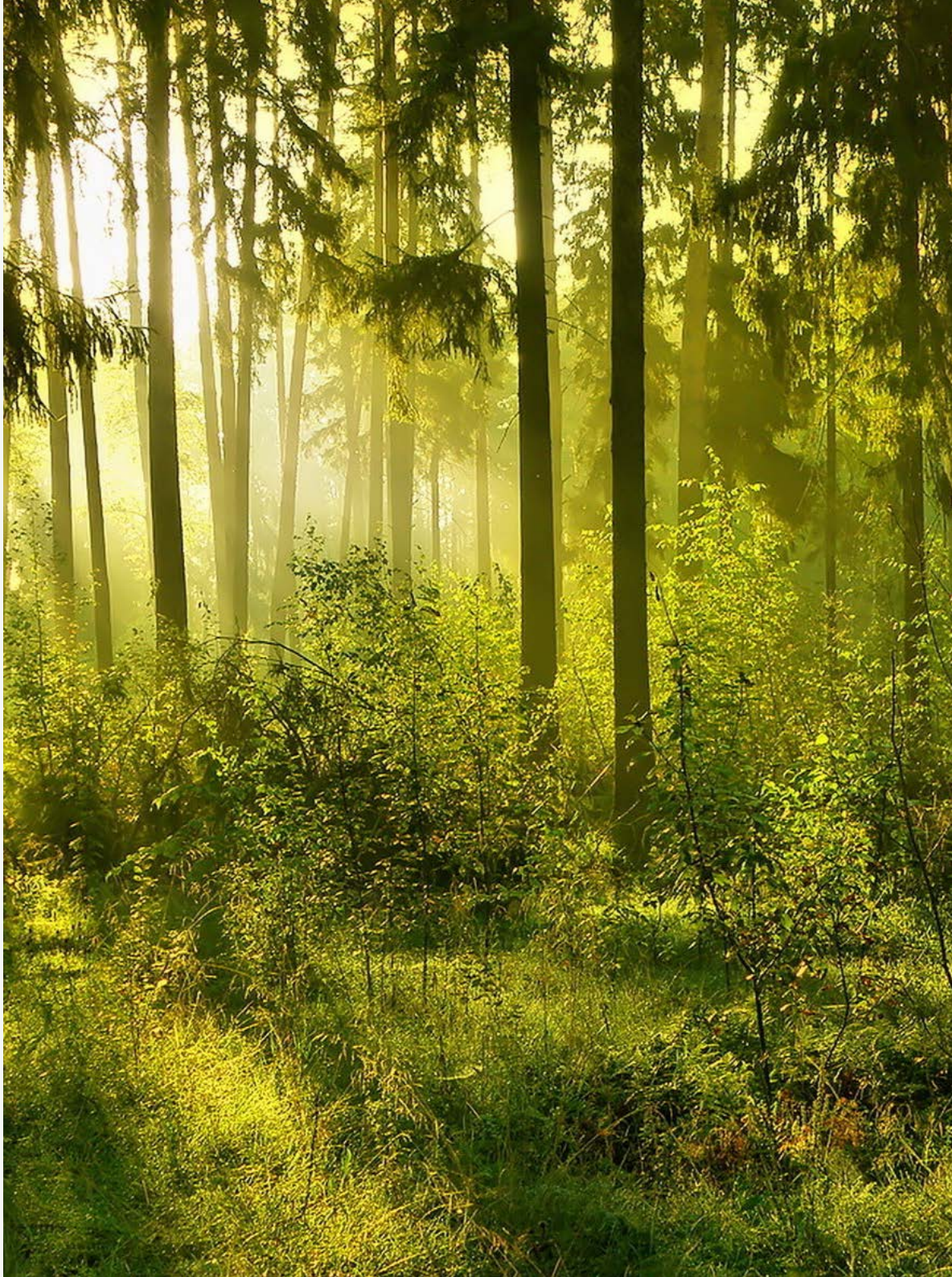
LAMINGTON GROUP

Net Zero Carbon Roadmap

Contents



Foreword

The recent UN IPCC "code red warning for humanity" has erased any doubt on the correlation between human activity and the climate crisis. This is why Lamington Group is taking decisive action to avoid climate disaster and future-proof our business.

We are starting by setting an industry first target of achieving whole life net zero carbon across our future development and existing portfolio. The ambitious target forms part of this 2030 Net Zero Carbon Roadmap with actions required to reach a 1.5°C Science Based Target. Showcasing innovation in carbon reduction will underpin the targeted delivery of 5,000 new keys by 2030 whilts achieving a 46% absolute reduction of operational carbon.

We are inviting others in the hotel industry to join us on this journey to build climate resilience in the communities we operate in and challenge the environmental criterion for the sector. We look forward to working with our stakeholders and partners to improve supply chains and encourage customers to adopt more sustainable practices.

We encourage your feedback and welcome support on the journey ahead.

Time for action

THE HOTEL SECTOR IS BEHIND

Climate change is the world's biggest threat we face. Despite buildings accounting for 40% of global greenhouse gases the hotel industry has increadibly low environmental standards and lagging behind in making progress to address the climate crisis. It is time for the sector to transition to net zero and to reduce its whole life carbon footprint.

WE MUST CHANGE

The real estate sector is starting to take climate action. Net zero commitments such as the **UK Green Building Council** and the **Better Buildings Partnership** are gaining momentum. Meanwhile, investors are pushing for more regulation such as **GRI, GRESB**, and **EPRA** and government's legislation is being strengthened with current and upcoming laws such as **SECR** and **TCFD**. Finally customers are voting with their feet, choosing companies that align with their values with 80% of them saying they want to stay in sustainable hotels. The industry has run out of excuses to take action.

LAMINGTON GROUP IS LEADING THE WAY

In January 2020 we shifted to urgent action on the climate crisis and started our journey to net zero carbon. We want to be a leader in this space and are committing to build and maintain **net zero whole life carbon hotels**. We are asking the rest of the industry to step up and match our ambition.

COLLABORATION IS CRITICAL

The whole industry has a part to play in the solution. We are sharing our plans, so they can be used and improved. If we take collective action we will have a bigger impact. This means we will future-proof our sector, attract purpose-led talent and build trust in our communities.

OUR NET ZERO ROADMAP

Our goal is to develop hometels that enhance the communities that they operate in. We will do this by following our roadmap and working with our stakeholders to create spaces that support both our planet and people to thrive.

> Lamington Group has committed to putting sustainability at the heart of its business, with the announcement of our Net Zero Carbon Roadmap, which uses science-based targets to reach Net-Zero by 2030, 20 years ahead of the Paris Agreement.

Robert Godwin
Managing Director

Transitioning to net zero by 2030

About Us

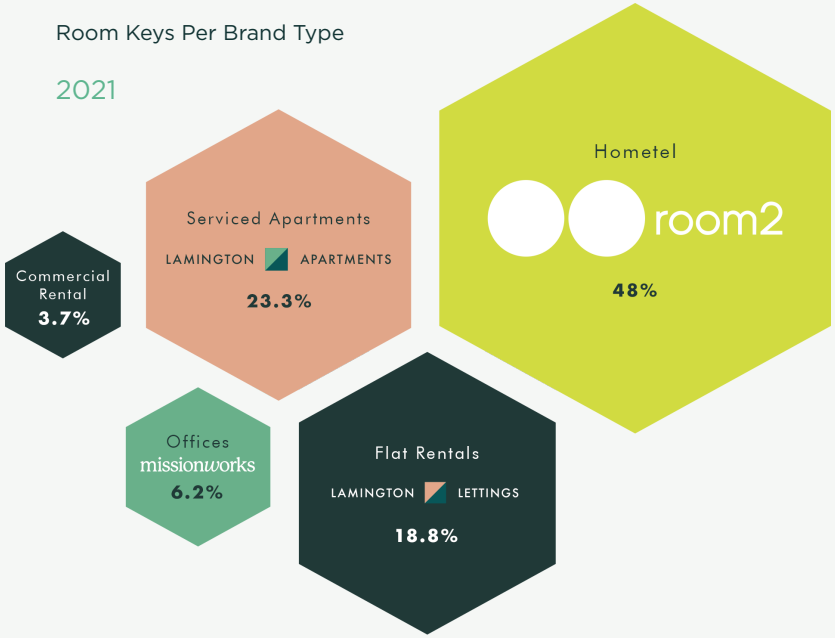
Lamington Group was founded in 1967 as a residential investor and developer in West London. It is a family owned and run group of companies that owns and operates 14,000m2 of real estate across a family of operating brands. Under leadership of brothers, Robert and Stuart Godwin, the group is embarking on a high growth phase with special focus on the extended stay accommodation sector, the fastest growing segment of the UK's hospitality industry.

The company's vision is to open 5,000 keys by 2030 under the award winning room2 and room2 lite hometel brands. This will be achieved through the acquisition and development of its own properties, alongside leases with it's investors to grow the pipeline.

LAMINGTON GROUP

Room Keys Per Brand Type

2021



room2

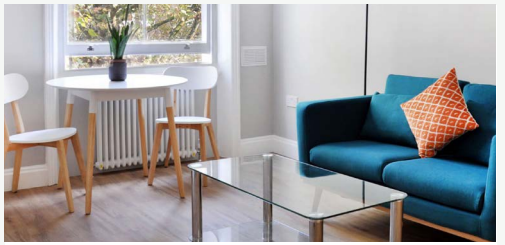
Bridging the gap between hotels and Airbnb. The world's first hometel brand.

room2lite

Challenging the budget sector, with a better product, better experience, and better value.

missionworks

Holistic co-working designed around the psychologist and theorist Jean Piaget



LAMINGTON LETTINGS

Residental lettings agency since 1978

LAMINGTON APARTMENTS

One of West London's largest and most trusted serviced apartment operators, since 2006

LAMINGTON DEVELOPMENTS

Development studio crafting inspiring spaces and delivering award-winning projects.

Baseline Emissions

The starting point has been to collect and publish our baseline greenhouse gas emissions based on our activities in 2019. The following pages set out our baseline emissions in comparison with our Greenhouse Gas (GHG) reporting for 2020, when emissions were heavily influenced by the Covid-19 pandemic.

The majority of our scope 1 and 2 emissions are associated with the operation of our buildings. Scope 3 represent the largest portion of our emissions, of which guest travel is largest contributor. While guest travel is optional for GHG reporting, we believe that it is important to take accountability to find ways to reduce this impact too. The baseline year did not include any new builds or major refurbishment projects and so we expect the capitals goods category to increase in future years.

EMISSIONS GLOSSARY

Scope 1 - Direct emissions resulting from the combustion of fuels in buildings, company owned vehicles, and fugitive emissions from the use of refrigerants.

Scope 2 - Indirect emissions from purchased electricity used in buildings.

Scope 3 - Indirect emissions associated with activities, including supply chain and tenants.

Lamington Group

Greenhouse Gas Emissions 2019

Current Emissions

Since committing to a net zero pathway in January 2020, we have been starting to reduce our emissions within the existing portfolio, through switching to renewables, challenging operations of processes, and putting in place energy reduction and efficiency programmes.

