# NET E ROOM

Carbon Pathway

January 2021







We acknowledge there is a climate emergency and recognise that the building and construction industry significantly contributes to the global carbon footprint. This is why we want to play our part in Building Back Better and transition to a green economy, by becoming a net zero carbon business by 2030. First and foremost, we will be focusing our efforts on driving down our operational and embodied carbon emissions in line with our approved science-based targets, aligned to limit global warming to 1.5°C.

This will be a significant challenge for us, particularly given many of our buildings are older and often listed, and therefore need to be carefully retrofitted without altering their appearance or character. Wherever possible we aim to retain the existing structures and repurpose our buildings, transforming them into modern spaces, whilst saving on embodied carbon. We directly manage our buildings and foster close relationships with our customers, giving us a unique opportunity to collaboratively drive down emissions, whilst our in-house facilities management team gives us greater control over our operational energy consumption. We will be supporting and engaging with all of our stakeholders to deliver this commitment and look forward to sharing our progress."

Graham Clemett, CEO Workspace Group PLC

# WE WILL BECOME A NET ZERO CARBON BUSINESS BY 2030



# **Our Commitment**

#### **Our Commitment**

In September 2019, Workspace signed up to the Better Building Partnership (BBP) Climate Change Commitment to deliver net zero carbon real estate portfolios by 2050. Since then we have carried out a review of our business and value chain emissions and are pleased to announce that we have brought this forward to 2030. This document will lay out how we plan to achieve net zero carbon including details on scope, boundaries and reporting metrics.

Going forward, we will be disclosing our progress against this pathway on an annual basis, ensuring that we remain transparent about activity and can gauge progress over time. We will also be sharing asset-level energy performance and developing a comprehensive climate change resilience strategy in line with the Task Force on Climate-Related Financial Disclosure (TCFD). We encourage all real estate owners to join us and the other 24 signatories to sign up to the commitment and develop their own net zero carbon pathways.

Environmental, social and governance (ESG) has become increasingly important to our stakeholders, particularly customers, investors and employees. In order to attract London's brightest businesses, we need to exceed their ESG expectations and ensure our service can provide them with the tools to manage their own environmental and social impact. Our customers are asking us questions about our energy contracts, recycling services, and energy-saving initiatives. Our investors are seeking greater transparency of climate-related risks and mitigation, and our employees want reassurance that they are working for a responsible business, aligned to their personal values.

Our net zero carbon commitment is a key aspect of our wider ESG strategy, which covers our development practices, operational emissions and our social impact. It ensures that we operate responsibly in our dealings with all stakeholders and reinforces our commitment to the sustainable long-term growth of our business and employment-led regeneration of London. The highest level of responsibility for our ESG strategy, accountability and performance lies with our Chief Executive

Officer and the Board of Directors. The strategy is implemented by our ESG committee which is made up of employees from across the business and we have committed to facilitate workshops and seminars to equip employees with the relevant skills and knowledge to deliver our ESG targets. This year we also introduced environmental and social objectives for all employees across the business. Working alongside our suppliers, partners and customers, we are confident that we will reduce our carbon footprint, build climate resilience and help create healthy sustainable communities.

At Workspace we have reviewed the 17 Sustainable Development Goals (SDGs) against our ESG strategy and supporting objectives and targets. Although our operations are geographically concentrated within London, the SDGs have given us a better understanding of how our objectives and targets align to the broader global issues and helped us identify where we can make a positive change. Out of the 17 SDGs, goals 7, 9, 11, 12 and 13 were the most material to our net zero carbon pathway. You will see these goals throughout our delivery strategy below.















# **Our Net Zero Carbon Pathway**

To help us achieve our net zero carbon goal, we will be reducing our emissions across our operations and value chain in line with our approved science-based targets, which are in turn aligned with limiting the global temperature rise to 1.5°C above pre-industrial levels. Here is a summary of what our pathway to net zero carbon looks like.

It is important to note that our pathway will evolve over time as our knowledge and understanding improves, and as new technologies emerge. Where we can, we will look to accelerate our emission reduction targets in the future.



#### **Operational Carbon** (energy, water & waste)



**Reduce absolute Scope** 1 GHG emissions 42% by FY2030 from a FY2020 base year

- All new developments & major refurbishments to have electric heating & cooling systems
- Retrofit standing assets with electric heating & cooling systems
- Reduce heating demand by improving wall & ceiling insulation
- Reduce performance gap between design and in-use by following Soft Landings or NABERS Design for Performance Framework
- Look to obtain asset level energy efficiency ratings such as BREEAM in-use or NABERS UK
- Accelerate energy efficiency upgrades including LED/PIR lighting, BMS optimisation
- Improve energy monitoring and controls
- Customer engagement

















#### **Embodied** Carbon

-20%



**Reduce Scope 3 GHG from** capital goods 20% per sqft of net lettable area by FY2030 from a FY2020 base year

- All new developments & major refurbishments to have an embodied carbon assessment
- Take embodied carbon into account when making development decisions
- Set specific embodied carbon reduction targets for new developments & major refurbishments
- Reduce the embodied carbon of development projects (using low carbon materials)

#### On-site Generation

- Install solar PV systems for all new developments and major refurbishments where possible
- Look to install solar PV systems for the 5 sites identified in the feasibility study carried out in 2020
- Continue to review the portfolio to identify further opportunities for on-site renewable energy generation



#### Renewables **Procurement**

100%



**Continue annually sourcing** 100% renewable electricity through FY2030

- Procure green gas upon next contract renewal\*
- Investigate opportunities to engage in power-purchase agreements (PPAs) to further drive the renewables market
- Survey customers who procure their own energy to gather data on existing renewable procurement, and use this to build on our existing strategy to encourage renewable procurement among customers

\*Backed by a REGO (Renewable Energy Guarantees of Origin) certificate



#### Offsetting

- Develop our company principles and approach to offsetting
- Explore internal carbon pricing options and setting up a decarbonisation fund
- Explore opportunities and the costs and benefits associated with investing in sustainable practices within our own supply chain (insetting)



#### **Third-party** Verification

- Extend scope of GHG emissions verification level
- Review science-based targets annually to ensure alignment with science and re-baseline if necessary
- Review carbon offsetting verification schemes to ensure they are aligned with our principles
- Support an industry net zero carbon certification for real estate











# **Our Carbon Footprint**

Before getting into the details, it is important to first understand our carbon footprint. To illustrate this, we have used our FY2019/20 carbon emissions which totalled 77,324 tonnes of carbon and have split the emissions up into our business and value chain activities.

