our assets to create better quality and better performing real estate assets for our clients, and will also support our occupiers in achieving their net zero goals

Regular reviews of our progress against our climate commitments, and updated interim milestones where relevant, will be disclosed annually in our climate report and the more detailed real estate net zero roadmap.

1. Our net zero definition is aligned with UK Green Building Council (UKGBC) guidance, which requires us to achieve net zero across whole building emissions, including those associated with occupiers. UKGBC guidance is deemed to be best practice at present, but we are aware that new UK-wide guidance is in development and likely to be released during 2023.
2. Including joint ventures and segregated mandates.
3. The BBP Climate Change Commitment, to which we are a signatory, requires signatories to publish net zero carbon pathways and delivery plans, disclose the energy performance of their assets and develop comprehensive climate resilience strategies.
4. group.legalandgeneral.com/NetZero
5. Building on the 'Paris-proof' concept developed by the Dutch Green Building Council, the UKGBC has developed energy use intensity targets that require building emissions to be reduced in line with a science-based trajectory, enabling the UK to meet its 'Paris-aligned' targets.
6. 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 base year emissions are from 2021.

Using our influence
continued

Through our engagement with companies, governments and policymakers.

Objective
Our investment management business contains our Investment Stewardship team, whose purpose includes protecting clients' assets through raising market standards and best practice on ESG. While it is a challenge to measure the direct impact of each engagement, we believe the best strategy to affect change is through engagement with consequences. We are an active owner, and our Investment Stewardship team focuses on client outcomes and broader societal and environmental impacts in its engagements with companies and policymakers. This spans consideration of systemic risks and macro-developments through to company-specific issues.

Our transition approach
Our Investment Stewardship team implements our engagement using 'Our six step approach to engagement', as described below.

1. Identify the most material issues
For each sector using our global stewardship themes.

2. Formulate the engagement strategy
We set clear timeframes for our engagement activity and the improvements we would like to see, and we consider in advance any escalation which may be required if key requests are not met. We set measurable outcomes, either at market or company level.

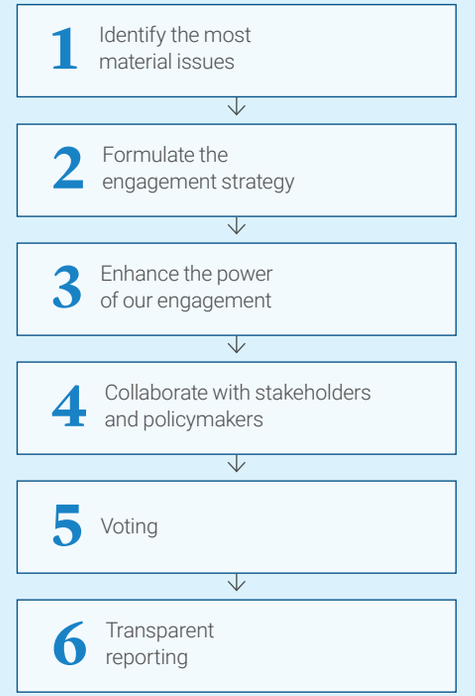
3. Enhance the power of our engagement
For example, increasing public pressure by releasing proposed voting intentions or publishing our list of sanctioned companies under our CIP. Public pressure is an important part of our escalation process.

4. Collaborate with stakeholders and policymakers
This allows us to raise our climate-related concerns with other investors and learn from our peers.

5. Voting
Voting is a fundamental tool we will continue to use to signal support for, or concern regarding, management actions to promote good corporate governance in the marketplace. The Investment Stewardship team exercises LGIM's voting rights globally, holding directors and companies to account. LGIM votes with one voice on all shares for which it has authority to do so; where there are no legal or practical impediments, we aim to vote with every share we hold and we aim to keep abstentions to a minimum.

6. Transparent reporting
Consistent and regular reporting to clients on our engagement outcomes is key to our stewardship responsibilities. We report to our clients in a number of different formats, detailing case studies of our engagement progress and publishing details of our campaigns and their progress in our regular quarterly and annual reports, published on our website. We also aim to be transparent in terms of our views and expectations of companies – by publishing our LGIM ESG scores and climate impact scores, we enable companies to better understand and monitor their progress against our expectations.

Our six step approach to engagement



Policymaker engagements and collaborations
Collaborating with like-minded investors and stakeholders is fundamental to an effective engagement process. It allows us to raise and share climate-related concerns about specific companies, topics and approaches with other investors and obtain additional information on climate change related to our peer group through our collaborations. These forums allow us to share resources and leverage external stakeholders, and enable us to monitor and influence a broad range of ESG topics, issues and companies globally. Collaboration helps us strengthen our voice on important topics around the world and is important in broadening our global reach. Furthermore, by being part of supportive networks, we hope to encourage greater investor involvement on climate initiatives.

Collaboration helps make engagement effective, but requires significant resources and planning. To facilitate this process, we are members of several key industry bodies and networks. These broadly seek to:

- develop cross-industry targets and best practice, for example through our membership of the UN-backed NZAOA and the NZAMi
- engage with policymakers, alongside other investors and civil society, on climate-related concerns and policy development, for example through the Institutional Investors Group on Climate Change (IIGCC), the Aldersgate Group, the Transition Plan Taskforce steering and delivery group and the UK Green Building Council
- engage collectively with investee companies to enhance the reach of our engagement, for example through Climate Action 100+.

Our memberships of various investor associations, including working groups and committees, enable us to influence the strategic direction of collaborative engagements and important market developments by contributing our views on their strategy and implementation.

Using our influence
continued

Net zero engagement: a focus on our CIP

Through our CIP, we assess companies across 20 climate-critical sectors on their approach to climate change, structured around the four pillars of the TCFD. We conduct a data-driven assessment of around 5,000 companies, as well as qualitative in-depth assessments on a subset of these companies, with whom we also engage directly. Our CIP score is published on our website, alongside the methodology, and we produce an annual CIP report providing further information on the progress and results of our assessments and engagements.

Combining quantitative and qualitative indicators drawn from a range of data providers, these assessments enable us to identify which companies are meeting our expectations on sector-specific climate factors (such as emissions and disclosure), and which are falling behind. Those companies failing to meet our expectations may be subject to voting sanctions and/ or divestment from relevant funds.

The CIP's focus is wider than just carbon emissions. Given the important links between climate and nature, it also incorporates expectations around biodiversity and, for relevant sectors, deforestation. In relation to biodiversity, and as outlined in our CIP 'sector guides', we encourage all sectors to consider and assess their impacts and dependencies on biodiversity. For those sectors where the links between biodiversity and net zero strategies are more obvious, we have included an explicit expectation around disclosure of these impacts and dependencies, and of considerations related to potential conflicts and trade-offs in their approach to net zero.

Engagement in action: deforestation

We understand the critical importance that sustainable forestry has in both combating climate change and preserving biodiversity, two systemic risks facing the world economy today, with significant implications for our clients' assets if left unaddressed. We also recognise that deforestation needs to be considered through a holistic lens, assessing both the environmental and social aspects of this issue; for example, the impact on indigenous people, and respective labour rights in operations and supply chains.

We have recently published LGIM's deforestation policy, which outlines our approach to assessing and integrating deforestation considerations into investment tools, expanding our stewardship activities and reporting to clients. This includes implementing a new voting policy to hold companies in deforestation-critical sectors to account for not meeting our minimum standard expectations with regards to action on deforestation.

From 2023, companies in critical sectors, for which we have data, and without a deforestation policy or programme in place, will be subject to a vote against the responsible director (or directors) standing for re-election. Voting will be escalated in subsequent years and, in line with our voting policies, we will continue to actively support and vote on shareholder resolutions related to deforestation where they align with our own views, as they continue to develop.
We have recently written to around 300 companies from a set of deforestation-critical sectors within our portfolios for which we have data, outlining our expectations, their current performance against these, and explaining LGIM's new deforestation voting policy.

This policy builds on the work we have been doing since 2016 under LGIM's CIP to engage with companies in the food and apparel sectors on deforestation within their supply chains. Through this programme, we have acted by using our shareholder vote and in certain cases have divested from companies we engage with that have not met our minimum expectations on deforestation. We are now setting minimum standard expectations across a broader scope of companies and sectors for which we have data and will be using our voice to hold them to account.

When it comes to working with other investors, in 2016 we joined the PRI Investor Working Group on Sustainable Palm Oil and we were subsequently an early member of the PRI Investor Initiative on Deforestation, where engagement focus expanded to other forest risk commodities, such as soy and cattle.

