Creating Thriving Cities

Our pathway to net zero

2022

bruntwood

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Our pathway to net zero

2022

Bruntwood's sustainable approach

Climate change is accelerating the pace at which we as a developer and investor must update our spaces and places to ensure we see the transformational change that is needed to avoid a climate catastrophe.

We know that we can only fulfil our purpose of creating thriving cities if we can deliver sustainable and environmentally-conscious spaces that support the wellbeing of our customers, colleagues and communities.

We also know that sustainability is becoming increasingly important to our customers and we're passionate about supporting them to reduce their own environmental impact through both short and long term initiatives.

Sustainable growth is built into our history

Acting sustainably has always been key to our approach as a business. From the very beginning, we've chosen to recycle rather than rebuild, bringing new value and life to our buildings and communities by realising their full potential, and developing with a net zero future in mind.

The built environment contributes around 40% of the UK's total carbon footprint, so as a business we have the opportunity to make a huge difference in the regions in which we operate. In 2018, we became the UK's first commercial property company to commit to the UK Green Building Council's Advancing Net Zero programme with the target of operating at net zero carbon by 2030.

As part of this commitment to net zero carbon, we've worked with the Carbon Trust to define a set of science based targets which will allow us to monitor and improve our output more efficiently.

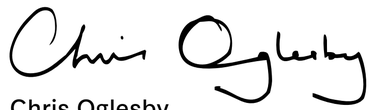
We continue to commit to a net zero future

In 2021, we reaffirmed this commitment by becoming a founder signatory to the World Green Building Council's Net Zero Carbon Buildings Commitment and signing up to the United Nations-backed global campaign, Race to Zero.

We remain committed to a net zero future, and have been investing in valuable building pilots to understand what changes we need to make so that our buildings operate more efficiently, and how our teams in our buildings can utilise technology to manage our buildings.

Our Net Zero Pathway has been created to highlight how Bruntwood will make essential changes to deliver our net zero ambitions and the robust targets that we've set ourselves to ensure we are successful.

I invite you to read through our ambitious plans, and thank you for engaging with us on our journey.



Chris Oglesby,
CEO of Bruntwood

Our commitment highlights

2030

All areas under our direct control will be net zero carbon

GHG Protocol scopes ❶❷

2050

We will be a net zero business

GHG Protocol scopes ❶❷❸

2022

All new buildings will have net zero upfront carbon, and be net zero in operation (in common areas)

2025

All common areas in our buildings will use electricity generated from renewable sources

2030

All electricity we supply into our buildings will be generated from renewable sources

All new developments will be designed with a limit of 600 $kgCO_2/m^2$ upfront embodied carbon

2050

We will have removed fossil fuel powered heating and hot water from all buildings across our portfolio

Our carbon footprint

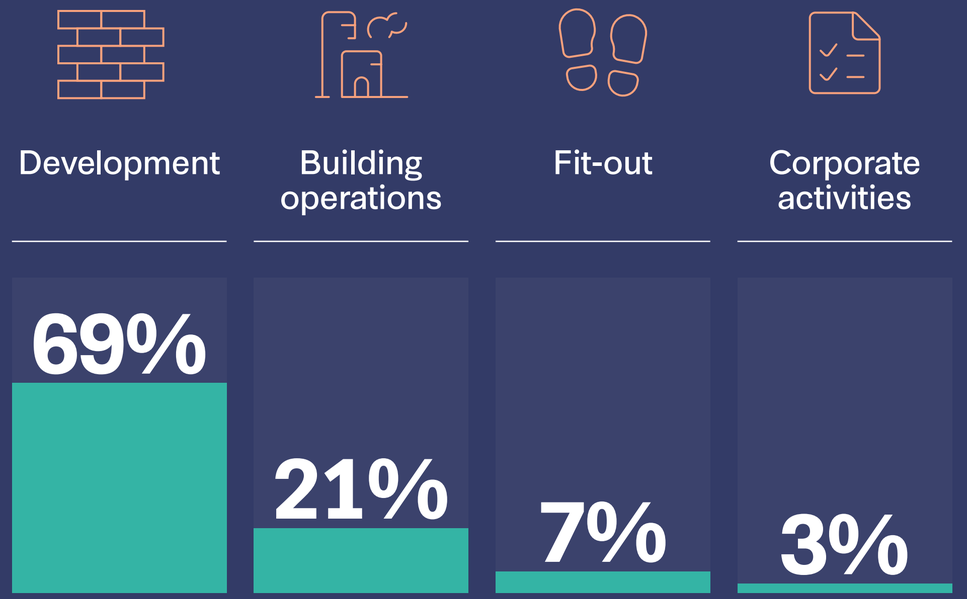
Our emissions include those created by our on-site gas boilers and fugitive emissions (scope 1), those created in the production of electricity we use to power our buildings (scope 2), and those created by our suppliers and customers in the development and use of our buildings (scope 3).