2020 EMISSIONS

When collating GHG for 2020 compared to 2019 carbon emission baseline, there is a 41% reduction in emissions across the portfolio. The heavy impact of COVID on business from March 2020 makes it hard to separate its affect vs true energy reductions/gains. Despite this the summary results are:

A reduction in scope 1 and 2 emissions of 13% and 14% respectfully, which is partially due to reduced occupancy. The reduction seen in purchased electricity is the result of increased purchase of renewable energy supplies.

Capital goods in scope 3 emissions increased by 32% due to the delivery of Missionworks and an accelerated Lamington Apartments refurbishment programme.

Fugitive emissions and water have both increased slightly, due to an increased number of serviced apartments within the portfolio.
Emissions from employee commuting, business travel and guest travel are all down significantly, due to working from home requirements and travel restrictions during the Covid-19 pandemic.

Scope 3 reductions were the largest in guest travel, clearly due to travel restrictions, and longer lengths of stay during the pandemic.

2019 scope 1, 2, 3 carbon emissions across Lamington Group portfolio
GHG PROFILE 2019, CARBON REPORT 2020
Lamington Group uses the Greenhouse Gas Protocol (GHG) developed by the World Resources Institute and the World Business Council for Sustainable Development (WBSD) as its reporting standards. For more information on the GHG Protocol, please visit **ghgprotocol.org**

Year and Property	Total 2019 Baseline (in tco2e)	% change from baseline year	Total 2020 (in tco2e)
Scope1			
Purchased natural gas	201	- 14%	173
Fugitive emissions	15.6	1%	15.7
Company vehicles	1.22	- 34%	0.81
Total Scope 1	**217**	**- 13%**	**190**
Scope 2			
Purchased electricity (market-based)	62	- 34%	41
Purchased electricity (location-based)	145	- 14%	124
Total Scope 2 (market base)	**62**	**- 34%**	**41**
Scope 3			
Capital goods	574	32%	758
Purchased goods and services	466	- 36%	297
Fuel and energy-related activities not included in Scope 1 or 2	63	- 17%	52
Employee commuting	33	- 71%	10
Business travel	20	- 47%	11
Guest travel	1653	- 79%	340
Waste generated in operations	16	- 23%	12
Water	2	1%	2
Tenant's emissions	252	- 1%	250
Total scope 3	**3079**	**- 44%**	**1731**
TOTAL Total Scope 1,2,3	t CO2e **3358**	**- 41%**	t CO2e **1962**

Our Journey So Far

JANUARY 2020

Shifted to take urgent action on the climate crisis and net zero journey started

MAY 2020

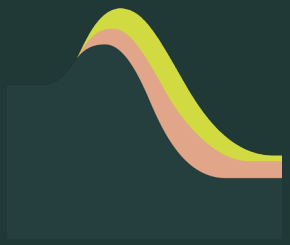
room2 Chiswick registers as 1st LETI Pioneer hotel

NOVEMBER 2020

room2 Chiswick energy intensity report produced with reduction measures and investment approved

December 2020

Lamington Group carbon baseline calculated covering scope 1, 2, 3 for the 2019 calendar year



FEBRUARY 2021

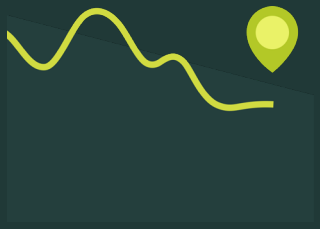
Lamington Group 2020 carbon report updated and the Group commits to setting Science Based Targets

MARCH 2021

room2 Southampton pilots food waste and mixed recycling as a new guest service

JULY 2021

room2 Net Nero Building specifications adopted for all new developments



SEPTEMBER 2021

Lamington Group published its Net Zero Carbon Roadmap

Carbon per Night

We have broken down emissions data to reflect carbon per night, as a metric to align with guest usage. We have developed the following carbon per night profiles for Lamington Apartments, room2 Hammersmith and room2 Southampton. They include emissions for operating the buildings as well as average guest travel per night sold. The noticeable findings are:

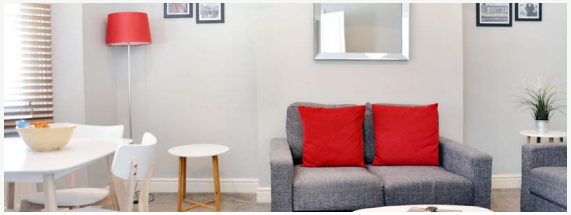
Larger buildings use less energy per room due their more recent refurbishments and increased efficiency from shared building plant.

Gas is the biggest contributor to operational carbon used for both heating and hot water in Lamington Apartments and Hammersmith, and used only for hot water in Southampton.

The older Victorian stock suffers from higher energy use due to heat loss from low building insulation and air tightness, and single glazed fenestration.

The biggest contributors to purchased goods and services category includes maintenance and housekeeping, manufactured good, food and beverages, and financial services.

Guest travel contributes the largest proportion of carbon emissions, which falls under scope 3 and usually not included in industry carbon disclosures.



2019 Lamington Apartments	kgco2e / night
Gas	7.49
Refrigerants	0.0003
Electricity	1.72
Water	0.01
Laundry	0.36
Other Purchased Goods & Services	10.99
Waste & Recycling	0.34
Guest Travel	38.07
Total emissions / room night	**60**

Traditional single use residential apartments
Average 50m2 apartments
19th Century Victorian properties

2019 Hammersmith data	kgco2e / night
Gas	3.91
Refrigerants	0.0003
Electricity	0.05
Water	0.01
Laundry	0.36
Other Purchased Goods & Services	10.99
Waste & Recycling	0.34
Guest Travel	40.64
Total emissions / room night	**57**

16 key hotel
Average room size 23m2
Victorian property converted in 2016

2019 Southampton data	kgco2e / night
Gas	1.38
Refrigerants	0.82
Electricity	0.33
Water	0.12
Laundry	1.51
Other Purchased Goods & Services	9.56
Waste & Recycling	0.41
Guest Travel	39.43
Total emissions / room night	**54**

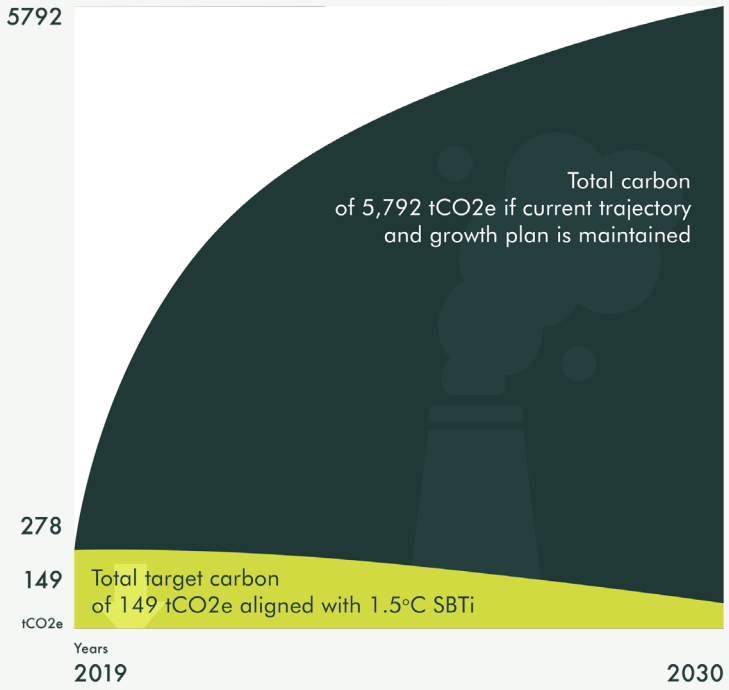
71 key hotel with food & beverage, communal lounge, laundry room and gym
Average room size 26m2
Conversion of a 1980s office building in 2018

Growth Pipeline

5,000 KEYS OPEN 2030

Central to Lamington Group's future is the planned expansion of the room2 brand across the UK, growing to 5,000 keys by 2030. Our pipeline of will include a mix of ownership and leases.

If no action was taken, the projected plan would result in a 1983% increase in our scope 1 and 2 emissions. Through our net zero delivery plan we have identified strategies to ensure that the continued growth will align with GHG emission SBTi targets, reducing absolute scope 1 and 2 emissions by >46% over the 2019 reported baseline.



Portfolio Status

Properties	Floor area (m2)	Number of bedrooms	Status
Properties as of 31st December included in 2019/20 GHG emission reporting			
room2 – Hammersmith	465	16	Open
room2 – Southampton	3,076	71	Open
Serviced Apartments	3,059	57	Open
Lamington Group Offices	149	0	Open
Missionworks (co-working)	604	0	Opened Jan 2021
Lettings - Long-Term Flat Rentals*	2,651	68	Open
Lettings - Commercial Properties*	524	0	Open
Total (tCO2e)	**10,528**	**212**	
Additional properties as of 30th April 2021			
room2 – Chiswick	3,200	86	Opening Dec 2021
Serviced Apartments	223	7	Open
Total (tCO2e)	**14,068**	**305**	
Coming Soon			
room2 – Belfast	6,500	175	Opening 2022
room2 – Liverpool	5,850	190	Opening 2023
room2 - Fulham Town Hall	2,250	90	Opening 2024

*All emissions associated with our lettings fall under Scope 3 Category 13 of the GHG Protocol, 'Downstream Leased Assets'.

Actual vs Forecast Pipeline

Year	Number of keys	Floor area for all properties	Scope 1 & 2 emissions based on current emissions (tCO2e)	Scope 1 & 2 science based targets (tCO2e)
2019 (Actual)	212*	10,528	278	-
2030 (Projected)	5,000	219,461	**5,792**	**149**

Committing to only build & operate Net Zero Whole Carbon buildings

Our Commitments

In committing to a net zero carbon future, Lamington Group is taking a lead in responding to the climate emergency.
We have made 3 major commitments that will guide our thinking, planning and actions along the journey. These commitments are designed to keep us to our science based target of a 46% net reduction in scope 1 & 2 emissions from our 2019 baseline and focus on the types of buildings we build, how we operate them, and how they are used. We will continue to engage and collaborate with key stakeholders to ensure that we seek and capitalise on opportunities to drive down carbon across our operations and supply chain to transition towards a low carbon economy.

1st Develop & operate net zero whole life carbon hotels

Net zero whole life carbon hotels must be both net zero operation and embodied carbon. This is achieved by:

- Net zero operational carbon - the net carbon emissions associated with energy and water will equal zero an annual basis.
- Net zero embodied carbon - the net carbon emissions associated with the production and construction of our hotels, the materials that go into them, maintenance and refurbishment, and their deconstruction and disposal at end-of-life, will equal zero.

HOW WILL WE DO IT?

From design through to end-of-life, we will reduce all the carbon emissions as much as possible. We will ensure all operational energy is met with 100% renewable energy, and that any residual operational and embodied carbon emissions are offset through the purchase of verified carbon offsets. Our standards aligns the LETI principles and UK GBC Net Zero Carbon Buildings Framework.

2nd Achieve net zero carbon Scope 1 & 2 by 2030 using science-based targets

The net carbon emissions from fuel combustion, purchased energy and refrigerants used in our buildings as well as company vehicles, will equal zero each year. Emissions will first be reduced in line with science based targets for limiting global warming to 1.5°C above pre-industrial levels and the remaining emissions will then be offset each year to get to zero.