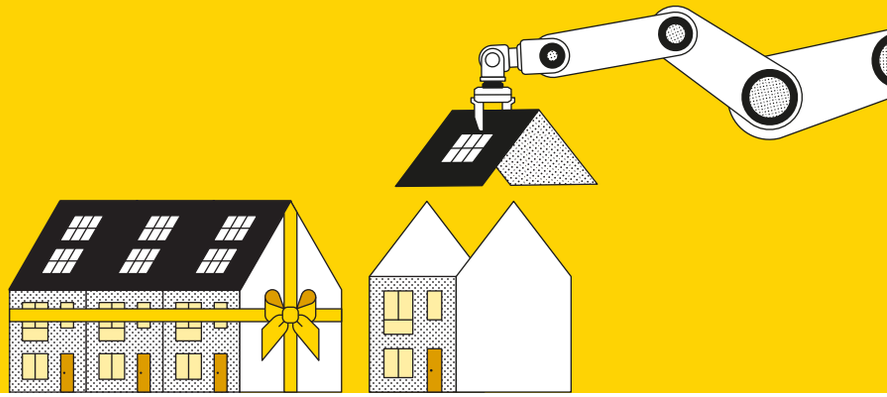
We are now working collaboratively with other signatories of the Finance Sector Deforestation Action commitment to lead in-depth company engagements and to speak with the weight of a critical mass of investors to accelerate progress across key sectors and value chains. We have further amplified our voice by raising concerns with relevant governments and calling for the enforcement of regulations to halt deforestation. We have done this both directly and collaboratively through our involvement in initiatives such as the Investors Policy Dialogue on Deforestation (IPDD).

We are strongly encouraging companies to proactively analyse, assess and address deforestation risks within their operations and supply chains, and to pay attention to the rising expectations of corporations from investors and a broader set of stakeholders. We believe it is vitally important that policymakers and regulators take action to provide an appropriate enabling backdrop.

Outlook and dependencies

Engagement with companies and policymakers, and working in partnership with our clients to provide net zero solutions, are fundamental to how we can use our influence to achieve LGIM's net zero commitments. Our transition to net zero will be dependent also on changes in the real economy and in client behaviour, preferences and demand across the regions in which our clients are based. Different regulatory backdrops around the world and how they evolve will also play a role.

Changing how we operate



We will change the way we operate to decarbonise our business.

2022 – 2025 → **2025 – 2030** → **2030 – 2050** → Net zero

By 2025

100%
of directly procured electricity will be from a renewable source

Enhance
the energy efficiency of new homes being brought to market

Understand
measure and set targets on energy used in the operation of buildings, and embodied carbon in the construction process

Purchased goods and services
Set an SBT aligned with our net zero ambition

By 2030

42%
We will reduce our absolute scope 1 and 2 GHG emissions by 42%[1]

Enable
our core occupied offices[2] and business travel to operate at net zero carbon emissions by 2030

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

By 2050

Net zero operational carbon footprint

Net zero carbon across our real estate equity platform

> “Making the decisions that will lead to lasting carbon reductions begins with our 11,500 employees. That is why we empower them to build such decisions into their daily work, and create a culture where challenging the status quo is encouraged.”

Emma Hardaker-Jones
Group HR Director

Key risks and dependencies for changing how we operate
As our target requires an absolute reduction, if our operational businesses grow at a faster rate than we decarbonise the intensity of the business, we will see an increase in absolute emissions. Noting this, we do not expect our reduction pathway to be linear.

Transitioning to net zero is a global challenge which brings resource pressures. For example, the demand for cleaner fuels will increase, which may impact supply. Net zero standards are continuing to emerge and we recognise that our approach to, and definition of, net zero may need to change. Our role in industry groups helps us shape and prepare for these changes.

1. This is an SBT, approved by the SBTi. To account for the impact of the pandemic, our 2021 base year includes estimated emissions data from our Real Asset 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.

Changing how we operate
continued

We will change the way we operate to decarbonise our business.

How we operate our business and the businesses we control are critical to the success of our climate strategy.

From the office spaces our people utilise and the way they choose to travel, to the assets we manage and the homes we build, all these activities build and shape our carbon footprint and each presents both challenges and opportunities in our journey to net zero carbon.

> We believe decarbonising housing makes sense – meeting customers' needs, being resilient to regulation, and creating value in the long-term."

Laura Mason
Chief Executive Officer, LGC

Through our operations
We are committed to reducing our absolute scope 1 and 2 GHG emissions by 42% by 2030 from a 2021[1] base year, using a location-based approach[2], and to achieve net zero by 2050.

By 2030, our occupied offices[3] will operate with net zero carbon emissions.

Through the businesses we control
All new homes we deliver from 2030 will be enabled to operate at net zero carbon emissions.

Net zero carbon across our real estate equity platform by 2050.

The three core contributors to our operational scope 1 and 2 footprint are outlined below.

1. LGIM Real Assets
LGIM Real Assets are the largest contributor to our operational footprint (16,447 tCO_2e4). We are committed to ensuring that the commercial buildings we own and manage are developed and operated to ensure that they are aligned to our net zero pathway. LGIM Real Assets' net zero road map is described on page 17.

2. Our housing businesses
The second largest contributor to our operational footprint is our LGC housing businesses. This is a collection of five house building businesses that develop, and in some cases operate, homes across the UK, of various house types and tenures. All five businesses have unique challenges but are aligned with our climate commitments.

3. Occupied offices
The third key contributor is our occupied offices. We are committed to ensuring that we reduce the impact of our operations and we are shaping our location strategy to align with our net zero ambition.

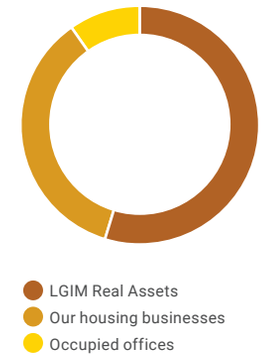
Our operational carbon footprint
Table 3.

Emission source[5]	tCO_2e Jan-Dec 2022	tCO_2e Jan-Dec 2021
Total scope 1 and 2 (location)	30,062	30,957
Scope 1	12,506	13,722
Scope 2 (location)	17,556	17,235
Scope 2 (market)	2,586	2,432

Chart 4 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 occupied offices.

Chart 4.

Operational footprint breakdown (%)



1. This is an SBT, approved by the SBTi. 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 base year emissions are from 2021.
2. Location basis reflects the average emissions intensity of the national grid on which energy consumption occurs and takes no consideration of the renewable or non-renewable source.
3. Applies to occupied offices where we actively control the management of utilities.
4. Figures as at 31 December 2022.
5. We include all scope 1 and 2 emissions where we have operational control. Please refer to our Basis of Reporting document which outlines how we calculate our scope 1 and 2 footprint (bit.ly/LegalandGeneralSustainabilityreportingcentre).

Changing how we operate
continued

Through our operations.

Objective
Our operational activities generate carbon, from the fuel used to heat, cool and light offices, to the homes we design, build and in some cases operate. We aim to achieve net zero by 2050 and in line with the latest scientific thinking we are committed to reducing our absolute scope 1 and 2 GHG emissions by 42% by 2030 from a 2021 base year[1], using a location-based approach.

Our transition approach
In line with the SBTi financial sector guidance, we are committed to delivering an absolute reduction in our scope 1 and 2 emissions.

To make sure that any steps we take are sufficient and aligned with our 2030 target, we have modelled our predicted growth in each of our operational businesses, along with the required carbon reduction.

Understanding how the growth ambitions of our businesses will impact our journey to net zero has been key to developing our transition plan. We have used the support of independent carbon experts, EcoAct, to model our carbon projections and better understand how we achieve absolute reductions in emissions when striving to grow our businesses.

Growth has been built into our decarbonisation approach, allowing us to develop interim milestones towards our commitments. We have identified the most important actions we will take over the short to medium-term, reaching out to our 2030 target:

- net zero carbon reviews on commercial buildings we own, manage or occupy
- increase self-generation of electricity
- removal of gas from our offices, commercial properties, LGIM Real Assets real estate and new homes
- replace the use of on-site diesel with low carbon alternatives
- embrace new technology as it comes online such as heat pumps, micro grids and battery storage.

Our actions out until 2030 will not lead to a linear annual reduction, as we expect to be taking these steps over a period of business growth which in the short term will result in an increase in our operational carbon footprint. This means that we expect to see an increase in our absolute carbon footprint before the impact of our actions result in a more rapid reduction to achieve our 2030 target (see the planned pathway for our housing businesses' in Chart 5). We plan to scale up these initiatives to 2030, as well as seeking new innovative solutions to support our operations.

