

Net Zero

Our goal: Net zero



GROSVENOR

Introduction

We will reduce our total carbon impact by 50% by 2030.

We will focus on three areas: cutting energy use in our buildings by one third, reducing the embodied carbon intensity of our developments by 50% and cutting the carbon intensity of purchased goods and services by at least 60%.

This strategy will support the delivery of our World Green Building Council and Better Buildings Partnership commitments to achieve a net zero carbon portfolio by 2050.

Cut carbon by

50%

Climate change is the biggest challenge facing the world today and the built environment is responsible for nearly 40% of global carbon emissions. This places a huge responsibility on our industry to drive radical change, if we are to make progress in mitigating the worst impacts of global warming. The scale of this challenge does not elude us. It requires us to change our collective approach to doing business, and to collaborate with all stakeholders including investment partners, occupiers and peers.

One of the most effective ways we can reduce our impact on the environment, and future-proof our business activities, is to reduce the carbon emissions of our real estate portfolio. In 2019, we were one of the first real estate companies to make the ambitious commitment for all buildings within our direct control to operate at net zero carbon by 2030, and for all buildings (directly and indirectly managed) to achieve embodied and operational net zero carbon by 2050.

We are pleased to continue our journey by unveiling an ambitious and commercially grounded Net Zero Carbon Strategy. This commits us to reducing our total carbon impact (Scopes 1, 2 and 3) by 50% by 2030, against a 2019 baseline. We will achieve this by reducing our carbon emissions from energy use in our buildings, developments and purchased goods and services. We also recognise that to achieve our own targets will require us to engage with and support our occupiers and suppliers with their own sustainability goals.

Our strategy has been developed in line with the Better Buildings Partnership's Net Zero Carbon Framework, aligns with the relevant UN Sustainable Development Goals and is reflective of our values of respect, integrity and trust. We will be transparent about our net zero carbon journey and will report regularly on our progress.

This document provides detail on the scope of our commitment, our approach and how we intend to measure and report our progress. The strategy is the result of business-wide stakeholder engagement, detailed technical modelling, and an in-depth review of net zero carbon performance in the market. We acknowledge that our path to net zero is likely to evolve, so we will continue to monitor changes in the market and learn from our experiences as we journey towards achieving a net zero carbon portfolio.

Sara Lucas
Chief Executive

Our journey so far

We were one of the first real estate companies to establish ambitious net zero targets

Our purpose at Grosvenor is to improve property and places to deliver lasting commercial and social benefit. To guide us, we have developed a strategy for delivering social benefit across Europe.

Our vision is to put mitigating climate change and the promotion of healthy, inclusive and economically resilient businesses and communities at the heart of everything we do. We have identified five priority areas, two of which relate directly to net zero carbon:



Net zero carbon

Achieve net zero operational carbon for directly controlled buildings by 2030 and achieve net zero operational and embodied carbon for all buildings by 2050.



Sustainable buildings

Improve the sustainability credentials and climate resilience of our assets, implement circular economy initiatives to reduce energy, water and waste, and increase the use of sustainable materials.

For more detail on our strategy for delivering social benefit, please see our [website](#).

In 2019, we became one of the first global real estate companies to establish ambitious net zero carbon targets, signing up to the World Green Building Council and Better Buildings Partnership commitments.

We have committed to achieve net zero operational emissions from all of our directly-managed buildings globally by 2030, and to work towards all buildings, directly and indirectly-managed, being embodied and operational net zero across our portfolio by 2050.

We are actively working towards achieving those UN Sustainable Development Goals where we can have the greatest impact, and we support projects that allow our portfolio to receive industry-recognised sustainability accreditations including BREEAM, LEED and GRESB.

Our Net Zero Carbon strategy

We have established a bold and ambitious target to halve carbon emissions from our operations and supply chain by 2030, and work towards net zero operational emissions in our directly managed portfolio. This will put us on track to be net zero carbon across our entire portfolio, both directly and indirectly managed, by 2050. To achieve this, we have developed a strategy to target the areas that make up more than 90% of our total carbon impact.



1. Energy use in buildings

We will reduce energy consumption by 1/3 to align with industry-leading net zero carbon building performance definitions



2. Purchased goods and services

We will reduce our carbon emissions per unit of spend by 60% through decarbonisation of our suppliers and low carbon refurbishments



3. New developments

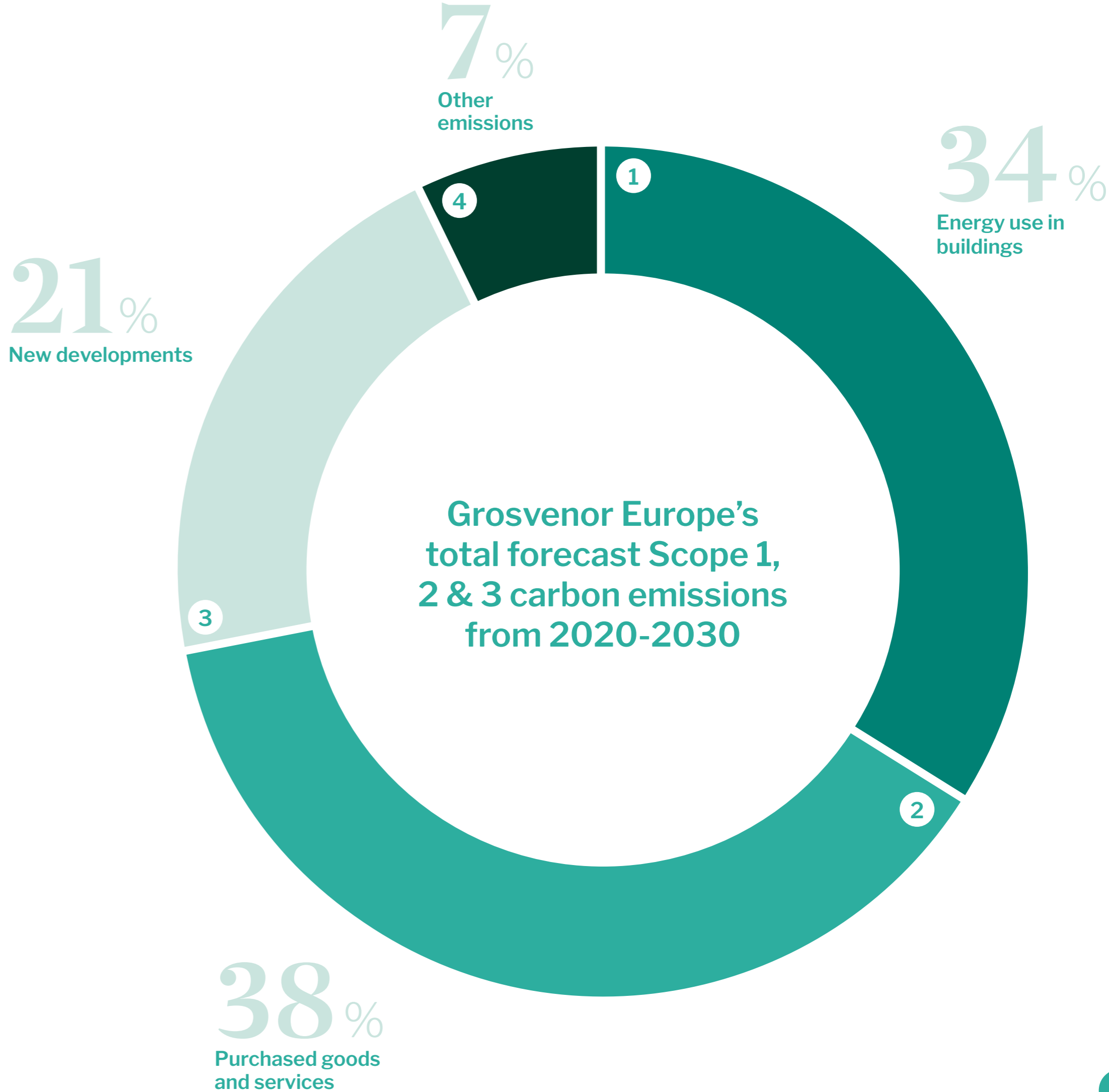
We will aim to reduce embodied carbon per square metre in our developments by 50% compared with typical benchmarks and practice today.