HOW WILL WE DO IT?

We have set targets with the Science-based targets initiative (SBTi) to reduce absolute scope 1 and 2 emissions by 46% over our 2019 baseline emissions by 2030. As our buildings become net zero operational carbon we will reduce our scope 1 and 2 emissions by eliminating fuel combustion and purchasing 100% renewable energy. Even as we grow we will commit to reduce our absolute scope 1 and 2 emissions. The remaining emissions will also be offset through the purchase of verified carbon offsets.

3rd Track & minimise Scope 3 emissions

By our business simply operating, there are many activities that produce carbon emissions that we're responsible for but are out of our direct control. This includes the emissions from goods and services we purchase, like water, emissions from things we generate, like waste, and emissions from employee commuting, guest travel and tenants.
We are required to measure and reduce our scope 3 emissions as much as possible.

HOW WILL WE DO IT?

We will work with our suppliers, employees, guests and tenants as well as the communities we operate in to help them reduce their own emissions, providing guidance as well as selecting leading suppliers who manage their own emissions and align to SBTi.

Our Roadmap

COMMITMENT NUMBER 1 2 3

We have developed a roadmap and detailed actions that set out how we will deliver our commitments, providing a journey to net zero carbon for Lamington Group.

REDUCE → **BALANCE** → **DELIVER**

OPERATIONAL CARBON

We will reduce the operational carbon from our buildings by eliminating fossil fuels and becoming all electric across our existing and new buildings. We will reduce energy consumption across our building, retrofitting our existing buildings and ensuring all new buildings meet energy intensity targets and other operational performance objectives set out in our building standards.

1 **This is key to achieving net zero operational carbon buildings**

2 **This will eliminate emissions from fuel combustion which falls under scope 1 and reduce emissions from purchased energy, scope 2**

3 **Reducing energy consumption will reduce emissions from fuel and energy related emissions, such as upstream emissions and transmission and distribution losses that fall under scope 3**

EMBODIED CARBON

We will ensure all new buildings and the retrofit of existing buildings are designed to minimise upfront, in-use and end-of-life embodied carbon, adopting low carbon materials and circular economy principles. We will carry out Lifecycle Carbon Assessments and work with our supply chain to monitor, track and reduce our embodied carbon.

1 **This is key to achieving net zero embodied carbon buildings**

2 **This will reduce emissions from in-use refrigerants which falls under scope 1**

3 **Embodied carbon falls over a range of scope 3 categories, reducing embodied carbon will help minimize our scope 3 emissions**

OUR ACTIVITIES

Not only do we need to reduce emissions from our buildings, but we also need to reduce emissions from our corporate activities. We will engage with our employees, suppliers, guests and tenants as we establish company initiatives, encourage others to come on the journey with us and explore alternative solutions to reduce the emissions under our influence.

1 **Not Applicable**

2 **This will reduce emissions from company vehicles that fall under scope 1**

3 **Most of our activities fall under scope 3, addressing these directly help minimize out scope 3 emissions**

RENEWABLE ENERGY

We will ensure all our buildings are supplied with 100% renewable energy, maximizing opportunities for onsite renewable energy generation and procuring the remaining energy through green tariffs and power purchase agreements (PPAs). We will also encourage our tenants to switch to renewable energy.

1 **This is key to achieving net zero operational carbon buildings**

2 **This will reduce emissions from purchased energy which falls under scope 2**

3 **Using renewable energy will reduce emissions from fuel and energy related emissions, such as upstream emissions and transmission and distribution losses that fall under scope 3**

CARBON OFFSETTING

Emissions that cannot be eliminated will be offset with the purchase of verified carbon offsets. We will be offsetting residual operational and embodied carbon emissions and any other scope 1 and 2 emissions. We are already working with ClimatePartner to offset our emissions through two afforestation projects.

1 **This is key to achieving net zero embodied carbon buildings**

2 **Offsetting can not be used to reduce scope 1 & 2 emissions, but it can be used to offset emission beyond this to achieve net zero scope 1 and 2**

3 **We will offer our guest the opportunity to offset their travel emissions, which fall under scope 3**

GOVERNANCE

We will ensure all our data is verified and communicated transparently. We will collaborate with our stakeholders to explore opportunities for green finance and continue to track and monitor our GHG emissions and progress against our commitments.

1 **Governance is key to delivering all our commitments.**

Taking decisive and significant actions to net zero

Net Zero Whole Life Carbon

Overview

COMMITMENT NUMBER 1 2 3

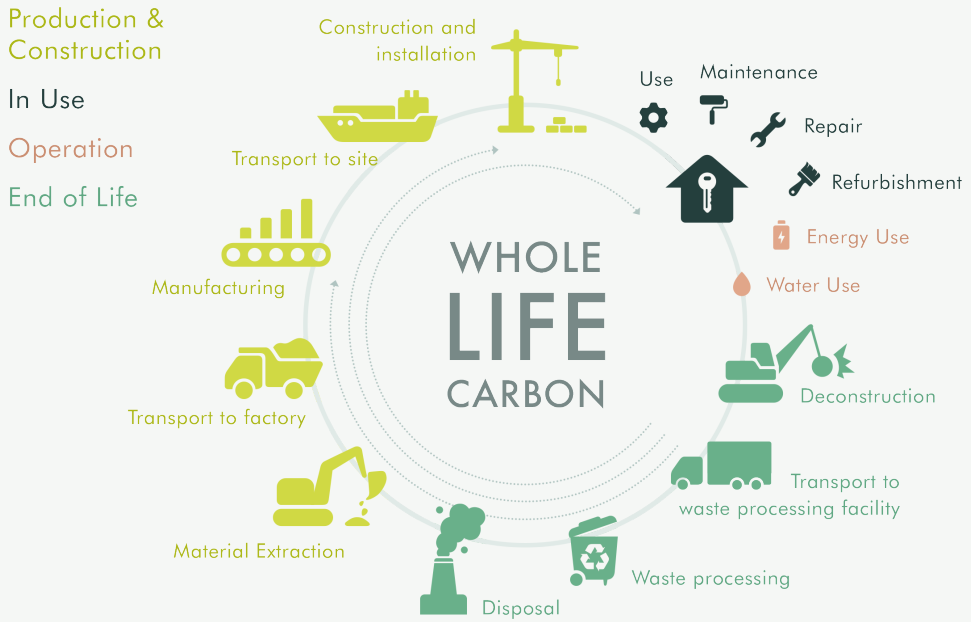
Our first commitment is to develop and operate net zero whole life carbon hotels across our portfolio. Our 10 principles of net zero buildings summarise what we will need to do to make this happen.

10 principles of net zero buildings

- Report annual energy use and renewable energy generation
- Assess, reduce and verify embodied carbon
- Eliminate the use of fossil fuels for heating and hot water
- Maximise on-site renewable electricity
- Purchase 100% renewable energy
- Incorporate energy demand response and storage measures where possible
- Maximise the reduction of energy use measured at the meter
- Report average annual carbon content of heat (gCO2/kWh)
- Maximise reduced space heating demand
- Calculate carbon & rebalance annually to achieve net zero

HOW WHOLE LIFE CARBON EMISSIONS ARE MADE UP

The life cycle of a building is structured into different stages including production & construction, in-use, and end of life. These cycles are divided into embodied carbon and operational carbon. The operational carbon includes the emissions from the energy required for heating, hot water, cooking, cooling, ventilation, lighting, and equipment, as well as water supply and wastewater treatment. The embodied carbon includes the emissions associated with materials and construction processes throughout the whole life cycle of a building until the end of its life and disposal.



Net Zero Whole Life Carbon

Overview

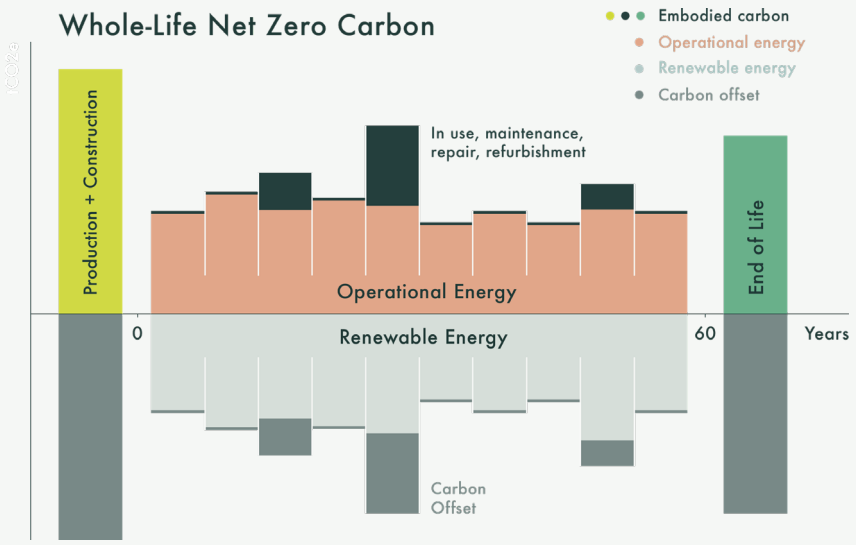
COMMITMENT NUMBER 1 2 3

HOW WHOLE LIFE EMISSIONS ARE REBALANCE TO ZERO

A whole life net zero carbon building achieves both net zero operational carbon and net zero embodied carbon.

A net zero operational carbon building is 100% powered by renewable energy and any residual direct or indirect emissions from energy generation and distribution are balanced through the purchase of verified carbon offsets. A net zero embodied carbon building is designed to reduce upfront, in-use and end of life embodied carbon. Any emissions relating to embodied carbon that cannot be eliminated must be balanced through the purchase of reputable carbon offsets.

The graphic below shows the rebalancing of operational carbon with the on-site generation or purchase of 100% renewable energy. After upfront construction it's assumed that at certain points in its lifespan the building will undergo minor to major refurbishment works generating additional embodied carbon which will be reset to zero with the purchase of verified carbon offsets.



UNDERSTANDING OUR PORTFOLIO

With our growth phase, some of the new keys will be come from new developments whilst others will come from conversion of existing buildings. The table below demonstrates the level of control we have over reducing both operational and embodied carbon emissions from new and existing buildings. For existing buildings upfront emissions will be greatly reduced and conversions should be sought to minimise embodied carbon in construction. However new buildings will often provide high energy efficiencies in operation, thus lower emissions in use due to better fabric, insulation and air tightness.

Control over new and existing buildings

Portfolio	Existing Keys	New Keys	
Building Type	Existing Building		New Building
Approach	Develop renovations plans for each building to reduce operational and embodied carbon.		Meet operational and embodied carbon requirements for each building in line with our building specification
Upfront Embodied Carbon	✗	✗	✓✓✓
Operational Carbon	✓✓	✓✓	✓✓✓
In-use Embodied Carbon	✓✓	✓✓	✓✓✓
End-of-life Embodied Carbon	✓	✓	✓✓✓

✗ Not Applicable ✓ Some Control ✓✓ Medium Control ✓✓✓ Full Control

We have divided our 1st commitment into existing and new buildings to address these different levels of control and designed targeted strategies for each.

