



NET ZERO CARBON PATHWAY FRAMEWORK

Supporting Signatories of the BBP Climate Commitment

Opening Statement

It has become evident that urgent action is needed to combat climate change. Over recent years reports published by the Intergovernmental Panel on Climate Change (IPCC) confirm the importance of limiting global temperature increase to 1.5 degrees Celsius.¹ Currently, the world is on track for 1.8-2.7 degrees of warming.²

Climate change has far-reaching implications for the real estate industry. With the built environment contributing approximately 40% of greenhouse gas emissions in the UK³, the thought of tackling this challenge can seem daunting. The path to net zero carbon is complex, challenging and uncertain, with much of the detail still unknown. However, this not a reason to delay action. It is critical that the real estate industry acknowledges the important role it has play, embraces the challenge, and collaborates to ensure that pathways are transparent so that the market can respond.

This was a guiding principle in the development of the BBP Climate Commitment. Launched in September 2019, it is one of the most comprehensive and extensive commitments in the real estate industry. It includes some of the most challenging emission sources for property owners to measure and manage, namely tenant energy consumption and embodied carbon. To that end, the Commitment is extremely ambitious in nature. Yet, members of the BBP understand and accept that if we are to tackle the full climate impact of the built environment, we must reflect the broad scope of carbon emissions that are associated with our property investments, even if we are not yet sure how we will do it.

The Commitment requires each signatory to publish their own Net Zero Carbon Pathway, setting out how they will be delivering against a net zero carbon target. The Commitment also requires signatories to report annually against their pathways, ensuring that we remain transparent and can gauge progress over time.

This Framework sets out the building blocks of a net zero carbon pathway for property owners. It has been designed to support Signatories, but it can also be used by any

Contents

The BBP Climate Commitment wording	3
Introduction	5
How to use this document	6
What is Net Zero Carbon?	7
Net Zero Carbon Pathway Framework	9
Appendix 1 – Detailed Carbon Scope Table & Greenhouse Gas Protocol Alignment	
Appendix 2 – References to industry guidance and best practice	
Acknowledgements	18

property owner seeking to develop their own pathway. It has been developed with extensive input from BBP members, demonstrating collective drive from the industry.

It is important to emphasise that the Framework is a working document. It is not set in stone. It is expected that it will change over time to reflect our evolving understanding of both the key attributes of a net zero carbon pathway, and how these can be applied in the context of different investment and operating models

M&G Real Estate is a proud signatory of the BBP Climate Commitment, and I look forward to working with my peers within the BBP to tackle the challenges that lay ahead. If we are to be successful as a sector, we must work together. This is only the first step, but collectively, we will achieve far more than we can alone.

The Climate Commitment is available to any property owner to sign up to – you do not need to be a member of the BBP. We encourage all real estate owners to follow this Framework in the development of their own Net Zero Carbon Pathways.

Nina Reid

Head of Responsible Property Investment, M&G Real Estate



The BBP Climate Commitment wording

The latest report from the Intergovernmental Panel on Climate Change (IPCC) highlighted that we are facing a global climate crisis and must limit global warming to 1.5 degrees to reduce the risks associated with long lasting or irreversible changes to the earth's atmosphere and ecosystems. To achieve this, global net human caused emissions of carbon dioxide would need to reach net zero before 2050.

It is therefore clear that buildings will have to be net zero carbon before 2050 and to achieve this, buildings will need to contribute to the 45% global reduction in CO₂ required by 2030.

The property industry needs to demonstrate that it is on a pathway to achieve this critical target and we must take urgent action to ensure our portfolios are resilient and deliver long-term value for our investors.

This is why we have come together to make a collective commitment and send a clear message to all of our stakeholders - we recognise that our leadership can provide an important catalyst for change within the sector.

We, the undersigned, make the following commitments:

- We will each publish our own net zero carbon pathway on signing the Commitment. This will set out how
 we will quantify and track our emissions over time and outline our trajectory towards net zero carbon
 new and existing buildings including any interim targets we will use. In doing so we will follow the BBP's
 <u>Net Zero Carbon Pathway Framework</u> and address:
 - Operational carbon, critically covering whole building performance including our tenant's activities.
 - Embodied carbon of development, refurbishment and fit-out works.
 - In developing our net zero carbon pathways we will follow the principles of the energy hierarchy to ensure effort is focused first on reducing energy demand and improving energy efficiency. To this end, we will support the development of property specific Energy Use Intensity (EUI) targets.
- We will each annually disclose our progress towards our net zero carbon pathway and in doing so, explain the scope and implementation of this commitment as it relates to our individual business.
- We will publicly disclose the energy performance of our portfolios, where we have permission to do so, as a minimum at a portfolio level by geography, and ideally at a property level, and support efforts to develop consistent industry performance disclosure and benchmarks.
- By 2022, we will develop comprehensive climate change resilience strategies for our portfolios and work together to develop consistent industry disclosure on climate change risks in line with industry standards, including the Task Force on Climate Related Financial Disclosure.