The GHG Protocol Corporate Standard classifies a company's GHG emissions into three 'scopes':



#### Scope 1

Scope 1 emissions are direct emissions from owned or controlled sources. Our Scope 1 emissions are essentially our gas and fugitive emissions (refrigerants).

# 3,580 tCO<sub>2</sub>e

Natural gas	2,620
Fugitive emissions	828
Purchased heat	130
Vehicle emissions	3



#### Scope 2

Scope 2 emissions are indirect emissions from the generation of purchased energy, i.e. our electricity consumption. Scope 2 can be reported as location-based or market-based. A location-based method reflects the average emissions intensity of the grid whereas a market-based method reflects emissions from electricity purchased from a supplier, allowing zero emissions to be reported for contracts on a renewable energy tariff. Our Scope 2 market-based emissions are zero because we procure 100% renewable electricity, and our Scope 2 location-based emissions are 7,020tCO<sub>2</sub>e. To be fully transparent, we have used our location-based emissions in the chart (right).

# 7,020 tCO<sub>2</sub>e

Electricity (location based)

7,020



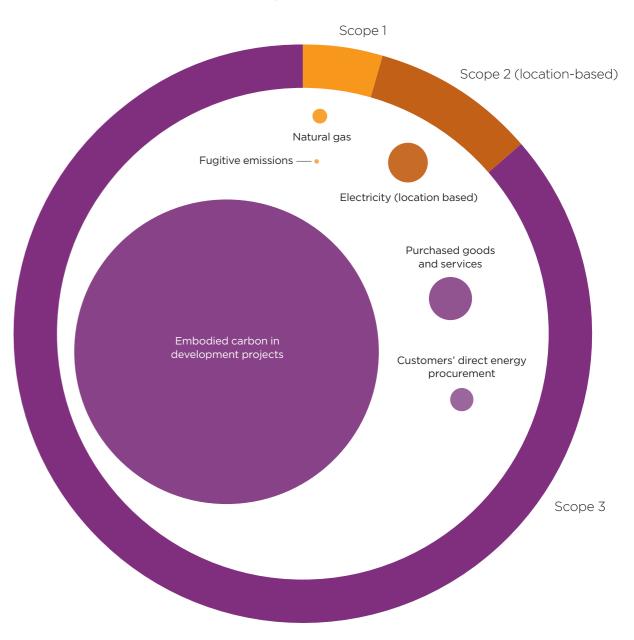
#### Scope 3

Scope 3 emissions are all indirect emissions (not included in Scope 2) that occur in the value chain, including both upstream and downstream emissions. The majority of our Scope 3 emissions are from the embodied carbon associated with our refurbishment and redevelopment activities. 10% of our total emissions are from 'purchased goods and services' which includes maintenance, service charge recoverable items and minor CapEx items. Some of our customers energy falls under our Scope 3 emissions where they procure their energy directly from the supplier.

# 66,724 tCO<sub>2</sub>e

,	
Embodied carbon in	53,774
development projects	
Purchased goods and services	7,678
Customers' direct energy	4,158
procurement	
Upstream emissions from our	596
energy consumption	
Water treatment	278
Employee commuting	84
Waste	82
Business travel	74

#### Location-based Scope 1,2 and 3 GHG Emissions



You will notice that our Scope 1 & 2 emissions make up only 14% of the total emissions, and although these look insignificant compared to our Scope 3 emissions, they are essentially our operational emissions that we have control over and therefore need to take full responsibility for.



# **Our Science-based Targets**

To help us achieve our net zero carbon goal, we have committed to reduce our emissions in line with the climate science presented by the Intergovernmental Panel on Climate Change (IPCC).

Following a detailed analysis of our emissions across the business and our value chain, we have developed a set of science-based targets which are aligned to the goals of the Paris Agreement and the IPCC's 1.5°C report. These targets have been approved by the Science Based Targets initiative (SBTi) and cover both our operational emissions and our embodied carbon emissions.

The charts to the right show our emission reduction trajectory from now through to 2050. In order to meet our net zero carbon 2030 target, we will need to offset our emissions from 2030 onwards.

We have committed to the following Science Based Targets to help us achieve our net zero carbon objectives: **-42**%

Reduce absolute Scope 1 GHG emissions 42% by FY2030 from a FY2020 base year

100% Continue annually sourcing 100% renewable electricity through FY2030

-20%

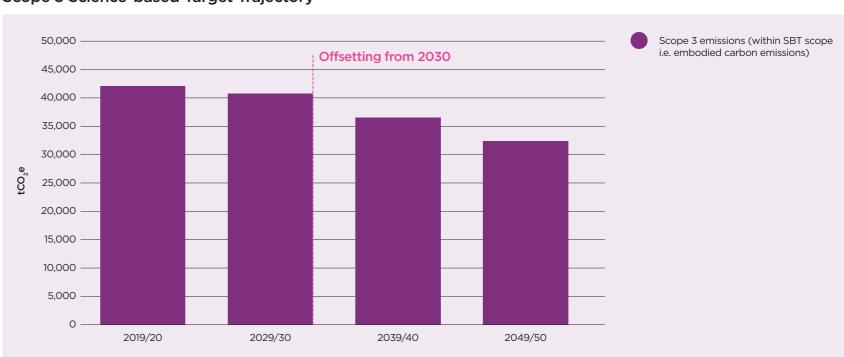
Reduce Scope 3 GHG from capital goods 20% per square foot of net lettable area by FY2030 from a FY2020 base year



#### Scope 1 Science-based Target Trajectory



#### Scope 3 Science-based Target Trajectory





# Our Challenges Achieving net zero carbon is not going to be easy.

#### Our main challenges will be:

The nature of our portfolio will be a significant challenge for us, particularly given many of our buildings are older and often listed. Whilst lots of energy efficiency improvements can be made without altering the character and appearance of the building (low energy lighting, loft insulation, improved heating systems), certain measures can be more problematic (wall insulation, glazing and heating/cooling).

**Retrofitting multi tenanted buildings** presents a challenge for us as working on parts of a building can have an impact on the efficiency of existing services such as heating & cooling systems.

