





# Sustainable development is at the heart of our business. It is more important than ever that we achieve net zero carbon by 2030.

Helical's Net Zero Carbon Pathway

#### Foreword



Matthew Bonning-Snook Property Director and Chair of Sustainability Committee Helical Plc

We are committing to becoming a net zero carbon business by 2030." In the UK, the built environment is responsible for 40% of the country's total greenhouse gas emissions. If the UK is going to achieve its commitment of becoming net zero by 2050, there needs to be rapid transformational change within the built environment and real estate sector.

> environment emissions. We therefore recognise we need to be a part of the transformational change that is required, while still delivering long-term sustainable growth to our shareholders. In consideration of this, we are committing to becoming a net zero carbon business by 2030. Transitioning to a low carbon business has been a key priority for Helical, firmly embedded in our sustainability strategy 'Built for the Future', and we are proud of the great progress we have made so far. Last year, in support of our strategy, we published 'Designing for Net Zero', a guide to aid our professional teams on our projects to challenge carbon from the initial design phase, through to the construction and operational phase. We have identified meaningful methods for reducing both our embodied and operational carbon emissions and we have taken a further, significant step: to sign up to the Better Buildings Partnership Climate Commitment.

As an office investment and development company, Helical's portfolio is a contributor to these built

This is our Net Zero Carbon Pathway. It outlines where we are now, where we need to get to and the key actions we will take over the following years to achieve that aim. Our portfolio is already seizing the array of opportunities available for pivoting towards net zero carbon. We have identified particular areas of focus in the coming years, including the transition to electrify our buildings, increasingly embedding circular economy actions into our new projects and identifying a high-quality carbon offset plan.

Actively engaging with our people and wider value chain is crucial if we are to achieve our ambitious targets. It is imperative for us to bring social, economic, and environmental benefits to the areas in which we operate. We strive to deliver "best in class" office buildings incorporating sustainability, wellness, smart technology and enhanced tenant amenities. By creating these low carbon, climate resilient spaces we are ensuring that Helical continues to deliver long term sustainable value for our shareholders and wider stakeholders.



## Helical has committed to achieve net zero carbon by 2030 for both operational and embodied carbon.

Setting this commitment and developing our Net Zero Carbon Pathway demonstrates our efforts as a responsible business and contributor to the UK's goal of decarbonising the economy by 2050.

In its simplest terms, net zero carbon involves achieving a balance between the amount of carbon emitted into the atmosphere and the carbon removed from it, following a straightforward hierarchy of actions. This hierarchy begins with understanding current and projected emissions, reducing embodied carbon, optimising energy efficiency, maximising on-site renewable energy, procuring energy from high-quality renewable sources and finally, using high-quality carbon offsets for any residual emissions.

Our Net Zero Carbon Pathway reviews the emissions from the key long-term assets held in our portfolio and considers future acquisitions in line with our wider business strategy. We have already undertaken significant efforts to optimise the performance of our current assets as they have all been refurbished or redeveloped in recent years. Our portfolio is well placed to transition to net zero with 99% of our assets (by value) already compliant with the proposed legislative requirement that all rented commercial buildings achieve a minimum EPC of a 'B' rating by 2030. Market research suggests only 23% of commercial assets are currently compliant with significant capital outlay likely to be required to take non-compliant buildings up to the minimum standard.

One of our main challenges to achieve net zero carbon will be reducing the use of gas within our existing portfolio. To address this, we are exploring the potential of "green" gas and the options of increasing our connections to district heating and cooling networks. Longer term, we will seek to replace gas boilers with electric ones or other onsite renewable solutions.

For our future assets, significant initiatives are being undertaken to minimise embodied and operational carbon levels. At 33 Charterhouse Street, through the careful design and selection of materials, we have reduced the embodied carbon to 40% below the current RIBA benchmark. We will also aim to deliver what we refer to as "Carbon Friendly New Build" schemes where we might re-use or recycle elements of the existing building, for example, by incorporating the existing structural frame in a new development to minimise the carbon impact. We will target a 600 kgCO<sub>2</sub>/m<sup>2</sup> embodied carbon intensity for new developments.

### Executive summary

(continued)

We are already taking decisive actions to ensure that we are on track for a net zero carbon target year of 2030. Our commitment will mean that we need to carefully evaluate the assets that we acquire in order to deliver truly sustainable buildings. We will need to build on the efforts we have undertaken with 33 Charterhouse Street for all new developments reducing embodied carbon through circular economy measures, innovative design and material selection.

We will look to reduce embodied carbon between now and 2030, and will seek to offset 100% of the residual embodied carbon for new developments that we complete in the interim. We will be applying the principles above to deliver 'net zero' carbon buildings, such as 33 Charterhouse Street and 100 New Bridge Street.