We annually collect data and report on our emissions according to the guidelines established by the GHG protocol.

We're proud to be continually exploring ways to improve the accuracy of our data, and will be using this to support our customers and suppliers to make positive changes that will benefit the environment.

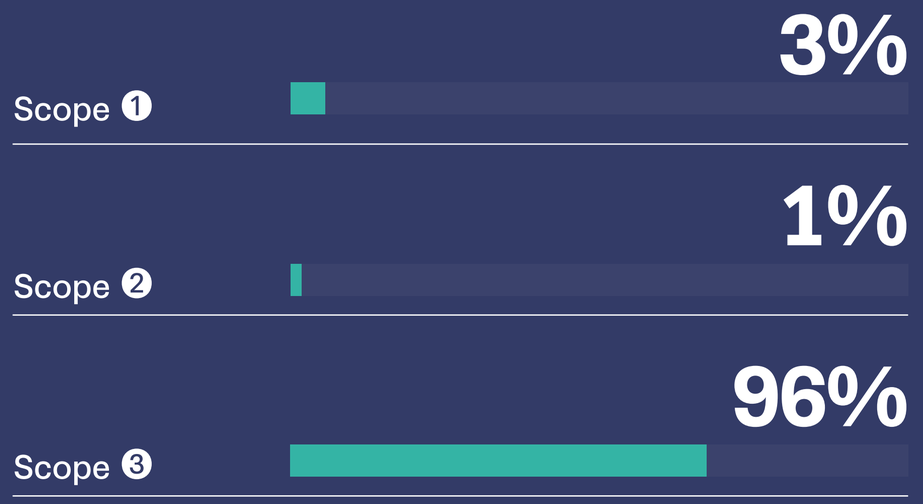
Where our emissions come from

We split our emissions based on our key business activities: developing new buildings, operating buildings across our portfolio, fitting out our common areas and customer suites, and our corporate business activities.



How we create our emissions

The majority of our emissions are created through our supply chain and customers, which is why we are adopting a collaborative approach to reduce our emissions impact.



Developing sustainable buildings

Achieving our purpose of creating thriving cities requires a combination of reinventing existing buildings and creating new developments to support modern requirements.

As a company that was borne out of refurbishing buildings, we continue to place sustainable development at the forefront of our business practices.

All our new developments will:

- ✓ be net zero in operation* (in common areas)
- ✓ have net zero embodied carbon*
- ✓ not use fossil fuels to provide heating and hot water

*based on **UKGBC criteria**

Planning sustainably

Since Bruntwood was established in 1976, we have focused on bringing new life to older buildings and communities, and we will continue to adopt a “refurbish where possible” approach to developing our portfolio.

To ensure we grow our portfolio sustainably, we have introduced a new assessment process for all future acquisitions, so we are ready to make the necessary improvements to buildings to support our net zero aspirations.

Alongside our buildings, we are growing our portfolio of renewable energy, and are pleased that customers in all our new developments will have access to a fully renewable electricity tariff.

Designing sustainably

All of our new development projects are designed with sustainability in mind, with best practices adopted from UKGBC, LETI, RIBA and NABERS Design for Performance.

We have committed that no fossil fuels will be used to provide heating or hot water in our new development activities, and all new office developments will be designed to target a whole building energy intensity of no greater than 55 kWh/m^2.

We undertake a whole life carbon assessment (WLC) for all new developments and major refurbishments, to minimise the combined embodied and operational carbon impact, and track performance against this throughout the construction process.

Our most sustainable building yet

Cross-laminated timber frame to lock in carbon

Facade design to create solar shading

Low-carbon concrete to reduce embodied carbon

Solar PV to generate energy onsite

Smart buildings technology to control temperature

Artist's impression

The Ev0 Building

To support our ambitious plans to reduce embodied carbon, we are proud to be developing the UK's lowest carbon new build workspace, Ev0, which will be net zero* for both upfront and operational carbon.

The fully electric **Ev0 building** will be built using a unique mass timber frame that captures and stores carbon - the same frame is a key part of the internal design featuring aspects like exposed timber soffits, beams and columns.

Smart technology will automatically control the building's temperature and air quality, and the building's facade will create solar shading.

Importantly, customers will be able to track their energy consumption through smart metering systems, so that they are able to better monitor and manage their usage.

* based on **UKGBC Net Zero Carbon Buildings Framework**

Collaborating across our supply chain

Over 75% of our overall emissions originate from our supply chain, meaning it's absolutely critical that we collaborate with our suppliers to collectively reduce our carbon footprint.

Whether that's during the evolving design of a new sustainable development or throughout the construction process, we are committed to reducing the emissions impact across our supplier network.

Low Carbon Materials

To achieve our goal of all new developments creating a maximum of 600 $kgCO_2/m^2$ of upfront carbon by 2030, we will continue to trial innovative materials technologies across our new buildings and major refurbishment projects, including:

- Lower-carbon variants such as recycled steel and low-carbon concrete
- Alternative materials such as cross-laminated timber
- Material reuse through circular economy principles

Reducing Construction Emissions

Reducing embodied carbon emissions doesn't stop once the building has been designed and the materials have been selected.