Carbon offsetting
We have not yet committed to carbon credit purchases to offset these emissions. Our priority is to reduce our emissions as far as possible, using offsetting only when absolutely necessary. The voluntary offsetting market is complex, but our offsetting policy will help us to shape our minimum standards. The policy focuses on best practice measurement and delivery of additional benefits where negative emissions are used, including the inclusion of the Oxford Offsetting Principles[2].

Outlook and dependencies
We need a clear and reliable roadmap of supportive government policy, noting the different regulatory regimes across England, Scotland and Wales. Emerging regulation will continue to be key to supporting our progress towards our climate commitments.

Our commitments take account of the rate at which the national grid 'greens'. This is currently on track but we lack control over it. As partial mitigation, we plan to increase self-generation of energy and are investigating the benefits of battery storage.

Technological advancement will be key to the transition beyond 2030, but is difficult to predict. We will engage with industry bodies and climate consultants, as well as with our supply chain to stay abreast of developments. Our clean energy investment team also assesses new and emerging technology which helps provide foresight of potential future climate solutions.

Core occupied offices and business travel
In addition to our SBTs, we have set a more challenging target for our core offices[3] and business travel to operate with net zero carbon emissions by 2030.

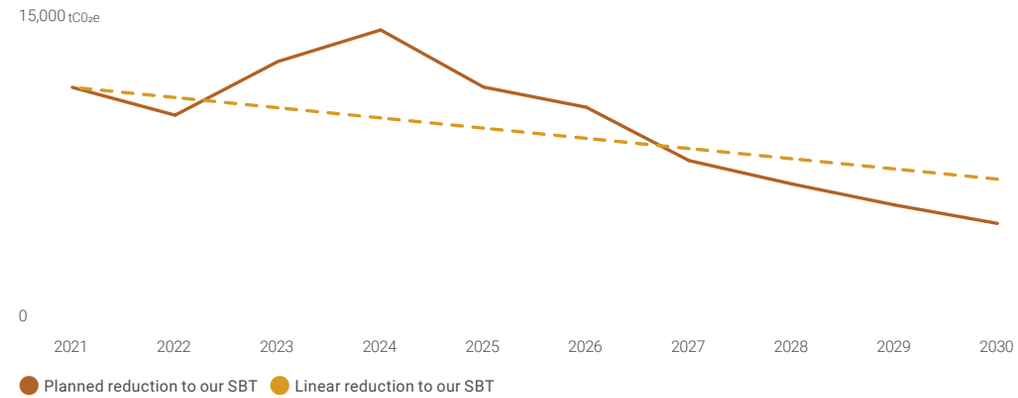
We have already undertaken net zero reviews of our core occupied offices and are developing our location strategy to ensure that we meet our business needs as well as deliver our net zero ambition.

As part of our urban regeneration project in Cardiff, we have developed new office space which we will occupy. This office space is utilising the NABERS UK[4] standard to drive energy in use towards a net zero carbon standard and reducing embodied carbon throughout the build was a key focus during development. This building creates a blueprint for future developments.

We are reshaping the buildings we occupy to optimise energy efficiency measures and investing in data monitoring and technology to help us understand our usage demands and patterns.

Chart 5.
Our housing businesses' decarbonisation pathway

Pathway to our 2030 SBT (including actual 2022 data)



1. This is an SBT, aligned with the SBTi. To account for the impact of the pandemic, our 2021 baseline includes estimated emissions data from our managed Real Assets portfolio based on 2019 data. All other base year emissions are from 2021.
2. smithschool.ox.ac.uk/sites/default/files/2022-01/Oxford-Offsetting-Principles-2020.pdf
3. Applies to occupied offices where we actively control the management of utilities.
4. bregroup.com/products/nabers-uk/nabers-uk-about/

Changing how we operate
continued

Our purchased goods and services.

Objective
We recognise that the purchasing of £912 million of goods and services, from over 1,900 suppliers, is a large contributor to our scope 3 GHG emissions.

Our transition approach
In looking to achieve real-world emission reductions in our supply chain, our most pressing challenge is to gather accurate carbon data associated with the products and services we procure. This is especially difficult with smaller suppliers. Our 2022 estimation of the GHG emissions in our supply chain is based on sectoral benchmarks linked to our spend, which means that today the only way to reduce our footprint is to buy less, rather than to buy better. More accurate information of the carbon associated with our supply chain, and innovation within the supply chain, are needed to enable us to deliver reductions in our supply chain footprint.

During 2023 we will be using the outputs from our analysis to work with our key suppliers to understand and capture the impact our procurement decisions have on our emissions, which should enable us to buy better and monitor our progress. By the end of 2023, we will set SBT-aligned targets for the most materially significant parts of our supply chain from a climate change perspective.

When setting our climate-related targets we want to make sure that we integrate the social impact that SMEs and social enterprises can have. We will work with procurement experts to ensure that we are being inclusive and fair in our engagement with our suppliers. We will seek to create ways to partner with and support them in understanding and reducing their environmental footprint.

We will set interim targets out to 2030 and, in the next three years, we will strengthen and expand our operational control procedures. This includes developing the tools and systems to support a fair transition, such as our Sustainable Sourcing Principles, which set out the core procurement principles we seek to uphold.

Outlook and dependencies
Our suppliers are the experts on their business, and we will be seeking to work collaboratively with them to develop efficient carbon reduction innovations into our supply chain, and to empower our procurement teams to make informed and balanced decisions. We need our supply chains to reduce their carbon emissions at pace to meet our net zero ambitions.

Our purchased goods and services approach

Understand	Collaborate	Reduce
Map our procurement carbon footprint based on spend data.	Work with our key suppliers to refine the data to more accurately capture and understand their carbon footprint.	Use external, industry-specific tools to aid procurement decisions.
Strengthen our procedures to help us better manage our procurement decisions.	Work with small and medium sized/ social enterprises to understand how we can set effective targets for their businesses.	By the end of 2023 we will set SBT-aligned target(s).
		Where practical, we will support and trial the development of innovations in the drive to achieve net zero.

Changing how we operate
continued

Through the businesses we control.

Objective
We have committed that by 2030, all new homes we deliver will be enabled to operate at net zero carbon emissions. We believe this is not only the right thing to do, but that it will bring commercial advantages, including providing an attractive offer to consumers and adding value to retained assets in the long term.

Our transition approach
The basis of meeting this target involved developing a common understanding of the challenge and a consistent way to monitor progress. During 2022, we commissioned BuroHappold to help us define our approach to calculating an estimate of operational carbon emissions over the lifetime of the homes we deliver, as well as energy use intensity, to be able to compare with industry-standard benchmarks[1]. This methodology has been used to evaluate a range of typical house types across our businesses and will be used to demonstrate progress against our target.

Our Suburban Build to Rent and Affordable Homes businesses have also been working with Currie & Brown to analyse the most efficient and effective strategies for decarbonising different house types, informing their respective pathways to net zero.

To allow us to analyse both the risks and opportunities, we also commissioned a crucial piece of market research by YouGov, which demonstrated that climate and energy efficiency have risen up the agenda for many people when choosing a home. The survey showed that buyers and renters are prepared to pay a 10.5% and 13% premium respectively for a low-carbon home[2]. This is an important piece of evidence for developers and investors in making the business case for investing in net zero.

To improve accountability and monitoring, our housing businesses have set short-term interim milestones en route to our 2030 commitment:

- **CALA** is targeting gas-free designs on all new schemes starting on-site after 1 January 2024. This is ahead of regulatory change in both Scotland and England
- **Inspired Villages Group (IVG)** has committed that all new schemes are built to net zero regulated carbon (i.e. carbon covered by Building Regulations), using enhanced building fabric, heat pumps and solar panels. IVG is targeting net zero in operation on new builds by 2025
- all homes produced in our **Modular Homes** factory are now gas-free, with an energy efficient design, all with a heat pump and using solar panels where possible
- **L&G Affordable Homes** is committed to delivering enhanced energy efficiency and gas-free designs in schemes it delivers itself that go through planning from 2023 onwards, and engage developer partners to encourage a raising of standards as quickly as possible in homes it acquires (for example, through Section 106 planning obligations)
- our **Suburban Build to Rent** business is targeting gas-free designs in at least 50% of homes in new investments from 2023 onwards, moving to 100% by 2024, and all homes built to high standards of energy efficiency, with solar panels where possible.

Outlook and dependencies
The solutions to delivering homes that operate with net zero carbon emissions largely already exist, and are within our control, with the exception of residual carbon content in grid electricity, where we are reliant on the UK hitting its decarbonisation targets.

We strongly support the raising of standards through building regulation and local planning requirements to support the transition. Good regulation makes for fair competition and helps to prevent developers reducing costs by lowering sustainability standards.