We will seek to optimise our operational energy, with the ambition that we comply with the UKGBC's 2030 Target for Offices of 90 kWh/m<sup>2</sup>. We will continue to procure the highest quality renewable energy tariffs, recognising that some of the tariffs available on the market do not meet the UKGBC's requirement that tariffs must create additional renewable energy supply in the grid rather than tapping into existing supply. In addition, we will work with our tenants with the aim that they do the same. Lastly, we will need to consider our carbon offsetting strategy. We recognise that the market is shifting rapidly towards high-quality carbon offsets that comply with the Oxford Offsetting Principles. We will therefore work to ensure that any offsets that we procure are used only for hard-to-abate emissions, that they have no negative unintended consequences, that they have positive co-benefits (for instance with biodiversity enhancement), and that we are transparent about how we use them as part of our net zero carbon strategy. We recognise the importance of frequent and transparent communication as the industry refines its understanding of net zero carbon. In light of this, we

We recognise the importance of frequent and transparent communication as the industry refines its understanding of net zero carbon. In light of this, we have signed up to the Better Building Partnership's Climate Commitment. This provides an accountable and transparent framework for delivering net zero carbon for a property portfolio. We are publishing this report as our first step of this commitment. In the coming years, we will continue to report on our progress as we move towards net zero carbon across our portfolio and deliver London office spaces that are future-proofed for a changing climate.

## $90\,kWh/m^2$

Target for operational energy optimisation

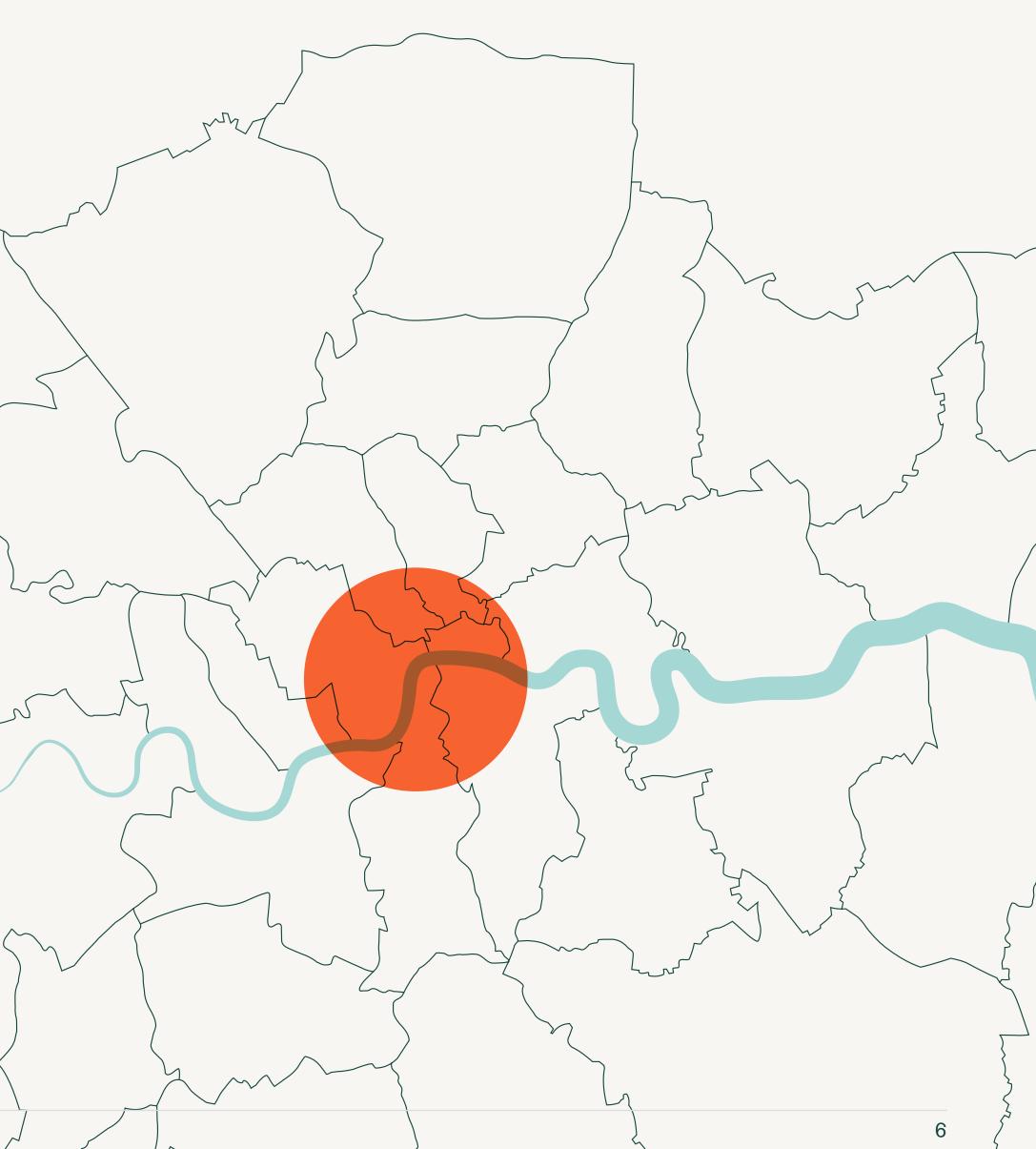
KgCO<sub>2</sub>/M<sup>2</sup> Target for embodied carbon intensity for new developments

100%

Offset of the residual embodied carbon for new developments

# Our strategy

Our strategy is to create and manage a high-quality portfolio of multi-let Central London office buildings which incorporate sustainability, wellness, smart technology and enhanced tenant amenities. We focus on well located buildings in vibrant areas of London where we can add value through active management. We will seek to acquire new assets for major refurbishments or new developments to provide the "best in class" space that our customers are seeking. Any existing assets which do not fulfil this strategy will be sold and proceeds reinvested into new opportunities.