^{*} https://www.un.org/en/climatechange/net-zero-coalition

To support the implementation of this commitment, we will work with the BBP to:

- Develop guidance on net zero carbon pathways for property owners to encourage greater consistency in definitions and boundaries.
- Develop clear guidance for the industry on the procurement of renewable energy for real estate assets to ensure that any purchasing in the UK creates additional capacity.
- Convene an 'owner & occupier' forum inviting our tenants to challenge property owners and engage with us to improve the performance of the space they occupy in line with our net zero carbon pathways.

Members of the BBP have diverse portfolios with different ownership and leasing structures, management arrangements and occupiers - how we implement these commitments within our businesses will differ. However, it is important to emphasise that we will adopt a 'comply or explain' approach to this commitment, with the intention that it will cover as many buildings as possible within our portfolios - the scale of the challenge ahead makes this absolutely imperative.

We see the real estate market's transition to a low carbon economy as an opportunity to drive innovation, respond to future demands and expectations of our occupiers and investors, and open up new markets for investment in real estate.

To meet these commitments will require unprecedented collaboration across the industry. We therefore also call upon:

- All our stakeholders (e.g. investors, occupiers, architects, engineers, contractors, managing agents, facilities managers) to disclose their own pathways to net zero carbon buildings and actively engage with us to help us deliver on these commitments.
- Professional bodies and built environment institutions to develop industry standards and support these with education and training to upskill the industry to deliver net zero carbon buildings.
- Government to deliver a supportive legislative agenda with a clear long-term trajectory to achieve net zero carbon buildings.
- All property owners to adopt the same commitments.

We will work with the BBP to monitor and report on our progress and to spearhead collaborative, collective action that delivers better buildings and creates long-term value for all of our stakeholders, including future generations.



Introduction

In recent years business has become increasingly vocal in the need to respond to the climate crisis and many organisations have sought to demonstrate action by making commitments to become "net zero carbon". The commercial real estate sector is no different.

The COP26 meeting in Glasgow in November 2021 saw a number of significant developments. The UK Chancellor announced that financial institutions and listed firms will soon be required to publish strategies on how they will transition to net-zero by 2050. These must include refence to "high-level targets the organisation is using to mitigate climate risk, including greenhouse gas reduction targets ... interim milestones and ... actionable steps the organisation plans to take to hit those targets".

In September 2019 the Better Buildings Partnership launched its Member Climate Commitment⁴. One of the key actions is for each Signatory to externally publish a Net Zero Carbon Pathway, setting out how they plan to deliver "net zero carbon" buildings before 2050, as well as publish progress towards this goal annually.

There continues to be ambiguity surrounding the definition and scope of "net zero carbon" commitments. This is certainly true in the property sector and is to be expected as the industry grapples with some of the new and unique challenges of what "net zero carbon" means for real estate investments - most especially when buildings have wide ranging ownership structures, leasing models and degrees of control throughout their life cycle. For the purposes of this document, "net zero carbon" is when the carbon emissions emitted as a result of all activities associated with the development, ownership and servicing of a building are zero or negative. As stated in the Climate Commitment text, this should follow the principles of the mitigation hierarchy, with a focus on reducing absolute emissions as a priority.

The BBP Climate Commitment was developed to demonstrate leadership, but also to encourage greater industry consistency and drive market transformation. It sets clear boundaries that apply equally to all Signatories with the intention that the Commitment should cover as many assets under management as possible and include emissions from all major activities associated with the development, operation and servicing of commercial real estate investments. The boundaries of the Commitment are absolutely critical and can be summarised as follows:

- Investment boundaries: All real estate holdings that a signatory has capital invested in, unless clearly stated otherwise. For indirect real estate investments it is recommended that carbon emissions should be attributed on a proportional share basis relative to ownership.
- Carbon boundaries: (For the purpose of this document the phrase "carbon" is used as shorthand for carbon dioxide equivalent (CO₂e), including all associated greenhouse gas emissions):
 - Operational carbon, critically covering whole building performance, including occupier activities; and services procured by the landlord to service and maintain the space.
 - Embodied carbon of development, refurbishment and fit-out works.

It is important to note that the Signatories' Net Zero Carbon Pathways will vary according to their real estate investment strategies, business models and leasing structures, and any review of Signatories' pathways should take account of this. It is also anticipated that Signatories' Pathways will evolve over time as best-practice is shared and understanding improves.



How to use the document

This document is intended for use by Signatories of the Better Buildings Partnership's Climate Commitment.