We will build to highly energy-efficient performance standards consistent with net zero carbon benchmarks



4. Other emissions

Covering areas such as business travel, employee commuting, water and waste, we will include these emissions within our overall 50% reduction target



Building our strategy

Our net zero carbon strategy is the result of a comprehensive programme of research and analysis undertaken in 2020. This included an assessment of our existing business practices and a review of industry-leading approaches to net zero carbon in France, Spain, Sweden and the UK. We have also modelled the cost and performance implications of delivering net zero carbon across our property portfolio. These activities ensure our strategy is aligned with market best practice in each area.

We prioritise energy efficiency, with offsetting considered a last resort

Activities

01 Review of net zero definitions

We reviewed all established and emerging net zero carbon definitions in the locations in which we operate to understand what 'net zero carbon' means. For Grosvenor, net zero means we need to ensure the amount of carbon we produce is compensated by the amount we remove from the atmosphere, resulting in net zero emissions.

02 Review of peers

We reviewed the commitments of asset owners and managers, tenants and investors with leading net zero carbon strategies to understand what constitutes typical, good and best practice today, and what this is likely to mean in the future.

03 Interviews

We interviewed key decision-makers from across the business to understand their views and attitudes around the journey to net zero carbon. This included colleagues involved in asset management, development, investment, strategy and risk management. These interviews covered the drivers, opportunities and challenges in achieving net zero carbon.

04 Technical modelling

We undertook technical building-level modelling of the building performance potential and cost of delivering net zero carbon standards in our property portfolio. This was supported by findings from a series of net zero carbon audits we undertook for key assets in 2020.

Strategy Fundamentals

Based on our findings we agreed that our approach to net zero carbon should:

- 01 Act quickly and be bold and ambitious in the changes we commit to making in the business.
- 02 Be straightforward in our communications with stakeholders both internal and external (including suppliers, tenants and investment partners).
- 03 Be agile and responsive to the market and regulatory changes that are expected, and changes in the portfolio.
- 04 Be highly tailored to reflect the needs of the business, the markets we operate in and the priorities of key internal stakeholders.
- 05 Act ahead of regulation to mitigate asset value risk.
- 06 Be integrated into policies and processes so that it can be implemented collaboratively, not just by the sustainability team.
- 07 Motivate a strong business case for energy efficiency and tenant engagement.
- 08 Follow a verification approach with strong industry backing.

Building our strategy

There is no single way to develop a net zero carbon strategy. There are both technical and organisational challenges and decisions to be made in developing an approach that is appropriate for any given business. We have set a scope for our commitment which is comprehensive and based on industry best practice. We will continue to monitor net zero carbon guidance to ensure it remains so.

We have adopted an equity stake approach

Scope

We have included all real estate holdings that we have capital invested in.

We have included all Scope 3 categories deemed material under the Greenhouse Gas Protocol. Based on our review of peers, we believe that our baseline is comprehensive.

We have not included the GHG Scope 3 Category 'Use of sold products' in our pathway, but we are committed to developing highly energy efficient assets going forward, following the principles of 'Design for Performance'. We have excluded these emissions generated from the lifetime operation of assets we develop and sell as we do not believe that there is currently a robust and consistent methodology in the market today to quantify this category. We will continue to review industry best practice and consider its inclusion in the future.

Pages 17 and 18 provide a detailed account of the scope of our commitment and comparison with the recommended Better Buildings Partnership scope.

Operational control or equity stake approach

For real estate investments where we do not hold a 100% ownership stake, we have attributed carbon emissions on a proportional basis relative to equity stake (ownership), rather than based on 'operational control'.

While Grosvenor Europe has 'operational control' of all assets in which we have capital invested, even if we are the minority partner, we believe reporting on an equity stake basis is the most appropriate approach for our business, despite being the more challenging of the two options. (If we were to use an 'operational control' approach, our carbon reduction target would be easier to achieve as the same measures would deliver a 70% reduction in carbon.)

Building our strategy

Our strategy follows the energy hierarchy: prioritising energy efficiency first, offsetting as a last resort. We have also aligned our approach with leading verification schemes such as the SBTi for our company-level target, and CRREM and local Green Building Councils for our asset-level pathways. This gives us the maximum confidence that we are aligned with best practice today.

Energy hierarchy modelling approach

While there is no single universal definition of net zero carbon in the market today, one commonality is the principle of the energy hierarchy. In simple terms, this states that reducing energy consumption in buildings through energy efficiency and on-site renewables should be prioritised over offsetting mechanisms such as carbon credits or green tariff electricity. Figure 1 shows how this works in practice.

We will set asset-specific energy use intensity (EUI) targets consistent with industry-leading net zero carbon benchmarks. We will build the cost of achieving these in landlord areas into asset capital expenditure plans. Tenant consumption will be addressed, where possible, through green lease clauses, tenant engagement plans and improved sub-metering. We will consider offsetting as a last resort and will explore all other means of reducing carbon emissions first.