Throughout the construction process we collaborate with suppliers to further reduce carbon emissions, through initiatives such as:

- Regular reviews of materials to reduce embodied carbon
- Sourcing local materials to reduce transportation emissions
- Transitioning away from fossil fuels to power construction activities
- Reducing waste to limit emissions created by waste collection and processing

Supplier Charter

We are working with our suppliers to support them to work with us in a more sustainable manner.

Firstly by aligning our approaches to sustainability, and then by collaborating with them to reduce the emissions of products and services they provide to us.

The first step in this process is the launch of our Supplier Charter in 2023. Following this, we will then work closely with our suppliers to identify and implement the necessary practices to reduce our scope 3 emissions.

Data Capture & Reporting

In parallel with introducing a system to capture our emissions data, we will be engaging with suppliers to identify ways to obtain accurate information about our scope 3 emissions.

This will help us to report transparently, understand where emissions are concentrated, and where to focus our reduction efforts.

Improving our building efficiency

We operate a mixed portfolio of over 100 buildings, ranging from city centre offices to complex science parks. To maximise the efficiency of this portfolio, it is essential that we take a holistic approach to implementing efficiency improvements, ranging from the day-to-day operations and interactions with customers, to strategic investments required to improve the efficiency of individual assets.

- ✓ Achieve an average 4.2% improvement in energy usage intensity (EUI) across the portfolio annually, in support of our science-based targets
- ✓ All buildings to be net zero in common areas by 2030
- ✓ All buildings to be net zero in common areas and customer suites by 2050

Building Efficiency project

In summer 2022 we completed a project to assess almost all of the buildings in our portfolio, then develop a bespoke plan for each asset to improve energy efficiency and eliminate the use of heating and hot water generated by fossil fuels.

Our new energy improvement initiatives will be delivered across our entire portfolio starting in 2023. We will prioritise poorly insulated buildings or those that are heavily reliant on gas-fuelled boilers, and align our plans with other sustainable investments including solar photovoltaic deployments, smart buildings technologies and major building works.

Sustainability Champions

In 2022, we launched our Sustainability Champions programme - a group of colleagues across the business who are responsible for driving sustainability efforts in our buildings, to minimise the environmental impact on a day-to-day basis. This group will be expanded in 2023, ensuring all our buildings have a nominated Sustainability Champion.

In addition, we will be working closely with our customers to help them to identify and implement opportunities to reduce energy consumption and carbon emissions in their own suites.

Transitioning to clean energy

Making the transition to renewable energy is critical to a sustainable and successful future. This requires a closely coordinated effort to remove existing fossil fuel energy sources, whilst introducing new energy generation from renewable sources.

On-site electricity generation

We will install solar on all of our new buildings where commercially viable, and identify opportunities to retrofit solar across suitable sites already in the portfolio

GOAL: By 2030, 3,000MWh solar capacity will be available across the Bruntwood portfolio

Off-site electricity generation

We are committed to continually exploring opportunities for major off-site electricity generation, with the aim of creating sufficient green electricity to match the energy demand of Bruntwood's entire portfolio, including future growth plans.

GOAL: By 2030, all electricity supplied to Bruntwood's portfolio will be generated from renewable sources

Gas boiler removal

We will decarbonise heating and hot water across the Bruntwood portfolio, by replacing gas boilers with technologies powered by renewable energy

GOAL: By 2040, all gas boilers used for heating and hot water will be removed from the Bruntwood portfolio

unify energy

In 2016, we launched Unify Energy, a fully licensed energy supplier offering an end to end solution for the supply and management of energy within multi-tenanted buildings.

This will accelerate Bruntwood's migration to renewable energy, and give customers the benefit of contracting with a fully licenced energy supplier.

"In helping our cities take a big step forward in their own net zero journeys, we're also giving customers some protection from the inflationary pressures on energy prices through greater stability."

Chris Oglesby,
CEO of Bruntwood

Kirk Hill Wind Farm

Investing in off-site electricity

In 2022, Bruntwood purchased a 42.4% share in a new co-operatively owned wind farm, becoming the first UK commercial real estate company to take such an opportunity.

This investment means we will be able to generate 80% of the electricity required to power the common spaces of all our buildings directly from a new wind farm to be built at Kirk Hill in Ayrshire - supporting the transition to a fully renewable energy supply for our buildings' common areas and our own offices by 2025.

We are actively exploring other innovative opportunities to create a fully renewable electricity supply to all Bruntwood buildings by 2030, accelerating our journey towards a net zero future.

Reducing emissions from fit-outs

We undertake major building refurbishments and fit out customer suites, both of which consume raw materials and create embodied carbon emissions. By considering circular economy principles alongside lifecycle thinking, our Product Design teams can minimise the environmental impact whilst continuing to create flexible, healthy workspaces that encourage collaboration and innovation.