Helical's net zero carbon commitment

# Helical's net zero carbon commitment

Helical is a signatory to the Building Better Partnership's (BBP) Climate Commitment, which provides a clear, accountable and transparent mechanism for real estate companies in the UK to drive towards net zero carbon by 2050.

The commitment has specific emissions criteria which need to be included to ensure transparency and accountability. These include emissions associated with the following activities: energy and water to operate the building, waste generated during the operation, refrigerants, purchase of goods and services, new development, refurbishment and fit-out works and finally, emissions generated from end-oflife processes. A summary of these activities and emissions are listed within Appendix I.

While the overall goal of the commitment is 2050, Helical has committed to achieving net zero carbon for its portfolio by 2030. This commitment will be for both operational and embodied carbon. For operational emissions, we will ensure that we can optimise this in the years leading up to 2030 with a view to using high-quality carbon offsets only if necessary and as a last resort in the target year. For embodied emissions we will be carefully reviewing the whole life carbon associated with each new project and identifying reduction opportunities.

#### Scope and boundaries

Aligned with best practice our Net Zero Carbon Pathway follows a whole life carbon approach. We will therefore be including both operational and embodied carbon consistent with the categories requested in the BBP Net Zero Carbon Framework.

Although not a requirement within this Framework, we will be including our corporate head office emissions. Whilst not a major source of emissions for Helical, these have been included because we have been addressing these through an implemented reduction program. We look to decrease our head office energy, waste, water usage and car use; we will use high quality carbon offsets for the remaining unavoidable emissions.

We have opted to exclude other emissions sources that are immaterial to our pathway, such as emissions from landlord purchased water. We will however seek to improve the methodology for calculating these emissions as well as take steps to improve data availability and quality, so that they can be accurately measured. A full list of the emissions excluded and included is available in our 'detailed scope table' within Appendix I.



Helical's net zero carbon commitment

# Defining net zero carpon

While there is no universal definition of net zero carbon, global and industry-appropriate definitions are coalescing. In essence, net zero carbon is achieved when a company removes as much carbon as it emits.

Our Net Zero Pathway is aligned with industry best practice:

- The BBP Net Zero Carbon Pathway Framework
- UKGBC net zero carbon hierarchy

According to industry guidance a building can be regarded as net zero if the following five steps are implemented:



and the



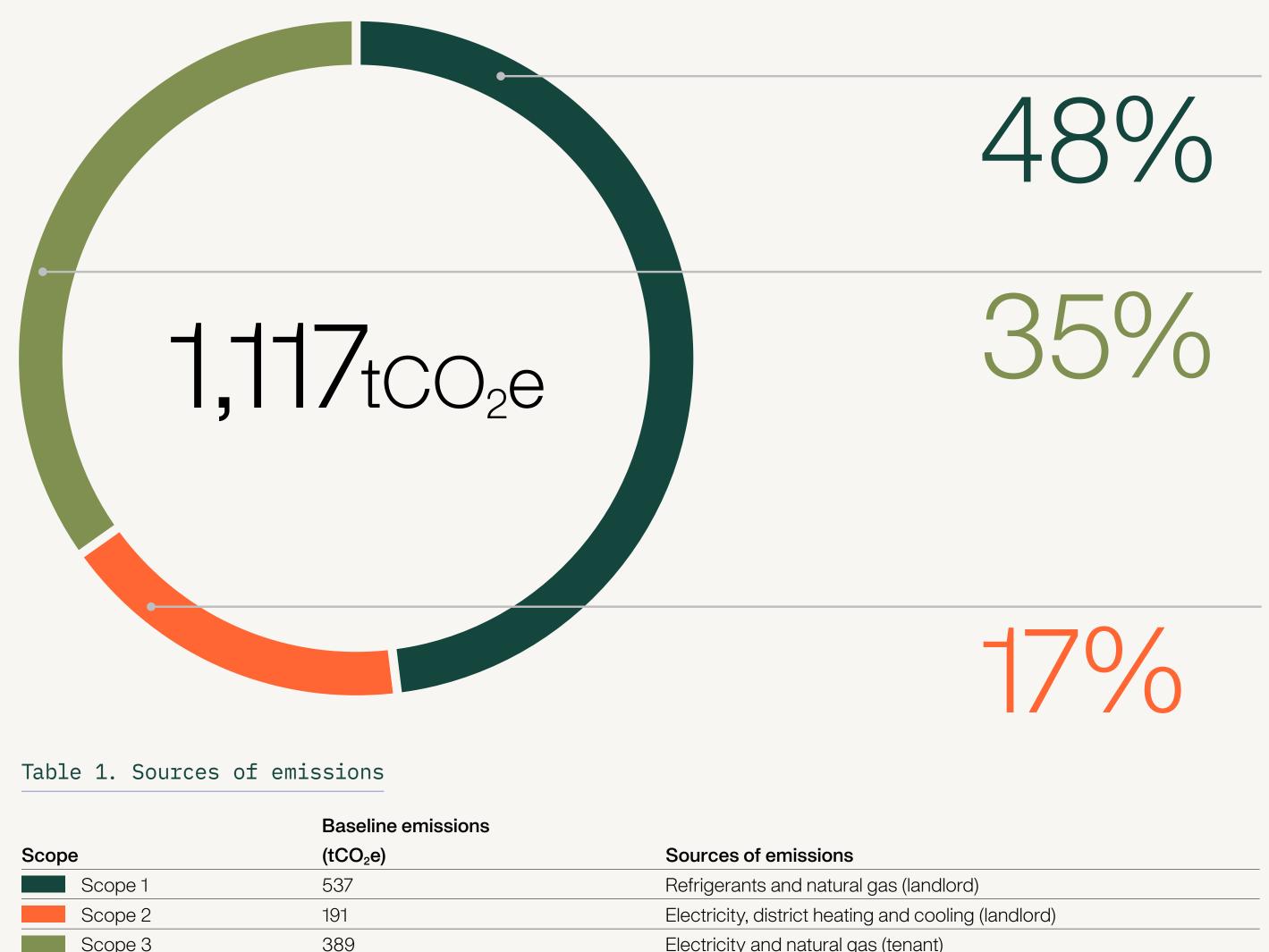
To be considered net zero carbon a company must demonstrate that it has gone through this sequence of steps. Critically, it must demonstrate that it has exhausted all reasonable previous steps before turning to the use of high-quality carbon offsets. This guidance has been elaborated on by many entities and was transformed into global guidance in the World Economic Forum's The Action Plan for Net-Zero Carbon Buildings.

