

# 2022 TCFD DISCLOSURE

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In line with the Financial Conduct Authority Listing Rules, we believe our climate-related financial disclosures for the financial year ended 31 December 2022 are consistent with all the Task Force on Climate-related Financial Disclosures (TCFD) Recommendations and Recommended Disclosures.

When assessing the consistency of our disclosures, we have had due regard for all relevant guidance including the TCFD's Guidance for All Sectors. We provide the same disclosures within our Annual Report and Accounts and Responsibility Report. We report this way to satisfy the variety of stakeholders we have, and for those who want access to a more detailed data breakdown which the Responsibility Report provides.

Climate change is a material issue for our business as identified in our sustainability materiality matrix and is also included as a risk in our principal risk register. We deem an issue to be 'material' when it is assessed as being sufficiently important to both our business and our stakeholders. A formal four-step process – identification, prioritisation, validation and review – is used to determine the issues within our sustainability materiality matrix which in turn informs the population of our risk register. As a result we believe the disclosures we have provided below are comprehensive within each of the four recommendations and 11 recommended disclosures.

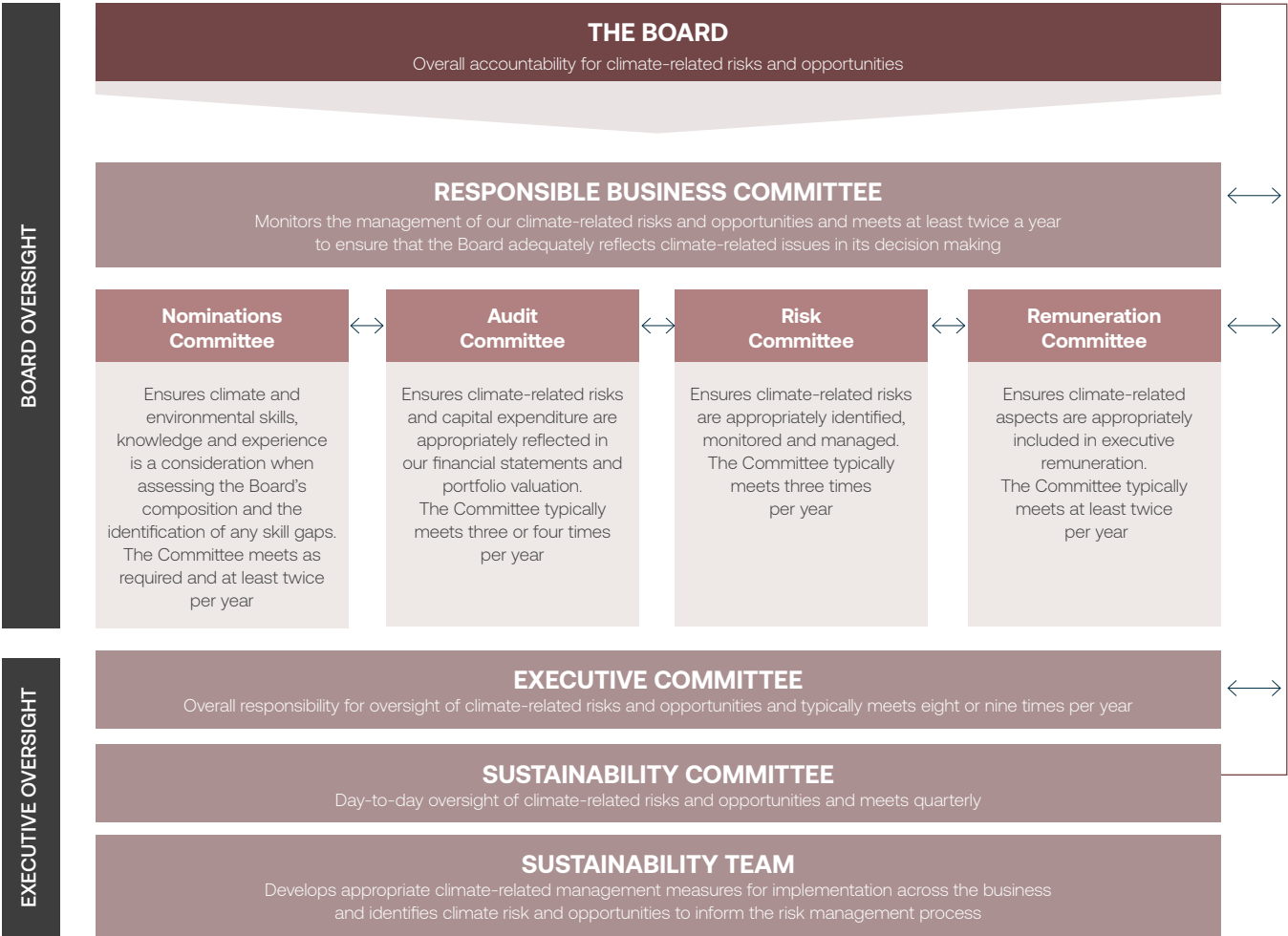


Governance

(a) Describe the board’s oversight of climate-related risks and opportunities

Climate change is a material issue for our business. The Board has overall accountability for climate-related risks and opportunities, which it factors into its strategy discussions. The Board’s governance framework allows for delegation of specific matters to the appropriate committees. As the risks and opportunities arising from climate change are likely to have an impact on various aspects of our business practices, all the Board’s sub-committees are involved in the oversight of climate-related matters.

Climate risk governance framework



Communication process

Effective oversight requires clear lines of communication and accountability.

Paul Williams (Chief Executive) and John Davies (Head of Sustainability) are members of the Executive and Sustainability Committees and provide regular updates to the Board, Responsible Business Committee, and the other principal committees on climate-related risks and opportunities. Climate-related reporting and discussion is held as part of standing agenda items on the Responsible Business, Risk and Audit Committees including updates on our net zero carbon journey or Energy Performance Certificate (EPC) reporting. Outputs from these committees are fed through to the Board, supported by the updates provided by Paul and John as mentioned above.