- ✓ All customer fit-outs offered by Bruntwood to have sustainable options presented by the end of 2023
- ✓ Reduce the average embodied carbon intensity associated with refurbishments and fit-outs by 40% by 2030

We're reviewing all products used for suite refurbishments and fit-outs, to assess their sustainability credentials and impact.

We're investing in software and processes to measure and assess the embodied carbon content of products and services used for fit-outs.

We're developing services to provide all customers with an upfront carbon assessment for their fit-outs, along with recommendations for improvements through sustainable products.

We're exploring opportunities to reuse products no longer required when suites are refitted, with a particular focus on supporting local community groups.

We're collaborating with suppliers to encourage widespread adoption of sustainable fit-out products.

Offsetting our residual emissions

Achieving net zero requires residual emissions to be offset, such as those from remaining gas boilers, fugitive emissions, or embodied carbon from building materials.

Bruntwood is committed to investing in offsetting transparently, aligned with recommendations set by UKGBC, and implemented in such a way that it encourages the ongoing reduction of actual emissions across all Bruntwood's business functions.

2022

Carbon policy

An internal carbon offsetting policy has been established, requiring the use of removal-based credits for offsetting where available, accredited by ICROA or the UK Environmental Reporting Guidelines (ERG).

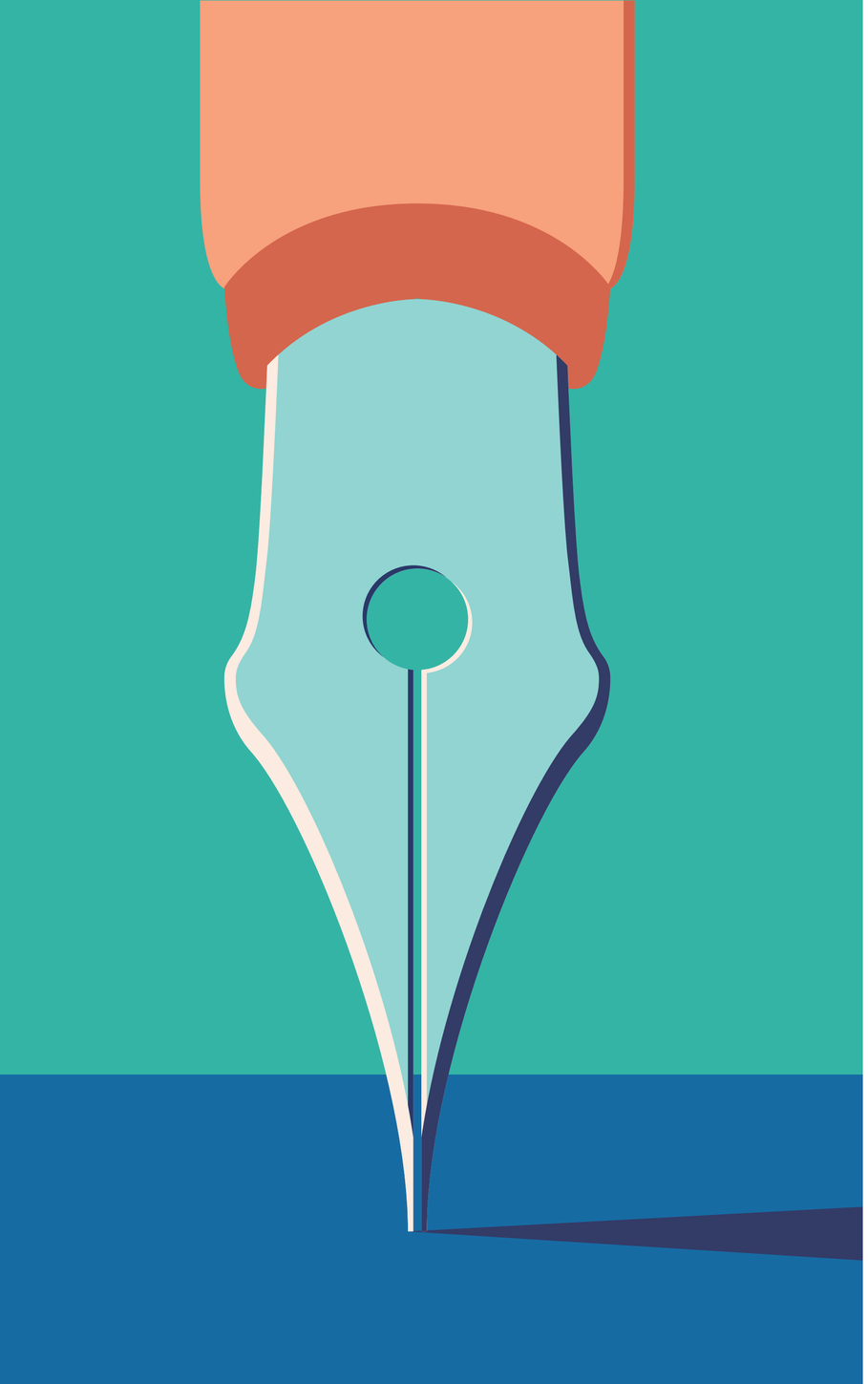
2024

Carbon offset capability

We will be exploring opportunities to invest in in-house carbon offsetting capability from 2024 onwards, available to offset both our own carbon emissions, as well as being available to support our customers on their own net zero journeys.