Choice of net zero carbon verification scheme

We manage real estate assets in four countries, and each has their own industry approach to net zero carbon and different challenges. We have undertaken a review of all relevant net zero carbon definitions – whether established or emerging – in the regions we operate. The purpose of this review was to identify the scheme or schemes we should align with to give ourselves the most credible net zero carbon pathway. We identified several with applicability to our business:

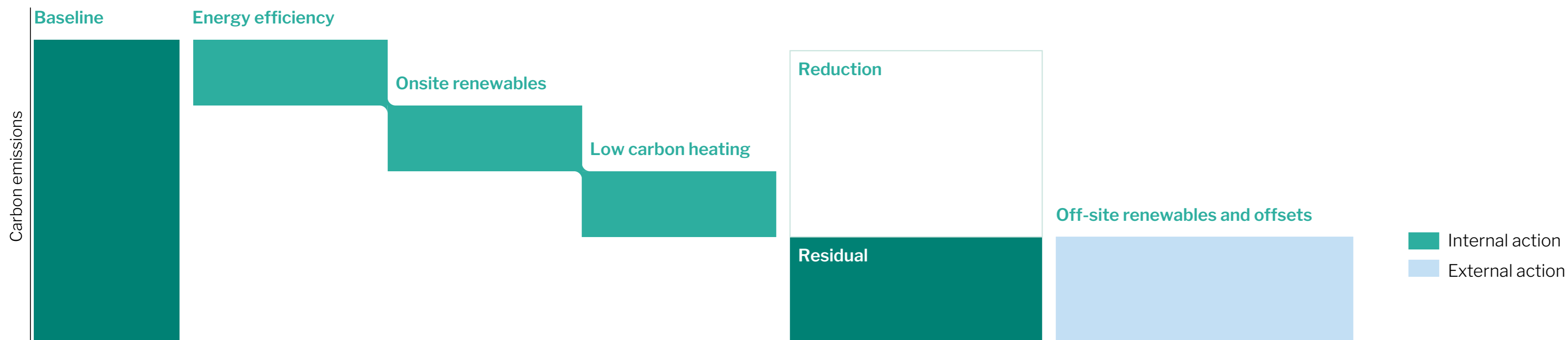
The **Science-Based Targets Initiative (SBTi)** provides a robust basis for corporate carbon target setting. We have chosen this approach for our overall company target.

The **Carbon Risk Real Estate Monitor (CRREM)** project is an EU-funded research project that provides energy use intensity targets by asset class and European country that will deliver the scale and pace of decarbonisation required by the Paris Agreement. This approach has developed significant traction in the market to date. We will use the CRREM tool's 1.5°C pathway to develop specific asset-level pathways for our portfolio.

The **Green Building Councils** of the UK, France, Sweden and Spain are at various stages of developing local net zero carbon approaches. As part of our analysis we have reviewed the UKGBC's Paris-Proof approach, the French ELAN policy and E+C- scheme and the Swedish NollCO2 scheme, and compared these with the targets set by CRREM.

We will be adopting the most stretching targets in each respective geography to minimise regulatory risk and future-proof our portfolio.

The energy hierarchy



Our 2019 carbon baseline

During 2020, we baselined our total carbon emissions for 2019. This covered our direct operations (Scopes 1 & 2) and, for the first time, our wider supply chain (Scope 3). This has provided us with a robust foundation on which to develop our pathway to net zero carbon.

Approach

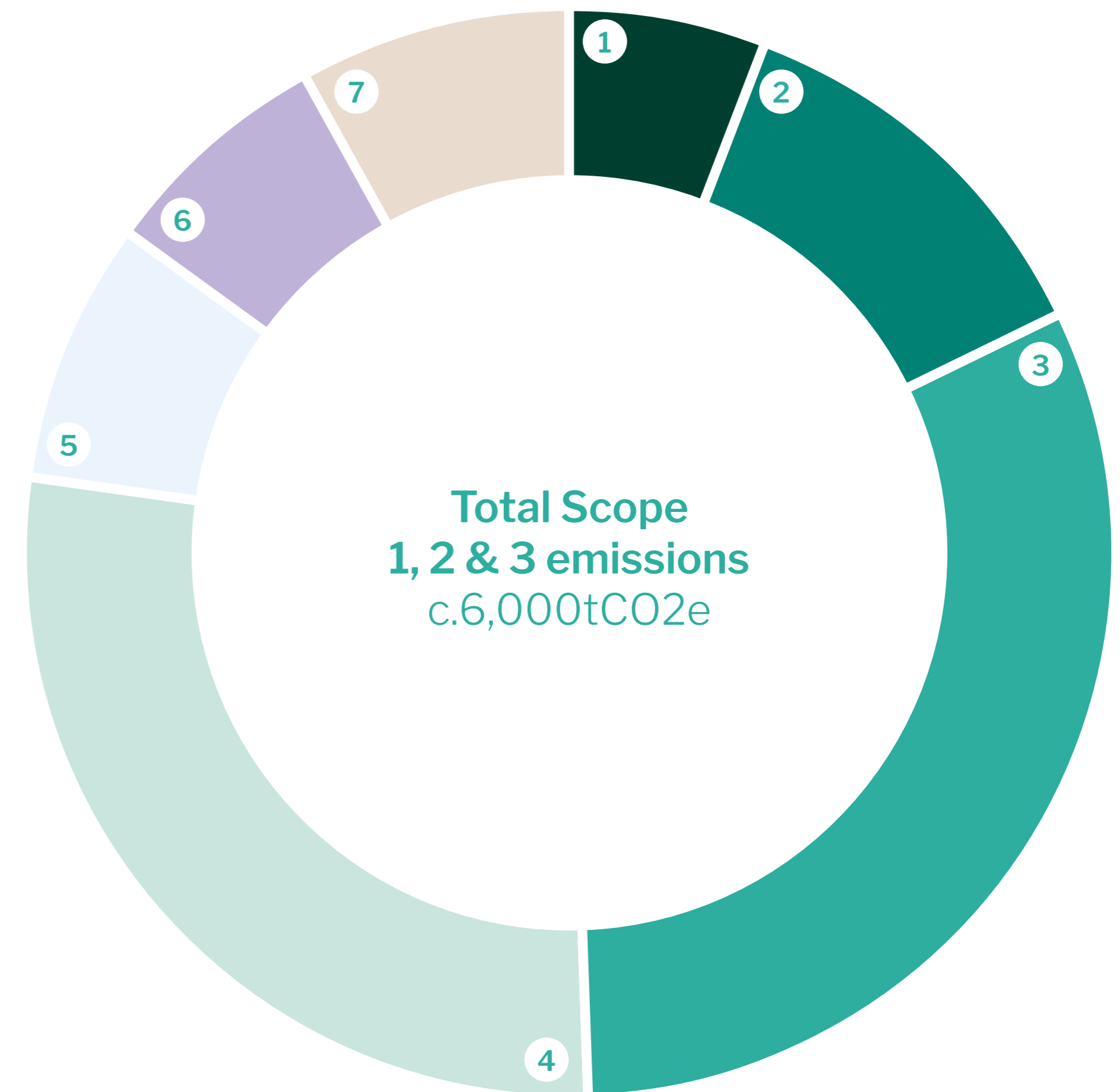
We chose 2019 as our baseline year and began the process with a materiality assessment. We assessed each relevant emissions source according to size, our ability to influence and the importance to stakeholders, among other factors. This identified the sources that are truly material to us as a business.