Additionally, the UKGBC guidance on energy performance targets for operational offices is of particular relevance to our portfolio. These targets provide an outcome-based approach that should be used when determining a company's energy performance targets.

## Baseline footprint

Helical's goal is to reach net zero carbon compared with its baseline year by 2030. As the first step in devising our pathway, we need to understand what our current carbon footprint is for Scope 1,2 and 3 emissions (Figure 1, Table 1). Helical has selected 2019-2020 as its net zero carbon baseline year; this was deemed the most appropriate year as our buildings were at their highest consistent occupancy and, structurally, the portfolio has not changed significantly since that point.

In the base year, almost half of our emissions were Scope 1, as we procure energy for most of our assets, including natural gas. We have used the market-based approach to calculate our Scope 2 emissions and as we procure the majority of our electricity from high-quality renewable sources, the primary sources of our Scope 2 emissions are district heating and cooling. Our Scope 3 emissions include our tenants' energy use. However, as we procure renewable electricity for most of our tenants these emissions are relatively low. Embodied carbon emissions are not included in our baseline as the projects that were proceeding at the time were part way through and not assessed from a carbon perspective. Our Scope 3 emissions will increase therefore as we now include all our refurbishment and redevelopment projects in our carbon modeling. This is reflected in our emissions projection to our target year (Figure 2). As we progress on our net zero carbon journey we will measure our embodied carbon emissions on a whole life basis and include these in our carbon footprint.



	Baseli
Scope	(tCO <sub>2</sub> e
Scope 1	537
Scope 2	191
Scope 3	389
-	



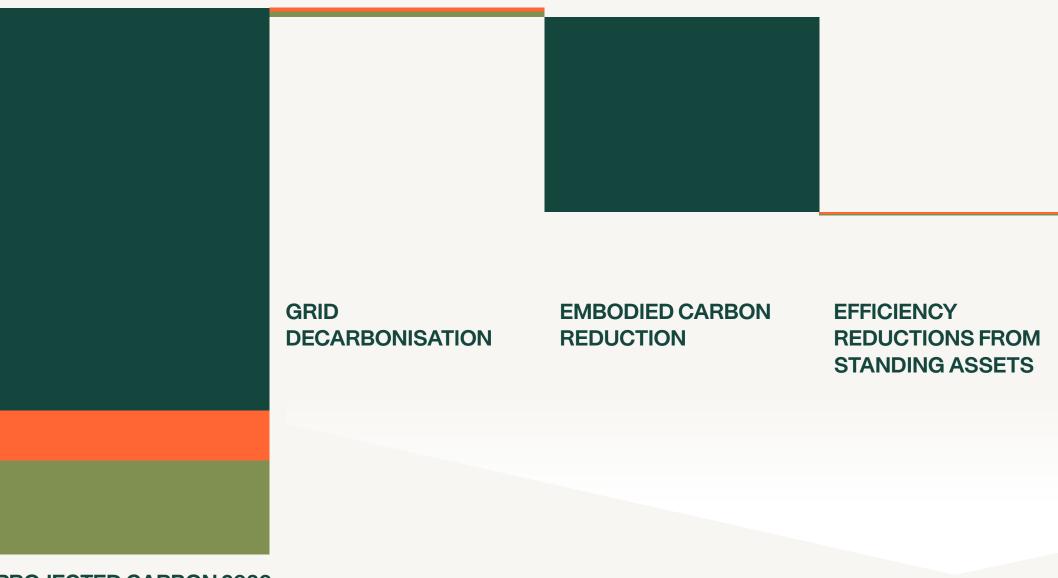
### Baseline footprint

(continued)

#### Figure 2. Helical's Net Zero Carbon Pathway

Embodied carbon from refurbishment
Operational – Tenant
Operational – Landlord





PROJECTED CARBON 2030 (BUSINESS AS USUAL)

Helical's Net Zero Carbon Pathway

A large portion of our anticipated emissions come from the embodied carbon associated with new developments. We will allow a grace period of three years to bring the operational carbon emissions of any new asset to a net zero carbon level. This is aligned with Helical's business model whereby we may acquire assets which cannot be redeveloped immediately (for example where they have unexpired leases). All efforts will be made to ensure that these assets have the minimum embodied carbon associated with them, that they are energy efficient, and powered by high-quality renewable energy.