**Data availability and accuracy** can be challenging, particularly around assessing embodied carbon as estimations and assumptions are used when calculating emissions. As we gain a better understanding over time, we could see an initial increase in Scope 3 emissions as accuracy is improved.

**Limited understanding within the UK building industry** on embodied carbon impacts for the maintenance, repair, refurbishment and end-of-life stages of a building's life cycle.









# **Our Opportunities**

However, these challenges lead us to opportunities. In addition to the well-known commercial opportunities associated with mitigating climate change, including resilience, competitive positioning and lower maintenance and operational costs, here are some Workspace-specific opportunities which explain how we are well placed to achieve our net zero carbon goal:

The close relationship with our customers that we have built up as a result of directly managing our properties gives us a unique opportunity to collaboratively drive down emissions. Our customer engagement initiatives include launching the Optergy energy platform whereby customers can view and monitor their energy consumption (see Optergy case study on page 11), setting up environmental groups at some of our centres to share energy and recycling data and encourage collaboration between customers, and offer energy-related events and resources.

Our in-house facilities management team gives us greater control over the day-to-day management of our operational energy consumption. The facilities managers proactively monitor and manage the energy consumption through analysing half hourly consumption profiles and adjusting controls and settings (see Optergy case study on page 11). Our facilities managers get involved early in the design stage of our refurbishment and development projects in order to provide valuable advice on what works in practice.

#### Direct energy procurement on behalf of most of our customers

means that we have access to whole building consumption data as well as control over electricity contracts which are 100% renewable.

Our rolling refurbishment and redevelopment programme aims to retain as much of the original buildings as possible, transforming them into modern spaces, whilst reducing the whole life-cycle carbon emissions as well as retaining the history of the sites (see case study on pages 12 & 13). The rolling programme has transformed our portfolio which now has 12 BREEAM rated energy efficient assets, with future refurbishment and redevelopment works planned in the pipeline to improve the standard further.

On-site generation opportunities throughout our portfolio as our buildings tend to have large flat roof spaces with limited shadowing from other buildings, making them suitable for solar PV panel installations. We currently have 13 solar PV panel installations and have identified a further five suitable sites (page 14). On-site generation requires less reliance on the grid and reduces our risk from future increase in electricity prices.

**Our long-standing investment portfolio**, with low churn, means that we can invest in long-term energy efficiency and generation projects.

Workspace is a dynamic business and can adapt quickly to change as we own the freehold of our buildings and have in-house development, asset management and facilities management teams.

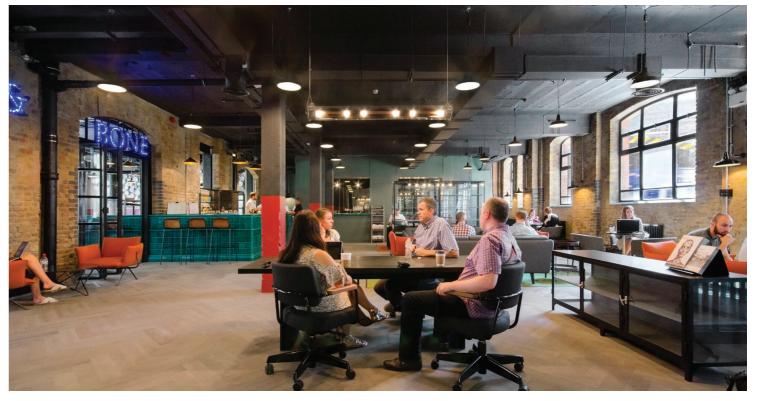
#### Significant energy efficiency measures have been implemented

over the last four years as part of our Energy Performance Certificate (EPC) project to meet the Minimum Energy Efficiency Standard (MEES) legislation. Four years ago, 39% of our portfolio was rated between A and C, and following our improvement works, we now have 61% of the portfolio rated between A and C, which has left us in a really good position in terms of energy efficiency, as well as improving our ability to let our assets. Works included LED lighting upgrades, insulation improvements, and heating upgrades.

**Science-based targets have been set**, providing us with clear and credible short- and medium-term emissions reduction targets. See page 6 for more details.









# **The Boundaries**

#### **Investment Boundary**

Workspace is a FTSE 250 listed Real Estate Investment Trust (REIT) which owns, develops and directly manages circa 60 business centres in London.

The portfolio of flexible offices covering some 4 million sqft is valued at £2,450m. Our net zero carbon target covers the whole Workspace portfolio, including our own corporate emissions as we occupy 14,000 sqft of space within one of our investment properties. Our corporate emissions have not been separated out from our portfolio emissions.

No assets are currently excluded from the scope of our commitment and we have no Joint Ventures (JVs) or real estate investment vehicles. We have a small number of full repairing and insuring (FRI) leases which are included within our commitment and although the data we hold for them is limited, we are looking to improve our data collection process for these. Any acquisitions and sales will be included from the date of purchase or up until the date of disposal. If these are likely to change our base-year inventory significantly (i.e. more than 5%) this will trigger a recalculation of our Science-based Targets as per the SBTi guidance.

#### **Carbon Emission Boundaries**

Our commitment includes our operational and embodied carbon emissions and can be summarised as below:

- Operational carbon, critically covering whole building performance, including customer activities; and services procured by Workspace to service and maintain the space.
- Embodied carbon of development, refurbishment and fit-out works.

Although not significantly material, our own corporate emissions have been included as our Head Office is located within one of our investment properties. Our corporate emissions have not been separated out from our portfolio emissions.

The table below provides a list of the activities that are included within our net zero carbon target. A more detailed table which demonstrates the range of the carbon sources recognised by the Commitment and their alignment to the Greenhouse Gas Protocol can be found in the Appendix.



#### **Workspace Carbon Emission Boundaries**

Activities which generate GHG emissions for real estate investment (directly or indirectly)	Activities controlled and managed by landlords	Activities controlled and managed by occupiers	Corporate / Head Office
Energy to operate buildings (electricity, fuels & heat networks)	✓	✓	<b>~</b>
Water to operate buildings	<b>~</b>		<b>~</b>
Waste generated during operation	<b>~</b>		<b>~</b>
Refrigerants (Fugitive emissions)	<b>~</b>		<b>~</b>
Purchase of goods and services (M&E & property management services) *	✓		<b>~</b>
Business travel (excluding that associated with development works)			<b>~</b>
New development works	✓		<b>~</b>
Refurbishment works	<b>✓</b>		<b>~</b>
Fit-out works	<b>✓</b>		<b>~</b>
End of life**			

<sup>\*</sup> This relates to services procured by the landlord to service and maintain the space e.g. property management, service charge recoverable items and minor CapEx items e.g. minor replacements.