Our offsetting commitments

- ✓ Offset all operational carbon (common areas and offices) from 2030 onwards
- ✓ Offset all upfront carbon for new builds from 2023 onwards, and for major refurbishments from 2030 onwards
- ✓ Offset all residual carbon (including scope 3 emissions from customers and suppliers) from 2050 onwards



Leading our sustainability strategy

Targets & KPIs

- Develop a target framework to support the delivery of this Net Zero Pathway
- Validate targets with the Science Based Targets initiative (SBTi)
- Externally publish our targets and annual progress towards achieving them
- Review progress on an annual basis and update the Net Zero Pathway as required

Data Collection

- Introduce a system to capture all emissions data
- Initiate a programme to continually improve accuracy and granularity of this data to support ongoing emissions reductions efforts
- Develop a centralised Sustainability Data Platform to consolidate all sustainability-related data and metrics, to improve transparency and aid business decision making

Transparent Reporting

- Produce internal quarterly reports on emissions, and review with the Bruntwood Sustainability Board
- Sign up to CDP (Carbon Disclosure Project) as the mechanism for public disclosure and initiate public reporting
- Undertake third-party auditing of our scope 1-3 emissions
- Continue to adhere to and exceed the expectations of the ISO50001 and PAS2060 standards

Working in partnership

In addition to our own pledges, we aim to support our communities with their sustainability ambitions.

Our CEO, Chris Oglesby, sits on the Board of Trustees for the UKGBC and our Director of Strategic Partnerships and Impact, Jessica Bowles, sits on the Board of the Manchester Climate Change Agency.

We also play an active role in sustainability groups and initiatives, such as the Better Buildings Partnership and the Yorkshire Climate Action Coalition.

Our Strategic Programme Commitments

ADVANCING NET ZERO	UKGBC Advancing Net Zero	2018
CLIMATE GROUP EP100	Climate Group EP100	2018
RACE TO ZERO	Race to Zero	2021
BPF	BPF Net Zero Pledge	2022
BBP CLIMATE COMMITMENT	BBP Climate Commitment	2022

Our Strategic Sustainability Partnerships

UK GBC · BBP BETTER BUILDINGS PARTNERSHIP · MANCHESTER CLIMATE CHANGE AGENCY · ENERGY INNOVATION AGENCY

Appendices

This pathway outlines our approach to achieving net zero, in support of the BBP Climate Commitment. The following appendices provide details around the investment boundaries, emissions boundaries, and full delivery strategy, in line with this commitment.

See here for more information about the BBP Climate Commitment

Our Scope

bruntwood Works

bruntwood SciTech

The Bruntwood Net Zero Pathway includes all areas where Bruntwood has operational control:

- Wholly owned assets, including the “Works” portfolio
- Assets owned by Bruntwood SciTech, the 50:50 joint venture with Bruntwood and Legal & General, including Alderley Park, Melbourn Science Park and ID Manchester

This combined portfolio of over 100 buildings across six regions will allow Bruntwood to make a material impact on emissions across the cities in which it operates, and support the emissions reduction plans for over 2,000 customers.

Out of Scope
Bruntwood’s recent joint venture partnerships - in Bury, Trafford and Liverpool - are currently out of scope of the Net Zero Pathway. We are working with those joint venture partners to fully understand the emissions impact of these newer portfolios, and agree how to best implement similar pathways to support their emissions reduction aspirations.

Bruntwood has a minority share in a small number of non-real-estate investments, leased suites outside the portfolio. which are sublet, and FRI properties. Given these are non-material to Bruntwood’s total emissions, they are not included in the Net Zero Pathway.

Landlord & Tenant Spaces
Bruntwood’s Net Zero Pathway includes consumption across both landlord and tenant-controlled areas in our buildings.

New Developments and Acquisitions
New, redeveloped assets and vacant possession acquisitions will be included in the second full financial year following PC/acquisition, provided 80% occupancy has been achieved. Non-vacant possession acquisitions will be included in the first full financial year following acquisition.

Disposals
Disposals will not be included in the financial year in which they are disposed.