Net Zero Whole Life Carbon
Existing Buildings

COMMITMENT NUMBER 1 2 3

DESKTOP STUDY

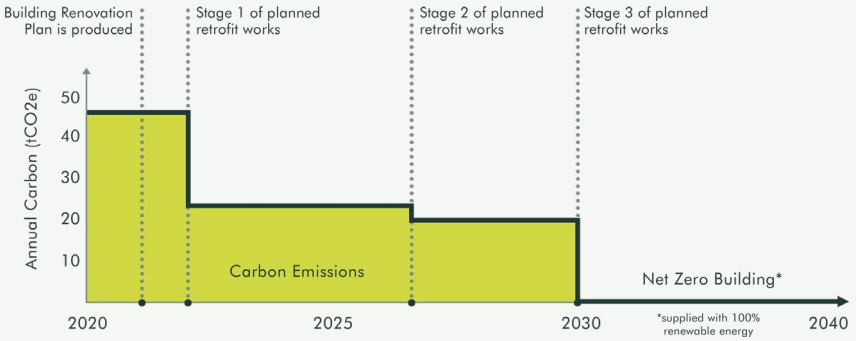
We have carried out desktop studies for some of our existing buildings to illustrate how retrofit works could be staged and how they affect energy use intensity (EUI), annual carbon emissions and fuel costs.

BUILDING RENOVATION PLANS

We have created renovation plans for the existing estate. These set out how we will reduce energy consumption and transition to net zero operational carbon, and how embodied carbon will be minimised throughout retrofitting. This includes investments such as switching away from gas boilers, addition of solar panels and fabric and fenestration improvements. Our building renovation plans detail staged retrofit works across the estate annually until 2030.

POTENTIAL CHALLENGES

All-electric buildings will result in higher fuel costs compared to gas and electric. To avoid this, we will ensure energy efficiency and a reduction in energy demand. Installing heat pumps over direct electric systems will also reduce this risk as they are far more energy efficient. Some of our buildings may have limitations due to their age, construction or location. We will work with Local Planning Authorities to demonstrate how retrofitting will give a new lease of life to old buildings.



This diagram is a relates to the desktop study done for room2 Southampton and how the different stages of a retrofit works can reduce operational carbon emissions over time. The expected decarbonization of the grid is not represented but will contribute to the reduction of carbon emissions over time. Renewable energy is not considered until after Stage 3 to demonstrate the carbon savings achieved through retrofit measures alone, but all properties could switch to renewable energy at any time for their current electricity consumption.

TYPICAL APARTMENT Stage	Retrofit Works	EUI kWh/m2		Annual Carbon tCO2e		Fuel Costs £	
Existing	–	300	-	2.5	-	600	-
Stage 1	Double Glazing, Roof Insulation, Improved Draft Proofing and LED Lighting	220	↓ 25%	1.9	↓ 25%	400	↓ 25%
Stage 2	Install a Heat Pump for Heating and DHW, Flow Restrictors, Heating Controls and New Appliances	90	↓ 69%	0.2	↓ 90%	600	↓ 5%

room2 HAMMERSMITH Stage	Retrofit Works	EUI kWh/m2		Annual Carbon tCO2e		Fuel Costs £	
Existing	–	280	-	45	-	5,000	-
Stage 1	Install Heat Pump for Heating and DHW and Flow Restrictors	120	↓ 58%	3	↓ 86%	7,000	↑ -24%
Stage 2	Double Glazing, Roof Insulation and Improved Draft Proofing	105	↓ 62%	3	↓ 88%	6,000	↑ -10%
Stage 3	LED Lighting, BMS Upgrades and New Appliances	**95**	↓ 66%	**2**	↓ 89%	**5,000**	↓ 1%

room2 SOUTHAMPTON Stage	Retrofit Works	EUI kWh/m2		Annual Carbon tCO2e		Fuel Costs £	
Existing	–	170	-	45	-	46,000	-
Stage 1	Install Heat Pump for Heating and DHW and Flow Restrictors	135	↓ 19%	21	↓ 53%	49,000	↑ -5%
Stage 2	Double Glazing, Roof Insulation and Improved Draft Proofing	125	↓ 24%	20	↓ 56%	45,000	↓ 2%
Stage 3	LED Lighting, BMS Upgrades and New Appliances	**110**	↓ 35%	**17**	↓ 62%	**39,000**	↓ 16%

For the desktop study Annual Carbon is predicted using the BIES Greenbook projected carbon factors for 2030. Fuel costs are based on the typical cost of electricity and gas rather than a green renewable energy tariff.

Net Zero Whole Life Carbon
New Buildings

Our future estate will benefit from a new net zero building specification for all newly signed hometels and residential properties to be built to.

WHOLE LIFE CARBON

Whole life carbon looks at the entire carbon footprint of a building from its conception all the way to its disposal, and net zero must be achieved for both operation and embodied carbon.

NET ZERO OPERATIONAL CARBON

A net zero operational carbon building will be 100% powered by renewable energy, and achieve a level of energy performance in-use in line with our Energy use intensity (EUI) targets.
EUI targets have been set in line with a net zero carbon building, ensuring energy and carbon demand is reduced, by

- Building and operating electric only buildings
- Maximising onsite renewable energy generation
- Purchasing 100% renewable energy for remaining energy required in operation
- Aiming to achieve a space heating demand of ≤15 kwh/m2.yr
- Aiming to achieve an EUI of ≤50 kwh/m2.yr by 2030 (excluding renewable energy generation), with the aim of reaching ≤35 kWh/m2.yr.
- Managing peak demand through thermal and electrical storage
- Meter and report annual energy use and renewable energy generation

We are aiming to reduce the average EUI of our new buildings year-on-year. Our aim is for the average EUI of new buildings be

- 90 kWh/m2.yr from 2021 to 2025,
- 70 kWh/m2.yr from 2025 to 2027 and
- 50 kWh/m2.yr from 2028 to 2030.

This factors in our improvements, including the availability of new, but not yet readily available technologies to better achieve the goals. We will aspire to get the EUI of any new building as low as possible with the aim of reaching ≤35 kWh/m2.yr for any given building.

NET ZERO EMBODIED CARBON

A net zero embodied carbon building is designed to reduce upfront embodied carbon as well as in-use and end of life carbon. Any unavoidable emissions must be balanced through certified carbon offsets.

Principles for reducing upfront embodied carbon include:

- Assess at the start and look to reduce embodied carbon throughout building design stages targeting post-construction embodied carbon emissions of <500kgC02/m2
- Purchase 100% renewable energy during construction
- Verify upfront embodied carbon emissions at post construction
- Offset upfront embodied carbon emissions
- Assess, reduce and verify in-use and end of life embodied carbon emissions
- Offset in-use and end of life embodied carbon emissions annually using verified carbon offsets

Carbon definitions for the Built Environment, Buildings and Infrastructure' developed by the Whole Life Carbon Network (WLCN) in collaboration with LETI provides a common set of definitions to bring consistency in whole life carbon assessment and reporting. It explains that an operational net zero carbon building 'meets the local energy use target (e.g. kWh/m2/a) and all energy use is generated on or off-site using renewables and that an embodied net zero carbon building meets local carbon targets (e.g.kgCO2e/m2), and with additional offsets, equals zero.
We are currently using carbon targets from the LETI 'Embodied Carbon Target Alignment'. These targets are based on how the industry defines 'good' for embodied carbon, but it is anticipated that targets will change given this a developing knowledge area. We will regularly review industry guidance to make sure our standards are up to date.

OUR BUILDING STANDARTS

The room2 Net Zero Building Specification has been created for all new hometels and residential developments that Lamington Group will undertake. It was created using the LETI principles and UK GBC Net Zero Carbon Buildings Framework.

Net Zero Scope 1 and 2

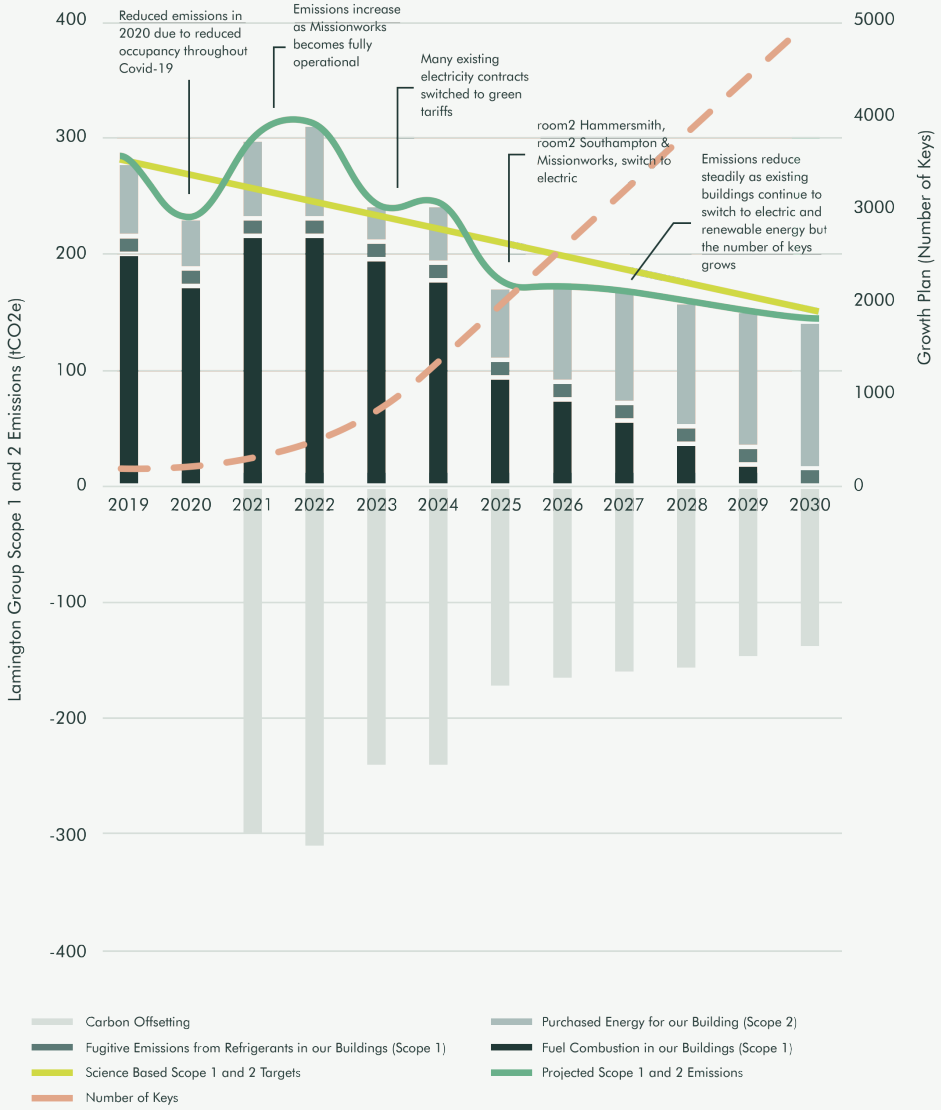
COMMITMENT NUMBER 1 **2** 3

The 2nd commitment is to become net zero by reducing and offsetting scope 1 and 2 emissions by 2030. This means reducing emissions by 46% in line with our 1.5 degrees science-based targets by 2030. Carbon offsetting will then be used to balance the remaining emissions and achieve net zero carbon scope 1 and 2.