<sup>\*\*</sup> End of life carbon has not been included within the scope of the BBP Climate Change Commitment due to lack of industry consensus on how it should be accounted for. As industry understanding improves and an agreed approach adopted, this position will be reviewed.

# **Delivery Strategy**





# Operational Carbon (Energy, water & waste)

#### What we have done so far:

We actively seek opportunities to manage and reduce our greenhouse gas emissions and use of natural resources from our building operations in order to minimise our contribution to climate change and reduce costs whilst continuing to deliver a high standard of customer satisfaction and comfort.

28%

reduction in Scope 1 & 2 GHG emissions in 2019/20 compared to 2012/13 baseline year

14

sites now have Optergy (smart sub-metering) installed

12

BREEAM rated assets (24% of the portfolio based on floor area)

73%

Average recycling rate across the portfolio, the highest rate achieved to date

#### Energy

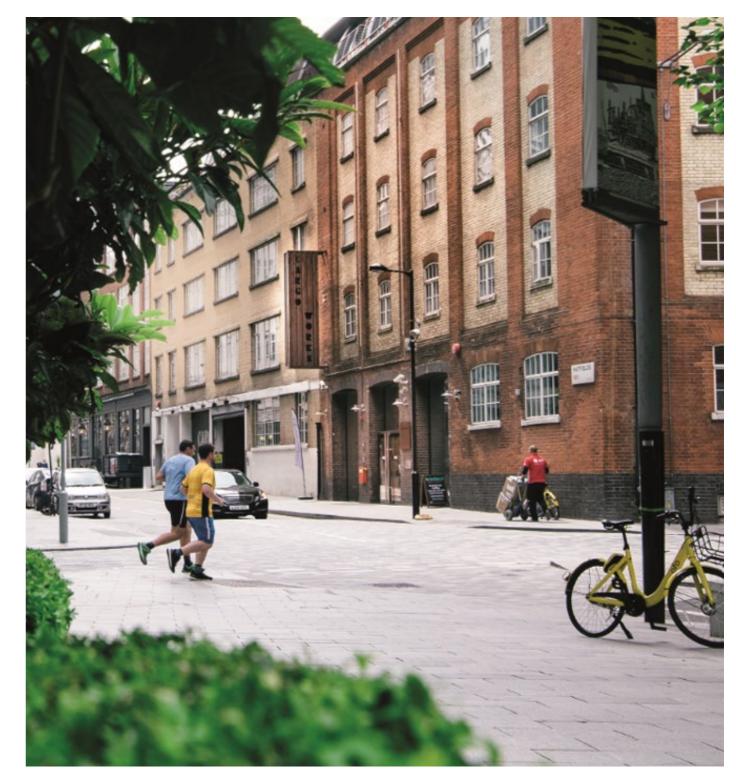
Since our 2012/13 baseline year, we have reduced our absolute Scope 1 & 2 emissions by 28%. This is a result of our rolling refurbishment and redevelopment programme, as well as our portfolio-wide energy efficiency projects which included LED lighting upgrades, insulation improvements and heating upgrades. Workspace now has 12 BREEAM rated energy efficient assets, with future refurbishment and redevelopment works planned to improve the standard further.

#### Water

Water efficiency measures are implemented for all new developments and refurbishments, as well as smaller refurbishment projects, to reduce water demand as much as possible. Our design specification requires that all water fittings have water saving features such as spray taps and showers, automatic sensors and dual flush cisterns. In addition to this, water metering and leak detection systems are installed so the building team can monitor and proactively manage consumption.

#### Waste

We monitor our recycling performance across the portfolio and our service provider conduct monthly waste audits to identify opportunities for improvements. Last year, we achieved a recycling rate of 73%, the highest rate achieved to date. We have also been working closely with our service provider to improve data accuracy and, in February 2020, 96.32% of our waste was measured by weight rather than by estimated by volume.





#### **Case studies:**

#### **Optergy Smart Sub-metering & Controls**

A key focus of our energy management strategy has been the roll out of our Optergy Building Energy Management System (BEMS) which is a smart metering technology system that has enabled real-time energy monitoring at the building level right down to individual plant equipment. The data provided by the BEMS is used by our in-house Facilities Management teams to improve energy management practices and reduce GHG emissions. The Optergy customer portal is now live at 14 of our sites and enables our customers to log in to view and monitor their energy consumption profiles, giving them the tools to reduce their own carbon footprint.

#### **Soft Landings Framework**

To help bridge the performance gap between design and real-life operation, Workspace trialled a bespoke Soft Landings approach at one of its recent developments, Brickfields in Hoxton. This smoothed the transition from design and construction, through to operational performance for customers. A three-year aftercare process is now set to close the gap between predicted and actual building performance, maximising efficiency, reducing energy costs and cutting carbon. Following the success of the project, all new Workspace developments will follow the Soft Landings or NABERS Design for Performance framework.

"The whole project team worked collaboratively to trial our bespoke Soft Landings framework at Brickfields in Hoxton. The result is a great working environment for customers and an operationally efficient building. We are already incorporating lessons learnt at Brickfields into the design of our new centres."

Alia Hashem,

Workspace Facilities Manager

#### **Waste-to-heat District Heat Network**

Four of our sites are connected to a local district heating network. A district heating network is a system of insulated pipes which transport heat from a central source to multiple buildings, providing a sustainable alternative to gas central heating systems. For example, our new building Cocoa Studios at the Biscuit Factory in Bermondsey is connected to the local waste-to-heat district heat network. Each unit has a heat meter which is linked to the Optergy Building Energy Management System (BEMS) and is therefore compliant with the Heat Network Regulations, allowing customers to view and monitor their usage, helping drive down consumption.