The Executive Committee, which has oversight responsibility of climate-related issues, receives updates from the Sustainability Committee. The Sustainability Committee monitors the day-to-day progress and performance of climate-related issues across the business (e.g., climate risk, energy efficiency and legislation such as the Minimum Energy Efficiency Standards (MEES)). A target performance and data dashboard (inclusive of climate-related targets/metrics) is produced for discussion and analysis. The Sustainability Committee is comprised of key department leaders, namely:

- Paul Williams – Chair
- Nigel George (Executive Director)
- John Davies (Head of Sustainability)
- David Lawler (Company Secretary)
- Richard Baldwin (Director of Development)
- Katy Levine (Head of HR)
- Victoria Steventon (Head of Property Management)
- Vasiliki Arvaniti (Head of Asset Management)
- Philippa Davies (Head of Leasing)
- Jay Joshi (Group Financial Controller)

# 2022 TCFD DISCLOSURE CONTINUED

## (b) Describe management's role in assessing and managing climate-related risks and opportunities

As Chief Executive, Paul Williams has overall accountability to the Board for climate-related issues. Paul Williams has delegated management oversight to Nigel George (Executive Director) and responsibility for implementation to John Davies (Head of Sustainability). Paul Williams oversees the review and performance as Chair of the Sustainability Committee and as a member of the Board, Executive and Responsible Business Committees. Nigel George also sits on the Board, Executive and Sustainability Committees. The Board is kept updated on climate-related issues through Paul Williams, Nigel George and presentations from John Davies and others within management.

John Davies has responsibility for developing and, together with his team, implementing the business-wide sustainability programme (inclusive of all climate-related aspects). John Davies reports directly to Nigel George and is a member of the Executive and Sustainability Committees. As a result, both Nigel and John have a comprehensive oversight of all our climate-related work.

As mentioned above, the Sustainability Committee comprises key department leaders many of whom have a responsibility for oversight and implementation of climate-related issues within their department. These include:

- **David Lawler (Company Secretary)** – is responsible for ensuring climate-related issues are adequately reflected within our corporate governance structure e.g. our risk management processes and Board and committee agendas.
- **Richard Baldwin (Director of Development)** – is responsible for ensuring our development schemes embed the required climate-related and net zero carbon aspects within their design and delivery programmes e.g. high EPC and BREEAM ratings.

- **Victoria Steventon (Head of Property Management)** – is responsible for ensuring our properties are operated efficiently e.g. building energy consumption is reducing in line with our energy targets.
- **Vasiliki Arvaniti (Head of Asset Management)** – is responsible (together with John Davies) for ensuring EPCs are tracked and monitored across the investment portfolio. Likewise, that our asset management plans incorporate the necessary improvement measures and budgets to facilitate our net zero carbon ambition and compliance with the forthcoming legislation e.g. EPC changes for 2030 under proposed MEES legislation.

As set out above there is 'top down, bottom up' oversight of climate-related aspects, from the Board to the Sustainability Committee. Target performance and data dashboards (inclusive of climate-related targets/metrics) are discussed and analysed during the Sustainability Committee and related sustainability performance meetings.

To embed a further level of oversight, we have linked climate-related performance measures into our Remuneration Policy for the Executive Directors' LTIP (please see pages 191, 192, and 212 of our [Annual Report and Accounts](#)).

### Governance actions during 2022

**The Board:** at the strategy awayday in June 2022, the Board received presentations on sustainability, ESG leadership and our progress to net zero carbon. In addition, the awayday was held in Scotland which allowed the Board to see first-hand how our Scottish assets are assisting with our sustainability initiatives.

**Responsible Business Committee:** reviewed progress of our Net Zero Carbon Pathway programme and targets, and the updates to our transition and physical climate risk assessments carried out by Willis Towers Watson (WTW).

**Risk Committee:** reviewed the latest position of the Group with regards to EPC compliance and our 2030 plans, and the updates to our transition and physical climate risk assessments.

**Audit Committee:** reviewed the current progress of our green finance initiatives and the structure of our non-financial assurance work and received training on the latest TCFD disclosure requirements. In addition, the Committee (with members of the Responsible Business Committee) received training on carbon accounting and the latest climate-related regulations applicable to our business.

**Remuneration Committee:** received a report on our carbon and energy intensity performance which was used to inform the performance metrics within the Executive Director annual bonus calculation (please see page 216 of our [Annual Report and Accounts](#)). As delivering on our net zero carbon commitments is a fundamental part of Derwent London's long-term strategy, the Committee considered it appropriate to introduce sustainability performance metrics (embodied carbon reduction and energy intensity reduction) within the Executive Directors' long-term incentive plan awards (PSP) for 2023, for further information please see page 212 of our [Annual Report and Accounts](#).

**Executive Committee:** the Board agreed on the appointment of John Davies to the Executive Committee, effective from 1 January 2022, strengthening its climate-related risk expertise and experience.

### Looking ahead

In 2023 we will look to:

- Expand our climate-related remuneration to all levels of the business.
- Continue to build knowledge at Board level and support Executive/ Non-Executive Directors in overseeing and addressing climate-related risks.
- Continue to build knowledge at the executive and heads of department level to ensure climate-related risks and opportunities are better understood.

# 2022 TCFD DISCLOSURE CONTINUED

## Strategy

### (a) Describe the climate-related risks and opportunities the organisation has identified over the short, medium and long-term.

Within our business we consider short, medium and long-term time horizons to be 0-5, 5-15 and 15+ years respectively (aligned to our corporate risk management approach), recognising that climate-related issues, in particular physical risks are often (but not exclusively) linked to the medium to long-term and that the properties within our investment portfolio have a long lifespan of many decades.

During 2022 we engaged Willis Towers Watson (WTW) to re-run our climate risk assessment and scenario analysis, which utilised a structured approach to identify the transition (risks related to the transition to a low carbon economy) and physical (risks related to the impact of climate e.g. storm damage) risks and opportunities applicable to our business and then apply three pre-defined climate scenarios to test the resilience of our business, strategy and financial planning.

The transition risks were identified and tested against a 'Low Carbon World' (~1.5°C) climate scenario, whilst the physical risks were assessed against the same Low Carbon World and a 'Hot House World' scenario (>4°C). These scenarios were selected because transition risk is generally most severe under a low temperature rise scenario whereby the world transitions to a low carbon economy, whilst physical risks are most severe under a high carbon world where the world fails to transition and as a result experiences more physical risk.

An additional 'Current Policies' (~2°C to 3°C) scenario was also used, to understand the resilience of our business to both physical and transition risk if the world follows the emissions trajectory we are headed for based on current policies/practice. The scenarios used for the physical risk modelling drew on Representative Concentration Pathways (RCPs), and the scenarios used for the transition risk assessment drew on the Shared Socioeconomic Pathways (SSPs) and the International Energy Agency (IEA) scenarios.