The largest contributor in 2019 was emissions from the energy used by our tenants, while the second largest source was from purchased services. Emissions from landlord-procured energy use – our Scope 1 and 2 emissions – accounted for 18% of the total, compared with 82% for Scope 3 sources. The ‘Other’ category includes emissions from employee commuting, business travel, waste and water.

Having measured our carbon baseline for 2019, we explored how our carbon impact might evolve over the next 10 years. Appendix C outlines the process we followed.

We were able to conclude that a ‘business as usual’ approach would deliver a 2030 footprint broadly the same as in 2019. While on an intensity basis business as usual would still reflect a decrease in carbon impact, this is not consistent with our net zero carbon ambition or the decarbonisation commitments we have made.

- Scope 1**
1. Landlord-procured thermal fuels
- Scope 2**
2. Landlord-procured electricity
- Scope 3**
3. Energy use by tenants
4. Purchased services
5. Embodied carbon from developments
6. Purchased goods
7. Other



*Purchased goods refer to embodied carbon from maintenance and refurbishment of existing assets in the portfolio, as opposed to new developments. The two are accounted for separately as they are calculated via different methods

Our net zero carbon pathway

By 2030, our total annual Scope 1, 2 and 3 carbon emissions will have halved compared with our 2019 baseline. This will put us in a great position as we look to drive carbon emissions down to net zero by 2050.

Approach

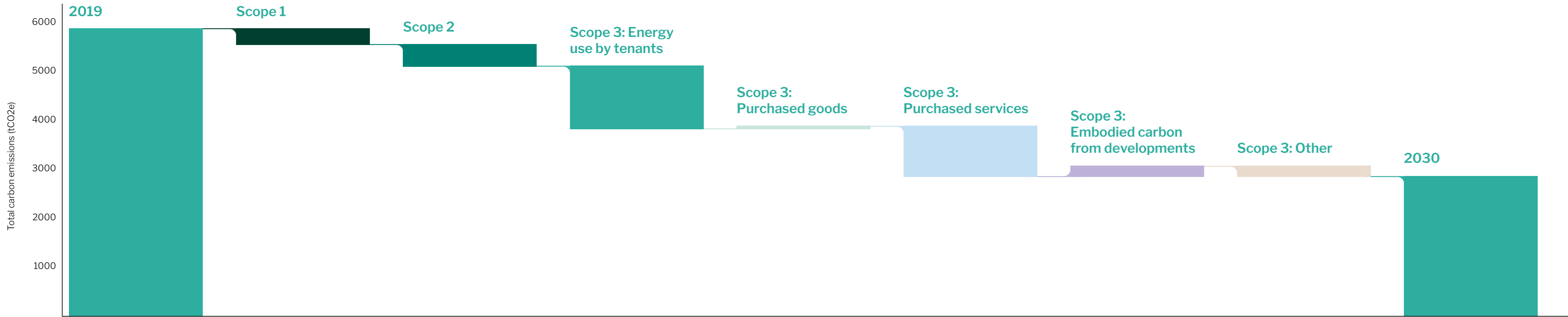
The chart below shows how our carbon emissions in 2019 and 2030 are expected to compare. It shows the relative size of the carbon savings we expect to deliver within each emissions category. This is based on our best current estimate. As we implement the strategy and learn lessons we may find that these boxes change relatively in size.

It is worth noting that emissions from embodied carbon in developments and purchased goods are predicted to increase in absolute terms between 2019 and 2030. This is because 2030 is anticipated to be a busier year than 2019 in terms of development completions and purchased goods.

This is based on our current forecast of activity in 2030 and will be revised as data becomes more certain. We may consider using an averaging approach to provide a fair comparison in the event that development activity in 2030 is particularly high.

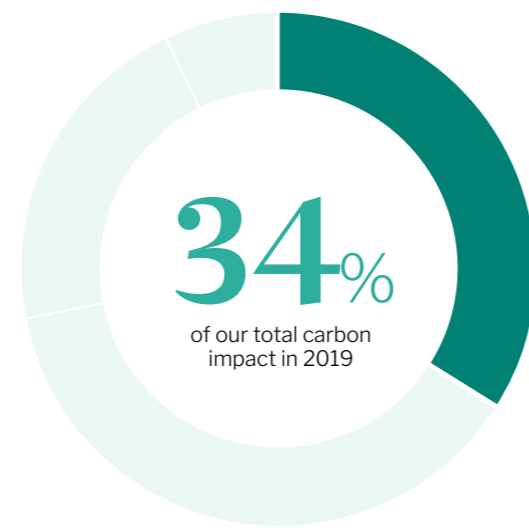
We will introduce a two-year transition period for new acquisitions to give us time to gather and verify energy consumption data and create a viable net zero carbon action plan to align the asset with our 2030 carbon reduction target.

More detailed methodology notes can be found in Appendix C.



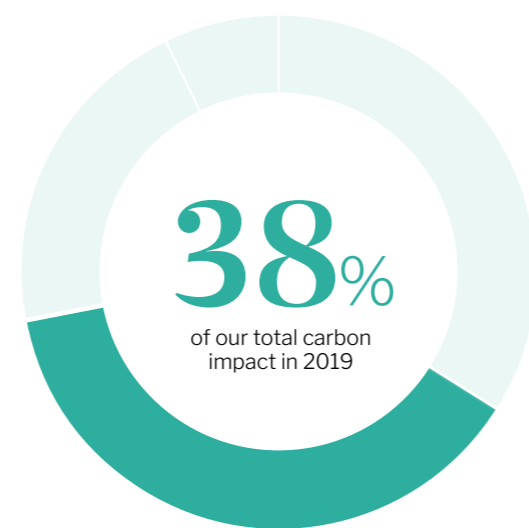
Our pathway focus areas

Our net zero carbon pathway addresses all material carbon emissions from our operations and supply chain. 93% of our overall carbon impact as a business is in three areas – energy use in buildings, purchased goods and services and the embodied carbon of our developments and refurbishments. In each of these areas we will need to experiment, try new approaches and learn lessons rapidly.