Net zero carbon homes cost more to build. In 2022, we commissioned modelling work which suggests an addition of between 5 and 12% to the overall capital cost. We approach this challenge in a number of ways:

- we anticipate costs of technical solutions to reduce in the coming years, as they benefit from economies of scale
- we see evidence for customer preference for low-carbon homes and the potential that this translates into a purchase or rental premium
- we believe that national regulation, local planning requirements and corporate leadership will level the playing field, which supports viability
- we believe that for retained assets, lower-carbon homes are more resilient assets over the long term
- it is approximately five times more expensive to retrofit to a net zero carbon standard than it is to build homes to a net zero standard in the first place.

As a complex topic, we welcome the cross-industry task force seeking to create a Net Zero Carbon Building Standard and are actively contributing towards a number of the working groups.

Energy Use Intensity

In our first year piloting our Energy Use Intensity (EUI) methodology, we were delighted to see our L&G Modular Homes business achieve 22 – 26kWh/m^2/year for two of its standard house types, an exceptional level of performance.

IVG estimated performance was also an encouraging 42 – 48 kWh/m^2/year.

Our other housing businesses have further to go, but our largest house builder, CALA, modelled EUI in a range of its typical house types at between 59 – 86kWh/m^2/year. This is currently above the 2025 industry target but not significantly[3].

1. RIBA's Climate Challenge proposes a 2030 Energy Use Intensity standard of 35kWh/m^2/year.
2. legalandgeneralcapital.com/media-centre/thought-leadership/the-value-of-energy-efficient-homes/
3. RIBA's Climate Challenge proposes a 2025 standard of 60 kWh/m^2/year.

Changing how we operate
continued

Measuring embodied carbon.

Objective
Housing is responsible for embodied carbon through: the production and transportation of materials; the on-site construction process itself; repair and maintenance of properties; and demolition.
For a building built under today's UK Building Regulations, embodied carbon is still a minority of emissions associated with that building over its lifespan. However, as we reduce operational carbon, embodied carbon becomes the dominant source of carbon emissions, as demonstrated in Chart 6 and Chart 7. Analysis by our largest house builder, CALA, has shown that as building regulations are strengthened to reduce operational carbon, this inadvertently increases embodied carbon through the additional material (e.g. insulation) and technologies (e.g. solar panels) used in meeting the new standards.

This is not an argument against higher standards, but demonstrates the importance of considering 'whole life carbon'. As policymakers and consumers become more aware of the full carbon impact of housing, the business case to address 'whole life carbon' will only become stronger.

Our transition approach
There are actions that developers can take that are within our control to reduce embodied carbon, such as consideration of material choices in design. However, we will not reach net zero embodied carbon without manufacturers and suppliers reducing the embodied carbon of their products by addressing their respective production processes. This is a challenge for certain carbon-intensive sectors. Based on materials available and techniques used today, even after taking actions to reduce emissions, net zero embodied carbon still cannot be achieved without significant offsetting.

Over the course of 2022, we worked on defining our methodology and protocols for the measurement of embodied carbon across all of our housing businesses, enabling us to benchmark ourselves against industry-agreed standards (such as the RIBA and LETI benchmarks). We have now agreed a consistent approach, using the commonly used industry tool 'One Click', which calculates embodied carbon.

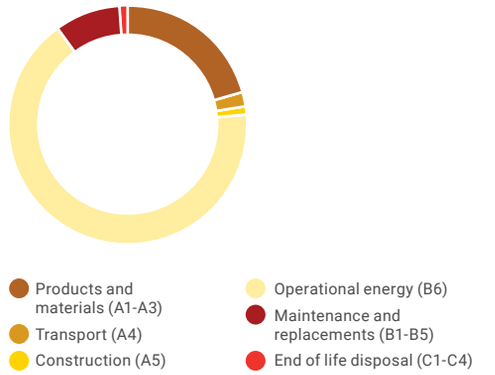
With the methodology agreed, we have modelled the embodied carbon of a representative sample of typical house types across our housing businesses, in order to be able to estimate the embodied carbon associated with every home delivered. Although our understanding of embodied carbon is still developing, this exercise is proving invaluable to better understanding our current performance and the scale of the challenge – and opportunity – ahead.

Where some of our businesses are acquiring homes delivered by other developers, we have begun to engage with those partners on the topic of embodied carbon, sharing our methodology and encouraging a reciprocal sharing of data.

Outlook and dependencies
Embodied carbon in buildings is a hard-to-abate sector, and is therefore a consideration for all construction businesses throughout the supply chain. This needs to be balanced with the social benefits of house building. We are focusing on the issue, engaging with industry bodies, seeking innovative solutions, and supporting strong action by policymakers to address the challenge.

Chart 6. Importance of embodied carbon

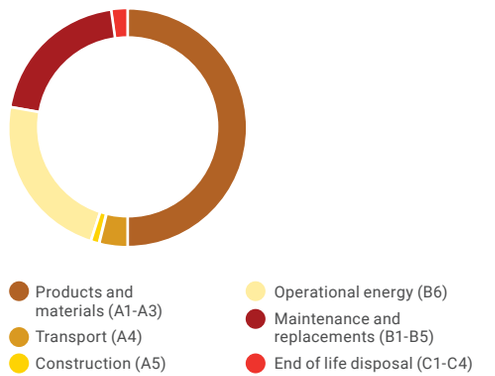
Residential building (built to Part L 2013) %



Source: LETI Climate Emergency Design Guide (January 2020)

Chart 7. Importance of embodied carbon

Low operational carbon building %



Source: LETI Climate Emergency Design Guide (January 2020)

Modelling embodied carbon

Using our newly developed methodology, we were encouraged by CALA's modelling, showing a representative sample of its Scottish house types scoring 376 – 461kgCO_2e/m^2, demonstrating the carbon benefits in CALA's use of (sustainably sourced) timber frame construction in Scotland.

However, there is more to be done across all of our housing businesses, where the modelling shows some house types scoring nearer to 900kgCO_2e/m^2, and giving a clear sense of direction for the coming years.

Key risks and uncertainties

A successful transition to a low-carbon economy will be underpinned by careful risk management. The transition involves significant levels of uncertainty, which increase as we look further into the future, especially beyond 2030. Our transition plan focuses on our short and medium-term actions, but there are several risks which may challenge these along the way.

The key risks and uncertainties are set out below including details of how they will be managed or mitigated, accepting some are beyond our control. Note also the cautionary statement on pages 35 – 36 of this transition plan.

Risks and uncertainties	Risk management	Outlook
Dependency on global transition As a financial institution, the emissions that we fund through the assets that we invest in are significantly larger than the direct emissions from our own operations. While we are taking actions to influence companies to decarbonise their businesses, and we can divest from those not meeting our expectations, we need to maintain a diverse portfolio of investments. This creates a dependency on the delivery of government policy actions and the climate-reduction targets of the companies we invest in to deliver on our own emission reduction targets.	Our commitments are made in the expectation that governments will follow through on their own commitments to ensure that the 'Paris' objective of limiting global temperature increases to 1.5°C is achieved, such as the UK's commitment in the Climate Change Act 2008 (2050 Target Amendment) Order 2019. We monitor the actions of the companies we invest in to assess whether their plans are aligned with 1.5°C pathways, and are active in our engagement with them to encourage the right behaviour.	While many governments have committed to the 1.5°C 'Paris' objective, there remains significant uncertainty in respect of the supporting policies and actions that will be taken to deliver on this commitment. Geopolitical instability and the related cost of living crises have focused world leaders on the need to secure reliable and diverse sources of energy. We expect policies and actions to emerge, but remain uncertain over their timing and impact.
Rapid social change A smooth transition is reliant on many actions that may result in inequitable impact across society. If transitional actions do not take into account the needs of all in society, there is increased risk that decarbonisation actions are not accepted, resulting in delayed or disruptive transition.	We understand that for a transition to be successful it needs to address both social and environmental issues, and that these are not mutually exclusive. We expect our investments to deliver on both positive social and environmental impacts. Our Climate Impact Pledge engagement includes 'just transition' considerations within the sector guides, highlighting the material social aspects for each climate-critical sector. Our housing businesses incorporate sustainability alongside financial metrics, including social impact assessments.	COP 27 saw the establishment of a 'loss and damage' fund. The fund will help the world's most vulnerable withstand and recover from the physical impacts of present and now unavoidable climate change. This is an important step in recognising the need to address social impacts. However, there remains significant uncertainty over how societal inequalities will be incorporated within broader climate policies.