The transition risks have been assessed against a 2025 and 2030 time horizon, whilst physical risks have been assessed against a current, 2030 and 2050 time horizon because the most severe physical impacts are not expected to occur until the longer term. Details of the sources and key indicators of these are shown in the table on the next page.

Physical risks were modelled using specific climate risk assessment software/data models (see the Risk Management section for further details on the models used) using the scenarios mentioned above with input from our business in terms of property characteristics, financial data and energy consumption data. This process ultimately reviewed nearly 20 transition and physical issues and we have set out in the table below the material risks and opportunities, in terms of impact, likelihood (transition risk) and exposure (physical risk) as defined by and drawn from the assessment.



# 2022 TCFD DISCLOSURE CONTINUED

Time horizon & climate scenario	Short-term Low Carbon World (~1.5°C)	Medium-term Current Policies Scenario (~2 to 3°C)	Long-term Hot House World Scenario (>4°C)
TEMPERATURE RANGE	1.4°C (median, 2100, IEA NZE2050) ~1.5°C (median, 2100, RCP2.6)	2.6°C (median, 2100, IEA STEPS) ~2.3°C (mean, 2100, RCP4.5)	~4.2°C (mean, 2100, RCP8.5)
SOURCES	IEA – Energy Outlook 2021: NZE2050 IPCC, 2014: Synthesis Report: RCP2.6 SSP1	IEA – Energy Outlook 2021: STEPS IPCC, 2014: Synthesis Report: RCP4.5 SSP2	IPCC, 2014: Synthesis Report: RCP8.5 SSP5
MATERIAL RISKS & OPPORTUNITIES IDENTIFIED	<p><b>Transition risk</b></p> <ol style="list-style-type: none"> <li><b>EPC rating requirements</b> – increasingly stringent rating requirements by 2030. <i>Opportunity</i> Improving buildings and spaces to meet more stringent EPC requirements and our net zero requirements align with market and customer demand for more sustainable space leading to better rental premiums. There are also operational cost savings that can be achieved from reduced energy intensity of more efficient spaces.</li> <li><b>Emission offsets</b> – increasing cost and constrained supply of appropriate carbon offsets. <i>Opportunity</i> By extending the carbon removal projects (e.g. tree planting) on our Scottish portfolio we can reduce our reliance on the voluntary carbon market in the long-term and also develop a tradable asset base which could be sold on the voluntary market. However, our current strategy is to utilise these offsets for our own purposes.</li> <li><b>Planning requirements</b> – increasingly stringent planning and design requirements.</li> <li><b>Cost of raw materials</b> – increasing cost of raw materials used in construction.</li> </ol> <p><b>Physical risk</b></p> <ol style="list-style-type: none"> <li><b>Windstorm</b> – our London portfolio and Scottish land portfolios have a moderate exposure to damage and interruption from windstorm damage in this scenario.</li> </ol>	<p><b>Transition risk</b></p> <p>The risk impact and likelihood profiles for these risks are unchanged in this scenario/time horizon when compared to the low carbon world scenario. This is because strategically we are expecting to decarbonise in a shorter time frame compared to the current policy approach.</p> <p><b>Physical risk</b></p> <ol style="list-style-type: none"> <li><b>Windstorm</b> – within this climate scenario the current science is inconclusive on any material shifts to the intensity or frequency. Therefore the risk profile has been deemed to be broadly similar to that in the short-term.</li> <li><b>Flooding</b> – all of our London portfolio assets are either out of risk zones or still protected by the Thames Barrier. Four agricultural assets in our Scottish portfolio are in flood zones of &lt;100 year return period. As a result, flooding presents itself moderately in this scenario.</li> </ol>	<p><b>Transition risk</b></p> <p>Not modelled in this scenario/time horizon.</p> <p><b>Physical risk</b></p> <ol style="list-style-type: none"> <li><b>Windstorm</b> – within this climate scenario the current science is inconclusive on any material shifts to the intensity or frequency. Therefore the risk profile has been deemed to be broadly similar to that in the medium term.</li> <li><b>Flooding</b> – data suggests no change to exposure in this scenario when compared to the medium term.</li> <li><b>Drought</b> – our London portfolio could see a moderate risk of drought, between three to four months per year. This is a notable increase over today's climate.</li> <li><b>Subsidence</b> – increased susceptibility, with all the London portfolio having 'probable' increases and instability issues albeit current data models are limited and make it difficult to characterise its overall impact.</li> </ol>

## 2022 TCFD DISCLOSURE CONTINUED

### (b) Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning

As a central London focused real estate investment trust (REIT) we invest in, develop and manage property in central London. We also have a portfolio of property and land holdings north of Glasgow, Scotland. As such, climate-related issues affect the way we develop new buildings, refurbish and manage our standing portfolio, and engage with our occupiers. This in turn affects the kinds of suppliers and consultants we use in these activities to ensure we have the requisite level of expertise. This is driven by an ever-increasing demand from our occupiers and other stakeholders wanting buildings with higher sustainability credentials, as well as the regulatory landscape becoming tougher and more demanding. As a result, our business model, strategy and approach to financial planning clearly recognises this and is underpinned by our low carbon transition plan – our Net Zero Carbon Pathway, which guides our approach and sets the appropriate parameters for our business. For further detail on our pathway please see the [environmental](#) and [data sections](#) of this report.

From the risk/opportunity identification above in section (a) we set out in the table below how those risks/opportunities then might impact our business, strategy and subsequent financial planning. Noting that as our business is based in and solely focused on the UK the risks/opportunities are not considered on an international and/or segmental basis.

Material risk/ opportunity	Articulation	Likelihood and/or exposure	Potential financial impact on our business	Impact on strategy	Impact on financial planning
EPC RATING REQUIREMENTS	Current environmental regulation in the UK prevents leasing space with an Energy Performance Certificate (EPC) rating of worse than E. This is projected to increase to a rating of B by 2030. Given 65% of our current portfolio by ERV (as at 31 December 2022) is rated B or better this could be a significant risk.	Almost certain	In 2021 a third party report identified £97m of works to achieve 2030 EPC compliance across our London commercial portfolio. This has since been updated to reflect changes to Part L of the building regulations and 2022 cost inflation, increasing to £107m by the year end. Following the sale of 19 Charterhouse Street EC1 in January 2023, this has subsequently decreased to £99m.	The outputs from the study have been embedded into our asset management planning to ensure our strategy and decision making accurately reflects the required actions and investment. Likewise, keeping up with market and customer demand for properties which have a low energy intensity and are more efficient to operate.	The cost estimates were analysed to identify potential service charge items versus direct capital expenditure, and consideration was given to costs reflected in our forecasts. In their December 2022 external valuation, Knight Frank made a specific deduction of £58.4m for identified EPC upgrade works across the portfolio. In addition, further amounts were allowed for general upgrades. These cost breakdowns are now regularly monitored and reported internally on progress made.