Our regions

Appendix 2 Emissions Boundaries

Business Area	Sub-Area	Carbon Scope	Required for BBP	Reported by Bruntwood
Corporate	Head office energy use	1 2	Optional	√
	Company vehicles	1	Optional	√
	Business travel (excluding commuting)	3	Optional	√
	Purchased Goods and services	3	Optional	√
	Operational waste generated	3	Optional	√
	Operational water use	3	Optional	√
	Employee commuting	3	Optional	√
Direct Real Estate Holdings (including JVs with management control)	Landlord purchased energy (electricity & fuels)	1 2 3	√	√
	Tenant purchased energy (electricity & fuels)	3	√	√
	Landlord refrigerants	1	√	√
	Tenant refrigerants	3		
	Landlord purchased water	3	√	√
	Tenant purchased water	3		
	Landlord managed operational waste	3	√	√
	Tenant managed operational waste	3		
	Tenant transport emissions	3		
	Tenant supply chain emissions	3		
	Landlord purchased capital goods & services (M&E & property management services)	3	√	√
Investments (Indirect Real Estate Holdings)	Landlord purchased Energy (electricity & fuels)	3	√	n/a
	Tenant purchased energy (electricity & fuels)	3	√	n/a
	Landlord refrigerants	3	√	n/a
	Tenant refrigerants	3		
	Landlord purchased water	3	√	n/a
	Tenant purchased water	3		
	Landlord managed operational waste	3	√	n/a
	Tenant managed operational waste	3		
	Visitors transport emissions	3		
	Tenant supply chain emissions	3		
	Landlord purchased capital goods & services (M&E & property management services)	3	√	n/a
Development	New development (including those where funding is being provided)	3	√	√
	Refurbishments	3	√	√
	Fit-out (landlord controlled)	3	√	√
	Fit-out (tenant controlled)	3	√	X
	End of life	3		

New Builds & Major Redevelopments

Outcomes / Aims	Delivery / Management Strategy	Reporting Metrics

Design Sustainable Buildings

All new build developments to have net zero embodied carbon and be net zero in operation for common areas

All new office build developments to be designed to achieve a maximum of 600 $kgCO_2/m^2$ upfront carbon and 800 $kgCO_2/m^2$ whole life carbon by 2030

All new office build developments to be designed to achieve whole building energy intensity of 55 kWh/m^2 (GIA) or less

All major redevelopments to target net zero in operation for common areas, and have net zero embodied carbon by 2030

Bring sustainability to the forefront of the development process

- Continue to adopt a "refurbish not rebuild where possible" mindset to portfolio development and expansion
- Introduce a standard Sustainability Assessment brief to be completed for all new developments and major redevelopments, for use in all appraisal processes, and reviewed by the Sustainability Board
- Expand the due diligence process for acquisitions, expansions and joint ventures, to include a full sustainability assessment
- Forward allocate renewable energy for all new developments

Embed sustainability throughout the design process

- Create Sustainable Development Guides to support the consistent delivery and best practice sharing of developing net zero buildings
- Design buildings aligned to industry best practice standards including UKGBC, LETI, RIBA and NABERS Design for Performance
- No new development activities to include heating or hot water provided by fossil fuels
- Undertake whole life carbon assessment for all new developments and major refurbishments
- Introduce a standardised reporting process to forecast and track upfront carbon costs throughout the development phase
- Explore opportunities to innovate with and trial low-carbon material options

Forecasted upfront carbon for all new developments and major redevelopments (tCO_2, tCO_2/m^2)

Forecasted whole life carbon for all new developments and major redevelopments (tCO_2, tCO_2/m^2)

Energy intensity assessment for all new developments and major redevelopments (including whole building, base build and tenant areas) (kWh/m^2)

Sustainable Construction

All key construction suppliers to sign up to Bruntwood Supplier Charter by the end of 2023

Embodied carbon impact of new build construction projects to be reported by the end of 2023

Partner with our supply chain to drive down construction-related emissions

- Introduce a Supplier Charter for suppliers supporting construction projects
- Build on the existing scope 3 emissions reporting to improve visibility of and granularity into upfront emissions, and highlight opportunities to improve data accuracy and implement emissions reduction initiatives
- Collaborate with key construction contractors to support and accelerate their transition to sustainable construction methods

Actual upfront carbon for all new developments and major redevelopments (tCO_2, tCO_2/m^2)

% key construction suppliers signed up to the Bruntwood Supplier Charter

Building Operations

Outcomes / Aims	Delivery / Management Strategy	Reporting Metrics

Reduce Energy Consumption

Achieve an average 4.2% improvement in EUI across the portfolio on an annual basis, in line with the expectations of the Science-based Targets initiative

50% of buildings to achieve individual EUI target by 2030; all buildings to achieve individual EUI target by 2040

All buildings to achieve individual net zero roadmap by 2050

Replace all manual electricity and gas meters with automated/smart meters by the end of 2023

Review and deliver energy efficiency improvements across the entire portfolio

- Undertake an assessment of all buildings to provide a net zero roadmap, including an EUI target and EPC improvement plan
- Initiate a programme to implement the EPC improvement plans and net zero roadmap for all buildings
- Migrate all submeters to automated/smart meters
- Develop a framework to manage and accelerate energy reduction efforts in high intensity asset classes such as labs and retail environments
- Explore opportunities to innovate with and trial technologies such as Smart Buildings and IoT