Key risks and uncertainties
continued

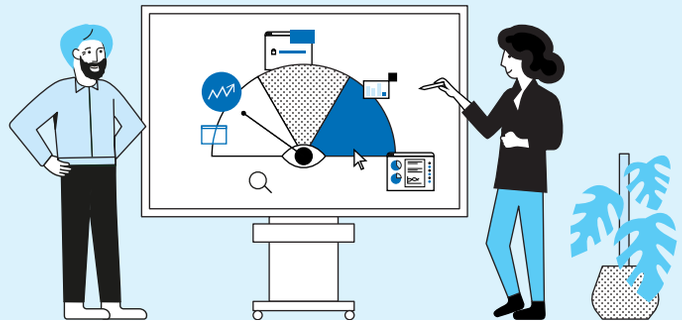
Risks and uncertainties	Risk management	Outlook
Investment control From the £1.2 trillion of LGIM's AUM[1], we manage £1.1 trillion on behalf of external clients, where the client is ultimately responsible for investment decisions. We have set targets for influencing clients to move into our range of net zero-aligned funds, but as we cannot force a client to alter their investment strategy there is a risk of slower adoption of net zero-aligned funds.	We seek to influence and assist these clients by: providing appropriate net zero-aligned investment products and climate-related information for their products; engaging with investee companies; and informing our voting practices based on their actions relating to climate change.	There is growing demand from European investors to align investment strategies with their own decarbonisation commitments. The outlook for consumer demand for net zero-aligned funds in the US and Asia is more uncertain.
Evolving science and carbon reduction practices Our understanding of the risks from climate change and the actions that are needed to mitigate them is based on science. The scientific evidence of climate change is clear, but there remains some uncertainty on the speed and scale of change, especially around irreversible tipping points such as the melting of the permafrost. The actions that the world is taking will to some extent inform the actions that we can take and will change the actions required in the long-term. This creates uncertainty in projecting the future impact of actions we and others are taking, so projections, forecasts and other forward-looking climate metrics should be treated with caution, in particular given the uncertainty around the evolution and impact of climate change.	Disclosure of climate and emissions data is evolving and remains a best endeavours analysis. We have made progress in our understanding and quantification of climate risk, but this is an evolving landscape. It is not yet clear where the financial sector will eventually align on metrics, calculation methodology, timeframe, and scenario definition. We disclose our metrics in this transition plan and provide further supporting information of the changes to our methodology in the additional information chapter of our climate report.	We will report our progress against our transition plan within our annual climate report. This will continue to report changes to our understanding of the risks from climate change, our methodologies and the actions that we are taking. We will review our transition plan at least every three years to ensure that it reflects these evolving practices, science and understanding.
Extended time horizons Achieving our group commitments will be challenging, reflecting the complexity and global interconnectivity needed to address climate change, and the significantly longer timeframe than our normal target setting. When we move beyond 2030 there is increased uncertainty due to reliance on unproven or unscaled technology to deliver net zero. These new technologies may not deliver the expected outcomes, or other global events may change the operating and investment environment beyond how we might expect it to be. Over such extended time horizons, it is possible that there may be various non-linear or compounding climate effects that may lead to faster or even irreversible global temperature increases than currently projected (for example, thawing of the permafrost leading to greater release of GHG emissions, as well as ancient bacteria and viruses).	This is why we have set interim milestones. Our climate risk management framework includes a framework for setting our climate commitments. Before making commitments, we undertake analysis of their implications at the underlying business level. This seeks to ensure that our commitments are integrated within divisional strategies, and that the business plans are aligned with delivery of our climate commitments. We have established governance and oversight (see pages 29 – 30) to ensure that we carefully monitor our progress against our existing commitments and identify when we need to adapt our plans. We have engaged with the SBTi to ensure our interim targets are aligned with 1.5°C and with broader industry groups to share best practice.	We will review our transition plan at least every three years to ensure that it reflects the evolving climate science, global context and the operating and investing environment. External factors, or the success of our own actions, may require us to adapt our future targets and actions.
Physical risks Even under a 'Paris' outcome of 1.5°C there will continue to be further emergence of the physical risks from climate change, where we may experience further 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.	Our exposure to the physical risks from climate change are dependent on the underlying asset. For direct investments, the potential loss from climate change should be included as part of the initial underwriting process and assessment of investment value, utilising scenario analysis. In LGIM Real Assets, initial analysis has demonstrated that flood risk is the most significant physical climate hazard for our UK-based real estate portfolios and more granular, asset specific information is currently being captured to identify where additional resilience measures may be required.	The IPCC has reported that global average temperature rises have reached 1.1°C since pre-industrial times. Adaptation planning and implementation has progressed, but there remain gaps, with maladaptation in some sectors and regions. Current financial flows for adaptation are insufficient for, and constrain implementation of, adaptation options, especially in developing countries.

1. Figures as at 31 December 2022.

Key risks and uncertainties
continued

Risks and uncertainties	Risk management	Outlook
Reliance on scenarios Climate-related events and their associated risks are subject to significant uncertainty in terms of their timing, frequency, or severity. Use of scenario analysis can inform our risk management and investment strategy, by understanding how climate change may affect asset and liability performance. It also forms an important part of our advice to clients on climate risks. Given the complexity of the global energy system, the drivers of climate change and the long timeframe, there is significant uncertainty around the assumptions and projection methods implicit in both the climate and financial models that we use to inform our decision making.	Scenario analysis is a useful tool for assessing and analysing the potential impacts from climate change. The scenarios we model are not forecasts or projections of the future, and include a wide range of assumptions and approximations to model the future. We do not assign probabilities to these outcomes and do not compare their likelihood of being realised. We are committed to the 1.5°C 'Paris' objective. However, our 1.5°C Net Zero scenario (see our climate report[1]) is only one of many ways this goal could be achieved. Climate scenario analysis remains a relatively new field of activity for financial institutions, meaning further improvements are likely to continue to emerge. We continue to invest in our own models, and their controls, and in skilled experts to build our capabilities.	Over the next decade, the change necessary to meet global carbon reduction targets will require societal adjustments on an unprecedented scale. Understanding the range of actions and their implications for the financial system will continue to shape our understanding of the range of potential outcomes, and our transitional approach. As the science of climate change and the world's responses to these risks evolves, we may need to adapt our actions.
Skills for the future As we change how we invest, the products and services we offer, and how we operate, we need to ensure that we have the right skills for the future. Successful transformation means embedding climate considerations into everything we do, ensuring it is part of our culture and impacting how decisions are made. The group aims to recruit, develop and retain high-quality individuals. We are inherently exposed to the risk that key personnel with relevant expertise may leave the group, with an adverse effect on the group's businesses. Although we believe we are taking the right steps, there remains a risk that our model does not align with the expectations of those we seek to attract or retain. We are also dependent on our suppliers developing their own solutions to decarbonise their businesses, and those we need to decarbonise our own. They require sufficient materials and training to deliver climate solutions at the scale required, for example, the supply and installation of heat pumps to replace gas heating.	As part of our annual strategic workforce planning exercise, we have identified areas of the business where we need to further develop our climate capabilities through recruitment or training. Our Board completes an annual skills self-assessment, which includes climate considerations, and we use this to tailor Board members' training. Climate change information is accessible to all employees on our company intranet: explaining what climate risk is; how we are mitigating it; and how our business model will help the transition to a low-carbon economy. Our online ESG Academy provides thought leadership and education to our employees, who in turn support our clients. We also have a community-led online platform open to every employee called Stay Curious, and have launched a new module named Stay Curious about Climate and Environment. We actively manage our supply chain to access the solutions and materials we need to decarbonise our construction businesses. This will increasingly include consideration of how well positioned suppliers are to deliver on sustainable solutions.	Competition for talent across the full range of capabilities and qualifications is intense and demands that the group offers competitive compensation arrangements as well as opportunities for development and an attractive work environment. People with skills in areas such as new technology are particularly sought after across many business sectors, including those in which we operate. New technologies and solutions need to be supported by a skilled workforce to enable our transition. This has been widely recognised, such as through the UK's net zero review, which highlighted the need to act on developing the skills needed to support net zero.
Data The lack of reliable, accurate, verifiable, consistent and comparable emissions data (and other important data), makes it challenging to accurately disclose or estimate metrics used to assess climate-related risks and opportunities. In particular: • there is a lack of standardisation, transparency and comparability of disclosures with many diverging disclosure frameworks and methodologies for calculating climate metrics. This leads to metric estimates that are not directly comparable. Finding robust sources for relevant required data remains a challenge • forward-looking climate metrics require many methodological choices, estimates, judgements and assumptions about climate change policies, technologies and other matters that are uncertain or not yet known.	Where changes to data or methodology have impacted on our reported climate metrics, we separate this out from the impact of our performance against our targets, and provide details on the analysis of change in supplementary information within our climate report. We make allowances for data uncertainty when using models to inform decision making. We actively engage on and support the development and implementation of standards that seek to improve the availability of high-quality and comparable data – gathered across jurisdictions and from both the public and private markets.	It is not yet clear where the financial sector will eventually align on metrics, calculation methodology, timeframes and scenario definitions. While we monitor and disclose our metrics, the underlying calculation methodologies continue to evolve, reflecting the availability and quality of supporting data, regulatory expectations and emerging industry practices.