# 2022 TCFD DISCLOSURE CONTINUED

Material risk/ opportunity	Articulation	Likelihood and/or exposure	Potential financial impact on our business	Impact on strategy	Impact on financial planning
EMISSION OFFSETS	<p>As more companies commit to net zero, the demand for high-quality carbon removal offsets is increasing, resulting in higher prices.</p> <p>There is also an increasing reputational risk associated with the use of emission offsets if carbon offsetting is chosen as the only net zero measure instead of focusing on reducing energy consumption/ emissions first.</p>	Almost certain	<p><b>Scenario 1: lower estimate</b>, assuming residual Scope 1 and 2 emissions (for gas and electricity) are a combined 757 tCO<sub>2</sub>e i.e. those emissions that remain after considering renewable electricity and gas use; that other Scope 1 emissions e.g. refrigerant emissions reduce; and that embodied carbon targets are met:</p> <p>In 2025: ~£450k per annum In 2030: ~£800k per annum</p> <p><b>Scenario 2: higher estimate</b>, based on possible more stringent regulations surrounding green tariffs and assuming residual emissions for gas and electricity are each reduced by 24% in 2025 and by 44% in 2030 from 2019 levels; that other Scope 1 emission types reduce; and that embodied carbon targets are met:</p> <p>In 2025: ~£750k per annum In 2030: ~£1.1m per annum</p> <p>(The above are estimated on projected IEA NZE2050 carbon prices used as a conservative proxy: £62 per tonne in 2025 and £108 per tonne in 2030. Current voluntary carbon market prices for carbon removal schemes as at 31 December 2022 range from £20-£40 per tonne.)</p>	<p>To offset our development-based residual embodied carbon we use carbon removal offsets purchased from the voluntary carbon market. Our development appraisals include a cost of carbon for these offsets, currently set at £25 per tonne with an annual inflation factor of 10% applied. This is then complemented by our embodied carbon targets (commercial office new build developments completing from 2025: ≤600 kgCO<sub>2</sub>e/m<sup>2</sup> and completing from 2030: ≤500 kgCO<sub>2</sub>e/m<sup>2</sup>) which aim to drive down the amount of embodied carbon on scheme completion and subsequently the need for and cost of offsetting.</p> <p>In reducing our reliance on the voluntary market our strategy has also been to utilise our Scottish land to create our own offsets, initially via tree planting schemes. Nearly seven years ago we planted over 30Ha of woodlands which has already generated 127 Woodland Carbon Code verified carbon credits and we are exploring how to increase this further. Our ambition is to be as self-sufficient with our offsetting as possible to meet our long-term needs and increase the transparency and robustness of the offsets we use.</p> <p>We are currently reviewing our offsetting strategy for the operational emissions of our investment portfolio which will be described and quantified in subsequent disclosures once agreed. Like embodied carbon we have put energy intensity reduction targets in place for properties in our managed portfolio which look to reduce intensity by 4% year-on-year, from our 2019 baseline out to 2030. These are designed to ensure (alongside our renewable energy procurement) that we drive down operational carbon as much as possible. This will be further strengthened when our energy and embodied carbon targets will be incorporated into our next Performance Share Plan (PSP) award grant in 2023.</p> <p>Within the financial impact analysis shown in the previous column we did include operational carbon to understand its likely contribution/impact.</p>	The carbon price and inflation factor included within our development appraisals ensure we are robustly mapping the possible financial impact and reducing exposure to future demand-led price movements. In addition, by investing in our own offsetting we can reduce our development-based carbon expenditure over the longer term.



## 2022 TCFD DISCLOSURE CONTINUED

Material risk/ opportunity	Articulation	Likelihood and/or exposure	Potential financial impact on our business	Impact on strategy	Impact on financial planning
PLANNING REQUIREMENTS	It is highly likely that the UK will need to incrementally increase the stringency of building planning and design requirements as part of its efforts to meet its net zero targets. This would affect our development pipeline, including increasing development costs to ensure all new buildings are net zero carbon ready.	Almost certain	As the impact on cost is primarily associated with compliance, we are assuming acceptance to incorporate these costs into our appraisals. Our current estimations show that approximately 5% to 10% of our development costs are associated with net zero carbon ready items.	<p>Our business strategy is aligned to, and takes account of, the latest changes and requirements, with our Responsible Development Framework and Net Zero Carbon Pathway ensuring we set the right design brief for our development pipeline. They ensure that the properties are more climate resilient such that they are built for a longer life, are more flexible to occupy and operate, less reliant on mechanical cooling and free from fossil fuel use i.e. all electric heating and cooling.</p> <p>Our EPC 2030 study also helps to inform the significant asset management programme we have which is also governed by our Responsible Development Framework.</p>	<p>The requirement to be net zero ready is already factored into our development appraisal process and ensures we have a more robust level of cost certainty and financial forecasting ability.</p> <p>Access to the right kind of good quality, affordable finance is also important to enable us to deliver our development pipeline effectively and demonstrate how we are addressing and effectively managing climate risk. In response, our Green Finance Framework has been specifically developed to allow us to link our debt to our net zero ambitions by setting out performance criteria and a governance framework which clearly show the link between the use of our new debt and our development and refurbishment activities. To date we have two specific debt facilities which are linked to our framework – the £300m ‘green’ tranche of our main corporate £450m revolving credit facility and a £350m Green Bond issued in 2021. These are being used to part-fund our latest eligible projects – see our <a href="#">Green Finance – Basis of Reporting</a> for more detail.</p>