#### **OUR PLAN TO MEET NET ZERO CARBON:**

All new developments & major refurbishments to have electric heating & cooling systems and explore local energy solutions such as district heating networks

Replace existing gas central heating systems with electric heating & cooling systems where feasible (full programme of works and timescales to be confirmed following detailed review in 2021)

Reduce heating demand through improving wall & ceiling insulation

Roll out of energy efficiency upgrades including LED/PIR lighting upgrades, BMS optimisation

Reduce the performance gap between design and in-use by following the Soft Landings framework or NABERS Design for Performance for all new development and major refurbishment projects, including post-occupancy evaluation

Look to obtain asset level energy efficiency ratings such as BREEAM in-use or NABERS UK

Improve our metering and monitoring systems including roll-out of AMR and Optergy smart submetering across the portfolio

Engage with customers on sustainability-related topics through the Optergy energy portal, events, workshops, toolkits and campaigns

Aim to improve collection of data from customers who procure their own energy, with a target to collect energy procurement data from all customers by 2025

Set operational energy use intensity (EUI) targets for landlord areas by 2021/22 and for every asset by 2025 and track EUI performance against net-zero carbon frameworks such as UK Green Building Council (UKGBC) or Carbon Risk Real Estate Monitor (CRREM) tool

Integrate ESG into our acquisition due diligence process to ensure any investment is in line with our long-term sustainability targets

Deliver workshops and seminars to equip employees with the relevant skills and knowledge to deliver our ESG targets

Continue to monitor our water intensity and progress towards targets, including measures such as AMR installations and water harvesting technologies

Continue to drive improvements in recycling rates and develop a net zero waste strategy

Review ESG-linked Revolving Credit Facility (RCF) opportunities when we next refinance



by FY2030 from a FY2020 base year













#### **Embodied carbon**

#### What we have done so far:

The vast majority (70%) of our carbon footprint is the embodied carbon associated with our redevelopment and refurbishment activities.

Embodied carbon is the total greenhouse gas (GHG) emissions generated to produce a built asset. This includes emissions caused by extraction, manufacture/processing, transportation and assembly of every product and element in the asset. During our own development activities, we try to retain as much of the existing structure of the building as possible, which typically account for 67%\* of embodied carbon in new build office developments.

To better understand and establish a baseline for our embodied carbon emissions, we carried out an assessment using a sample of recent development projects and extrapolating the data across the portfolio of past and ongoing projects from 2015-2020. A rolling 3-year average was used to create a more representative base period which smooths out unusual fluctuations in emissions. So far, we have calculated our embodied carbon emissions retrospectively using estimations and assumptions. Going forward, all new development and major refurbishment projects will have an embodied carbon assessment carried out during the planning stage to help inform our decisions.

#### Case studies:

#### **Chester House, Kennington Park**

Chester House is a Victorian warehouse converted into offices. Workspace completed a £3.7 million refurbishment project, retaining many original features, at the same time as introducing an internal light well and a new glazed, Cor-Ten steel clad entrance atrium. A whole lifecycle carbon assessment was commissioned to assess whether our business model is inherently more carbon efficient than that of other prime office developers, by virtue of repurposing older buildings, rather than demolishing them and building new ones. Whole lifecycle carbon reporting takes account of all emissions associated with a building's lifespan, from construction to deconstruction, rather than just looking at those that arise from energy use during operation. Through refurbishing Chester House instead of demolishing and rebuilding, we cut the whole lifecycle carbon emissions of the building by almost 25%, compared to a new regional office building. This will save more than 9,000 tonnes of CO2 over the building's 60-year lifespan. Read more here.



# 9,000 Tonnes CO<sub>2</sub>

saved over building lifespan, the equivalent to the electricity used in 1,524 average homes in one year

**25%** 

reduction in whole lifecycle carbon emissions compared to a new regional office building

#### **Brickfields**

Built specifically for heavy engineering works in the 1970s, Cremer Street Studios in Hoxton had low floor to ceiling heights, poor quality brick and concrete which meant that it didn't meet the requirements of modern businesses today. We therefore decided to demolish it and create a brand-new centre, renamed Brickfields, designed to BREEAM Excellent standard. In order to save on embodied carbon, we retained 65% of the existing foundations, and the brick and concrete demolition waste was crushed and almost all re-used on site. Since it is predominantly dry construction, the building can be disassembled and separated into components which can be re-used. The use of an engineering brick with a weak class 4 mortar is intended to permit separation and re-use of bricks. Collaboration across all teams was essential to build this adaptable, durable and 'circular' asset.



**65%** existing foundations were retained

BREEAM excellent

\*Source: UKGBC Net Zero Carbon Buildings: A Framework Definition: Read more here

#### **Delivery Strategy continued**

#### **Case studies:**

#### **Record Hall**

By maintaining the existing frame and much of the masonry façade we saved 67kgCO2/m2 against a new build option and 39% of the total embodied carbon. Through infilling and by doubling the height of the building via roof extensions we were able to add 40% to the original floor area and we also saved an estimated year in construction time through refurbishing.

**39%** reduction in embodied carbon compared to a new build



#### **OUR PLAN TO MEET NET ZERO CARBON:**

Undertake embodied carbon assessments for all new developments and major refurbishment projects

Take embodied carbon into account when making development decisions

Set specific embodied carbon reduction targets for new developments & major refurbishments

Reduce the embodied carbon of development projects by choosing materials and processes with low carbon intensity

Deliver workshops and seminars to equip employees with the relevant skills and knowledge to deliver our ESG targets

Continue to look at circularity, adaptability and durability for all new developments & major refurbishments









Reduce Scope 3 GHG from capital goods 20% per square foot of net lettable area by FY2030 from a FY2020 base year





### **On-site generation**

#### What we have done so far:

To date, we have 13 solar photovoltaic (PV) installations across our portfolio, and our generation over the past four years has increased by 163% to 129,533 kWh generated in 2019/20.

We install solar PV systems at all new developments and major refurbishments where possible, and in 2020 we completed a solar PV feasibility study which identified a further 5 suitable sites which have the potential to generate 666,245 kWh per annum, with annual savings of 149 tonnes of carbon. Although we already procure 100% renewable electricity across the portfolio, maximising our on-site generation will play a key role in meeting net zero carbon, whilst also generating returns on investment, reducing dependence on the grid, and protecting us from potential increases in energy costs in the future.