Oversight and governance



Board oversight

The Group Board ('the Board') is ultimately accountable for the long-term stewardship of the group. Responding to climate change and the risks and opportunities associated with it are of importance to the Board. In early 2020 the group added 'addressing climate change' as one of our six strategic growth drivers, emphasising the importance of climate risk and the opportunities arising from the necessary transition. In recognition of the importance of this matter, the Board appointed Nilufer von Bismarck as Non-Executive Director with specific focus on climate change. The Board has approved the transition plan and receives regular updates on how the group is progressing against the climate commitments.

Beginning in 2021, we set climate-related targets in our executive directors' remuneration. We disclose the climate considerations within both the annual variable pay and performance share plan within our climate report.

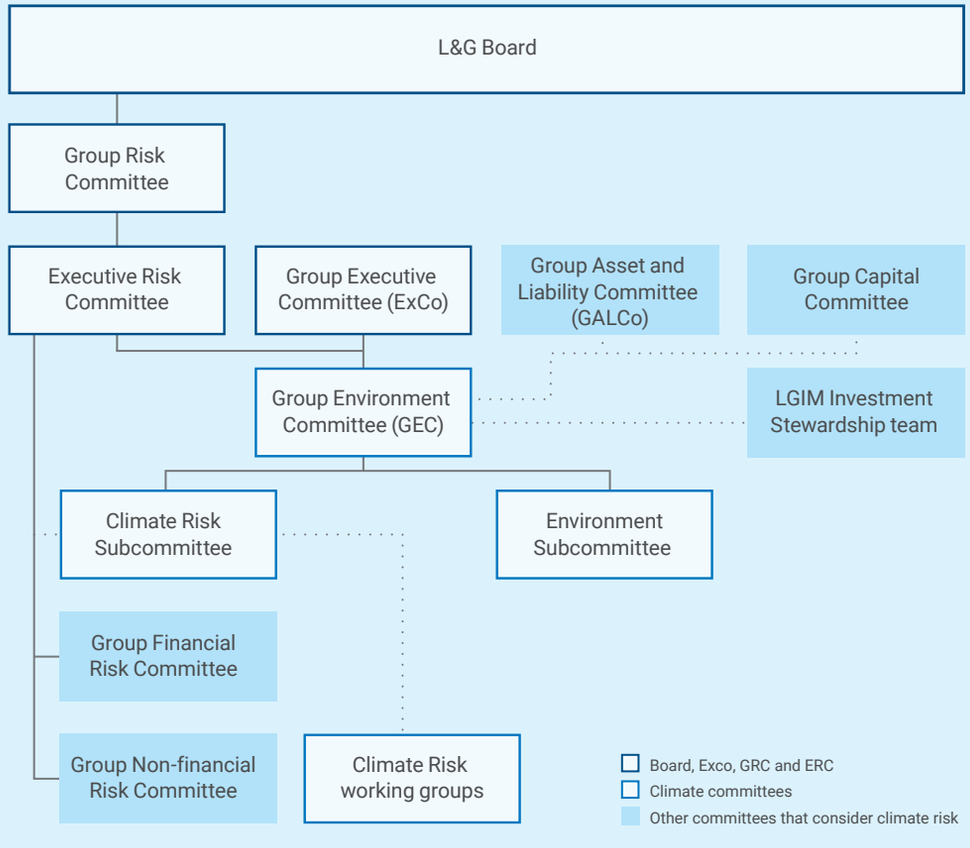
The Group Climate Change Director, a new position created in 2021, is responsible for coordinating the group's response to climate change and ensuring that an appropriate strategy is in place to understand, identify, measure, monitor, control and report risks from climate change in line with the risk strategy and risk appetite parameters set by the Board. The Group Climate Change Director also supports management in the development of appropriate processes to monitor and report on exposures to the risks from climate change.

The Board, through the Group Risk Committee (GRC) and Executive Risk Committee (ERC), has delegated oversight of the management of the risks associated with climate change to the Group Environment Committee (GEC).

> "Responding to the changing conditions, while maintaining discipline on our 'North Star' of net zero by 2050, will characterise the way we do business."

Simon Gadd
Group Climate Change Director

Group environment governance



Oversight and governance
continued

Role of the GEC

The GEC is responsible for providing strategic direction for the management of environmental impact, with a particular focus on the delivery of our strategic response to climate change. From a transition plan perspective, this includes:

- setting the group strategy for targets, and monitoring and reporting on performance
- providing central oversight of the group's management of its climate transition actions to ensure that climate change informs strategic planning and decision-making across all group activities (including investments)
- overseeing that management practices are in line with our climate strategy and the group's risk appetite
- overseeing our commitments as part of external industry memberships to support our overall climate commitments
- promoting internal awareness and understanding of climate-related opportunities and risks
- ensuring that the group's actions and responses to climate change are proportionate.

The GEC is supported by subcommittees to review and challenge performance against tolerances and targets; one for climate risk and another for other environmental issues. It is further supported by working groups to focus on specific additional regulatory requirements relating to the management of climate-related risks and opportunities.

Divisional governance

The group-level governance is supported by additional divisional-specific governance.

Within 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.

Three lines of defence

The risks associated with delivery against our transition plan are managed through a three lines of defence model. The first line has responsibility for the management of the business against our climate commitments. The second line provides oversight and challenge, through ensuring that appropriate policies and procedures are in place to understand, identify, measure, monitor, control and report risks from climate change in line with our risk appetite parameters. These are set by the Board, and support business managers in the development of appropriate processes to monitor and report exposures to climate change risks. Our Internal Audit function provides assurance on the operation of the risk management framework.

Independent verification

To ensure that our commitments are suitably ambitious we have committed to, and completed, validation with the SBTi (see page 32). This covers our top sources of emissions, our operational carbon footprint (scope 1 and 2) and our financed emissions. We have further commitments in this report that are additional to the more granular SBTi targets we have set.

Since 2021, we have also sought external independent limited assurance over some of our key climate-related metrics. The scope of this was expanded for our 2022 metrics, covering our scope 1, 2 and scope 3 (categories 6, 7 and 8)[1], and we will continue to disclose the details behind these engagements, and our progress against our climate commitments, in our climate report.

1. Deloitte provided independent limited assurance in accordance with International Standard for Assurance Engagements 3000 ('ISAE 3000') and Assurance Engagements on Greenhouse Gas Statements ('ISAE 3410') over the referenced metrics. Deloitte's full unqualified assurance opinion, which includes details of the selected metrics assured, can be found in our 2022 climate report.

Monitoring and reporting progress

While our commitments are for the long-term, we need to ensure that progress is being made at pace. The actions we are taking today have an impact on our ability to achieve both our interim milestones and long-term commitments.

These pages set out the core elements of our climate-related monitoring and reporting framework, whereby:

- business divisions are accountable for delivering their climate commitments and managing risks in line with our group risk policies
- the Group Climate Change team provides objective challenge and guidance on our strategic response to climate change
- the Risk function provides independent challenge to ensure the impact of climate change on financial, conduct and reputational risks are managed
- Group Internal Audit provides assurance on the effectiveness of business risk management and the overall operation of the framework.

We manage our businesses to align with the mitigation of the worst outcomes from climate change and to be resilient to the risk of different climate outcomes. There is now widespread recognition that actions taken today can impact on future risk exposures. We monitor our progress against our planned transition pathways through our primary metrics set out in Table 4. We expect these metrics to evolve with our understanding, and this will be reported on annually through our climate report.

The group's management and delivery against our commitments is overseen by our governance. Oversight includes ensuring that our external industry memberships are supporting our ambition of warming of no more than 1.5°C.

Our climate commitments and targets are set at the group level, however we ensure that expertise at a divisional level is integrated into this process. These commitments cascade through to business managers, who are empowered to deliver against them.

Oversight and governance
continued

We have set a formal climate risk policy. This policy specifies our overall approach for ensuring our climate commitments are managed in line with our risk appetite and the minimum control standards that should be applied in managing our significant risk exposures.

We deploy a range of risk management techniques to manage and mitigate risks from climate change, ensuring we control risk to align with our risk appetite. For example, we use exclusions and a high-carbon escalation process as part of our investment portfolio management activity.