Desktop modelling has been carried out to see how scope 1 and 2 emissions are affected by the growth plan and the retrofit of existing properties, projecting if it possible to achieve 46% reduction. The assumptions that have been made are based on the actions detailed in this plan and our building specifications.

- All new keys will be all-electric and supplied by renewable energy.
- Target average EUI for new buildings of:
  - 90 kWh/m2.yr from 2021 to 2025,
  - 70 kWh/m2.yr from 2025-2027 and
  - 50 kWh/m2.yr from 2028 to 2030
  - Upcoming developments in Chiswick, Belfast and Fulham have predicted EUI of 64, 188 and 125 kWh/m2.yr respectively.
- On average, 8 serviced apartments will be retrofitted each year from 2023 to 2030. This includes switching all systems to electric. It is estimated that an average EUI of 90 kWh/m2.yr can be achieved from within the Victorian housing stock. From 2023 all electricity for the serviced apartments will be supplied with 100% renewable energy.
- From 2025 room2 Hammersmith and Southampton, Missionworks and the Lamington Group offices will be retrofitted, including switching all systems to electric. It is estimated that an EUI of 95, 110 and 100 kWh/m2.yr can be achieved for each building respectively. room2 Hammersmith and Southampton are already operating with 100% renewable energy, as will Missionworks and our offices from 2023.
- Nearly all fugitive emissions are from the HVRF system installed at room2 Southampton. This will not be be replaced until the end of its lifespan, 15-20 years to avoid unnecessary embodied carbon emissions.
- All new systems for heating and cooling will be self contained heat pumps with a low GWP, resulting in negligible refrigerant leakage. If VRF or HVRF systems are to used it is imperative that they have a GWP < 5 to avoid additional fugitive emissions.
- The renewable energy procured from green tariffs has a small amount of carbon associated with it. Our growth will mean an increase in emissions but we will increase also renewable energy generation on site to reduce this impact.
- Company vehicles will become all electric by 2025.
- As we reduce are scope 1 and 2 emissions each year the amount of carbon offsetting to balance our emissions for net zero reduces.

Scope 1 and 2 Projections



Minimising Scope 3 Emissions

COMMITMENT NUMBER 1 2 3

Commitment 3 is to track and minimise scope 3 emissions. They represent the largest proportion of emissions. These are the result of activities from assets we do not own or control, but that indirectly impacts the value chain.

SMEs are not expected to submit scope 3 targets for validation to the Science Based Targets Initiative (SBTi), however, as part of the approval of our scope 1 and 2 targets we are choosing to commit to measure and reduce scope 3 emissions - reviewing our choices, setting up initiatives and influencing others.

EMBODIED CARBON

As part of the commitment to achieve whole life net zero carbon buildings we are working hard to reduce embodied carbon in new buildings and will continue to do so as we grow, with ambitious targets for embodied carbon set out in our building specifications. Embodied carbon falls across a range of the scope 3 categories, so this is key as we look to reduce our emissions.

GUEST TRAVEL

We will be providing our guests with information on low carbon routes to our hometels and properties. We will also provide them with the option to track and offset their travel emissions.

TENANT EMISSIONS

We are working to develop green leases for our tenants which will require tenants to move to 100% renewable energy tariffs renewable. We will also develop a programme for tenant engagement to improve building performance, including energy and water consumption and waste production.

EMPLOYEE COMMUTING

We offer our employees a 'bike to work' scheme, to encourage a more sustainable commute and promote wellbeing. Continued flexible working agreements will also reduce emissions.

SUPPLY CHAIN

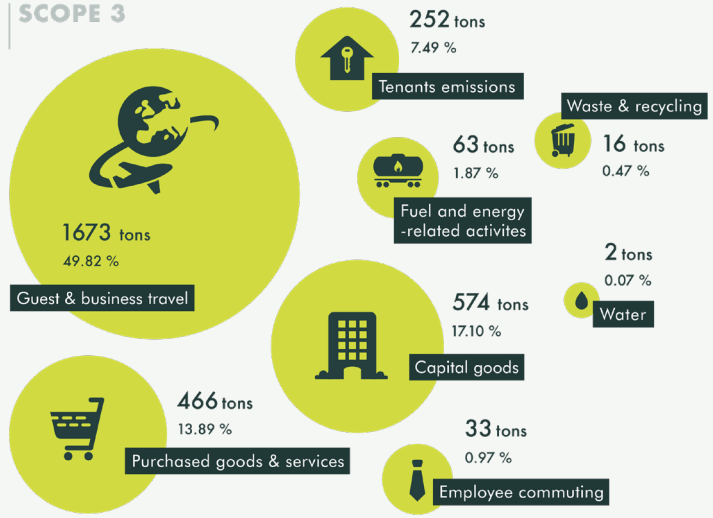
We will review our top 20 suppliers to assess who is taking climate action, those who are committed to SBTi, and those who we can try to influence. We will recommend alternative suppliers where appropriate to reduce emissions from our supply chain.

WASTE

We have developed and will manufacture a 3-in-1 room recycling bin to separate food waste and mixed recycling from general waste, in a design led and convenient way. We will continue to send zero waste to landfill and review the waste production and recycling figures of managed buildings, set reduction targets and monitor ongoing performance.

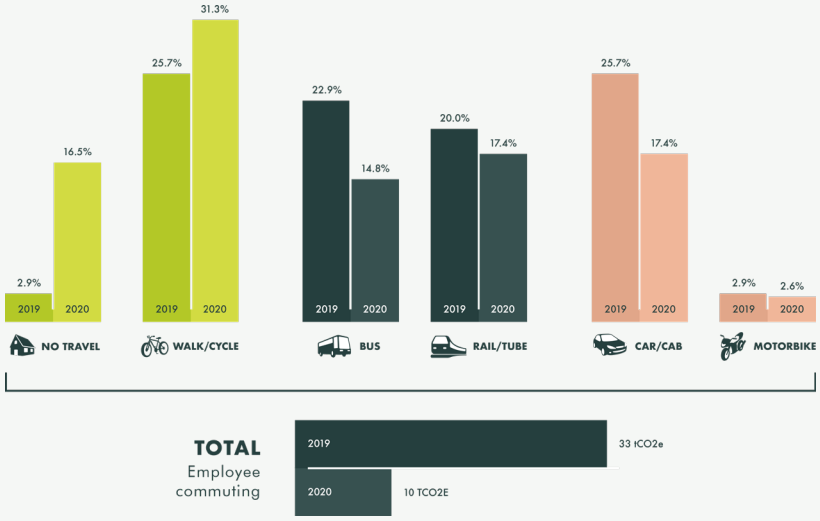
Our 2019 Scope 3 Emissions

It is optional to include guest travel in reported GHG emissions under to GHG Protocol, but we believe it is important as it represents the largest portion of our scope 3 emissions and is at the centre of what we do.



Comparison 2019 and 2020 Employee Commuting

Covid-19 saw a big switch to working from home, walking and cycling, reducing emissions associated with employee commuting.



Carbon Offsetting

COMMITMENT NUMBER 1 2 3

WHAT WILL WE BE OFFSETTING?

We will offset our unavoidable scope 1 and 2 emissions annually. Offsetting does not count towards the 46% scope 1 and 2 emissions reduction that we must achieve as part of 1.5 degrees science-based targets, but provides a way to go beyond our emission reduction. Embodied carbon emissions fall under scope 3 of the GHG protocol and as such the carbon offsets used to achieve whole life net zero carbon will be separate to the carbon offsets used to achieve net zero carbon scope 1 and 2.

WHAT ARE WE ALREADY DOING?

We will neutralize unavoidable emissions with verified nature-based carbon offset credits focused on carbon removal from the atmosphere. We are working with ClimatePartner to offset emissions in 2021 and have purchased offsets from an afforestation project detailed aside. The afforestation of new or reforestation of degraded areas is an important contribution to increasing the biosphere's carbon storage capacity. New forests also create habitats for animals and plant species and opportunities for local people.

HOW MUCH WILL WE BE OFFSETTING?

The table below gives an estimate of the tCO2 emissions we will be offsetting each year between now and 2030. These are based on our scope 1 & 2 forecasting and the embodied carbon associated with the growth plan.

ClimatePartner

Project
Afforestation, San Jose, Nicaragua
Project standard
Verified Carbon Standard (VCS)
Validated by Rainforest Alliance
Verified by TÜV NORD CERT GmbH
Further information
www.climatepartner.com/1249

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
New Keys	86	175	280	606	606	606	606	606	606	606
Total Keys	305	480	760	1,366	1,971	2,577	3,183	3,789	4,394	5,000
Emission Type	**Carbon Emissions (tCO2e)**									
Upfront Embodied Carbon Emissions	2,500	4,500	5,300	11,400	11,400	11,400	11,400	11,400	11,400	11,400
In-use and End-of-life Embodied Carbon	200	200	300	400	700	900	1,200	1,500	1,700	2,000
Scope 1 & 2 Carbon	300	311	243	243	176	171	167	159	151	143
Estimated Total to be Offset	**3,000**	**5,011**	**5,843**	**12,043**	**12,276**	**12,471**	**12,767**	**13,059**	**13,251**	**13,543**

Governance

COMMITMENT NUMBER 1 2 3

COMMUNICATION AND COLLABORATION

Achieving the commitments set out in this roadmap is going to be challenging and we will not be able to do it alone. It requires working closely with all our stakeholders to take coherent and urgent action. We want to set an example for the rest of the industry and we will share our understanding of best practice and the lessons learnt along the way. We will also communicate progress against the commitments annually, being transparent on the areas we need to improve in, as well as areas where we are succeeding.

OWNERSHIP

The accountability for achieving the commitments set out in this Net Zero Carbon Roadmap sits with us. Our sustainability team will convene a taskforce dedicated to resourcing and delivering our roadmap, and includes the senior managers from each business unit. The taskforce will review the status of each actions set out in the roadmap along with collecting and reporting the carbon data and progress made towards the commitments. We will regularly review our roadmap against new industry guidance, regulations and technologies, as well as our growth plan to ensure our standards and targets are aligned.

GREEN FINANCE AND CARBON ACCOUNTING

Over the last few years the green finance market has grown considerably, and we intend to tap into this funding. We will ensure that carbon accounting is incorporated into our financial appraisal. This will ensure that the strategic moves in our business plan align with our roadmap. Our management team will review the estimated carbon impact alongside the financial implications of any proposed development or acquisition.

INNOVATION

Experts have given us guidance on best practices. We are leading the industry and will innovate. Lab rooms will be installed in room2 Southampton and future hometels to sub meter energy use for room level lighting, large appliances and small equipment, monitor water consumption and air quality. This data will be used to pilot technology and behaviour change interventions to help us reduce energy consumption and enhance guest comfort and well being across our portfolio. We will also actively encourage collaboration with partners to test new low carbon technologies.