# 2022 TCFD DISCLOSURE CONTINUED

Material risk/ opportunity	Articulation	Likelihood and/or exposure	Potential financial impact on our business	Impact on strategy	Impact on financial planning
COST OF RAW MATERIALS	There is a risk of increased development cost if the construction value chain passes the impact of carbon pricing for high carbon building materials such as steel and cement onto us.	Almost certain	<p>If carbon taxation imposed on raw materials suppliers was passed through to us via increased prices, two 'pass through' scenarios were mapped to provide a low and high-cost range estimate:</p> <p>By 2025: ~£200k – £400k per annum By 2030: £350k – £700k per annum</p> <p>(The above are estimated on projected IEA carbon prices used as a conservative proxy: £62 per tonne in 2025 and £108 per tonne in 2030. The lower figure in the range in each year assumes 50% of the tax impact is passed through and the higher figure assumes 100% is passed through.)</p>	As mentioned above, our Responsible Development Framework and Net Zero Carbon Pathway ensure we set the right design brief for our development pipeline. Included within this are stringent embodied carbon requirements and reduction targets. These drive us to explore lower carbon materials and methods of construction which in turn should assist us in reducing the significance of the impact created by such carbon-related cost increases. However, we recognise that the transition time frame and subsequent availability of these lower carbon materials is not yet entirely clear in some instances. As a result it could mean it takes longer to realise the use of such materials in our developments.	Whilst the increased cost of raw materials cannot be borne solely by customers, the market has seen price increases to key material groups, albeit not necessarily exclusively linked to sustainability-related drivers. In line with our approach to embodied carbon we continue to engage with our principal contractors and Tier 1 suppliers on the impacts of using traditional materials and moving to less carbon intensive materials, and the implications of doing so e.g. availability, cost and supply chain knowledge.
WINDSTORM	Damage to our buildings from windstorm damage primarily caused by flying debris.	Moderate to high exposure	Expected losses could be £2.6m with a 10% probability in 10 years (based on a 1-in-100-year return period or 'bad year' event).	Overall, the impact of windstorms on our portfolio does not impact our business strategy, but instead helps us to ensure we have the right building maintenance and management measures in place.	Whilst the probabilistic modelling showed a possible loss of approximately £2.6m, based on a 10% probability over the next 10 years we currently don't believe that it will impact our financial planning. Any recommendations from the climate assessment will then be fed into our Property Management plans and planned preventive maintenance schedules.
FLOODING	Loss and damage to our assets which are located in high flood risk zones.	Low to moderate exposure	Expected losses could be £3.5m with a 10% probability in 10 years, related to four agricultural assets in our Scottish portfolio (this only occurs in a Hot House World Scenario (>4°C)).	Like windstorm, the risks from flooding do not impact our overall business strategy, albeit we are likely to undertake a greater level of due diligence during the acquisition process given future purchase targets could potentially be in flood zones.	To ensure we understand the flood risk of potential new acquisitions our due diligence procedures will need to be enhanced to account for a greater level of flood mapping to ensure we aren't introducing higher levels of risk and loss exposure into the portfolio.

Note: drought and subsidence risks have not been included above due to there being no clear financial quantification models available within the datasets used.

# 2022 TCFD DISCLOSURE CONTINUED

## (c) Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario

As a REIT our properties are subject to climate-related risks such as increasing temperatures which could lead to greater physical stresses. Our business model/strategy involves both investing in new developments and acquiring older properties which hold future regeneration/income potential. We ensure a high degree of resilience in our new developments and regeneration of older properties by setting high standards for sustainability, which includes climate-related aspects. When managing our core income portfolio, we have a significant focus on energy and carbon reduction (as dictated by our energy intensity reduction targets), ensuring our buildings operate as efficiently as possible. As a result, our strategy centres around the concept of continual improvement which ensures a high degree of both climate and financial resilience. Ultimately, we do not envisage having to make changes to our overall approach when considering climate-related scenarios.

Like previous sections, the table below maps out the material risks and opportunities drawn from our latest assessment and the resilience of our strategy to the three different climate scenarios used in the assessment. Of the risks identified, none were deemed likely to have a substantial impact such that the viability of our business would be interrupted, although our cost profile could increase.

		Scenario		
		Short-term Low Carbon World (~1.5°C) ~1.5°C (median, 2100, RCP2.6)	Medium-term Current Policies Scenario (~2 to 3°C) ~2.3°C (mean, 2100, RCP4.5)	Long-term Hot House World Scenario (>4°C) ~4.2°C (mean, 2100, RCP8.5)
MATERIAL RISKS & OPPORTUNITIES	<b>Transition risk</b>		<b>Transition risk</b>	<b>Transition risk</b>
	<b>EPC rating requirements</b> In this scenario, it is assumed the minimum EPC rating of B will be in place and it will cost us £107m out to 2030 to ensure we meet these requirements, although since the year end this has reduced to £99m after disposals.  To address the impact of this risk on our profit and loss, the EPC 2030 study we commissioned addressed each affected property in the portfolio and set a clear, costed plan on how to achieve the new minimum rating.  However, there is a clear opportunity in that market and occupier demand for more sustainable space is leading towards better rental premiums. Likewise, there are also operational cost savings that can be achieved from reduced energy intensity of more efficient spaces.		<b>EPC rating requirements</b> In this scenario, it is assumed there would be no increase in EPC requirements. However, with our strategy we would still look to retrofit and improve our properties in line with our net zero strategy and overall business model. Likewise, to take advantage of market demand and occupier preference opportunities.	Not modelled in this scenario/time horizon.
	<b>Emission offsets</b> In this scenario, UK net zero emissions will be deemed to have been met by 2050. This could lead to a significant increase in pricing of voluntary offsets as demand grows as more companies seek to meet net zero targets by offsetting residual emissions.  Using projected IEA carbon prices of £108 as a proxy for the price of a carbon offset by 2030 this could have a projected impact of £800,000 to £1,100,000 per annum.		<b>Emission offsets</b> In this scenario, the price of voluntary offsets is anticipated to rise as demand grows as some companies seek to meet net zero targets by offsetting residual emissions. However, the assumption is that the price does not increase by as much as under the Low Carbon World scenario. The increase in pricing of voluntary offsets is assumed to be in line with the projected carbon price.  Using the IEA STEPS scenario and assuming the UK implements a carbon price of \$65 (£54) by 2030 in line with stated EU prices this could have a projected impact of £400,000 to £570,000 per annum.  It is assumed the opportunities available on our Scottish portfolio remain the same.	<b>Physical risk</b> <b>1. Windstorm</b> – within this climate scenario there was no scientific evidence to suggest that intensity or frequency would increase significantly, therefore the risk profile has been deemed to be broadly similar to that in the medium-term. <b>2. Flooding</b> – data suggests no change to exposure in this scenario. <b>3. Drought</b> – our London portfolio could see a moderate risk of drought, between three to four months per year, a notable increase over today's climate. <b>4. Subsidence</b> – there is increased susceptibility of subsidence, with all the London portfolio having 'probable' increases and instability issues in line with the wider London area.