#### **OUR PLAN TO MEET NET ZERO CARBON:**

Install solar PV systems for all new developments and major refurbishments where suitable

Look to install solar PV systems for the 5 sites identified in the feasibility study carried out in 2020

Continue to review the portfolio to identify further opportunities for on-site renewable energy



solar PV installations across the portfolio

666,245 kWh

potential generation at five sites identified in the feasibility study carried out in 2020. The equivalent to the electricity used in 80 average homes in one year

#### **Solar PV generation**

2016-17 - 2019/20

374,088 kWh

Total generated over the last four years

2019/20				129,533
2018/19			107,540	
2017/18		87,738		
2016/17	49,277			



The solar PV panels on the roof of the Metal Box factory were installed in 2015 and have since generated a total of 106,830 kWh. This is a prime example of how older listed buildings can be retrofitted with renewable technologies.



#### **Renewables Procurement**

#### What we have done so far:

We began to procure renewable energy in 2017 and since then all electricity supplies within our group contract have been put on a 100% renewable tariff supported by a REGO (Renewable Energy Guarantees of Origin) certificate.

This change has resulted in a significant reduction in our Scope 2 market-based emissions which is why we report both our location-based and market-based Scope 2 emissions for full transparency. We recognise that whilst the decarbonisation of the grid is promising, we cannot rely on this to meet our net zero target, which is why we will be investing in on-site renewable energy and reviewing opportunities around corporate Purchase Power Agreements (PPAs), where electricity is purchased directly from the generator, providing an additional source of renewable energy.

#### **OUR PLAN TO MEET NET ZERO CARBON:**

Procure green gas upon next contract renewal

Investigate opportunities to engage in PPAs to further drive the renewables market

Survey customers who procure their own energy to gather data on existing renewable procurement, and use this to build on our existing strategy to encourage renewable procurement among customers



Continue annually sourcing 100% renewable electricity through FY2030





To achieve a net zero carbon portfolio by 2030, we will need to offset our residual emissions left over after our significant reduction efforts. These will mainly be emissions from the embodied carbon associated with our development and major refurbishment activities.

Other residual emissions may include operational emissions from assets where we haven't been able to retrofit electric heating and cooling systems due to planning restrictions for listed buildings, or simply where it is not feasible or economically viable. Additionally, there will be some Scope 3 emissions where we have little control which we will need to offset, such as distribution losses from our Scope 1 and 2 emissions. Although carbon offsetting can be seen as shifting responsibility to somebody else, if it is used in addition to ambitious reduction efforts, it is helpful to incentivise improved performance and innovation.

#### **OUR PLAN TO MEET NET ZERO CARBON:**

Develop our company principles and approach to offsetting, which will be used to guide an offsetting strategy to outline the scope and timeline of offset arrangements

Define boundary and scope of emissions to be compensated

Appoint a provider to support implementation

Explore opportunities and the costs and benefits associated with investing in sustainable practices within our own supply chain (insetting)

Explore internal carbon pricing options and setting up a decarbonisation fund





Additional
Measurable
Permanent
Independently verified
Unique
Offsetting principles



## **Third-party verification**

Third-party verification is completed in accordance with recognised verification standards. Some examples include:

#### **GHG** verification

We verify our greenhouse gas emissions at a limited level of assurance by a third party to give us confidence that our data is accurate, complete, consistent, transparent and free of material error or omission. Following each audit, we receive a certificate and an improvement report.

#### **Science-based targets**

As mentioned earlier in this document, our science-based targets have been formally approved and verified by the SBTi.

#### **OUR PLAN TO MEET NET ZERO CARBON:**

Extend scope of GHG emissions verification level

Review science-based targets annually to ensure alignment with science and re-baseline if necessary

Review carbon offsetting verification schemes

Support an industry net zero carbon certification for real estate



# **Appendix**



#### **Delivery Strategy**

Operational Carbon (energy,	water & waste)		
TOPIC/ SUBTOPIC	OUTCOMES / AIMS	DELIVERY / MANAGEMENT STRATEGY	REPORTING METRICS
Operational carbon emissions	Monitoring our progress in decarbonising our operations in line with climate science.	We have set science-based targets which have been verified by the Science Based Targets Initiative (SBTi) in line with keeping global warming to 1.5° which cover our Scope 1 & 2 operational emissions. These will be monitored and re-baselined as needed following SBTi guidance.	Absolute carbon emissions (tCO <sub>2</sub> e).
Operational emissions intensity	Reducing the emissions intensity of heating and cooling our buildings.	We plan to carry out a detailed assessment of building heating and cooling, including the programme of replacements and installations, to identify a road map for retrofit of our standing assets with electric heating & cooling systems, and the removal of existing gas central heating systems & replace with air source heat pumps.	Percentage of gas systems replaced. Carbon intensity ( $tCO_2e/m^2$ ).
Energy Intensity	Reducing the energy intensity of heating, lighting, and cooling our buildings.	We plan to instruct a detailed assessment of building heating and cooling, including the programme of replacements and installations, in order to develop building benchmarks for the different landlord areas & whole buildings. We also plan to roll out a suite of energy efficiency upgrades including LED/PIR lighting upgrades, BMS optimisation, and wall/ ceiling insulation improvements.  We will set operational energy use intensity (EUI) targets for landlord areas by 2021/22 and for every asset by 2025 and track performance against net-zero carbon frameworks such as UK GBC or CRREM tool. These targets will be integrated into these into team objectives.	Percentage of buildings with intensity targets.  Energy intensity of each building (kWh/m²).  Average portfolio energy intensity (kWh/m²)
Water consumption & intensity	Reduce water consumption.	Continue to monitor our water intensity and progress towards targets. We plan to implement AMRs to improve water monitoring. Development of a forward-looking strategy for water monitoring to include measures such as water harvesting technologies.	Monitor water consumption & intensity annually – total m³ and m³/sqft
Recycling rate & waste generation	Increase recycling rates and reduce waste volumes.	Continue to monitor, review and update our waste targets and to drive improvements in recycling rates. We will develop a strategy for waste reduction in line with net zero. These targets to be incorporated as part of personal objectives. We will develop a strategy for absolute waste reduction in line with net zero target.	Monthly monitoring of recycling rates (%) and total waste produced (tonnes).
Measurement & monitoring strategy	Increased understanding of opportunities to reduce energy consumption.	We will improve our metering and monitoring systems including roll-out of AMR and promoting the uptake of Optergy smart submetering across the portfolio.	Percentage of buildings on optergy, coverage of portfolio (% total sqft).
Measurement & monitoring application	Using improved data on energy consumption to drive reductions.	Use metering and monitoring to actively manage energy consumption, including review of half-hourly data etc and developing thresholds for flagging opportunities on an ongoing basis through our data management system.	
Customer engagement & data collection strategy	Support our customers to reduce their operational energy consumption.	We will encourage our customers to log onto the Optergy platform to view and monitor their energy consumption. Collect environmental data from customers where Workspace are not directly responsible for energy procurement and waste management (2025). Engage with our customers on sustainability-related topics through events, workshops, newsletters, posters, and social media platforms. Create opportunities for knowledge sharing and engaging with our customers by rolling out customer-led Environmental Groups.	% customers reporting own energy procurement. % sqft covered by customer reporting.  Customer participation in environmental groups, number of customers with access to their metering through optergy, number of newsletters sent out to customers. Number of energy-related events.
Acquisition strategy	Ensure investment strategy is in line with our long-term sustainability targets.	Use the BBP toolkit to guide our acquisition strategy. ESG considerations to be integrated into our established due diligence process for acquisitions.	Evidence of ESG considerations in acquisition process.
Targets for major refurbishments/ new developments	Reducing the emissions intensity of heating and cooling new developments and acquisitions.	All new developments & major refurbishments to have electric heating & cooling systems.	
Targets for major refurbishments/ new developments	Reduce energy consumption of new developments and acquisitions.	We have started using the Soft Landings Framework to help bridge the performance gap between design and real-life operation, to find opportunities for maximising efficiency, reducing energy costs and cutting carbon. Following the success of a pilot project, all new Workspace developments will follow the Soft Landings framework or NABERS Design for Performance.  We plan to introduce energy consumption targets for new developments and acquisitions along the guidelines provided by UKGBC or similar. These targets will be reviewed annually to flag areas for increased ambition.	Number of projects following the Soft Landings Framework.  Percentage of new developments with energy consumption target according to UKGBC.