Energy use in buildings

We will reduce energy consumption in our buildings by an average of 1/3 between 2020 and 2030. We will ensure that the energy use intensity of our assets aligns with industry-leading net zero carbon definitions. We will start by undertaking a programme of 'top-up' net zero carbon audits, enhancing our existing audit findings by investigating deeper building fabric measures and tenant areas. We will develop green lease clauses, tenant engagement plans and improve sub-metering to address tenant consumption.



Purchased goods and services

We will reduce carbon emissions per unit spend by 60% on average. We will do this by introducing new supplier terms that prioritise access to supplier-specific carbon data. We will encourage our suppliers to set science-based carbon reduction targets of their own. We will also require more detailed breakdowns of materials, plant and equipment used in our refurbishments to better quantify carbon impacts.



Early successes - energy use in buildings

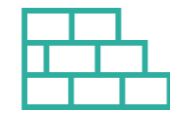
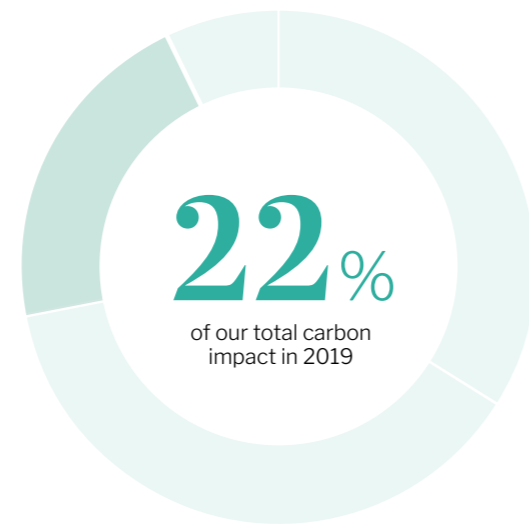
To mobilise our strategy, we invest in and develop assets with strong environmental performance.

In Spain, we acquired a LEED Gold certified office building, IDOM, in 2019. We were attracted by the building's pioneering architecture and design, which ensures it operates with an energy use intensity more than 30% lower than the CRREM 2020 energy use intensity benchmark. A 15kW solar photovoltaic array is also being installed, which will provide on-site renewable energy.

We also look for opportunities to improve the environmental performance of our existing portfolio. At Bålsta Centrum in Stockholm, we recently installed a geothermal energy system. Not only does the system significantly reduce energy consumption and costs, it allows us to offer cleaner energy to an increasing number of occupiers who request green solutions.

Our pathway focus areas

For our new developments and major refurbishments, we are targeting industry-leading embodied carbon benchmarks. We will also ensure that new developments operate efficiently and are future-proofed to meet enhanced energy performance standards in the coming years. Reducing the remaining 7% of our 10-year carbon footprint – which includes business travel, employee commuting, water and waste – is also included within our company-wide 50% carbon reduction target.



New developments

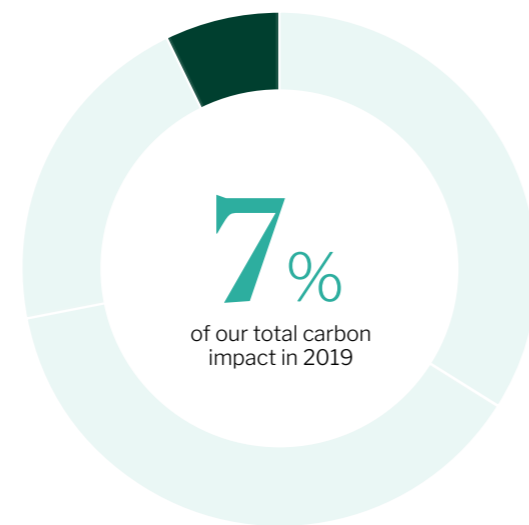
We will target the most stretching embodied carbon benchmarks in the market today for office and residential developments, **reducing embodied carbon per square metre by 50%** compared with typical practice.

Though not included in the pathway figures, we are committed to ensuring new developments are built to highly energy efficient standards consistent with leading 2030 industry energy performance benchmarks.



Other

This includes emissions from business travel, waste, water and employee commuting. Emissions will be reduced by **diverting 100% of waste from landfill** and setting targets to **reduce emissions from business travel**. Reducing energy consumption in our buildings will drive carbon savings from upstream transmission and distribution of electricity – another contributor to this 7%.



Early successes - new developments

We experiment with and learn from design concepts to help reduce carbon emissions.

At Anatole France 85, an office development in Levallois-Perret in north west Paris, we have analysed the carbon and cost impacts of utilising low carbon materials.

Specifically, we have considered incorporating timber into the floor structure of the new 2,400 sq m building, and reducing the amount of concrete and steel.

Early analysis indicates that using timber will reduce the embodied carbon impact of the building by 8%, with a potential cost increase of 1.5%

Action Plan:

Asset management

To successfully implement the strategy we will start with a mobilisation phase. Over the next 12-18 months we will revise policies and processes and roll out training, skills and capacity building for our staff. This will be crucial to the success of the strategy as it will integrate net zero carbon into our day-to-day business activities.

Once mobilised, we will implement and monitor processes to ensure we stay on track, learn from our experiences, and share our knowledge with industry peers. We have also established a detailed action plan and a series of reporting metrics to guide our teams in achieving our 2025 and 2030 targets.

The table below summarises actions for our asset management functions.