Drive down energy usage in our building common areas

- Develop Sustainable Operations Guides for each building, outlining energy efficiency improvement measures and opportunities
- Create energy, water and waste reduction plans for our common spaces
- Introduce Sustainability Champions across all our regions to engage with building users and support the implementation of sustainability plans and initiatives

Collaborate with customers to help them reduce their energy consumption

- Develop a platform to provide customers with online access to energy, water and waste data
- Engage and partner with customers to implement in-suite energy efficiency measures, and improved energy usage behaviours
- Support customers who want to capitalise sustainable fit-out costs through their lease
- Develop joint energy efficiency improvement plans with key customers
- Make a Green Lease available to customers in selected buildings

Annual building and portfolio energy usage (kWh)

Annual portfolio office energy usage intensity (kWh/m^2)

Annual portfolio energy usage intensity (kWh/m^2)

% buildings meeting EUI targets EPC compliance levels (#)

Annual common area energy usage (kWh)

Annual customer suites energy usage (kWh)

% buildings with automated/ smart meters

Reduce Refurbishment and Fit-out Emissions

Reduce average embodied carbon intensity associated with refurbishments and fit-outs by 40% by 2030

All customer fit-outs offered by Bruntwood to have sustainable options presented by the end of 2023

Implement all Bruntwood-controlled refurbishments with sustainability in mind

- Develop a plan to undertake upfront carbon assessments for all fit-outs and suite refurbishments, and optimise where commercially viable
- Review all fit-out product categories and ensure a sustainable option is available for each category
- Establish a programme to facilitate the reuse of products disposed during fit-out activities

Enhance the customer fit-out proposition to encourage sustainability

- Introduce a sustainability performance criteria to allow customers to easily assess sustainable options during fit-outs
- Provide all customers with an upfront carbon assessment for Bruntwood-managed fit-outs
- Engage with suppliers to encourage widespread adoption of sustainable fit-out products

Embodied carbon resulting from refurbishment and fit-out activities (tCO_2)

Embodied carbon savings against non-sustainable refurbishment and fit-out options (tCO_2)

Building Operations

Outcomes / Aims	Delivery / Management Strategy	Reporting Metrics

Reduce Scope 1 Emissions

Remove gas combustion systems for heating and hot water from all buildings by 2040

Eliminate use of all refrigerants with a GWP exceeding 1,000 for new installations by 2030

Decarbonise heating across the portfolio

- Develop a portfolio-level roadmap to remove all gas boilers, and initiate a programme of activity to implement this
- Identify and promote opportunities to participate in district heat networks
- Explore opportunities to innovate with and trial alternative heating technologies (eg. heat pumps, hydrogen)

Manage and reduce fugitive emissions

- Implement a proactive monitoring and maintenance programme to limit and reduce fugitive emissions
- Explore new system and refrigerant technologies

Number of buildings with gas boilers (#)

Portfolio fugitive emissions (tCO_2e)

Transition to Clean Electricity

Expand solar deployments to achieve 3,000 MWh/year solar energy generation by 2030

Procure sufficient renewable energy to meet Bruntwood's scope 2 requirements by 2025

By 2030, all electricity supplied to Bruntwood's portfolio will be generated from renewable sources

Green electricity tariff to be available to all Bruntwood customers by 2030

Implement on-site energy generation opportunities

- Undertake a feasibility assessment to identify opportunities to deploy solar PV generation across the existing portfolio
- Install solar PV on all new buildings where commercially viable
- Explore opportunities to innovate with and trial localised energy generation technologies, including wind, water, V2G and kinetic
- Explore opportunities to innovate with and trial localised energy storage technologies

Migrate to emissions-free grid-sourced electricity

- Complete the construction of Kirk Hill wind farm in partnership with Ripple Energy
- Explore further opportunities for additional off-site generation to meet Bruntwood's long-term energy requirements
- Develop and launch a renewable energy tariff available to all Bruntwood customers

Renewable energy generation (MWh/year)

% portfolio energy demand created by on-site renewable energy generation (%)

% portfolio energy demand created by off-site renewable energy sources (%)

Corporate Operations

Outcomes / Aims	Delivery / Management Strategy	Reporting Metrics

Reduce Corporate Emissions

All company vehicles to be powered by non-fossil fuel sources by 2030

Reduce commuting-related carbon emissions by 5% each year

Reduce transportation-related emissions

- Introduce a policy requiring all vehicles to be replaced by electric vehicles at the point of renewal
- Initiate a project to report and reduce emissions resulting from employee commuting and business travel

Reduce non-building related scope 3 emissions

- Introduce a system to capture data on supplier-generated (scope 3) emissions, and highlight opportunities to improve data visibility and performance improvement projects
- Implement a programme to report on, assess and identify opportunities to reduce non-building related scope 3 emissions

Emissions created from colleague commuting (tCO_2)