INDEPENDENT ASSURANCE

Transparency is very important to us across everything we do. Our environmental data and progress against our commitments will be audited annually and independently verified by a third party. Independent certification and industry standards set by the UK GBC Net Zero Building Framework and LETI will be used to verify the performance of our buildings and when procuring renewable energy and carbon offsets.

SUSTAINABILITY TEAM

Chantal Beaudoin
Senior Sustainability Manager

Melisa Gooding
Sustainability Officer

SUSTAINABILITY TASKFORCE

Robert Godwin
Managing Director

Stuart Godwin
Finance Director

Michael Liverman
Head of Development

Chris Exell
Acquisitions Manager

Mark Harris
Strategic Investment Partner

Rob Canh
Group Operations Manager

Alexander Handley
Commercial Manager

Detailed Actions

The following table details the planned actions we will take to deliver our commitments. We anticipate that our roadmap and actions will evolve over time as industry understanding develops and innovation occurs. We will review our progress on an annual basis and update the roadmap as necessary.

Pathway Topic	Actions	Outcome	Reporting Metric
Reduce Operational Carbon **Emissions included;** Fuel combustion in our buildings (1) Purchased energy in our buildings (2) Water (3) ( ) - GHG Protocol Scope	Ensure all new buildings meet room2 building standards, including space heating demand, energy use intensity targets and the specification for 100% electric systems.	Reduced energy consumption and associated operational carbon emissions from new buildings. New buildings are fossil fuel and combustion free	Space heating demand of new buildings, kWh/m2.yr Energy use intensity of new buildings, kWh/m2.yr Percentage of new buildings with all electric systems, % Percentage of new buildings that meet room2 buildings standards, %
	Develop building renovation plans for existing buildings, including switching to 100% electric systems, and carry out retrofits at the earliest viable opportunity. Reduce space heating demand and energy use intensity. • retrofit 8 serviced apartments each year from 2023 so that all 64 are retrofitted by 2030 • room2 Hammersmith to be retrofitted, including the electrification of heating and hot water by 2025 • room2 Southampton to be retrofitted, including the electrification of hot water by 2025 • Missionworks to be retrofitted, including the electrification of heating and hot water by 2025 • The Lamington Group Offices to be retrofitted, including the electrification of heating and hot water by 2025	Reduced energy consumption and associated operational carbon emissions from existing buildings Fossil fuels and combustion is eliminated where possible across existing buildings	Space heating demand of new buildings, kWh/m2.yr Energy use intensity of new buildings, kWh/m2.yr Percentage of existing buildings with all electric systems, % Percentage of existing buildings with building renovation plans, %
	Review management and maintenance programmes for existing buildings when developing building renovation plans to align retrofit actions.	Ensures a coherent plan where maintenance works undertaken do not conflict with planned improvement works	Percentage of building renovation plans aligned with management and maintenance programmes, %
	Review the water demand of occupied buildings, set operational water intensity targets, and monitor ongoing performance	Reduced GHG emissions associated with water	Water consumption, m3/m2.yr GHG emissions from water, tCO2e
	Review the accuracy of existing meters in existing properties and install additional metering and sub-metering where required	Suitable metering for monitoring energy and water consumption in existing properties	Percentage of existing properties with reviewed and suitable metering, %
	Evaluate operational performance of new and existing buildings. • Meter and report annual energy and water use and have independently verified • Post Occupancy Evaluation • Comparison against the as-built operational energy modelling (TM54) to determine performance against design. Where there is a disparity, recommissioning and tuning will be required to rectify to as design energy operation	Data on operational performance and a closed feedback loop, ensuring that buildings achieve optimum low energy performance	Percentage of buildings with reported operational performance, % Percentage of disparities addressed, %
	Install lab rooms in room2 Southampton and new hometels to submeter room level lighting, large appliances and small equipment energy use, monitor water consumption and air quality with with sensors. This data will be used to pilot technology and behaviour change interventions.	Improve understanding operational performance and tracking the impact of measures and new interventions piloted	Number of new interventions piloted, # Energy and water savings measured at pilot stage for each intervention, kWh/m2.yr, m3/m2.yr

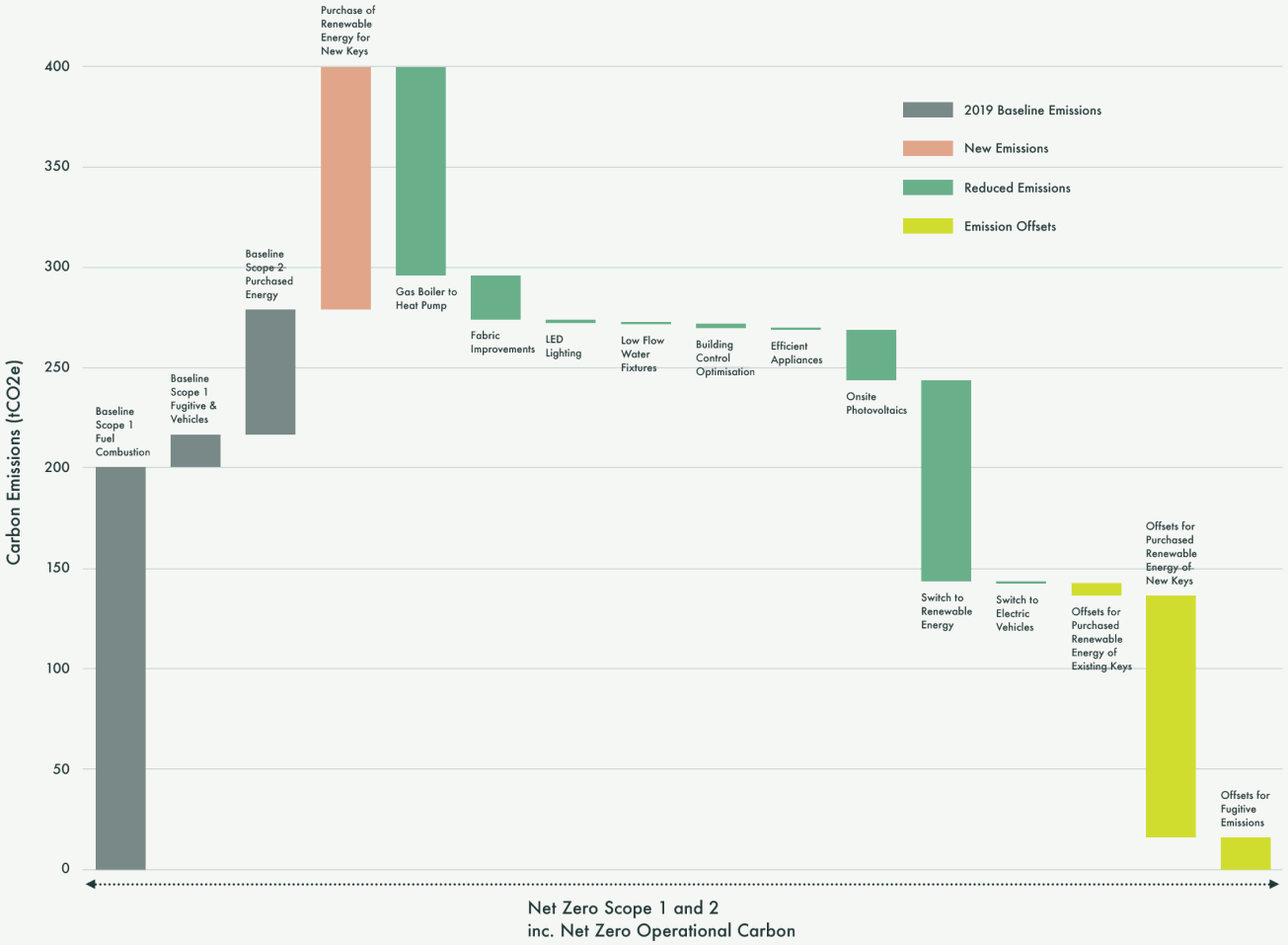
Pathway Topic	Actions	Outcome	Reporting Metric
Reduce Embodied Carbon **Emissions Included** Upfront embodied carbon (3) In-use embodied carbon (3) End-of-life embodied carbon (3) Fugitive emissions from refrigerants in our buildings (1) ( ) - GHG Protocol Scope	Conduct whole life carbon assessments and reduce embodied carbon for all new developments and refurbishments and ensure they meet targets set out in our building standards	Reduced embodied carbon of new developments and refurbishments	Embodied carbon per key and building, tCO2e
	Explore and pilot innovative uses of low-carbon materials to minimise embodied carbon for future developments	Reduced embodied carbon of new developments and refurbishments	Number of technologies investigated, and buildings installed in, #
	Implement reporting tools to track embodied carbon through procurement routes and construction	A record of upfront embodied carbon emissions to determine residual carbon emissions to be offset	Reporting tool
	Train all property managers and other relevant staff to log embodied carbon in-use when equipment and furnishing is replaced	A record of in-use embodied carbon emissions to determine residual carbon emissions to be offset	Number of delivered training sessions, #
	Establish strategic procurement frameworks with partners who can deliver against our targets and begin to immediately reduce embodied carbon	Reduced GHG emissions from our supply chain and collaboration with companies that share our values	Number of established procurement frameworks, #
	All new systems for heating and cooling will be packaged heat pumps or chillers where no refrigerants are managed on site. If a refrigerant system is used, refrigerant volume will be reduced by selecting HVRF and ensuring GWP <5.	Minimised fugitive emissions and in-use embodied carbon emissions from refrigerant leakage	Percentage of new system that are HVRF or VRF, % GWP of refrigerant across all installed systems
	Review industry guidance for latest targets and benchmarks for embodied carbon and update building specifications as required	Alignment with the latest guidance on achieving embodied net zero carbon	Updated buildings specifications (if required)
Reduce Our Activities **Emissions Included;** Company vehicles (1) General purchased goods and services (3) Potable water (3) Capital goods (3) Fuel and energy related (3) Waste generated (3) Business travel (3) Employee commuting (3) Guest travel (3) Leased assets and tenants (3) ( ) - GHG Protocol Scope	Ensure all company owned vehicles are electric by 2025	Company owned vehicle are all electric	Percentage of company own vehicles that are electric, % GHG emissions from company owned vehicles, tCO2e
	Review top 20 suppliers to assess associated carbon emissions and their values, opt for alternative suppliers with lower emissions where required	Reduced GHG emissions from our supply chain and collaboration with companies that share our values	List of supply chain and associated emissions Record of alternative goods and services explored.
	Ask employees and guests for details of their travel and track employee commuting, business travel and guest travel	More accurate data for GHG emissions from employee commuting, business travel and guest travel	Percentage of employees and guest's data is collect from, %
	Establish company policies that enable employees to minimise GHG emissions from commuting including flexible working and a 'Bike to Work' scheme	Reduced GHG emissions from employee commuting	GHG emissions from employee commuting, tCO2e
	From 2022 provide all guests with information and recommendations for travel to our hometels detailing associated carbon emissions, so our guest can make informed decisions	Reduced GHG emissions from guest travel	GHG emissions from guest travel, tCO2e
	Provide guests with an option to measure and then offset their travels emissions	GHG emissions from guest travel are offset, guest are engaged with offsetting	Percentage of GHG emissions from guest travel that are offset, % Number of carbon offset credits purchased by our guests, tCO2e
	Minimise business-related travel by air, rail, bus, car and other modes of transport. Where business travel is essential assess options and compare associated GHG emissions	Reduced GHG emissions from business travel	GHG emissions from business travel, tCO2e
	Review the waste production and recycling figures of managed buildings, set reduction and recycling targets and monitor ongoing performance	Reduced GHG emissions associated with waste	Waste produced, tonnes Percentage recycled, % GHG emissions from waste, tCO2e
	Develop a programme for tenant engagement to improve building performance, including energy and water consumption and waste production	Raised awareness of building performance and behaviour change to reduce operational carbon emissions	Percentage of tenants engage with, % GHG emissions from tenant activities, tCO2e
	Develop green leases for our tenants that include a requirement to use 100% renewable energy green tariffs	Reduced GHG emissions associated with our tenants	Percentage of tenant electricity met through green tariffs, % GHG emissions from tenant activities, tCO2e