It is designed to support those individuals who will be responsible for outlining and reporting on progress in relation to their organisations' Net Zero Carbon Pathways. It also indicates the nature of the information that the BBP would expect to see in a Net Zero Carbon Pathway. It can therefore be used by any property owner and it is hoped that this will provide some much-needed clarity and consistency for the sector. The document provides:

- 1. Guidance on the carbon and investment boundaries covered by the Commitment, and where additional information may be required.
- 2. A delivery strategy template that outlines the topic areas that should be covered and the information that could be provided to articulate how the Net Zero Carbon Target will be delivered and reported against.
- 3. References to wider industry guidance on best practice in areas including offsetting, Scope 3 measurement and reporting, energy use intensity targets and other areas (see Appendix 2).

PUSHING THE BOUNDARIES: DELIVERING AGAINST A CHALLENGING COMMITMENT SCOPE

Climate change is a rapidly evolving issue, and one which requires bold action. The carbon emissions associated with the ownership and management of real estate portfolios will include activities that are under the owner or manager's direct and indirect control. The scope of the carbon footprint covered by the BBP Climate Commitment is intended to cover the material sources of carbon that need to be reduced to net zero before 2050 by owners and investors in real estate. However, for several sources of carbon emissions covered by the Commitment, the industry is still working with limited data, particularly for areas not under the direct control of property owners e.g. emissions associated with occupier activities.

It was felt important by Signatories that the commitment covered these material sources of carbon, even if the industry was still grappling with how to measure and how to reduce it.



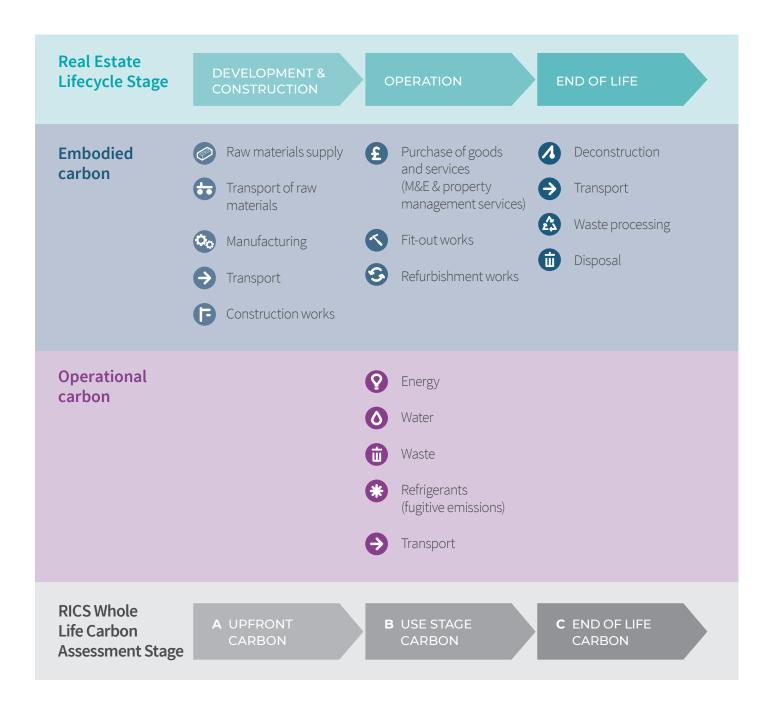
It should therefore be recognised that in reviewing any Net Zero Carbon Pathway, the level of action and underlying detail will not be equal across all business areas at first. It should be expected that, initially, the business areas that are easiest to tackle, and that will have the greatest level of impact, will include the most comprehensive and detailed delivery and management strategies. Conversely, the more challenging areas will contain the least amount of detail, with a focus on filling data gaps and developing strategies.

It will take time for industry understanding and consensus to develop regarding how best to overcome these challenges and it is fully intended that Signatories' Net Zero Carbon Pathways will evolve over time as this understanding improves. However, Signatories of the BBP Climate Commitment recognise the importance of highlighting these now in order to be transparent about the enormity of the challenges that lie ahead, and to drive collective action in the hope of overcoming such challenges together.



What is Net Zero Carbon?

In its simplest form, "net zero carbon" is when the carbon emissions emitted as a result of all activities associated with the development, ownership and servicing of a building are zero or negative. As outlined in the diagram below, the scope of these activities is extensive.





However, a review of corporate net zero carbon commitments will show wide ranging variations in the carbon scope included within any given organisation's target. One of the most common variations is whether a target includes operational carbon (i.e. carbon associated with the energy used to operate a building), embodied carbon (i.e. the carbon associated with all the material and operations to construct and maintain a building) or both. Even looking more granularly at operational carbon, one can see differences in whether targets only include landlord energy usage (Scope 1 & 2 emissions) or also include occupier energy usage (Scope 3 emissions). Such variations can make the comparison of commitments and targets between organisations challenging at best, and in many cases, impossible.