The below graph (Figure 2) shows that, in a businessas-usual situation, our carbon emissions from our portfolio are projected to be 28,000 tCO<sub>2</sub>e in 2030.

If we meet the energy and carbon targets set out in this pathway we expect this to reduce to 15,000  $tCO_2e$ . This represents a 46% reduction in carbon emissions by 2030. Most of these reductions will come from efforts to reduce embodied carbon. A smaller portion will come from grid decarbonisation and energy efficiency at existing assets. No new renewable energy is reflected because we already procure high-quality renewables for all our landlord and part of our tenant spaces. Therefore, the focus is to support tenants to switch to high-quality renewables.

Given the prominence of embodied carbon in our pathway a proportion of our emissions will still need to be offset using high-quality carbon offsets. To achieve the reductions necessary we have outlined our targets and plans for each area of the net zero carbon hierarchy.

<sup>1</sup>Though we are taking a market-based approach to our Scope 2 emissions, where electricity is procured directly by tenants and the source is unknown, we assume a small proportion of carbon reductions will be attributable to grid decarbonisation. We will follow this approach until we can ensure all tenant electricity is supplied by high quality renewables.

> **15,000** tonnes C0<sub>2</sub>e

EFFICIENCY REDUCTIONS FROM REFURBISHMENT TENANTS SWITCHING TO RENEWABLE ELECTRICITY

OFFSET RESIDUAL EMISSIONS TO ACHIEVE NET ZERO CARBON FROM 2030 ONWARDS

PROJECTED RESIDUAL CARBON IN 2030 (NZC) Reduce embodied carbon

# Reduce embodied carbon

Embodied carbon comes from the emissions created by a building's construction up to the point of practical completion.

We will target a 600 kgCO<sub>2</sub>/m<sup>2</sup> embodied carbon intensity for new developments and what we refer to as: "Carbon Friendly New Build", where we might re-use or recycle elements of the existing building, for example, by incorporating the existing structural frame in a new development to minimise the carbon impact.

Our approach is consistent with comparable LETI targets and we will continue to review and revise our target in the future as further guidance and benchmarks emerge.

We have already undertaken a series of actions on the ongoing new developments currently in our portfolio in alignment with our guide 'Designing for Net Zero'. The 10-step process in this guidance has been applied to the assets under development ensure that opportunities to minimise embodied carbon are taken wherever possible. The steps are:

01/ Site planning and building form	06, Rec ten
02/ Optimising facades	07/ Sp cor
03/ Optimising materials and construction choices	08/ Ma exp
04/ Design performance	09/ Spe ren
05/ Specifying efficient landlord systems	10/ Mo

ecommending efficient nant systems

ecifying intelligent ntrols/capturing data

anage occupant pectations

pecifying on-site newables

onitor and verify

In order to reduce our embodied carbon emissions in the future we will carefully consider the types of assets that we acquire and the extent to which elements can be reused or recycled. We will also measure carbon throughout the life cycle of all future developments so that we can ensure that we are minimising emissions and accounting for any residual emissions that will need to be offset. While we will endeavour to have minimised our carbon emissions from our operations by our target year, it is highly unlikely that we will be able to achieve net zero carbon for embodied emissions without the use of some high-quality carbon offsetting as a last resort.

While we look at reducing embodied carbon between now and 2030, we will seek to offset 100% of the residual embodied carbon for new developments that we complete in the interim. We will be applying the principles above to deliver 'net zero' carbon buildings, such as 33 Charterhouse Street and 100 New Bridge Street.

 $m^2$  $\sqrt{900}/11$ 

Target for embodied carbon in new developments

Case study:

# Minimising embodied carbon at 33 Charterhouse Street

Helical is undertaking a new 'net zero' development at 33 Charterhouse Street where we are making significant efforts to minimise our environmental impact. We have adopted the use of recycled materials in the construction process, within the aluminium cladding, steel frames, raised floor tiles, light fittings and are using reclaimed bricks. We have used Earth Friendly Concrete that is 50% less carbon intensive than the standard concrete mix. Our steel was sourced from recycled/ re-used steel in the UK benefiting from the lowered transportation related emissions. Through these means, this new development has been delivered with an embodied carbon level that is 40% below the RIBA benchmark.