#### Delivery Strategy continued

Embodied carbon associated with capital goods, services, and capital works e.g. management, maintenance, fit-outs, refurbishment and new development						
TOPIC/ SUBTOPIC	OUTCOMES / AIMS	DELIVERY / MANAGEMENT STRATEGY	REPORTING METRICS			
Embodied carbon targets	Monitoring our progress in decarbonising our development projects in line with climate science.	We have set science-based targets which have been verified by the Science Based Targets initiative (SBTi) for our Scope 3 upstream embodied carbon. This will be monitored and re-baselined as needed following SBTi guidance. We will establish a methodology to feed this target into project-by-project targets.	tCO <sub>2</sub> e/m² (sqft)			
Whole life carbon assessments	Identifying opportunities for carbon emissions reduction for development projects.	Carry out whole life carbon assessments for all new major refurbishments & developments, and ensure this target is reflected in the team's goals. The intention is to identify and implement opportunities for carbon savings in new projects.	# assessments carried out % savings identified; % savings achieved			
Standards for smaller projects and M&E	Establish environmental standards for smaller projects.	Review best practice guidelines for smaller projects and M&E for environmental and social standards. These will be incorporated into personal objectives for the team.				
Minor refurbishment standards	Reducing the environmental impact of minor refurbishment projects	Review projects for suitability for SKA ratings and carry out where relevant.	# assessments carried out, and the standard achieved.			
Embodied carbon of heating systems	Identifying opportunities for carbon emissions reduction in fit-out.	Detailed analysis to include consideration of embodied carbon of heating systems to identify optimum switch-out across Sc1 / Sc3.	% of portfolio reviewed.			
Procurement strategy	Reducing the environmental impact of fit-out.	Develop procurement strategy, including guidelines for contractors, to focus procurement targets on sustainable sourcing (FSC timber), and providing local value (e.g. hiring and procurement).	Contractors' procurement guide.			
Customer fit-out	Reducing environmental impact of customer fit-out	To be confirmed once we gain a better understanding of the carbon impact associated with customer fitouts.	Explore impact of customer fitouts.			

On-site generation						
TOPIC/ SUBTOPIC	OUTCOMES / AIMS	DELIVERY / MANAGEMENT STRATEGY	REPORTING METRICS			
Generation	Maximise on-site renewable energy generation.	We have established a target to increase the coverage of on-site installed renewables year on year.	Total portfolio generation (kWh).			
		We have established a target to install solar PV systems for all new developments and major refurbishments where suitable.	% energy consumption per building covered by on-site renewables.			
			% increase in coverage of on-site renewables.			
Feasibility studies	Reducing the emissions intensity of heating and cooling our buildings.	We will look to install solar PV systems for the 5 sites identified in the feasibility study carried out in 2020. We can then carry out further reviews to identify more opportunities for on-site renewable energy.	# of installations as a result of the feasibility studies.			
			# feasibility studies.			
Investment in renewable energy projects	Increasing on-site renewable energy generation.	We will develop an investment strategy for on-site renewables - building on the feasibility studies and incorporating our understanding of site energy demand and payback periods.	Number of on-site renewables projects established for existing portfolio.			

# **Appendix continued**



#### Delivery Strategy continued

Renewables Procurement			
TOPIC/ SUBTOPIC	OUTCOMES / AIMS	DELIVERY / MANAGEMENT STRATEGY	REPORTING METRICS
Electricity procurement	Support reducing carbon intensity of the UK renewable energy grid.	We currently procure 100% renewable electricity supported by REGO (*Renewable Energy Guarantees of Origin) certificates. We intend to investigate opportunities to engage in power-purchase agreements (PPAs) to further drive the renewables market.	kWh and % kWh consumption covered by PPA contracts kWh and % kWh consumption covered by renewable energy tariffs
Green gas procurement	Support reducing carbon intensity of the UK renewable energy grid.	We intend to procure Green Gas Certified gas upon our next contract renewal.	kWh green gas consumed and % gas consumption covered by green gas.
Customer's renewable energy procurement	Support reducing carbon intensity of the UK renewable energy grid.	We will survey customers who procure their own energy to gather data on existing renewable procurement and use this to build on our existing strategy to encourage renewable procurement among customers.	% customers' own procurement renewable.