Those companies that have signed the BBP Climate Commitment have agreed a common basis for target setting and reporting that includes carbon emissions arising from the energy used to operate, service and maintain the property—both regulated and unregulated^{*} and the embodied carbon for construction, refurbishment and fit-out activities.

Work is being undertaken by the industry, including that of the UK-Green Building Council ** to help build consensus around the detail of a net zero carbon definition for the built environment.

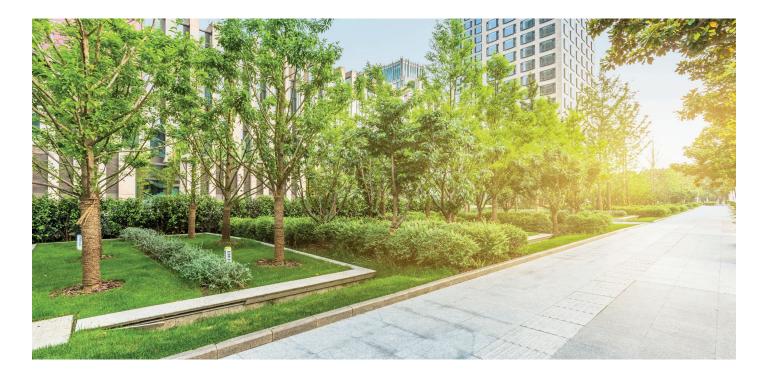
However, there are still many questions that need to be answered before a clear and consistent agreement on what net zero means for the real estate industry can be arrived at. Specifically, further work is required by the industry to answer the following:

- Do buildings need to achieve an Energy Use Intensity (EUI) target? The work undertaken by the UK Green Building Council and the Carbon Risk Real Estate Monitor (CRREM) suggests that this will be needed. Further work is required to ensure that EUIs are developed across a wide range of property types and that these are appropriate in relation to different geographical contexts.
- What is acceptable in terms of renewable energy procurement and offsetting? The UKGBC's Renewable Energy Procurement and Carbon Offsetting Guidance provides a steer on best practise here. Further guidance may assist in developing fund-level approaches.
- How can organisations confidently announce the achievement of a net zero carbon building or portfolio?

It is clear from discussions within the BBP membership that there is a strong desire for market transparency and integrity concerning the verification and certification of net zero carbon buildings and portfolios. There is clear demand for the creation of a certification scheme that will provide this level of assurance and in doing so, embody the principles of the energy hierarchy. It is hoped that such an offering may be developed in the near future.

*Regulated energy is building energy consumption resulting from controlled, fixed building services and fittings, including space heating and cooling, hot water, ventilation, fans, pumps and lighting. Unregulated energy is building energy consumption resulting from a system or process that is not 'controlled', ie energy consumption from systems in the building on which the Building Regulations do not impose a requirement e.g. IT equipment, lifts, escalators, refrigeration systems, external lighting.

**https://www.ukgbc.org/ukgbc-work/advancing-net-zero/





Net Zero Carbon Pathway Framework

1. NET ZERO CARBON TARGET DATE

Signatories must state their Net Zero Carbon Target date that covers the full scope and boundaries of the Commitment. This will be before 2050 unless an earlier date is selected.

Where the scope differs from that outlined in Table 1 below, it should be clearly stated.

The Climate Commitment also recommends that signatories set interim, near-term decarbonisation targets in line with recognised standards. The Science-based Targets Initiative defines 'near term' as within the next 5-10 years and recommends that targets reflect a c. 45% global reduction in CO_2 by 2030 identified as a requirement in the IPCC special report on global warming of 1.5° C. The BBP recognise that signatories may choose to use other methods of target setting such as <u>intensity or economic</u> <u>indicator-based methodologies</u> – particularly in cases where overall growth or changing investment priorities may lead to significant growth in absolute emissions. It is recommended that these targets are aligned with a 50% reduction in absolute emissions where possible.

2. INVESTMENT BOUNDARY

Each Signatory should clearly articulate the investment boundary of their Net Zero Carbon Target.

The investment boundary of Signatories' Net Zero Carbon Targets may vary depending on each individual company's business strucutre, e.g., whether they are a a property company, REIT or fund manager and the real estate investment vehicles they manage and utilise.

Signatories that invest across multiple geographies should make clear whether any specific geographies are not included within their Net Zero Carbon Target.