Focus areas	Mobilisation actions	Implementation and monitoring	Reporting metric
Net Zero Carbon building audits	Top-up NZC audits to include whole buildings	Monitoring to ensure that measures identified in the audits are integrated into capex plans and that outcomes of NZC audits contribute to hold/sell decisions	% of assets with completed NZC audit and costed NZC plan
Asset capex plans	Develop capex plans and set energy use intensity (EUI) targets by asset based on CRREM or local regulation	Implementation of measures and ongoing monitoring to ensure 2025 and 2030 targets are met	% of assets achieving EUI target or with costed plan in place to do so
Tenant engagement	Develop tenant engagement plans	Implementation and ongoing monitoring to ensure engagements are mutually useful and 2030 targets met	% of tenants participating in tenant engagement programmes by asset
Tenant energy data	Develop sub-metering plan	Implementation of sub-metering and ongoing monitoring to ensure 2025 and 2030 targets met	% of tenant consumption covered by sub-metering by asset
Green leases	Develop green lease clauses	Set 2025 and 2030 targets	% of tenants under green leases by asset
Supplier procurement	Revise supplier terms	Ongoing monitoring and supplier engagement to ensure carbon data and supplier carbon reduction targets are met	% of suppliers with credible carbon reduction targets % of £ spent covered with verified supplier-specific carbon data
Energy procurement	Identify Power Purchase Agreement (PPA) options by asset	Ongoing monitoring and review of PPA market	% of landlord electricity provided under PPA % of tenant electricity provided under PPA
Fit-outs	Update fit-out specifications	Ongoing monitoring and industry engagement to improve fit-out specifications and access to tenant fit-out data	% of tenants meeting revised fit out specification

Action Plan:

Investment and Development

The table below summarises actions for our investment and development functions.

Focus areas	Mobilisation actions	Implementation and monitoring	Reporting metric
Acquisition due diligence	Establish due diligence NZC audit process	Undertake NZC audits for all acquisitions to ensure they can technically be brought in line with 2030 trajectory	% of acquisitions with a costed plan to achieve NZC
Supplier engagement	Revise supplier terms to include requirement for carbon data	Suppliers provide full materials schedule for developments, refurbishments, maintenance to be used in carbon accounting. Suppliers provide product carbon footprint for materials and equipment	% reduction in carbon intensity of refurbishments
Development materials	Integrate whole life carbon assessment in design process	Quantify embodied carbon impacts for lifecycle stages A-C. Identify low carbon material alternatives	% reduction in embodied carbon vs typical practice % materials from re-used sources % materials designed to be re-used at end of life % of £ spent covered by supplier-specific carbon data
Energy performance of developments	Integrate Design for Performance principles into design process	Implementation and ongoing monitoring to ensure that energy performance of developments meets design standards	% of new developments meeting 2030 EUI targets
On-site renewables	Revise development standards to prioritise on-site renewables	Implementation and ongoing monitoring of progress, sharing of case studies/exemplar projects	% of new developments exploit maximum technical potential for on-site renewables
Internal carbon pricing	Establish internal carbon price	Use 'transition fund' to finance retrofit of standing portfolio	£/tCO ₂ e carbon price £ of investment in retrofit activity
Disposal	Include carbon risk in investment decision-making	Annual review of assets in portfolio to identify those at risk of 'carbon stranding'	% of assets in portfolio either meet 2030 EUI targets or have costed plans to achieve them

Monitoring, reporting and verification

Measuring and reporting our progress will be critical to ensure transparency and accountability. We need to verify that our carbon reductions meet those required by science to limit global warming to 1.5°C. We want to learn lessons from areas where the strategy is working, and act quickly to remedy areas where it is not. This requires the collation of data on a timely basis. We will be reporting overall progress in implementing this strategy on an annual basis, but many aspects of the strategy will be monitored more frequently.

Measuring and reporting our progress will be critical to ensure transparency and accountability

Annual reporting

Beginning in 2021, we will report our progress in delivering the strategy on an annual basis as part of our standard non-financial reporting. We will provide an update on our annual carbon footprint, our overall progress against the 50% carbon reduction target and a summary of progress in each emissions area.

Setting science-based targets

We will submit our 50% carbon reduction target to the Science-Based Targets Initiative to provide third-party verification of our strategy. This will provide independent confirmation that our strategy is consistent with the level of carbon reductions required by climate science. We also recognise that wider third-party assurance of net zero carbon pathways is an emerging field and we will continue to monitor whether additional external verification is appropriate.

Internal monitoring

We will monitor our progress against each sub-target on a more frequent basis. During the mobilisation phase we will set quarterly targets for the implementation of new policy and process document updates. We will establish quarterly reviews and will continue to report to GRESB for all properties, which will incorporate the CRREM tool.

Revising our practices

We acknowledge that some areas of our strategy will need revisiting as industry measurement methods improve. We anticipate that we will update our current benchmark estimation approach to purchased goods and services with supplier-specific carbon intensity factors. Any building energy use which is currently estimated will be superseded with real data as we expand sub-metering and green leases. We will also develop a clear approach to offsetting our residual emissions and revisit other areas, such as the use of sold products and the end-of-life treatment of sold products, as the industry's approach evolves.

Challenges and opportunities

In implementing this strategy we have considered what we can do to maximise the opportunities and mitigate the potential challenges that we are likely to face. Above all, the strategy will push us to try new things and to innovate.

 Challenges  Our response

Integrating carbon impacts into decision-making

We believe that targeting net zero carbon is the right thing to do, but recognise that in some instances the long-term commercial case for reducing carbon may be difficult to quantify and estimate today.

We believe that commercial and sustainability drivers will align, and acting ahead of regulation is the right strategic move. Acting on net zero carbon is consistent with our wider business purpose – to deliver lasting commercial and social benefit. We will also develop a comprehensive climate change resilience strategy in line with TCFD by 2022.

Data

Approximately half of the energy consumption of our buildings is currently estimated. Some sections of our carbon footprint are estimated using industry benchmarks.

Our strategy development process has identified data gaps. We will address these in the mobilisation phase of our strategy. Improving our carbon data is essential for robust measurement and monitoring of progress.

Tenant engagement

Approximately two-thirds of carbon from energy use in buildings arises from tenant consumption. We cannot deliver our asset-level energy use intensity targets without addressing tenant spaces.

We will develop tailored tenant engagement plans by asset, and create forums to support our tenants with their sustainability challenges in a mutually beneficial way. We aim to overcome the barriers of the traditional landlord-tenant relationship.

Skills, training and capacity

Delivering the strategy will require those involved in asset management, investment and development to understand new sustainability concepts.

We will provide training and skills development as part of the mobilisation phase of the strategy. We will ensure that responsibility for delivering the various aspects of the strategy is included in roles and responsibilities and that staff are fully motivated to meet these objectives.

Changing net zero carbon definitions

There is no single industry recognised definition of net zero. We expect standards to change and ultimately align over time.

We will monitor developments, engage with our peers and be active in industry forums such as the BBP and global and national Green Building Councils. We will also review the status of third-party net zero carbon certification schemes as they evolve.

Appendix A:

BBP Climate Commitment Scope Table

The scope of our commitment includes all recommended areas of the BBP Climate Commitment scope.