# 2022 TCFD DISCLOSURE CONTINUED

		Scenario	
		Short-term Low Carbon World (~1.5°C) ~1.5°C (median, 2100, RCP2.6)	Long-term Hot House World Scenario (>4°C) ~4.2°C (mean, 2100, RCP8.5)
MATERIAL RISKS & OPPORTUNITIES CONTINUED	Emission offsets continued	Medium-term Current Policies Scenario (~2 to 3°C) ~2.3°C (mean, 2100, RCP4.5)	
	Planning requirements	Planning requirements	
	<p>Over the long-term and to reduce the impact on our balance sheet, extending the carbon removal projects (e.g. tree planting) on our Scottish portfolio will help to reduce our reliance on the voluntary carbon market. However, in this scenario we are unlikely to realise the full value straight away given such projects take time to yield a significant number of credits.</p> <p><b>Planning requirements</b></p> <p>In this scenario, it is assumed that the UK will need to increase the stringency of building planning and design requirements as part of its efforts to meet its net zero targets. Our strategy already reflects this expected move – primarily via the introduction of our Net Zero Carbon Pathway back in July 2020. We have estimated the cost impact of our pathway on our developments with approximately 5% to 10% of our development costs associated with net zero carbon requirements.</p> <p>As described above there is a clear opportunity in that market and occupier demand for more sustainable space is leading towards better rental premiums. As a result, we will look to take advantage of this opportunity and ensure our properties are aligned.</p> <p><b>Cost of raw materials</b></p> <p>In this scenario, there is expected to be increased cost of high carbon raw materials such as steel, cement and glass, which will therefore be impacted by a carbon tax.</p> <p>Price increases set out in the table above derive from the assumption that suppliers pass on 50-100% of their exposure to high carbon taxation via increased prices.</p> <p><b>Physical risk</b></p> <p><b>Windstorm</b> – our London and Scottish land portfolios have a moderate exposure to damage and interruption from windstorm damage in this scenario.</p>	<p><b>Planning requirements</b></p> <p>In this scenario, it assumes there are no changes to existing planning requirements. Therefore, whilst we will have to ensure we meet planning regulations, there will be no new, more stringent regulations introduced.</p> <p>However, we would still intend to follow our Net Zero Carbon Pathway and therefore the impact and likelihood of this risk remains the same. In addition, this is supported by market and occupier demand for more efficient spaces which we would look to take advantage of.</p> <p><b>Cost of raw materials</b></p> <p>In this scenario, the increase in cost of key materials is anticipated to be substantially lower than in the Low Carbon World scenario. Price increases set out below derive from the assumption that suppliers pass on 50-100% of their exposure to high carbon taxation via increased prices.</p> <p>Using the IEA STEPS scenario and assuming the UK implements a carbon price of \$65 (£54) by 2030 in line with stated EU prices this could have a projected impact of £170,000 to £340,000 per annum.</p> <p>Setting robust embodied carbon reduction targets drives us to explore lower carbon materials and methods of construction which in turn should assist us in reducing the significance of the impact created by such carbon-related cost increases on our profit and loss.</p> <p><b>Physical risk</b></p> <ol style="list-style-type: none"> <li><b>Windstorm</b> – within this climate scenario there was no scientific evidence to suggest that intensity or frequency would increase significantly, therefore the risk profile has been deemed to be broadly similar to that in the short-term.</li> <li><b>Flooding</b> – all of our London portfolio assets are either out of risk zones or are protected by the Thames Barrier. Four agricultural assets in our Scottish portfolio are in flood zones of &lt;100-year return period. As a result, flooding presents itself as a moderate risk in this scenario.</li> </ol>	

# 2022 TCFD DISCLOSURE CONTINUED

## Strategy actions during 2022

**2030 EPC assessment** – since undertaking our EPC 2030 study we have embedded the suggested actions into our asset management and refurbishment programmes. We have also assessed the proportion of the costs which are CAPEX/service charge recoverable/already included in our forecasting and valuations.

**Offsetting** – we continued our assessment of further tree planting sites on our Scottish portfolio, as well as other carbon removal projects such as peatland restoration.

## Looking ahead

In 2023 we will look to:

- Expand and finalise our carbon removal projects in Scotland.
- Continue with the detailed design and project management of our proposed solar park.
- Continue to refine our EPC 2030 actions and cost apportionments to ensure we remain on track. This is picked up through our five-year asset management strategies which include plans for efficient operation and/or upgrade of our assets.
- Look to incorporate the physical risk analysis into the appropriate property and asset management planning activities.

## Risk management

**(a) Describe the organisation's processes for identifying and assessing climate-related risks. (b) Describe the organisation's processes for managing climate-related risks. (c) Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organisation's overall risk management.**

Owing to their complex nature, the identification and assessment of climate-related risks and opportunities are undertaken with the support of third-party expertise. During the year under review, Willis Towers Watson (WTW) were engaged to perform an update to their climate risk assessment and climate scenario analysis which was first conducted in 2020.

### Process:

Transition risks were identified and assessed via a workshop facilitated by WTW with senior cross-functional representation from across Derwent London. The risks were then identified, assessed and challenged in terms of impact and likelihood, and then set into context based on the latest regulatory updates and WTW's experience with the real estate sector. The financial impact (whether to the balance sheet or income statement) was estimated, and likelihoods assessed on an annualised basis and aligned to our risk rating criteria (see page 174 of our [Annual Report and Accounts](#)). High and low impact estimates were assigned to applicable cost components, depending on the success of planned mitigating actions, and risks given a '1 to 5' impact rating according to a defined rating criterion. Working through the assessment process, we applied mitigation measures already captured within the scope of our Net Zero Carbon Pathway and those within our existing business processes, to define our residual risk profiles.

Physical risks were identified and assessed through an asset-by-asset exposure analysis using a range of acute and chronic climate hazards (risks).