For fund managers who have multiple types of real estate investment vehicles—e.g. unlisted funds, listed and unlisted companies and real estate debt, they should be clear which investment vehicles are included within their Net Zero Carbon Target. In an effort to ensure consistency of approach and transparency, Signatories must clearly state any real estate assets under management that are not in scope of the target, coupled with the reasoning and a measure of financial materiality, i.e. percentage of total real estate investments.

Where a real estate investment vehicle or fund is included then all assets under management in those funds and vehicles owned by the Signatory must be included within the investment boundary of the Signatories Net Zero Carbon Pathway.

For the purpose of clarity, for real estate investments managed by a third party, e.g., Joint Ventures (JVs) and indirect real estate investments, these should be included either on a proportional basis by ownership, or by operational control where a level of operational control exists.

For example, two real estate investors who have signed up to the BBP Climate Commitment co-own a shopping centre through a JV partnership - one owning 75% and the other owning 25%. The owner with a 75% equity share also has full management control of the property. In this scenario:

- The owner with the minority share will include the shopping centre within its investment boundary and report the carbon proportionally in line with its 25% equity share.
- The owner with the majority share will include the shopping centre within its investment boundary and can elect to either report 100% of the carbon in line with its management control, or 75% in line with its equity share^{*}.

It is fully appreciated that including indirect real estate investments within the scope of a Net Zero Carbon Target is likely to be significantly more challenging than direct investments due to the level of control and access to data individual Signatories have for those investments. To support Signatories in assessing how their individual real estate investment boundaries should be articulated within their Net Zero Carbon Pathway an example is provided in Figure 1.



^{*} It is appreciated that within this example there is a risk of double counting if the two property owners do not elect to apply the GHG Reporting Protocol in a consistent manner. However, the BBP is not specifying how Signatories should report against the GHG Reporting Protocol as both options are valid. It is also felt any risk of double counting is not material to the efforts of developing a Net Zero Carbon Pathway.

Figure 1. Example Target Investment Boundary

In this example, ABC Real Estate Investment Management, which utilises a number of different real estate investment vehicles across multiple geographies has elected to exclude all assets under management in North America, include all assets under management in Asia Pacific, and exclude its real estate debt investments in EMEA.



ABC REAL ESTATE INVESTMENT MANAGEMENT

In such a scenario, the following example commentary would be expected to be included in a Signtatories' published Net Zero Carbon Pathway.

"ABC Real Estate Investment Management is responsible for £50bn AUM globally. Our Net Zero Carbon Target has been formally ratified for our real estate investments covering EMEA & Asia Pacific totalling £30 AUM. However, our £3bn UK debt fund has been removed from the boundary of our net zero carbon target due to the lack of data we hold to fully understand the implications of including this fund within our target. We have started a two-year plan to review this and assess how this fund can be integrated into our target in the future.

In addition, as a result of the company structure, our North American real estate investments, totalling £17bn AUM, have not been ratified for inclusion. We are working to understand the implications of including these investments within our net zero carbon target investment boundary and will be reviewing our position in the coming year."



3. CARBON EMISSION BOUNDARIES

Each Signatory must clearly articulate the sources of greenhouse gas emissions (referred to throughout this document as carbon) included within their Net Zero Carbon Target.

In an effort to ensure consistency the carbon sources included within each Signatory's Net Zero Carbon Target should be confirmed against carbon sources recognised for real estate owners and investors; these are set out in Table 1. If there is divergence, particularly regarding the addition of any interim targets, Signatories must clearly state where this is the case, coupled with the reasoning and a measure of materiality.

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 Appendix 1. It should be noted that the Climate Commitment is focused on investment portfolios rather than corporate emissions. These are commonly the most material emissions for real estate owners. We do however recommend that corporate emissions are either included within the pathway or that a reference is made to how these are addressed elsewhere (e.g. through a parent compant where relevant, or other aspect of ESG strategy).

Signatories may choose to exclude small sources of carbon emissions through the 'de minimis' principle. This is designed to allow signatories to exclude small emissions sources where the administrative burden of measuring and reporting would be higher than the potential emissions savings to be found. Where this principle is applied this should be clearly stated. Analogous to the approach taken for the most recent consultation on the Energy Savings Opportunities Scheme in the UK it is recommended that the de minimis threshold is set at 5% of total carbon emissions⁵.

Table 1: BBP Climate Commitment Carbon Boundaries

= activities that should be included within Signatories net zero carbon target.

Activities which generate GHG emissions for real estate investments (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)	✓	✓	•
Water to operate buildings	✓		٠
Waste generated during operation	✓		•
Refrigerants (Fugitive emissions)	✓		•
Purchase of goods and services (M&E & property management services)**	✓		•
Business travel (excluding that associated with development works)			•
New development works	✓		•
Refurbishment works	✓	✓	٠
Fit-out Works	✓	✓	٠
End of life***			

- * It is expected that this includes all AUM covered by the BBP Climate Commitment, including indirect investments on a proportional share basis. Signatories must clearly state whether these emissions will be covered proportionally on the basis of ownership or operational control.
- ** 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. The UKGBC provides further guidance on the definition and measurement methods for this category. For building owners, this may be largely on facilities management, contractors, lawyers and consultants.
- *** End of life carbon has not been included within the scope of the BBP Climate 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.