Pathway Topic	Actions	Outcome	Reporting Metric
Balance Renewable Energy	Conduct feasibility study of on-site renewable energy technologies for all existing and new properties. We will engage with planning officers at the London Borough of Hammersmith and Fulham to discuss opportunities for PV on our serviced apartments	Identified opportunities for on-site renewable energy generation	Number of feasibility studies carried out, #
	Install and maintain feasible on-site renewable energy technologies across existing and new properties In 2021, 88m2 of PV will be installed at room2 Southampton, providing an estimated 17,720 kWh of on-site renewable energy each year In 2021, room2 Chiswick will open, with 118m2 of PV installed, providing an estimated 23,000 kWh of on-site renewable energy each year	Maximised on-site renewable energy generation	Number of on-site renewable energy technologies installed, #
	Meter and report annual renewable energy generation	Data on annual renewable energy generation	Annual renewable energy generation, kWh Percentage of electricity met through on-site renewable energy generation, %
	Explore available options for corporate power purchasing agreements (PPAs) and green tariffs to provide remaining electricity not met through on-site renewables	Identified opportunities for renewable electricity procurement	Record of opportunities for renewable electricity procurement
	Establish and maintain contracts for PPAs and green tariffs • In May 2023, our current energy contracts for Missionworks, the Lamington Group Offices and our serviced apartments expire, we will then make the switch to green tariffs for electricity. • room2 Hammersmith and room2 Southampton have already been switched to 100% renewable energy green tariffs • All future buildings to be supplied with 100% renewable energy from opening	Ensures 100% renewable energy for all operations	Percentage of electricity met through PPAs and green tariffs, %
Balance Carbon Offsetting	Offset 100% of residual embodied carbon emissions for new developments and refurbishments each year through the procurement of verified carbon offsets	Advance our commitment of whole life net zero carbon hotels	Percentage of residual embodied carbon emissions offset with verified carbon offset credits, % Number of carbon offsets credits procured, tCO2e
	Offset 100% of scope 1 and 2 emissions each year through the procurement of verified carbon offsets	Advance our commitment of net zero carbon scope 1 and 2	Percentage of residual scope 1 and 2 emissions offset with verified carbon offset credits, % Number of carbon offsets credits procured, tCO2e
	Investigate the carbon offset projects that carbon offsets are procured from, pursue projects that add local and social value. Where possible opt for carbon offset projects that provide carbon removal	Investment in carbon offset projects that provide local and social value, investment in carbon offset projects that neutralise our GHG emissions	Type of carbon offsets credits procured Percentage of carbon offsets credits from carbon removal projects, %
Deliver Governance	Launch and communicate our net zero carbon roadmap	Internal and external communication of our commitments	Net zero carbon roadmap
	Set up taskforce dedicated to delivering actions in our roadmap, including representatives across our organisation	Effective collaboration and delivery of actions in our roadmap	Taskforce
	Monitor, track and publicly disclose our greenhouse gas emissions and progress against our commitments	Understanding of progress and accountability	Annual GHG emission reporting
	Ensure all environmental data and GHG emissions reporting is independently verified by a third party in line with ISAE 3000	Independently verified data and credible reporting	Annual third party verification
	Regularly review our roadmap against new industry guidance, regulations and technologies as well as our growth plan	Identify if changes need to be made to our roadmap	Record of reviews
	Provide guidance and support to employees, suppliers, customers, and guests on reducing GHG emissions	Gives employees, suppliers, customers, and guests the skills and knowledge they need	Evidence of guidance and support
	Update our financial appraisal process to incorporate carbon accounting	Ensure the impact of carbon emissions is accounted for in our business plan	Updated financial appraisal process

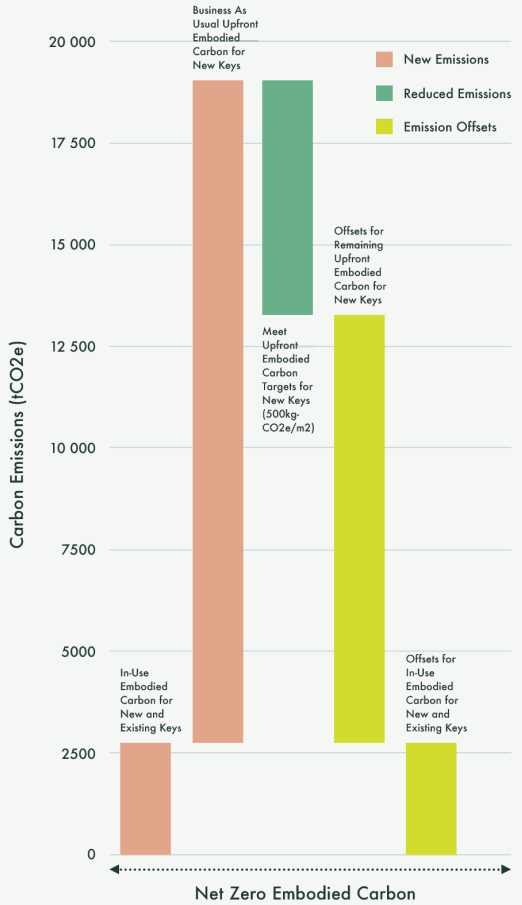
Decarbonisation Pathways to Net Zero

The two graphics below show the planned decarbonisation measures to net zero split between scope 1 & 2 operational carbon and scope 3 embodied carbon. Switching from gas boilers to heat pumps and purchasing 100% renewable energy will have the greatest impact in reducing our operational emissions. The upfront embodied carbon from new builds will be reduced with the adoption of low carbon construction methods and materials instead of building to 'business as usual' standards for our growth plan. The unavoidable emissions from existing and new keys will be balanced to zero with verified carbon offsets.

Lamington Group Decarbonisation Pathway (Scope 1&2)



Lamington Group Decarbonisation Pathway (Scope 3: Embodied Carbon)



Being transparent & accountable in our carbon definitions and reporting

Understanding GHG Emissions

To make sure we align with the ambitions of the Paris Agreement and the UK's net zero emissions targets, it is important that we fully understand the terminology used to talk about greenhouse gas emissions (GHG). It is useful to distinguish between an organisation's greenhouse gas emissions and the emissions arising from developing and operating buildings.

GREENHOUSE GAS PROTOCOL

The Greenhouse Gas Protocol is the most widely used and accepted global standard for measuring and reporting on an organisation's GHG emissions. The Protocol divides GHG emissions into three categories, referred to as scope 1, 2 and 3. Together, these represent the total GHG emissions related to an organisation and its activities. Each scope covers the following emissions:

Scope 1 Emissions - The organisation's direct greenhouse gas emissions resulting from the combustion of fuels in buildings and company owned vehicles, and from fugitive emissions from the use of refrigerants.

Scope 2 Emissions - The indirect greenhouse gas emissions which result from the organisation's procurement of electricity, steam, heating, or cooling from a third-party.

Scope 3 Emissions - The indirect greenhouse gas emissions which occur in an organisation's value chain, including emissions from its supply chain ('upstream') or its customers ('downstream'). The GHG Protocol defines 15 categories within scope 3 emissions, such as purchased goods and services, transportation and distribution, and the use of sold products - not all are always relevant to the respective organisation.

SCIENCE BASED TARGETS

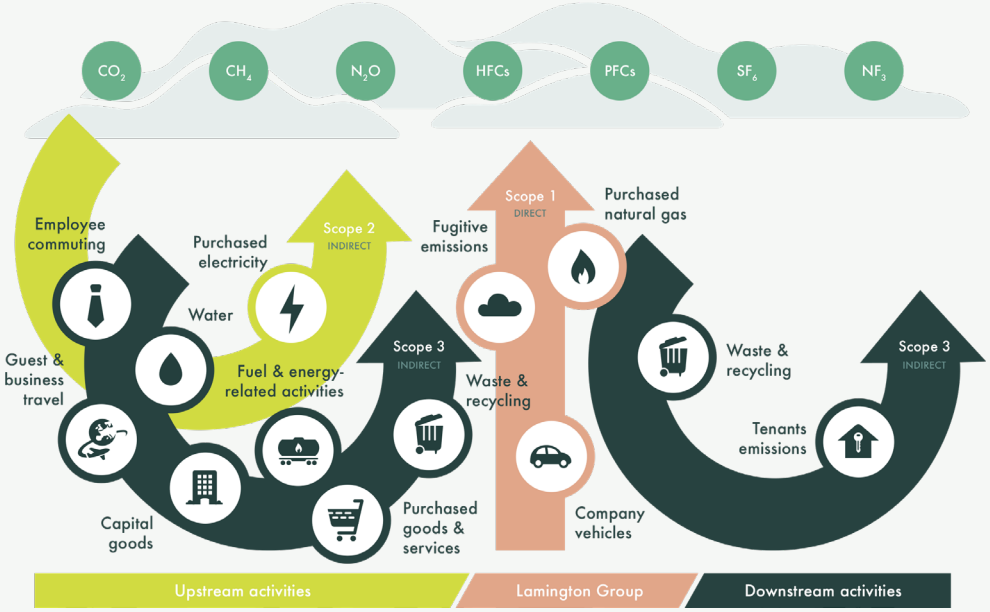
Science-based targets provide organisations with a clearly defined, future-proof pathway to reduce emissions in line with the Paris Agreement goals, specifying how much and how quickly they need to reduce their greenhouse gas emissions. A greenhouse gas emissions target can be considered 'science-based' if the emissions reductions it requires are in line with keeping the global temperature increase well below 2°C compared to pre-industrial temperatures, with many targets set based on a 1.5°C scenario.

Science-based targets must cover an organisations scope 1 and 2 greenhouse gas emissions, as defined by the GHG Protocol, and also must include scope 3 emissions for large organisations where scope 3 emissions represent more than 40% of their overall emissions. Small and medium sized enterprises (SMEs), have less intensive requirements around Scope 3 emissions due to the complexity and resources required track these emissions.

Science based targets require absolute emission reductions through direct action within a companies operations and/or their value chains over the their baseline reported GHG emissions. The use of carbon offsets must not be counted as emissions reduction toward the progress of a companies' science-based targets. Offsets are only considered to be an option for companies wanting to finance additional emission reductions beyond their science-based targets to reach net zero.