Emissions created from business travel (tCO_2)

Emissions created by company vehicles (tCO_2)

Offset Residual Emissions

Establish an internal carbon price by the end of 2022

Support net zero commitments through the transparent use of credible offsetting opportunities

- Introduce a Carbon Offset policy to drive consistency and transparency around the use of carbon offsetting across the business
- Ensure that, where available, only certified NBS credits will be used for offsetting, and offsetting will always be undertaken in compliance with BBP and UKGBC guidelines

Build an internal offsetting capability

- Develop and deliver a long-term plan for offsetting, including the use of PIUs and investment in owned offsetting assets

Carbon offsets procured (tCO_2)

Owned carbon offsetting assets secured by the business (tCO_2/yr)

Corporate Operations

Outcomes / Aims	Delivery / Management Strategy	Reporting Metrics

Lead through Accountability

N/A

Set clear targets and KPIs across all aspects of Bruntwood's emissions-related activities

- Build on our 2018 commitment to agree and publish externally, new, more ambitious targets
- Validate targets with the SBTi
- Externally publish our targets and annual progress towards achieving them
- Review progress on an annual basis and update the Net Zero Pathway as required

Establish data collection

- Introduce a system to capture all emissions data
- Initiate a programme to continually improve accuracy and granularity of this data to support ongoing emissions reductions efforts
- Develop a centralised Sustainability Data Platform to consolidate all sustainability-related data and metrics, to improve transparency and aid business decision making

Introduce transparent, public reporting

- Introduce quarterly reporting on all sustainability-related metrics, including carbon emissions, and review with the Sustainability Board
- Sign up to Carbon Disclosure Project (CDP) as the mechanism for public disclosure, and initiate public reporting
- Undertake third-party auditing of scope 1-3 emissions
- Continue to adhere to and exceed the expectations of the ISO50001 and PAS2060 standards

Progress towards all sustainability targets

Appendix 4 Glossary

Carbon emissions	Carbon emissions are the release of carbon into the atmosphere. This term is often used interchangeably with greenhouse gas emissions.
Carbon offsetting	Offsetting is the process of compensating for a residual level of carbon emissions. This can either be in the form of investing to avoid emissions elsewhere, or by directly removing emissions from the atmosphere.
Circular economy	The circular economy involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible.
Embodied carbon	Embodied carbon refers to the greenhouse gas emissions associated with the manufacturing, maintenance, and demolishing of a structure.
Fossil fuels	A natural fuel such as petroleum, coal or gas, formed in the geological past from the remains of living organisms. The burning of fossil fuels by humans is the largest source of emissions of carbon dioxide, which is one of the greenhouse gases that allows radiative forcing and contributes to global warming.
Fugitive emissions	Fugitive emissions are typically created by systems leaks, and are often particularly damaging to the environment due to their high GWP multiplier.
Green energy	Any energy type that is generated from natural resources, such as sunlight, wind or water.
Green lease	A lease that incorporates clauses whereby the owner and the occupier undertake specific responsibilities/obligations with regards to the sustainable operation/occupation of a property, for example: energy efficiency measures, waste reduction/management and water efficiency.
Greenhouse gas emissions	Greenhouse gas emissions are the release of emissions into the atmosphere which strengthens the greenhouse effect and contributes to climate change.
Net Zero Carbon	Achieving a balance between the carbon emitted into the atmosphere, and the carbon removed from it. This balance – or net zero – will happen when the amount of carbon we add to the atmosphere is matched by the amount removed by carbon offsetting.
Operational carbon	The carbon dioxide and other greenhouse gases associated with the in-use operation of the building. This usually includes emissions associated with heating, hot water, cooling, ventilation, and lighting systems, as well as those associated with cooking, equipment, and lifts.
PIUs	A Pending Issuance Unit (PIU) is effectively a 'promise to deliver' a Woodland Carbon Unit (WCU) in future, which can be used to offset residual emissions.
Science Based Target	Science-based targets are a set of goals developed by a business to provide it with a clear route to reduce greenhouse gas emissions, aligned to climate science.
Scope 1, 2 & 3 emissions	Greenhouse gas emissions are categorised into three groups or 'scopes' by the most widely-used international accounting tool, the Greenhouse Gas (GHG) Protocol. While scope 1 and 2 cover direct emissions sources (e.g., fuel used in company vehicles and purchased electricity), scope 3 emissions cover all indirect emissions due to the activities of an organisation.
Solar shading	Solar shading reduces glare and heat gain to help keep a building cool and comfortable. By providing glare-free natural light, solar shading reduces the amount of artificial light required during the daytime and reduces energy costs.
Upfront carbon	Upfront carbon is the embodied carbon created in the development of a building or structure.
Whole-life carbon (WLC)	Whole-life carbon is the overall carbon created in the lifetime of a structure. It includes the embodied carbon created during its manufacturing, maintenance, and demolishing, and the operational carbon created during its lifetime

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