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



4. DELIVERY STRATEGY

Signatories must complete the following table, which outlines the delivery strategy for their Net Zero Carbon Target.

The table lists a series of elements that the BBP would expect to see in a delivery strategy ordered by the principles of the energy hierarchy. This Framework is not designed to set specific requirements or standards concerning net zero carbon buildings, but for clarity, it is the BBP's view that any credible net zero carbon pathway must be able to demonstrate how it has employed the energy hierearchy. (see Figure 2)

For each topic area it is recommended that Signatories set their own outcomes or aims. Each outcome or aim should be supplemented by commentary on how it will be delivered, together with the metric(s) used to report against progress as part of annual reporting requirements. If there are significant differences in approach across geographies or indirect investments, then this should be clearly described.

It should be recognised that each Signatory will implement their own approach tailored to their individual business activities, their assessment of their carbon footprint and associated challenges. As referenced above, it is expected that actions and detailed commentary will initially focus on the business areas that are easiest to tackle. Conversly, it is expected that the more challenging areas will initially be less sophisticated in their approach, with a focus on filling data gaps and developing strategies.

It is expected that Signatories will update their delivery strategies on a periodic basis.

Figure 2. Illustration of the energy hierarchy

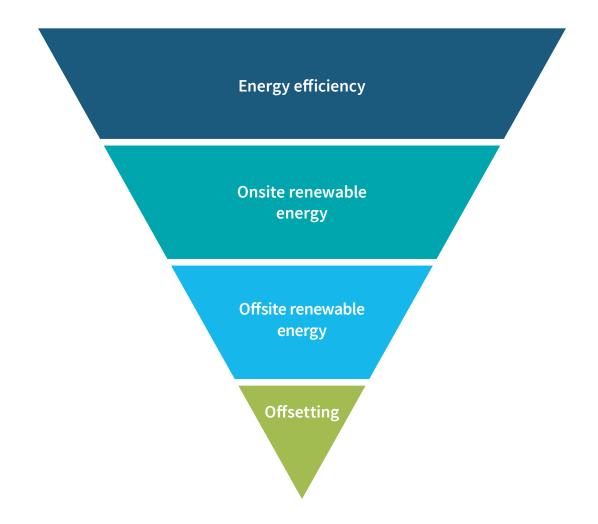




Table 2: Delivery Strategy Table

ΤΟΡΙϹ	OUTCOMES / AIMS	DELIVERY / MANAGEMENT STRATEGY	REPORTING METRICS
Measurement and baselining of carbon emissions	Desired outcomes in relation to measuring the baseline carbon emissions across the portfolio	 Commentary could cover: Materiality assessment process Data acquisition strategy Calculation methodology Approach to estimation / gap filling References to industry guidance / best practice Approach to calculation conventions (e.g., market vs location basis for Scope 2, equity vs operational control) 	tCO2e, tCO2e/m² tCO2e/FTE, tCO2e/£ (value/ revenue)
Operational Carbon reductions (energy, water & waste)	Desired outcomes in relation to improving operational carbon performance and efficiency across the portfolio.	 Commentary could cover: Acquisition strategy. Asset & property management strategy. Procurement strategy. Tenant engagement & data collection strategy. Energy, water, waste & carbon targets† (for existing building and major refurbishments/ new developments. Measurement & monitoring strategy. Approach to setting short term (interim) and long term target-setting 	tCO ₂ e saved, tCO ₂ e/m ² kWh/m ² m ³ /m ² , percentage of buildings with specific measures in place
On-site generation	Desired outcomes in relation to installing on-site renewables.	 Commentary could cover: Strategy to identify on-site capability for the installation of renewables. Delivery / roll-out strategy. 	kWp, kWh∕year, tCO₂e saved
Renewables Procurement	Desired outcomes in relation to the procurement of renewable energy.	 Commentary could cover: Procurement strategy covering renewable energy tariffs and Power Purchase Agreements. Strategy for encouraging renewable tariffs where tenants procure their own supplies. 	kWp, kWh/year
Carbon associated with capital goods, services, and capital works e.g. management, maintenance, fit- outs, refurbishment and new development	Desired outcomes in relation to measuring and reducing embodied carbon.	 Commentary could cover: Requirements for new development / refurbishment briefs. Embodied carbon targets including the approach to setting short term (interim) and long term target-setting Measuring and monitoring strategy and commentary on calculation methodologies used. Asset, property management and FM strategies. Strategy for capturing and managing tenant embodied carbon impacts. Approach to setting short term (interim) and long term target-setting 	tCO2e kgCO2e/m²
Offsetting	Desired outcomes in relation to reducing carbon emissions outside the Signatory's value chain.	 Commentary could cover: Principles and approach to offsetting e.g. Type of project and locations; use of independent standards etc. Proportion of carbon to be offset. Development of an internal cost of carbon to support procurement decision making. 	tCO ₂ e, no. carbon credits, carbon price (£/tCO ₂ e)
Third-party verification; industry standards and certification	Desired outcomes in relation to third party verification, and the use of certification schemes & industry standards.	 Commentary on: Use of third-party assurance & verification to audit performance against targets. Use of any certification scheme or industry standard. 	Type of certification, Scope of certification (emissions scopes)