The scenarios were tested as at the present day, as well as for future projections under three climate scenarios (see below). This was supplemented by a climate risk modelling analysis for flood and windstorms. Physical assets were considered 'exposed' if they were in an area where a climate hazard may occur. The degree of exposure was defined by the severity/intensity of that hazard, with each hazard having its own intensity scale. If an exposure was deemed to be moderate or above (i.e. scored 3 out of 5 or above) it could have a material impact. It should be noted that the scores were based on a global scale. For the UK, a modest increase in a chronic hazard, such as heat-stress (heatwaves), from 'very low' to 'low' could have wider implications on properties and infrastructure.

Once the risks and opportunities had been identified, they were tested against various climate scenarios. The key considerations in the scenario analysis were:

- Forecasting: scenarios are not intended to be forecasts of the future, rather a way to imagine plausible states of the world and plan for our resilience.
- Balance: they should have aspects of quantification, but not so much it impairs strategic thinking.
- Challenge: they must ensure we challenge our own thinking about our organisation and business model.
- Certainty: some drivers within the scenarios may be relatively certain and predictable whilst others highly uncertain as to their development and impacts over time.
- Number: the resilience of our strategy should be investigated under multiple scenarios, including a '2°C or lower' scenario.

### Scope:

The scope of the 2022 assessment included our entire London-based investment portfolio (including our head office) and our Scottish land. In our 2020 assessment, we did not include our land in Scotland.

# 2022 TCFD DISCLOSURE CONTINUED

Climate scenarios (for both physical and transition risk), transition assumptions and physical risk data sources used:

Scenario name	Low Carbon World (~1.5°C)	Current Policies Scenario (~2 to 3°C)	Hot House World Scenario (>4°C)
TEMPERATURE RANGE	1.4°C (median, 2100, IEA NZE2050) ~1.5°C (median, 2100, RCP2.6)	2.6°C (median, 2100, IEA STEPS) ~2.3°C (mean, 2100, RCP4.5)	~4.2°C (mean, 2100, RCP8.5)
SOURCES	IEA – Energy Outlook 2021: NZE2050 IPCC, 2014: Synthesis Report: RCP2.6 Narratives for SSPs: SSP1	IEA – Energy Outlook 2021: STEPS IPCC, 2014: Synthesis Report: RCP4.5 Narratives for SSPs: SSP2	IPCC, 2014: Synthesis Report: RCP8.5 Narratives for SSPs: SSP5
Primary risks			
	Transition risks (2025 and 2030)	Moderate transition (2025 and 2030) and physical risks (current, 2030, 2050)	Physical risks (current, 2030, 2050)
Underlying assumptions			
GLOBAL NET ZERO ACHIEVED BY:	2050 (IEA NZE2050)	Not achieved before 2100 (IEA STEPS)	Not achieved
CARBON PRICE	Advanced economies: 2025, 2030, 2040, 2050 \$75/tonne; \$130/tonne; \$205/tonne; \$250/tonne (IEA NZE2050)	EU: 2030, 2040, 2050 \$65/tonne; \$75/tonne; \$90/tonne (IEA STEPS)	No carbon pricing in existence (SSP5)
BUILDING SECTOR POLICIES	Implementation of more stringent building energy conservation building codes for existing and new buildings, including net zero emission requirements by 2030 and 85% of all buildings are zero carbon-ready in 2050. (IEA NZE2050)	In the UK, Low Carbon Heat Support and Heat Networks Investment Project; various retrofit incentive schemes for improving buildings efficiency as part of Plan for Jobs. It does not however assume increasing stringency of EPC requirements. (IEA STEPS)	Assumes current policies promoting sustainability are removed. (SSP5)
TECHNOLOGY ASSUMPTIONS	Promotion of alternative fuels and technologies such as hydrogen, biogas, biomethane and carbon capture, utilisation and storage across sectors. The share of renewables by 2030 in the global electricity supply would increase to approximately 61%, shifting economies from being fossil fuel dependent to renewable energy driven. (IEA NZE2050)	Phase out of traditional coal-fired power by 2024 in the UK and the Ten Point Plan, with up to 40 GW offshore wind capacity by 2030. Electrification component of the 6th Carbon Budget and Industrial Energy Transformation Fund provides grant funding for energy efficiency projects. (IEA STEPS)	Little to no development in low carbon technology. (SSP5)
PHYSICAL RISK DATA SOURCES	Willis Towers Watson's Global Peril Diagnostic and Climate Diagnostic Tools, data from the MunichRe hazard databases, and the Intergovernmental Panel of Climate Change (IPCC). For the climate loss modelling the catastrophe model from RMS (Risk Management Solutions) was used.		



# 2022 TCFD DISCLOSURE CONTINUED

## How we integrate climate risk into our overall risk management approach:

We identify and monitor climate change risks as part of our wider risk management procedures which are overseen by the Board and its principal committees (see pages 114 and 174-175 of our [Annual Report and Accounts](#)). Although the Board has ultimate responsibility for the Group's robust risk identification and management procedures, certain risk management activities are delegated to the level that is most capable of overseeing and managing the risks. Our risk management structure is on page 176 of our [Annual Report and Accounts](#). Throughout the year, the Executive Committee reviews the Group's risk registers, which include sustainability/climate change related risks. These reviews consider the risk severity, likelihood and the internal controls and/or mitigation actions required to reduce our risk exposure, so that it is aligned with or below our risk appetite. This approach allows the effects of any mitigating procedures to be considered properly, recognising that risk cannot be eliminated in every circumstance.

The Board reviews and approves the Group's risk registers on at least an annual basis and they are subject to review by the Risk Committee at each of its meetings. Due to its importance, changes to the Schedule of Principal Risks can only be made with approval from the Risk Committee or Board (changes made to our principal risks during 2022 are on page 113 of our [Annual Report and Accounts](#)). Climate-related topics are included on the agenda of each meeting of the Responsible Business Committee and the Sustainability Committee. The climate governance framework on page 72 of our [Annual Report and Accounts](#) details the frequency of the committee meetings.

Climate resilience has been classified as a principal risk for the Group and is contained on our Schedule of Principal Risks (see pages 116-125 of our [Annual Report and Accounts](#)). Emerging climate-related risks are monitored via our Schedule of Emerging Risks (see pages 124 and 125 of our [Annual Reports and Accounts](#)). At 31 December 2022, we monitor three climate-related emerging risks which relate to Energy Performance Certificate (EPC) compliance, renewable energy and the importance of ESG-related concerns to our key stakeholders. We define an emerging risk as a condition, situation or trend that could significantly impact our financial strength, competitive position or reputation within the next five years. Emerging risks involve a high degree of uncertainty and are therefore factored into the Board's viability assessment and strategic planning process.