Offsetting			
TOPIC/ SUBTOPIC	OUTCOMES / AIMS	DELIVERY / MANAGEMENT STRATEGY	REPORTING METRICS
Offsetting	Invest in global carbon reduction in line with our emissions which cannot be eliminated.	We will develop our company principles and approach to offsetting, which will be used to guide an offsetting strategy to outline the scope and timeline of offset arrangements and appoint a provider to support implementation.	% of emissions which have been offset.  Number and type of schemes invested in.
Insetting	Generate our own carbon reduction schemes.	We will explore opportunities and the costs and benefits associated with insetting projects, investing in sustainable practices within our own supply chain.	Number and type of carbon reduction scheme initiated.  Estimated annual savings (tCO <sub>2</sub> e).
Internal cost of carbon	Incentivise carbon consideration in procurement decisions and energy efficiency.	We will explore developing an internal cost of carbon and its applicability to procurement decisions and energy efficiency. Initially we intend to pilot a shadow to develop the process, with the aim of establishing a price for both operational and development emissions which can feed into a decarbonisation fund we will create. We will seek guidance on best practice standards and work to align ourselves.	Carbon price of annual procurement.

Third-party verification; industry standards and certification						
TOPIC/ SUBTOPIC	SUBTOPIC OUTCOMES / AIMS DELIVERY / MANAGEMENT STRATEGY					
Verification	Increase the credibility of our reporting.	We plan to extend the scope of our GHG emissions verification (currently limited).	Verification level.			
Certification	Understand our performance against industry standards.	We will continue to carry out BREEAM certification and will explore integrating BREEAM in use or NABERS UK.	BREEAM, BREEAM in-use and NABERS UK assessments carried out.			
Reporting	Understand our performance against industry standards.	We will continue reporting to the Real Estate Environmental Benchmark and measuring our buildings' performance against that standard.	Properties benchmarked.			
Assessments	Understand our performance in fit outs against industry standards.	Carry out SKA Rating assessments for appropriate fit-out projects.	SKA rating assessments carried out.			
Industry standards	Take guidance from industry standards.	Integrate guidance from the London Energy Transformation Initiative (LETI) and UKGBC net zero standard into our best practice guidelines for development projects.				

## **Appendix continued**



#### **Detailed Scoping & Greenhouse Gas Protocol Alignment**

BUSINESS AREA	SUB-AREA	GHG PROTOCOL REPORTING CATEGORY	EMISSIONS SCOPE	COMMITMENT INCLUSION	WORKSPACE	WORKSPACE COMMENTS
Corporate	Head office energy use	Company facilities	1&2	•	<b>~</b>	Included within our pathway as our Head Office is located within our Kennington Park Business Park, one of our Direct Real Estate Holdings.
	Company vehicles	Company Vehicles	1	•	<b>~</b>	These emissions are not significantly material to our business. However, we already report against this as part of our GHG emission reporting and will therefore include this within our pathway.
	Business travel (excluding commuting)	Business travel	3	•	<b>~</b>	These emissions are not significantly material to our business. However, we already report against this as part of our GHG emission reporting and will therefore include this within our pathway.
	Purchased Goods and services	Purchased goods & services	3	•	<b>~</b>	This is included within our pathway along with our Direct Real Estate Holdings.
	Operational waste generated	Waste generated in operations	3	•	<b>~</b>	This is included within our pathway along with our Direct Real Estate Holdings.
	Operational water use	Purchased goods & services	3	•	<b>~</b>	This is included within our pathway along with our Direct Real Estate Holdings.
	Employee commuting	Employee commuting	3	•	<b>~</b>	
Direct Real Estate Holdings	Landlord purchased energy (electricity & fuels)	Purchased electricity, heat and steam	1, 2 & 3	✓	<b>✓</b>	
(including JVs with management control)	Customer purchased energy (electricity & fuels)	Downstream leased assets	3	✓	<b>✓</b>	
	Landlord refrigerants	Purchased goods and services	1	✓	✓	
	Customer refrigerants	Customer Scope 3	3			
	Landlord purchased water	Purchased goods & services	3	✓	✓	
	Customer purchased water	Customer Scope 3	3			We will be looking to collect our customer's environmental data including purchased water; however, we have limited control over this.
	Landlord managed operational waste	Waste generated in operations	3	<b>✓</b>	~	
	Customer managed operational waste	Customer Scope 3	3			We already include customer managed operational waste within our GHG emissions; however, we have limited control over this.
	Customer transport emissions	Customer Scope 3	3			
	Customer supply chain emissions	Customer Scope 3	3			
	Landlord purchased capital goods & services (M&E & property management services)*	Purchased goods and services	3	<b>✓</b>	<b>~</b>	

Corporate emissions are not included within the scope as the focus of the BBP Climate Change Commitment is on Signatories real estate investments. It is also likely these emissions are not significantly material. However, some Signatories may voluntarily elect to include them in their target scope.

<sup>\*</sup> This relates to services procured by the landlord to service and maintain the space e.g. property management, service charge recoverable items and minor CapEx items e.g. minor replacements.

\*\* End of life carbon has not been included within the scope of the BBP Climate Change Commitment due to lack of industry consensus on how it should be accounted for. As industry understanding improves and an agreed approach adopted, this position will be reviewed.





#### Detailed Scoping & Greenhouse Gas Protocol Alignment continued

BUSINESS AREA	SUB-AREA	GHG PROTOCOL REPORTING CATEGORY	EMISSIONS SCOPE	COMMITMENT INCLUSION	WORKSPACE	WORKSPACE COMMENTS
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)	N/A	N/A	N/A	N/A	N/A	N/A. We don't have any JV's or investments in other real estate investment vehicles.
Development	New development (including those where funding is being provided)	Purchased Goods & Services	3	~	<b>~</b>	
	Refurbishments	Purchased Goods & Services	3	✓	<b>✓</b>	
	Fit-out (landlord controlled)	Purchased Goods & Services	3	✓	<b>✓</b>	
	Fit-out (customer controlled)	Customer Scope 3	3	<b>~</b>		This may be included once we gain a better understanding of the carbon impact associated with customer fitouts.
	End of life	End of life treatment of sold products	3	**		

<sup>•</sup> Corporate emissions are not included within the scope as the focus of the BBP Climate Change Commitment is on Signatories real estate investments. It is also likely these emissions are not significantly material. However, some Signatories may voluntarily elect to include them in their target scope.

<sup>\*</sup> This relates to services procured by the landlord to service and maintain the space e.g. property management, service charge recoverable items and minor CapEx items e.g. minor replacements.

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