5. REPORTING AGAINST NET ZERO CARBON PATHWAY

Signatories to the Climate Commitment must annually disclose their progress towards their net zero carbon pathway. It is recommended that signatories include the following:

- 1. **Changes to scope**. Signatories should provide information on any revisions to the scope of their pathway in terms of investment boundary, emissions boundary or target year, and an indication of the materiality of the change (i.e., the quantity of annual emissions added or removed from the pathway). This may be supported by providing an updated version of the detailed scope table (see Appendix 1). As per the original Commitment, signatories should strive to align as closely as possible with the BBP Climate Commitment scope and provide an explanation of any exclusions.
- 2. **Delivery strategy update**. Signatories are encouraged to provide an overview of key actions and activities undertaken in the previous year in implementing their pathway delivery strategy. This may take the form of case study examples of projects, updates on changes to policies and processes. Where possible these should be supported with figures reflecting the emissions savings derived. Signatories are encouraged to focus on the most material areas of carbon emissions from their activities.

- 3. **Reporting metrics**. Signatories are recommended to report against as many of the reporting metrics identified in their original pathway as they can, given data availability. As per the Commitment wording, signatories should publicly disclose the energy performance of portfolios as a minimum at a portfolio level by geography, and ideally at a property level. Signatories are recommended to report on progress towards their overall emissions reduction targets as outlined in their original pathway.
- 4. **Case studies**. Signatories are encouraged to provide case study information for projects / assets / initiatives that support the achievement of net-zero carbon related goals
- 5. **Updated carbon footprint**. If this was part of the net zero carbon pathway, signatories are encouraged to provide a carbon footprint for the most recent reporting year to enable tracking of progress and comparison with the baseline. We recognise that some signatories will not have undertaken a carbon footprint baselining exercise as part of their original pathway documents. It is recommended that signatories clearly communicate where data is based on primary evidence and where it is based on estimation.



Appendix 1 – Detailed Carbon Scope Table & Greenhouse Gas Protocol Alignment

The table below provides an extended breakdown of Table 1. on page 8, that outlines the carbon scope covered within the BBP Climate Commitment. In addition to the breakdown of activities, references to the carbon scope, as well as how activities align to the GHG Protocol reporting categories are also provided.

Business Area	Sub-Area	GHG Protocol Reporting Category	Carbon Scope	Commitment Inclusion
Corporate	Head office energy use	Company facilities	1&2	•
	Company vehicles	Company Vehicles	1	٠
	Business travel (excluding commuting)	Business travel	3	•
	Purchased Goods and services	Purchased goods & services	3	•
	Operational waste generated	Waste generated in operations	3	•
	Operational water use	Purchased goods & services	3	•
	Employee commuting	Employee commuting	3	٠
Direct Real Estate Holdings (including JVs	Landlord purchased energy (electricity & fuels)	Purchased electricity, heat and steam	1,2&3	~
with management control)	Tenant purchased energy (electricity & fuels)	Downstream leased assets	3	~
	Landlord refrigerants	Purchased goods and services	1	~
	Tenant refrigerants	Tenant Scope 3	3	
	Landlord purchased water	Purchased goods & services	3	~
	Tenant purchased water	Tenant Scope 3	3	
	Landlord managed operational waste	Waste generated in operations	3	~
	Tenant managed operational waste	Tenant Scope 3	3	
	Tenant transport emissions	Tenant Scope 3	3	
	Tenant supply chain emissions	Tenant Scope 3	3	
	Landlord purchased capital goods & services (M&E & property management services)**	Purchased goods and services	3	~