## 40%

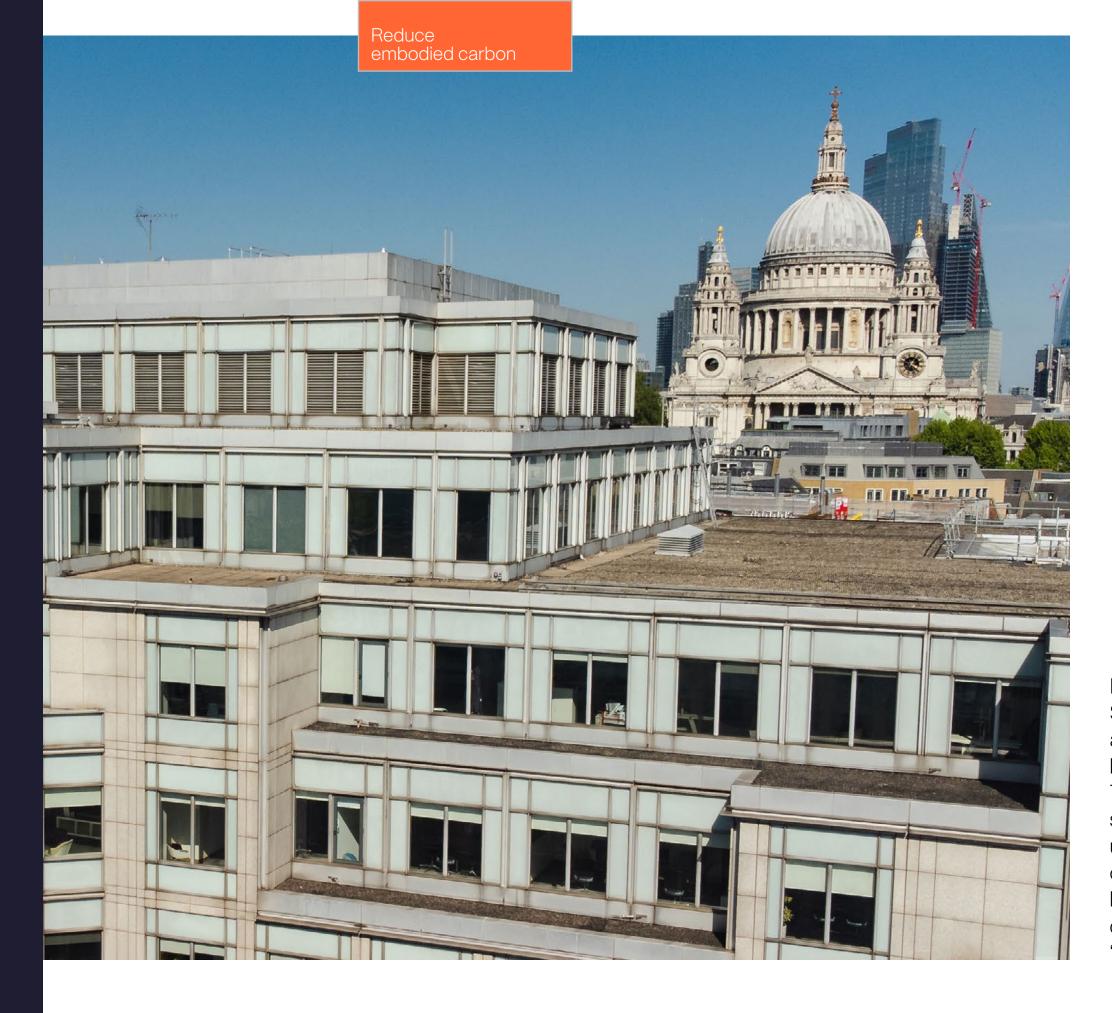
The building will achieve 40% lower embodied carbon than the RIBA benchmark

50% Embodied carbon reduction of Earth Friendly Concrete



#### Outstanding Targeting BREEAM "Outstanding"

5\* NABERS rating target



Case study:

In March 2022, Helical acquired 100 New Bridge Street, a c160,000 sq ft building between Farringdon and Blackfriars stations. The office is currently let with the lease expiring in December 2023. This "Carbon Friendly New Build" will have significantly less environmental impact than a ground up development due to the retention of large portions of the existing structure. We plan to incorporate the latest smart building technology as well as highquality tenant amenities to create a new best in class 'net zero' and all electric office building.

## "Carbon Friendly New Build" proposed at 100 New Bridge Street

### Reduce operational energy

Operational energy is the energy used to run a building and focuses largely on electricity and gas supply.

Helical intends to achieve the UKGBC's target for offices of 90 kWh/m<sup>2</sup> by 2030. We will review the EUI (Energy Use Intensity) targets as we progress on our journey and will strive to continue to set ambitious targets aligned with Paris Proof Targets beyond 2030.

Our portfolio already operates with relatively low energy intensity (Figure 3) as the buildings within our portfolio have all been recently developed or refurbished. We have been working to electrify our buildings which will ensure that they are able to be supplied by renewable energy as the grid continues to decarbonise. We will, however, explore the use of district heating systems and are currently considering connecting The Bower to the Bunhill Heat and Power Network and have already connected a number of our other buildings to the Citigen District Heating Network. These actions will further reduce our Scope 2 emissions especially if we are able to exploit these options on future assets.

Using district heating networks affords numerous benefits for city-based portfolios like ours. These deliver significant energy and emissions savings compared to onsite mechanical and electrical 'plant heavy' alternatives. District heating networks operate in a number of ways, Citigen, for example, uses a modern tri-generation system with internal combustion engines but also incorporates the latest geo-thermal and heat pump technologies. By contrast. The Bunhill Heat and Power Network uses excess heat from the London Underground network to provide a renewable source of energy.

We know that there is more that we need to do to achieve our 2030 target. For our existing assets, we will ensure that we evaluate what energy optimisation interventions need to take place. While we are increasingly electrifying our portfolio there will still be some challenges around removing gas supplies to assets in the short term as some have only recently been completed and a wholescale change now would not seem appropriate from a carbon perspective.

Our aim is to replace gas supplies to our assets at the point of intervention to ensure that we are entirely electrified as soon as possible. In the lead up to the intervention years we will continue to purchase green gas that is compliant with the Green Gas Certification Scheme.