How we monitor our progress

The Group Environment Committee (GEC) has group-level oversight for monitoring progress and includes senior leaders from our divisional businesses. This includes review and challenge of the robustness of target owners' underlying plans to achieve their targets and interim milestones. The GEC receives regular status updates to monitor commitment owners' progress and provide challenge both on their level of ambition and their delivery against plan. Table 4 covers our primary metrics for measuring our progress against our climate commitments.

We recognise that future climate outcomes remain uncertain and undertake scenario analysis of emerging and uncertain future events to assess possible outcomes and to develop proactive management responses.

We will review and refine our transition plan to take account of changes in regulation, practice, science and other matters. It is anticipated that, following an initial vote at our upcoming AGM, a further advisory shareholder vote to approve our transition plan will be held no later than 2026, and sooner if there are significant changes to our plan before then.

Table 4.

Metric	What does it mean?	Metric measurement	Transition plan outcome	Target ambition
Operational carbon footprint	This consists of the operations we directly control, such as the energy in our occupied offices, the energy from our landlord activities in LGIM Real Assets, and from our housing businesses, including the construction of new homes.	Tonnes of carbon dioxide equivalent (tCO_2e) emissions.	Changing the way we operate to reduce our emissions through our operations.	Aligned with 1.5°C and validated by the SBTi.
Carbon footprint of real estate	For internal management, we are gathering additional information on the main sources of carbon from the buildings we deliver. These are via the energy used in the operation of the building, and the embodied carbon in the construction process, including building materials.	Energy use intensity: (kWh/m^2/year). Embodied carbon: $kgCO_2e$ per m^2.	Changing the way we operate to reduce our emissions.	To be developed further to align with industry best practice (we await the outcome of the Net Zero Carbon Buildings Standards).
Investment portfolio economic carbon intensity	This is made up from our ownership share of the emissions of the assets we invest in, be they corporations or governments. It includes equities and bonds, but not cash and derivatives, or any assets already covered in our operational footprint. It is measured per unit of investment.	tCO_2e emissions/£1m investment. Primary metric using enterprise value including cash (EVIC) as the stock divisor.	Incorporating climate into how we invest our assets through reducing the intensity of our financed emissions.	Supported by NZAOA targets.
Implied portfolio temperature alignment	This measures the implied warming potential of the group investment portfolio aggregated from its individual components.	°C.	Incorporating climate into how we invest our assets through investing in the transition.	Aligned with 1.5°C and validated by the SBTi.
AUM in alignment with net zero	The percentage of AUM that meet the LGIM Net Zero Framework requirements.	GBP value of AUM in net zero-aligned funds/ total eligible AUM.	Using our influence as a large investor to promote a 1.5°C net zero transition through the products we offer our clients.	Aligned with NZAMi ambition.
Average carbon footprint on real estate equity AUM	The GHG emissions associated with the underlying property managed in the real estate equity fund.	tCO_2e emissions per m^2 of the property area.	Using our influence as a large investment manager to promote a 1.5°C net zero transition through the products we offer our clients.	Aligned with 1.5°C and validated by the SBTi.
Engagement metrics	Complex multifaceted engagements, often over longer timeframes, cannot be fully captured by a single metric. We present a range of metrics that seek to demonstrate our impact when viewed as part of our wider engagement strategy.	Range of metrics.	Using our influence as a large investment manager to promote a 1.5°C net zero transition through our engagement with the real economy.	To be developed further in line with industry best practice.

Oversight and governance
continued

Science-based targets

Our suite of SBTs is summarised in the table opposite. For context:

- Our group scope 1 and 2 target covers all operational carbon. This includes carbon from our core Legal & General occupied offices[1], our directly delivered housing businesses and our LGIM Real Assets business where we control and/ or procure utilities.
  - To enable the occupied offices within our scope 1 and 2 footprint to achieve the SBTs, we are reviewing our location strategy, which alongside our net zero ambition, focuses on our business requirements following the recent pandemic.
  - The approach to target delivery in our LGC housing businesses is not expected to be a linear pathway and each of the businesses will operate slightly different timeframes. There is anticipated to be increases within the LGC footprint in the initial years to accommodate for business growth, followed by a rapid reduction due to changes in operational activities, with the ultimate outcome of a 42% reduction by 2030.
  - In order to achieve SBTs and stay on a net zero trajectory to 2030, our Real Assets businesses intend to:
    - remove gas from landlord-controlled areas – aim for 100% (minimum of 75%)
    - obtain actual occupier data for 100% of assets (at least 50% during 2022)
    - reduce the energy intensity (kWh/m^2) of our assets by 55% (minimum 65% of assets).
- Our scope 3 investment targets cover c.47%[2] of the total shareholder investments as at 2021[3].
  - The SBTs will help to evolve how we manage our net zero transition in line with industry best practice as it develops, and will enhance our climate transition risk management.

Science-based targets – (SBTi approved)

Emissions scope	Target	Metric	2019	2021	2022
Scope 1 and 2 – operational	We commit to reduce absolute scope 1 and 2 GHG emissions by 42% by 2030 from a 2021 base year[4].	tCO_2e	38,942	30,957[5]	30,062
Scope 3, category 15 – investments (proprietary assets)	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: • from 2.4°C at end 2021 to 2.1°C by end 2026, covering portfolio company scopes 1 & 2 • from 2.9°C at end 2021 to 2.5°C by end 2026, covering portfolio company scopes 1, 2 & 3.	°C (ECOTS aggregation[6]) n/a	n/a	2.4 2.9	To be reported in 2023
	We commit to maintain the emissions intensity of our electricity generation project finance portfolio, within our shareholder owned investments, at or below 60 gCO_2e/kWh from 2021 through to 2030 and only finance 1.5°C aligned electricity generation projects.	gCO_2e/kWh	n/a	60	To be reported in 2023
	We commit to reduce our real estate investment portfolio GHG emissions, within our shareholder owned investments, by 58% per square metre by 2030 from a 2019 base year.	tCO_2e/m^2	0.06	0.05	0.05

Science-based targets – (SBTi aligned[7])

Emissions scope	Target	Metric	2019	2021	2022
Scope 3, category 13 – downstream leased assets	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	0.06	0.05	To be reported in 2023

1. Applies to occupied offices where we actively control the management of utilities.
2. As at 2021, required activities made up 47% of our total shareholder investments while optional activities made up 14% and out of scope activities made up 39%.
3. Shareholder investments are defined as total investments to which shareholders are directly exposed. Policyholder and external client investments are captured within LGIM's separate target ambitions, are not in scope of the SBTi approval.
4. To account for the impact of the pandemic, our 2021 baseline includes 2019 emissions data for our managed Real Assets portfolio; while all other baseline emissions are from 2021.
5. Due to improvements in data collection and assessment methods, the 2021 data for IVG and L&G Affordable Homes has been restated.
6. ECOTS: Enterprise value plus cash emissions weighted temperature score.
7. SBTi validation process has to date focused on our operational scope 1 and 2 and material scope 3 emissions (category 15 – investment portfolio emissions). Further scope 3 validation is expected through engagement on the developing net zero standard for financial institutions.

Additional information

Scope 1 and 2 emissions

We have set SBTs in accordance with the SBTi. Scope 1 and 2 targets cover all entities within the group where we have operational control.

The group commits to reduce absolute scope 1 and 2 GHG emissions by 42% by 2030 from a 2022[1] base year.

Our reduction target is based on scope 2 measured on the 'location' basis.

Scope 3 coverage

In addition to disclosing our scope 1 and 2 emissions, we have conducted a materiality assessment of our scope 3 emissions, with category 15 (investments) being the most significant category for our business.