Investments (Indirect Real Estate Holdings, e.g., where investments are	Landlord purchased Energy (electricity & fuels)	Investments (proportional to the investment)	3	\checkmark
	Tenant purchased energy (electricity & fuels)	Investments (proportional to the investment)	3	~
managed by a third party such	Landlord refrigerants	Investments (proportional to the investment)	3	~
as JVs with no management	Tenant refrigerants	Tenant Scope 3	3	
control or investments in other real estate	Landlord purchased water	Investments (proportional to the investment)	3	~
investment	Tenant purchased water	Tenant Scope 3	3	
vehicles)*	Landlord managed operational waste	Investments (proportional to the investment)	3	~
	Tenant managed operational waste	Tenant Scope 3	3	
	Visitors transport emissions	Tenant Scope 3	3	
	Tenant supply chain emissions	Tenant Scope 3	3	
	Landlord purchased capital goods & services (M&E & property management services)**	Purchased goods and services	3	~
Development	New development (including those where funding is being provided)	Purchased Goods & Services	3	~
	Refurbishments	Purchased Goods & Services	3	~
	Fit-out (landlord controlled)	Purchased Goods & Services	3	~
	Fit-out (tenant controlled)	Tenant Scope 3	3	~
	End of life	End of life treatment of sold products	3	***

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

* For indirect investments it is recommended that carbon emissions should be attributed as a % ownership of the investment.

** 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 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.



Appendix 2 – References to industry guidance and best practice

The table below provides references to industry guidance and best practice in the areas set out in Table 2. Please note that this is not exhaustive and that sources of guidance in these areas are consistently evolving to reflect a changing market position.

ТОРІС	DELIVERY / MANAGEMENT STRATEGY
Measurement and baselining of carbon emissions	 <u>GHG Protocol</u> <u>UKGBC Guide to Scope 3 Reporting in Commercial Real Estate</u> <u>The Global GHG Accounting and Reporting Standard for the Financial Industry</u>, <u>Partnership for Carbon Accounting Financials (PCAF)</u>
Operational Carbon reductions (energy, water & waste)	 <u>UKGBC Net zero carbon: energy performance targets for offices</u> <u>Carbon Risk Real Estate Monitor (CRREM)</u> <u>LETI Climate Emergency Retrofit Guide</u> <u>RIBA 2030 Climate Challenge</u>
On-site generation	<u>UKGBC Renewable Energy Procurement & Carbon Offsetting Guidance for Net Zero</u> <u>Carbon Buildings</u>
Renewables Procurement	<u>UKGBC Renewable Energy Procurement & Carbon Offsetting Guidance for Net Zero</u> <u>Carbon Buildings</u>
Carbon associated with capital goods, services, and capital works e.g. management, maintenance, fit-outs, refurbishment and new development	 LETI Embodied Carbon Primer RIBA 2030 Climate Challenge RICS Professional Guidance, Methodology to calculate embodied carbon UKGBC Guide to Scope 3 Reporting in Commercial Real Estate Quantis
Offsetting	 <u>The Oxford Principles for Net Zero Aligned Carbon Offsetting</u> <u>UKGBC Renewable Energy Procurement & Carbon Offsetting Guidance for Net Zero</u> <u>Carbon Buildings</u>
Third-party verification; industry standards and certification	 NABERS UK BREEAM LEED Science-based Targets Initiative Upcoming UK Net Zero Carbon Buildings Standard



Acknowledgements

Authors and Editors

Christopher Botten Sarah Ratcliffe Adam Smith Anneli Tostar Nina Reid Ruairi Revell Andy Haigh

Original Working Group

John Davies Olivia Allen Ritu Rajashekar Amira Hashemi Kulbir Bhatti Kathryn Barber Louise Ellison Alan Richardson Fernanda Amemiya Sophie Carruth Malcolm Hanna Connor McCauley Miles Lewis Alan Page Abigail Dean Tim Coffin Michael Grantham Matt Smith Jane Wakiwaka **Richard Groves** Karen Jamison

Better Buildings Partnership Better Buildings Partnership M&G Real Estate abrdn Grosvenor Derwent London Derwent London Federated Hermes Frasers Property UK Great Portland Estates Great Portland Estates Hammerson intu Landsec LaSalle Investment Management Legal & General Real Assets

Better Buildings Partnership

Better Buildings Partnership

- Lendlease
- Lendlease
- M&G Real Estate
- Nuveen Real Estate
- Royal London Asset Management
- SEGRO
- Shaftesbury
- The Crown Estate
- Transport for London
- Workspace

References

- 1 First, 2018
- 2 Climate Action Tracker, 2021
- 3 Abergel et al., 2018
- 4 <u>https://www.betterbuildingspartnership.co.uk/</u> <u>member-climate-change-commitment</u>
- 5 <u>https://www.gov.uk/government/consultations/</u> <u>strengthening-the-energy-savings-opportunity-</u> <u>scheme-esos</u>



info@betterbuildingspartnership.co.uk www.betterbuildingspartnership.co.uk