#### Figure 3. Energy intensity of current assets compared with UKGBC Paris Proof Interim Targets of 2020-2025 and 2025-2030



#### Case study:

### Piloting Enhanced Building Management Systems at The Bower

In January 2021, Helical and our managing agents, Ashdown Phillips, trialled an upgraded, technologically advanced Building Management System (BMS) at The Warehouse, one of the buildings at The Bower. During the pandemic it had been noted that in periods of low occupation the building was still using large amounts of energy more consistent with a fully occupied building. In response to this a non-intrusive assessment and installation of an integrated enhanced BMS was actioned. The BMS uses data and a set of operating "rules" to assess when and how the equipment should operate and creates an alert for when it is running outside of these "rules" and can be automatically shut down. In December 2021, we reviewed the outputs from this system and found that a yearly saving of 213,000 kWh of electricity and 840,500 kWh of gas per annum had been achieved. Given the success of this trial we have committed to roll this out to other suitable assets within the portfolio.



## 213,000 kWh

Yearly electricity saving

## 840,500 kWh

Yearly gas saving

## Maximise renewable energy

In alignment with the net zero carbon hierarchy, the possibility of supplying renewable energy on-site must be explored before procuring it offsite. The opportunities for on-site renewable energy are not viable at scale at our existing assets, due to their high density urban environment. We have installed solar PV panels on 33 Charterhouse Street with the aim of powering the majority of landlord-controlled areas with the support of the Citigen ground source heat pumps. Given the limited roof space available on our existing buildings, our focus will be on ensuring that we procure the highest-quality renewable energy to supply our offices.



To this end, Helical currently procures a proportion of our energy from high-quality renewable sources. The UKGBC identifies three criteria for purchased energy within net zero carbon for it to be considered high-quality:

- Renewably sourced
- Be backed by a Renewable Energy Guarantee of Origin (REGO) certificate
- Create additional renewable energy capacity to the grid

Most of the REGOs available in the UK market at the moment do not meet the third criteria of additionality. Even though such REGOs are currently compliant with net zero carbon their inability to spur the increased generation and supply of renewable energy to the grids suggests that this might not be the case in the future. In light of this Helical is looking to future-proof its portfolio and ensure that it is doing its part to stimulate the uptake of renewable energy in the UK. As such Helical has committed to ensuring that its electricity is supplied using high-quality green tariffs.

# Offset unavoidable residual emissions

We are constantly making inroads to remove carbon emissions from our value chain but we will require carbon offsets for some of our residual difficult-todecarbonise emissions. In alignment with the Better Building Partnership requirements and those of the Oxford Offsetting Principles we will only use such offsets when all other options for reducing our emissions have been exhausted. These will mostly come from the embodied carbon emissions in our portfolio. Based on our current projections, we anticipate that we will have c.15,000 tonnes of carbon to offset in our target year.

We will ensure that the carbon offsets we procure align with the Oxford Principles for Net Zero Aligned Carbon Offsetting, specifically:

- Additionality: We will ensure that the carbon offset would not have taken place without the specific offsetting activity that we have funded.
- Avoid negative unintended consequences: While it is challenging to anticipate all consequences, these could include the loss of livelihood to farmers, violation of local land rights, and reductions in biodiversity. We will ensure that we vet all projects to avoid such impacts.

- **Permanent:** Without good management, there is a risk that emissions will be re-released into the atmosphere. For instance, if not effectively managed, a reforestation project could become ineffective if the trees are later destroyed by fire, pests, or illegal logging, then the stored carbon is reversed, and the offset is no longer valid.
- Type of offset: We recognise that there is a need to transition from emissions reduction offsets (that avoid the release of new emissions into the atmosphere) to carbon removal offsets (that remove emissions directly from the atmosphere, such as through afforestation or carbon capture and storage (CCS) and bioenergy with carbon capture storage). Our aim is to ensure the use of carbon removal technologies to the extent possible. This will largely need to be through the low-technology approaches currently available, such as afforestation, reforestation, and soil organic carbon sequestration, but this should change over time.
- Verify and disclose: There is a lack of transparency in the carbon offsetting market, especially around carbon pricing. Helical is committed to increasing transparency by disclosing the proportion of its emissions that will be compensated for using carbon offsetting, indicating the prices that it will use for offsets, and outlining the kinds of offsets that it will use.





The carbon offsetting market is evolving rapidly to meet the demand for high-quality offsets. Helical will therefore monitor these developments to ensure that its approach to offsetting reflects the latest principles and guidance.



# Reporting, disclosures, and appendices

Our Net Zero Carbon Pathway is part of our efforts as a responsible business to contribute to the UK's goal of decarbonising the economy by 2050.

#### Governance

Our entire business is committed to driving forward the sustainability agenda. We have appointed a Head of Sustainability who will ensure that these efforts are coordinated. Our activities and reductions will be monitored on an ongoing basis. We will also monitor any changes to legislation and guidance in this fast-evolving landscape.

#### Reporting

As a signatory to the BBP Climate Commitment, we will ensure that we publish our progress against our net zero carbon commitment each year. This will include transparency about progress against our net zero carbon targets, key initiatives, and carbon offsetting approaches.