Scope 3 category	Scope 3 category description	Key business relevance	2022 tCO_2e	Materiality assessment	Example associated target/ commitment
Category 1	Purchased goods and services	Group-wide	–	Materially relevant to our organisation. We are working closely with our supply chain to obtain robust data during 2023 and plan to disclose in future years.	By the end of 2023 we will set a scope 3 category 1 (purchased goods and services) science-based target aligned with our net zero ambition.
Category 2	Capital goods	LGIM Real Assets and LGC	–	Relevant to our organisation. We are developing processes to capture this data and will disclose in future years.	We are committed to reducing the embodied carbon of our homes and real estate investments.
Category 3	Fuel and energy-related activities	Group-wide	8,301	Relevant to our organisation. Data collated and disclosed for 2022.	100% of our energy to be purchased from a renewable source.
Category 4	Upstream transportation and distribution	Group-wide	–	Included in category 1.	–
Category 5	Waste generated in operations	LGC and core occupied offices	400	Relevant to our organisation. Data collated and disclosed for 2022.	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	Group-wide	5,467	Relevant to our organisation. Data collated and disclosed for 2022.	From 2030, our group-wide business travel will generate net zero emissions.
Category 7	Employee commuting (working from home)	Group-wide	4,739	Relevant to our organisation. Data collated and disclosed for 2022.	None at present.
Category 8	Upstream leased assets	Group-wide	306	Relevant to our organisation. Data collated and disclosed for 2022.	Our net zero ambition is shaping our future location strategy.
Category 9	Downstream transportation and distribution	L&G Modular Homes	–	Relevant to our organisation. Data will be collated as we deliver modular homes across the UK and will be disclosed in the future.	None at present.
Category 10	Processing of sold products	n/a	–	Not relevant.	–
Category 11	Use of sold products	LGIM Real Assets and LGC	–	Relevant to our organisation. We are developing processes to capture this data and will disclose in future years.	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 product	LGIM Real Assets and LGC	–	Relevant to our organisation. We are developing processes to capture this data and will disclose in future years.	–
Category 13	Downstream leased assets	LGIM Real Assets and LGC	0.4m[2]	Relevant to our organisation. Data collated and disclosed for 2022.	LGIM Real Assets is committed to achieving net zero carbon across our real estate equity platform by 2050.
Category 14	Franchises	n/a	–	Not relevant.	–
Category 15	Investment	Group proprietary assets	5.8m	Relevant to our organisation. Data collated and disclosed for 2022.	By 2030, reduce portfolio GHG emission intensity by 50%[3] and increase financing of low-carbon technology and infrastructure.

1. 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 base year emissions are from 2021.
2. Figure from 31 December 2021 used until latest data available.
3. From a 2019 base year.

Glossary

Anthropogenic global greenhouse gas (GHG) emissions
Emissions of GHGs caused by human activities. These activities include the burning of fossil fuels, deforestation, land use and land use changes, livestock production, fertilisation, waste management and industrial processes.

Assets under management (AUM)
Funds that are managed by our fund managers on behalf of investors. AUM represents the total amount of money that investors have entrusted with our fund managers to invest across our investment products.

Carbon dioxide equivalent (CO_2e)
Carbon dioxide is the most significant contributor to global anthropogenic GHG emissions, which also include other gases like methane and nitrous oxide. CO_2e is the universal unit of measurement to indicate the global warming potential (GWP) of each greenhouse gas, expressed in terms of the GWP of one unit of carbon dioxide. It is used to evaluate different GHGs against a common basis. The equivalent warming of non-CO_2 GHG emissions are measured as tonnes of CO_2e.

Carbon emissions intensity
Carbon emissions intensity is the amount of emissions released per unit of another variable, such as CO_2e per £1 million. This enables a comparison of the emissions efficiency to be made between different sized operations.

Carbon footprint
Carbon footprint is the amount of emissions as a result of the associated activity.

Climate Impact Pledge (CIP)
The CIP is LGIM's dedicated climate engagement programme. Through the CIP we are committed to helping companies step up on their commitment to net zero, build resilient strategies for this transformative transition period and succeed in the low-carbon world.

Commodity-driven deforestation
Expanding agriculture is responsible for most of the world's tropical deforestation[1]. When referring to commodity-driven deforestation, we are focused on agricultural commodities such as palm oil, soy, beef, pulp and paper.

Enterprise value including cash (EVIC)
EVIC is defined as the sum of the market capitalisation of ordinary shares at fiscal year end, the market capitalisation of preferred shares at fiscal year end, and the book values of total debt and minorities' interests. No deductions of cash or cash equivalents are made to avoid the possibility of negative enterprise values.

ESG
Environmental, social, and governance. This term is commonly used to denote the material non-financial factors that are an important contributor to company performance.

Exclusions
Relates to a business policy that bars certain companies from being purchased for a portfolio due to their business activities.

Greenhouse gas (GHG)
Any of the seven gases covered by the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard – carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF_6) and nitrogen trifluoride (NF_3).

Implied temperature alignment
A forward-looking metric that attempts to convey the future trajectory of GHG emissions of a given portfolio in terms of its estimated temperature rise.

Investment portfolio carbon footprint
The investment portfolio carbon footprint related to the funded GHG emissions from an investment portfolio.

Investment portfolio emission intensity
The investment portfolio emission intensity is calculated by weighting the normalised emissions (tonnes of CO_2e emissions per £1 million normaliser entity value) by the size of our investment and summing up for all the holdings in our investment portfolio.

Location-based scope 2 emissions
A location-based method reflects the average emissions intensity of grids on which energy consumption occurs (using mostly grid-average emission factor data).

Market-based scope 2 emissions
A market-based method reflects emissions from directly purchased electricity using supplier specific emissions factors such as renewable energy backed by Renewable Guarantees of Origin certificates.

Net zero
Achieving an overall balance between anthropogenic carbon emissions produced and carbon emissions removed from the atmosphere.

Operational carbon footprint
The emissions from the operations we directly control, such as: the energy in our occupied offices, the energy from our landlord activities in Real Assets and our housing businesses, as well as the construction of new homes.

'Paris' objective
The Paris Agreement was an agreement within the United Nations Framework Convention on Climate Change effective 4 November 2016. The objective is to limit the increase in average global temperatures to below 2°C, preferably to 1.5°C, compared to pre-industrial levels.

Proprietary assets
Proprietary assets are the total investments to which shareholders are directly exposed, minus derivative assets, loans, and cash and cash equivalents.

Science-based targets (SBTs)
GHG reduction targets that are aligned with what the latest climate science deems necessary to meet the scientific consensus on the scale of reductions needed.

Scope 1 emissions
Direct GHG emissions occurring from sources owned or controlled by the company.

Scope 2 emissions
Indirect GHG emissions from consumption of purchased electricity, heat or steam.

Scope 3 emissions
Indirect emissions not covered in scope 2 that occur in the value chain of the reporting company, including both upstream and downstream emissions. These emissions are a consequence of the activities of the company, but occur from sources not owned or controlled by the company.

tCO_2e
Tonnes of carbon dioxide equivalent (CO_2e).

1. bit.ly/GlobalForest

Cautionary statement

The climate metrics, particularly targets, projections, forecasts and other forward-looking climate metrics used in this transition plan should be treated with caution, in particular given the uncertainty around the evolution and impact of climate change.

Climate metrics include estimates of historical emissions and of historical climate change and forward-looking climate metrics and estimated climate projections and forecasts.

1. Climate change and climate-related 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 are long-term as scenarios that play out over at least several decades and are therefore inherently more uncertain
- understanding about how different climate-related risks could interact continues to evolve
- climate-related risks may also interact with non climate-related risks and vulnerabilities and compound impacts in ways not currently anticipated
- climate change and the 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 climate metrics that limit the extent to which climate metrics can be relied on.

2. The lack of reliable, accurate, verifiable, consistent and comparable emissions and other important data makes it challenging to accurately disclose or estimate metrics used to assess climate-related risks and opportunities. In particular:

- finding the sources for relevant required data remains a challenge as does validating and standardising that data
- climate metrics and data, the models, scenarios used to create them 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 metrics 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. Climate metrics require many methodological choices, estimates, judgements and assumptions about climate change, 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 climate 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. In particular:

- climate scenarios and the models that analyse them have limitations that are sensitive to key assumptions and parameters
- climate scenarios cannot capture all of the effects of climate policy and technology-driven outcomes
- scientific understanding of climate change continues to develop
- models cannot fully capture the range of societal changes that could result from climate change
- over-reliance on a limited number of the same prescribed models or scenarios may amplify systemic climate-related risks.

7. This transition plan 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 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 transition plans.

8. Any opinions or views of third parties expressed in this transition plan 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.

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 41 – 42 of the 2022 climate report).

9. While all reasonable care has been taken in preparing this transition plan, 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 transition plan 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 transition plan contains climate-related and other forward-looking statements and metrics, such as targets, climate scenarios and emissions intensity pathways, estimated climate 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 climate-related metrics (such as carbon and other emissions metrics) and metrics to assess climate-related risk and opportunity outside of carbon exposure may limit the extent to which these climate-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 transition plan. 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 transition plan are not a substitute for judgements and analysis made independently by the reader.

    The statements in this transition plan 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, 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 effectively
    - the delivery of policy actions and achievement of climate reduction targets by companies in which the group invests and in the wider economy.

    Please see the group's latest annual report for further details of risks, uncertainties and other factors relevant to the business, as well as pages 26 – 28 of this transition plan.

    Any climate-related 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 transition plan 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.