We have included optional emissions categories from our corporate activities, such as business travel, purchased goods and services and employee commuting.

Business area	Sub-area	GHG Protocol Reporting Category	Carbon Scope	BBP inclusion	Grosvenor Europe inclusion
Corporate	Head office energy use	Company facilities	1&2	—	X
	Company vehicles	Company vehicles	1	—	X
	Business travel (excluding commuting)	Business travel	3	—	X
	Purchased goods and services	Purchased goods and services	3	—	X
	Operational waste generated	Waste generated in operations	3	—	X
	Operational water use	Purchased goods and services	3	—	X
	Employee commuting	Employee commuting	3	—	X
Direct Real Estate Holdings (including JVs with management control)	Landlord purchased energy (electricity & fuels)	Purchased electricity, heat and steam	1,2&3	X	X
	Tenant purchased energy (electricity & fuels)	Downstream leased assets	3	X	X
	Landlord refrigerants	Purchased goods and services	1	X	X
	Tenant refrigerants	Tenant Scope 3	3	—	—
	Landlord purchased water	Purchased goods and services	3	X	X
	Tenant purchased water	Tenant Scope 3	3	—	—
	Landlord managed operational waste	Waste generated in operations	3	X	X
	Tenant managed operational waste	Tenant Scope 3	3	—	—
	Tenant transport emissions	Tenant Scope 3	3	—	—
	Tenant supply chain emissions	Tenant Scope 3	3	—	—
	Landlord purchased capital goods & services (M&E & property management services)	Purchased goods and services	3	X	X
	Investments (Indirect Real Estate Holdings, e.g. where investments are managed by a third party such as JVs with no management control or investments in other real estate investment vehicles)	Landlord purchased energy (electricity & fuels)	Investments (proportional to investment)	3	X
Tenant purchased energy (electricity & fuels)		Investments (proportional to investment)	3	X	X
Landlord refrigerants		Investments (proportional to investment)	3	X	X
Tenant refrigerants		Tenant Scope 3	3	—	—
Landlord purchased water		Investments (proportional to investment)	3	X	X
Tenant purchased water		Tenant Scope 3	3	—	—
Landlord managed operational waste		Investments (proportional to investment)	3	X	X
Tenant managed operational waste		Tenant Scope 3	3	—	—
Visitors transport emissions		Tenant Scope 3	3	—	—
Tenant supply chain emissions		Tenant Scope 3	3	—	—
Landlord purchased capital goods & services (M&E & property management services)		Purchased goods and services	3	X	X
Development		New development (including those where funding is being provided)	Purchased goods and services	3	X
	Refurbishments	Purchased goods and services	3	X	X
	Fit-out (landlord controlled)	Purchased goods and services	3	X	X
	Fit-out (tenant controlled)	Tenant Scope 3	3	—	—
	End-of-life	End-of-life treatment of sold products	3	—	—

Appendix B:

Key terms

Better Buildings Partnership (BBP):

The BBP is a collaboration of the UK's leading commercial property owners who are working together to improve the sustainability of existing commercial building stock.

Carbon dioxide equivalent (CO2e):

CO2e is a unit for measuring carbon footprints. It allows for the expression of the impact of different greenhouse gases in terms of the amount of CO2 that would lead to an equivalent amount of global warming impact. As a result, the total impact of all these gases can be expressed as a single number in a same unit.

Design for Performance (DfP):

Developed by the Building Better Partnership, this is an industry-backed project established to tackle the performance gap and provide an approach, based on measurable performance outcomes, to ensure new developments deliver on their design intent.

Embodied carbon:

Carbon emissions associated with energy consumption and chemical processes during the extraction, manufacture, transportation, assembly, replacement and deconstruction of construction materials or products.

Energy use intensity (EUI):

A building's energy use per unit size, typically expressed as energy consumption in kWh per square metre per year. The measurement of floor area can be expressed in terms of Net Lettable Area (NLA) or Gross Internal Area (GIA).

Greenhouse Gas (GHG) Protocol Corporate Accounting Standard:

Provides standards and guidance for companies and other types of organisations to prepare a GHG inventory. The standard and guidance were designed to help companies prepare a GHG inventory that represents a true and fair account of their emissions, through the use of standardised approaches and principles. This provides a company with the information that can be used to build a strategy to reduce GHG emissions.

Net zero carbon (NZC):

Definitions for Net Zero Carbon can be generic or relate to specific industries or activities. The World Green Building Council definition of a net zero carbon building is one that is highly energy efficient and fully powered from on-site and/or off-site renewable energy sources. We define net zero as ensuring that the amount of carbon we produce is compensated by the amount we remove from the atmosphere, resulting in net zero emissions.

Offsets:

An action or activity to reduce emissions of CO2 or other GHG gases made in order to compensate for emissions made elsewhere. A company can buy carbon credits equivalent to their carbon impact.

Operational carbon:

The term used to describe the emissions of carbon dioxide and other greenhouse gases during the in-use operation of a building, most materially from energy use and refrigerants.

Power purchase agreements (PPAs):

A contract for the purchase of electricity from one or more generation projects, typically between 5 and 20 years in length.

Renewable Energy Guarantees of Origin (REGO):

The REGO scheme administered by Ofgem provides transparency to consumers about the proportion of electricity that supplier's source/provide from renewable generation. An equivalent term used in the EU are Guarantees of Origin, or EU GoOs.

The Science Based Targets Initiative (SBTi):

A collaboration between CDP, the United Nations Global Compact, World Resources Institute (WRI) and the Worldwide Fund for Nature (WWF). The SBTi defines and promotes best practice in science-based target setting and independently assesses and approves companies' targets.

Scope 1 emissions:

Direct emissions from an organisation's building, vehicles, plant, including the combustion of fuel etc.

Scope 2 emissions:

Indirect emissions from electricity consumption or other energy generated by third parties.

Scope 3 emissions:

All other indirect emissions, e.g. energy use by tenants, embodied carbon of materials used in developments and refurbishments, third-party procured goods and services.

Sub-metering:

A system that allows a landlord, property management firm, or other multi-tenant property etc. to bill tenants for individual measured utility usage. The approach makes use of individual water meters, gas meters, or electricity meters. It enables building and facility managers to have visibility into the energy use and performance of the equipment, creating opportunities for energy and capital expenditure savings.

Task Force on Climate-related Financial Disclosures (TCFD):

The TCFD has developed a framework to help public companies and other organisations more effectively disclose climate-related risks and opportunities through their existing reporting processes.