## Appendix I – Detailed scope table

Business Area	Activity	Scope	BBP Requirement	In Scope	Commentary
Corporate	Operational energy consumption	1&2	No	Yes	
	Operational water consumption	3	No	Yes	
	Operational waste production	3	No	Yes	
	Company vehicles	3	No	Yes	
	Business travel	3	No	No	Determined immaterial due to limited business travel within the Group.
Investment Portfolio (direct real estate)	Landlord purchased energy (electricity & fuels)	1&2	Yes	Yes	
	Occupier (managed and unmanaged) purchased energy (electricity & fuels)	3	Yes	Yes	
	Landlord refrigerants	3	Yes	Yes	
	Occupier refrigerants	3	No	No	
	Landlord purchased water (managed and unmanaged)	3	Yes	Yes	
	Occupier purchased water (managed and unmanaged)	3	No	No	Data evaluated and determined immaterial accounting for less than 1% of our total emissions.
	Visitor transport	3	No	No	
	Customer supply chain emissions	3	No	No	
	Landlord purchased goods and services	3	Yes	No	Excluded due to limited ability to measure accurately. We will seek to improve the methodology for calculating these emissions.
	Occupier supply chain emissions	3	No	No	
	Visitor transport emissions	3	No	No	
Developments and Refurbishments	New development	3	Yes	Yes	
	Refurbishments	3	Yes	Yes	
	Landlord controlled fit-out	3	Yes	Yes	
	Occupier controlled fit-out	3	Yes	No	Excluded due to limited ability to influence these emissions. Helical will liaise with occupiers to understand the scale of emissions associated with these activities and opportunities to support their reductions.
	End of life	3	No	No	

## Appendix II – Our net zero carbon action plan

Our overall aim is to achieve net zero carbon by 2030. To achieve, this we are setting targets along the net zero carbon hierarchy and identifying the key actions we need to undertake to hit them.

Net Zero Carbon Area	Target	Actions	Metrics
Governance		Ensure operational and embodied carbon emissions are being monitored at least annually	Annual updated model
		Optimise data collection for tenant spaces	Percentage of tenant data estimated
		Ensure annual reporting of progress against targets	Annual sustainability report, including emissions by scope
		Engage with tenants to identify opportunities of mutual benefit	Tenant engagement plan
		Explore the need for internal carbon pricing	Report including potential for decarbonisation transition fund and shadow carbon price with indicative pricing ( $\pounds$ )
		Explore the need to undertake climate risk assessments on the physical and transitional risks to assets	Proportion of portfolio for which assessments have been conducted
Reduce embodied carbon	600 kgCO <sub>2</sub> /m <sup>2</sup> by 2030 for major refurbishments and new developments	Identify a grace period in which assets can be brought to net zero carbon	Net zero carbon section of acquisition check list – current proposal is 3-year grace period
	Offset 100% of residual carbon from future new developments and major refurbishments	Undertake net zero carbon audits on planned acquisitions on all refurbishments and developments	Net zero carbon audit summary results
		Monitor progress against the kgCO <sub>2</sub> /m <sup>2</sup> target by 2030 throughout life cycle	Emissions (kgCO <sub>2</sub> /m <sup>2</sup> ) at design, procurement, and practical completion stages
		Continue to implement circular economy solutions to reduce embodied carbon	Proportion of low carbon materials used (e.g., recycled, reused, lower carbon intensity) compared with virgin materials
		Calculate residual carbon from new developments and refurbishments and offset at the point of practical completion	Residual emissions (kgCO $_{\!\!2}/m^2\!)$ and carbon price used (£)
Increase operational efficiency	90 kWh/m <sup>2</sup>	Enable electrification of assets during any major refurbishments or new development processes	Investment in energy efficiency measures (£)
		Require Design for Performance (NABERS) for new developments	Energy intensity kWh/m²/yr
		Evaluate the viability of green gas as a transitional low carbon energy option prior to refurbishments	Independent assessment
$\mathbf{5}$		Optimise energy consumption data collection from tenanted spaces	Proportion of estimated tenant data (%)

#### Appendix II – Our net zero carbon action plan (continued)

Net Zero Carbon Area	Target	Actions	Metrics
Maximise on-site	100% of environmentally and financially viable on-site renewable energy solutions exploited	Maintain existing on-site solar PV	Energy generated (kWh/m²/yr)
renewable energy		Identify the opportunities for connecting future acquisitions to decarbonised district heating and cooling networks	Feasibility studies
		Undertake feasibility studies on future acquisitions to ascertain viability	Feasibility studies
		Evaluate benefit of on-site installations compared with procurement of high-quality renewable energy from the grid	Energy generated or cost (£kWh/m²/yr)
Maximise high-quality	Y 100% of procured energy is from high-quality renewable sources	Obtain detailed report of renewable energy mix from suppliers	Renewable energy breakdown (%)
renewable energy procurement		Identify any potential lower-quality renewable energy sources and phase out	Contracts with low-quality renewable energy
		Phase in high-quality renewable energy sources	Contracts with high-quality renewable energy
5		Evaluate the feasibility of developing a Power Purchase Agreement (PPA) to meet supply	Feasibility assessment
		Continue to evaluate and implement connections to district heating/cooling	Energy supplied (kWh/m²/yr)
Procure high-quality	Procure carbon offsets that are aligned with the Oxford Offsetting Principles for residual emissions only in the target year onwards	Develop a carbon offsetting strategy	Strategy document
carbon offsets		Identify appropriate carbon price	£/tCO <sub>2</sub>
		Identify providers of high-quality carbon offsets for 2030 onwards	List of providers
$\bigcirc$		Identify project verifiers to audit these projects	List of projects

#### HELICAL

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