## Risk management actions during 2022

### Oversight provided by the Risk Committee:

- Regular updates on Willis Towers Watson's climate risk assessment.
- Received an update on the availability and cost of sourcing renewable energy.
- Updated on the work performed by the Sustainability, Development and Asset Management teams to upgrade the EPC ratings of our buildings.

### Oversight provided by the Audit Committee:

- Considered the impact of ESG credentials and EPC capital expenditure on the portfolio valuation.
- Received an update from Deloitte on its assurance work performed on our key ESG data.
- Both the Risk and Audit Committee received training on climate-related disclosures provided by Deloitte in November.

## Looking ahead

In 2023 we will look to:

- Embed the results of the latest climate risk analysis into our portfolio management.
- Review the Group's risk registers to ensure they reflect all of the Group's material climate-related risks.

# 2022 TCFD DISCLOSURE CONTINUED

## Metrics and targets

### (a) Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process

We set out in the table below a range of metrics that reflect those highlighted in the TCFD buildings and materials group selected metrics and indicators guidance. In addition, to enable our stakeholders to further understand our performance with regards to climate-related issues, the data section within our annual Responsibility Report includes an extensive range of consumption and intensity metrics for energy, carbon, waste and water.

Financial category	Climate-related category	Metric	Unit of measure	2022	2021	2020	Applicable risks and opportunities	Risk timescales
Assets	Risk Adaptation & Mitigation	Percentage of portfolio with an EPC rating of A	% of ERV	9%	6%	6%	EPC rating requirements	Short to medium-term
		Percentage of portfolio with an EPC rating of B	% of ERV	45%	35%	31%		
		Percentage of portfolio with an EPC rating of C	% of ERV	20%	18%	24%		
		Percentage of portfolio with an EPC rating of D	% of ERV	9%	14%	21%		
		Percentage of portfolio with an EPC rating of E	% of ERV	4%	6%	9%		
		Percentage of portfolio with an EPC rating of F	% of ERV	0%	0%	1%		
		Percentage of portfolio with an EPC rating of G	% of ERV	0%	0%	0%		
		Properties in development	% of ERV	12%	19%	0%		
		Exempt/ under review/ outstanding	% of ERV	1%	2%	8%		
		Percentage of portfolio which is BREEAM certified	% by floor area (total portfolio NIA%)	34%	30%	32%	Planning requirements	Short to medium-term
	Risk Adaptation & Mitigation	Percentage of portfolio which is LEED certified	% by floor area (total portfolio NIA%)	13%	9%	9%		
Expenditures	Energy/Fuel	Total energy consumption	kWh	47,790,663	49,324,077	48,784,205	Cost of raw materials, emission offsets	Short to medium-term
		Proportion of energy consumed from renewable sources	% of energy	92%	71%	63%		
	Energy/Fuel GHG Emissions	Total electricity consumption	kWh	33,156,706*	31,972,908	30,714,359		
		Proportion of electricity consumed from renewable sources	% of energy	98%*	97%	100%		
		Total fuel consumption (gas)	kWh	14,633,956*	17,351,169	17,896,075		
		Proportion of fuel consumed from renewable sources	% of energy	79%*	22%	1%		
		Total building energy intensity	kWh/m <sup>2</sup>	123*	128	135		
		GHG emissions intensity from buildings (location-based)	tCO <sub>2</sub> e/m <sup>2</sup>	0.0234	0.0258	0.0300		
		GHG emissions intensity from buildings (market-based)	tCO <sub>2</sub> e/m <sup>2</sup>	0.0054	0.0081	0.00922		
	Water	Total water consumption	m <sup>3</sup>	150,072*	107,864	95,719	Drought, flooding, planning requirements	Medium to long-term
		Building water intensity	m <sup>3</sup> /m <sup>2</sup>	0.41*	0.29	0.26		
	Risk Adaptation & Mitigation Remuneration	Expenditures (capex) for carbon offsets from the voluntary carbon market (carbon removals)	£	£410,863	£12,950	£247,375	Emission offsets	Short, medium to long-term
		Percentage of Executive Director annual bonus calculation linked to climate-related aspects	% of bonus	7.5%	7%	5%	Cost of raw materials, planning requirements	Short to medium-term

NB: the above utility/carbon-based data points relate to our managed property portfolio only. For further details on the make-up of this portfolio and our entire investment portfolio please see our Environmental – Basis of Reporting.

\* 2022 metrics subject to independent reasonable assurance under 'ISAE 3000 (Revised)' and ISAE 3410 by Deloitte LLP

# 2022 TCFD DISCLOSURE CONTINUED

In addition to the above metrics we also use our science-based carbon targets and Net Zero Carbon Pathway to support us in the strategic planning of our portfolio and undertake future projections of carbon intensity reductions. For more information on our progress against these please see the [data section](#) of this report.

## **(b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks**

We publish a detailed data report which sets out our environmental data performance. This includes extensive carbon reporting across all scopes: Scopes 1, 2 and 3 calculated using the Greenhouse Gas (GHG) Protocol Corporate Accounting and Reporting Standard. Likewise, we provide at least three years to show progress/historical performance and allow for trend analysis. Please refer to the data report and our [Environmental – Basis of Reporting](#) which also includes full details of the aggregation and calculation methodology. Moreover, we publish a full breakdown of our corporate carbon footprint (inclusive of Scopes 1, 2 & 3) in our Streamlined Energy and Carbon Reporting (SECR) disclosure which can be found on pages 69-71 of our [Annual Report and Accounts](#).

## **(c) Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets**

In addition to the targets set out in section (a) above we developed a set of science-based carbon targets to ensure our carbon reduction programme is aligned to its objectives, as well as minimising our risk exposure to climate change on our managed portfolio. These targets, aligned with a 2.0°C climate warming scenario, were verified by the Science Based Targets initiative (SBTi) in 2019 and are:

“To reduce Scope 1 and 2 GHG emissions by 55% per square metre by 2027 from a 2013 base year” and “To reduce Scope 3 GHG emissions 20% per square metre by 2027 from a 2017 base year.”

To see the latest progress against these targets and the progress across our Net Zero Carbon Pathway, please see the [data section](#) of this report for more details. As part of our net zero ambition, we will be reviewing these targets to align them with a 1.5°C climate warming scenario and we will provide further updates when this is complete.