Appendix C:

Methodology notes

Page 8: Our 2019 carbon baseline

The GHG categories of ‘franchises’, ‘investments’, ‘processing of sold products’, ‘upstream transportation’, ‘downstream transportation’ and ‘upstream leased assets’ were excluded from our Scope 3 screening as they are not relevant to our business. Emissions associated with visitor travel were quantified as part of this project but have not been included in our baseline as they are not complete for all assets and an industry-standard methodology for handling such emissions has not been proposed.

All carbon emissions are weighted by ownership stake. For example, if we own 50% of an asset we have included 50% of the associated total emissions for that asset in our pathway. See page 6 for an explanation of why we chose the equity stake approach over the operational control approach.

Energy use in buildings (Scope 1, Scope 2 and Scope 3: Energy use by tenants)

We have followed GHG Protocol Accounting rules for attributing energy consumption in buildings between landlord and tenant. In these rules, any emissions associated with energy procured by the landlord on behalf of the tenant must be counted within the landlord’s Scope 1 and 2 emissions unless it is directly sub-metered to a tenant i.e. the quantity of the tenant’s consumption is known. For the majority of our assets for which we have whole building energy consumption, we have estimated the share between landlord and tenant based on industry standard models, but in our pathway have aligned with GHG Accounting rules as outlined above.

In calculating carbon emissions from energy use in buildings we have used location-based carbon factors rather than market-based carbon factors (those specific to the suppliers from whom we procure the energy). We believe that this method is in keeping with the principle of the energy hierarchy as it incentivises energy reduction over offsetting in the form of procuring green tariff energy. There are questions around the additionality of such energy supplies.

For some assets, whole building energy consumption was not available. For example in some cases we only held data on the base building consumption. In these cases, we have estimated the residual consumption of the building. This estimation process follows a methodology and set of analytical tools developed by the UK energy and carbon advisory company Verco. Their approach is based on their work in developing the UK Government’s evidence base for non-domestic building energy usage – the Building Energy Efficiency Survey (BEES).

Scope 3: Purchased goods and services

This has been calculated using our total supplier spend across the entire business and converted into carbon using spend-based emission factors (CO₂e/\$) from the Quantis Scope 3 Evaluator. This is in line with the UKGBC’s ‘Guide to Scope 3 Reporting in Commercial Real Estate’.

Scope 3: Embodied carbon from developments

Emissions from development activity have been calculated using floor area-based carbon intensity factors from the ‘Construction Carbon Assessment Tool’, developed by the Scottish Futures Trust,

Construction Scotland Innovation Centre and Circular Ecology. This provides embodied carbon footprint data for a sample of more than 400 construction projects across a range of building types including offices, retail and residential.

Scope 3: Other

This includes carbon emissions from upstream transmission and distribution of energy, business travel, employee commuting, water and waste. All carbon emissions figures have been calculated using primary activity data and BEIS emissions factors for 2019. Employee commuting emissions are based on the findings of an employee commuting survey.

Page 8: Our ‘business-as-usual’ carbon emissions forecast

Having set our carbon baseline for 2019, we explored how our carbon impact might evolve over the next 10 years. Using information from our strategic plan, capital expenditure plans for each asset and development pipeline, we developed a business as usual forecast scenario. This provides us with a base case against which to measure the impacts of our strategy. We factored in the anticipated effects of grid decarbonisation so that we can account for savings from actions we take versus those due to external factors.

Some emission sources are expected to undergo a smooth gradual decarbonisation over time. For example, emissions from energy use in buildings decrease over time even as the portfolio grows in size due to the anticipated effects of grid decarbonisation. Some sources are ‘lumpier’ in nature, such as embodied carbon from developments. These are added to the pathway in the year of completion.

Our pathway prediction will be revised over time as new information becomes available. We have identified the factors that our pathway is most sensitive to – the scale of developments and the overall size of our property portfolio among them. As with our 2019 baseline, all emissions are accounted based on our equity stake in each asset/fund.

Energy use in buildings (Scope 1, Scope 2 and Scope 3: Energy use by tenants)

We have used predictions from the International Energy Agency (IEA) for grid decarbonisation to 2030 in each country we operate in to produce our business as usual forecast.

Scope 3: Purchased goods and services

Emissions from purchased services are predicted to change proportionally with the size of the property portfolio. This is based on our understanding that the majority of our third party procured services relate to activities which scale with portfolio size.

Scope 3: Embodied carbon from developments

Emissions from embodied carbon in developments are based on our future development pipeline predictions. We have assumed that all future developments are built to industry standard embodied carbon intensity. We have not applied any averaging or smoothing to the pathway. Emissions from developments are counted towards the pathway in the year of completion, including phased or multi-year projects. Grid decarbonisation effects are not applied to

embodied carbon. In reality, we would expect embodied carbon from developments to fall even if we take no action as the operations of product manufacturers, distributors and contractors are partly decarbonised, but we cannot quantify this effect robustly enough to include in our business as usual pathway.

Scope 3: Other

In our business as usual scenario, emissions from employee commuting, business travel and waste are expected to remain static throughout the 10 year period.

Page 9: Our carbon emissions forecast

Energy use in buildings (Scope 1, Scope 2 and Scope 3: Energy use by tenants)

Our net zero carbon pathway shows the impacts of reducing energy use intensity in each of our assets to comply with the more stretching of a) the CRREM 2030 EUI benchmarks for the relevant country and asset type or b) the net zero carbon definition set by the local Green Building Council or local regulation in the relevant country (if applicable). Further to this, our pathway assumes that all emissions from natural gas and oil (i.e. Scope 1 emissions) will be eliminated by 2030 through the electrification of heating systems or use of geothermal/district heat networks.

Scope 3: Purchased goods and services

Our net zero carbon pathway shows the impacts of a 30% reduction in the carbon intensity per unit spend on purchased goods and services. This is on top of the effects of grid decarbonisation which we estimate will drive a 40% reduction between 2019 and 2030, based on the current distribution of our portfolio’s activities by country today and projections from the IEA.

Scope 3: Embodied carbon from developments

Our net zero carbon pathway shows the impacts of a 50% reduction in average embodied carbon intensity of new developments. This % reduction will vary depending on asset type – the majority of our developments are offices and residential. This is consistent with the level of decarbonisation recommended by the leading embodied carbon targets in the market today. Our forecast for development activity suggests that 2030 will see a greater degree of completed development than our base year of 2019. We may consider using an averaging or smoothing approach to provide a fair comparison in the event that development activity in 2030 is particularly high.

Scope 3: Other

Our net zero carbon pathway assumes a 5% year-on-year reduction in emissions from employee commuting, business travel, water and waste.