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

The graphic below shows Lamington Group's relevant scope 1,2 and 3 GHG categories for both upstream and downstream activities.



Understanding GHG Emissions

WHOLE LIFE CARBON EMISSIONS

The greenhouse gas emissions associated with buildings are defined in terms of whole life carbon emissions, which consider emissions across the entire life cycle of a building. The life cycle of a building is structured into different life cycle stages as defined in the British Standards, BS EN 15978:2011, these are sub-categorised into modules. The modules are often divided into embodied carbon and operational carbon.

Operational Carbon [modules B6-B7] - Emissions associated with the everyday energy and water used to operate the building, over the course of its life-cycle. This includes, but is not limited to: energy required for heating, hot water, cooking, cooling, ventilation, lighting, and equipment, as well as water supply and wastewater treatment.

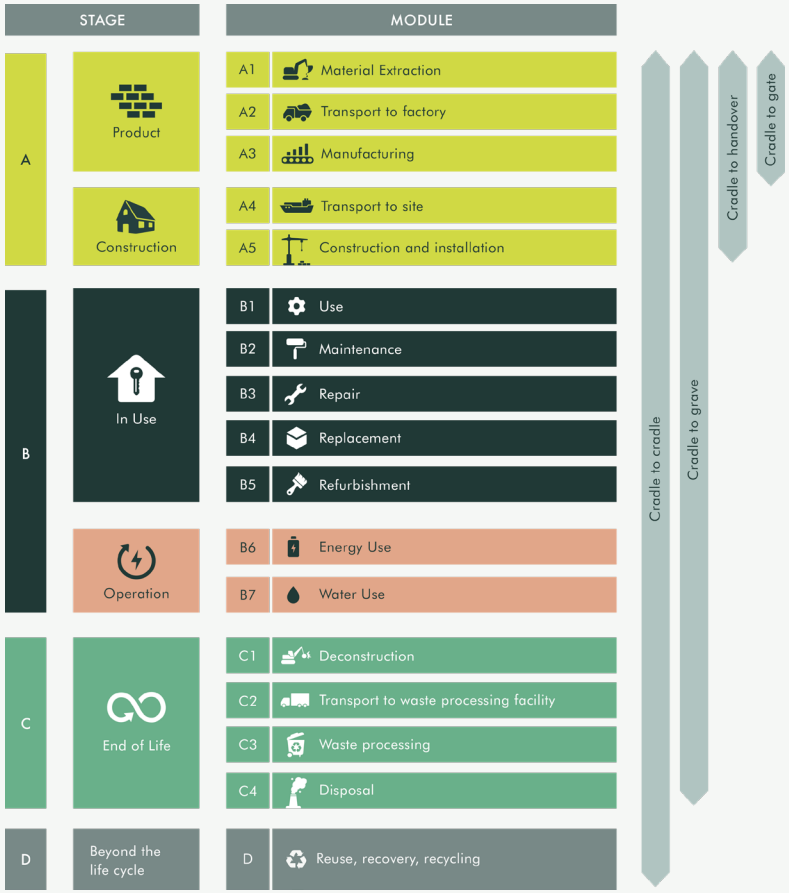
Embodied Carbon [module A1-A5, B1-B5, C1-C4] - Emissions associated with materials and construction processes throughout the whole life cycle of a building, this includes;

- **Stage A,** product and construction, modules A1-A5 - The extraction and processing of materials, the energy and water consumption used by a factory or in constructing a product or building and any transportation relating to the above. These are referred to as upfront embodied carbon emissions.
- **Stage B,** in-use, modules B1-B5 - The use, maintenance, repair, replacement and refurbishment of products and building elements, including refrigerant leakage.
- **Stage C,** end-of-life stage, modules C1-C4 - The demolition, disassembly and disposal of products and building elements and any transportation relating to the above.

Net Zero Operational Carbon – A net zero operational carbon building is 100% powered by renewable energy, and achieves a level of energy performance in-use in line with local energy use target (e.g. kWh/m2/yr). Any residual direct or indirect emissions from energy generation and distribution are balanced through the purchase of reputable carbon offsets. Water use is also minimised, meets local water targets (e.g. litres/person/year) and GHG emissions arising from water supply and wastewater treatment are also offset.

Net Zero Embodied Carbon – A net zero embodied carbon building is designed to reduce upfront, in-use and end of life embodied carbon in line with local carbon targets (e.g.kgCO2e/m2). Any emissions relating to embodied carbon that cannot be eliminated must be balanced through the purchase of verified carbon offsets.

Whole Life Net Zero Carbon – A whole life net zero carbon building achieves both net zero operational carbon and net zero embodied carbon.



Whole Life Carbon Emissions	GHG Protocol
Operational Carbon Emissions from Fossil Fuel Energy Use	**Scope 1**
Operational Carbon Emissions from Electricity Energy Use	**Scope 2**
Stage A (Upfront) Embodied Carbon Emissions	**Scope 3**
Stage B (In-use) Embodied Carbon Emissions	
Stage C (End-of-life) Embodied Carbon Emissions	

The table above outlines where whole life carbon emissions sit within the GHG Protocol. Embodied carbon sits across a range of the categories defined in scope 3. Organisational GHG emissions reported under each scope also include emissions not associated with the whole life cycle of a building.

Understanding GHG Emissions

OFFSETTING AND NET ZERO

To reach our net zero commitments we will have to carbon offset unavoidable emissions.

Carbon Offsets - Are avoided emissions, emission reductions or carbon removal achieved by one entity that can be used to offset emissions from another entity.

Carbon Offset Credit – A credit certified by governments or independent certification bodies to represent an emission reduction of one metric tonne of CO2e. Any carbon offset credits purchased must be 'retired' in a registry.

The overarching aim is to achieve net zero carbon emissions, which is different to being carbon neutral. Carbon neutrality means large amounts of carbon emissions can be released as long as they are offset. It does not prioritise carbon reductions, we know this is required to achieve net zero carbon both nationally and globally.

Net Zero Carbon - All carbon emissions are reduced in line with the Paris Agreement 1.5° C trajectory, with residual emissions offset through the purchase of verified carbon offset credits.

Carbon Neutral - All carbon emissions are balanced through the purchase of verified carbon offset credits.

Absolute Zero Carbon - Eliminating all carbon emissions without the use of offsets.

Many of the third party voluntary climate commitments, such as the Science Based Targets initiative and World GBC's Net Zero Carbon Buildings Commitment are calling for even tighter definitions for 'achieving net zero carbon', which require all offsets to be based on carbon removal. To achieve net zero emissions into the atmosphere any emissions that cannot be eliminated must be permanently removed using an equivalent amount of carbon removal - this is referred to as neutralisation.

The current market for carbon offsets is predominantly made of offset projects that provide avoided emissions and emission reduction, these provide emission abatement and compensation respectively, rather than neutralisation. As the market changes we should move towards carbon removal.

While neutralisation is the end goal, abatement and compensation is hugely important in accelerating our global transition to net zero as it reduces the GHG emissions being emitted right now.

Types of Carbon Offsets

How is the offset generated;

Avoided Emissions Abatement	Emission Reduction Compensation	Carbon Removal Neutralisation	
Avoided emissions and emission reduction with short-lived storage e.g. N20 and methane abatement, switching out fossil fuels, renewable energy sources, retaining stored carbon in land	**Emission reduction with long-lived storage** e.g. energy efficiency improvements, carbon capture and storage in industrial processes.	**Carbon removal with long-lived storage** e.g. bioenergy with carbon capture and storage (BECCS), direct air carbon capture and storage (DACCS)m enhanced weathering.	**Carbon removal with short-lived storage** e.g. nature-based offsets such as reforestation, afforestation, ecosystem restoration, soil carbon enhancement

Overtime offsets should move towards carbon removal to neutralise emitted emissions

Our GHG Emission Reporting

Emission Type	2019	2020	Notes
Scope 1 Emissions	217	190	
Fuel combustion in our buildings	201	173	Metered Data
Fugitive emissions from refrigerants in our buildings*	16	16	Metered Data
Company vehicles	1	1	1 company owned vehicle in 2019
Scope 2 Emissions	62	41	
Purchased energy for our buildings	62	41	Metered Data
Scope 3 Emissions	4,890	2,826	
Category 1 - Purchased goods and services	466	297	Spend based
Category 1 - Water	2	2	Average-data method
Category 2 - Capital goods	574	758	Spend based
Category 3 - Fuel and energy related activities (Not included in Scope 1 or Scope 2)	63	52	Average-data method
Category 4 – Upstream transport and distribution	0	0	Not Relevant
Category 5 - Waste generated in operations	16	12	Spend based and Waste-type-specific method
Category 6 - Business travel	20	11	Spend based
Category 7 - Employee commuting	33	10	Distance-based method
Category 8 - Upstream leased assets	0	0	Included in Scope 1 and 2
Category 9 - Downstream transportation and distribution	1,653	340	All relating to Guest Travel - Distance-based method, 10% weighting factor
Category 10 - Processing of sold products	0	0	Not Relevant
Category 11 - Use of sold products	0	0	Not Relevant
Category 12 - End-of-life treatment of sold products	0	0	Not Relevant
Category 13 – Downstream leased assets (our tenants)	252	250	Average data method (electricity, gas and fugitive estimated from tenants)
Category 14 - Franchises	0	0	Not Relevant
Category 15 - Investments	0	0	Not Relevant

Our Collaborators

Throughout the development of this roadmap we have been collaborating with industry experts to deliver and set ambitious standards and actions. We are now aligned with leading industry initiatives as we continue our journey to net zero.

WHO WE ALIGN TO

The Science Based Targets initiative (SBTi) drives ambitious climate action in the private sector by enabling companies to set science-based emissions reduction targets. Our emissions assessments and reporting, this roadmap and our targets align to the most ambitious 1.5 degree SBTi scenario.

UK GBC has published a Net Zero Whole Life Carbon Framework to achieve net zero carbon in construction and operation. Our building standards and reporting templates align to their Framework.

London Energy Transformation Initiative (LETI) is a network of over 1000 built environment professionals that are working together to put the UK on the path to a zero carbon future. room2 Chiswick is the 1st LETI Pioneer hotel and we align to their whole life net zero definition and principles as part of our growth plan future developments.

The Climate Pledge (TCP) calls on companies to commit to net zero by 2040. As a signatory we commit to reach this target by 2030. This includes measuring and reporting greenhouse gas emissions on an annual basis, implementing decarbonisation strategies in line with the Paris Agreement, and neutralising any remaining emissions to achieve net zero annual carbon emissions.

WHO WE'RE WORKING WITH

Elementa is our strategic partner helping us develop our net zero building standards and roadmap to net zero.

Zero Carbon Forum is using our emissions data and insights to build the UK's hospitality roadmap to achieving net zero faster together.

Climate Partner is helping us to build and deliver an effective carbon offset strategy.

EEA aims to help hotels and other hospitality businesses tackle the challenge of climate change and we sit on the advisory board to lead the way to this brighter future, in the most effective way possible.

Verco is helping us to assess and recommend ways to reduce the embodied carbon in our construction and developments.

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People. Places. Planet.

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Get in touch

We'd love to hear your feedback or to partner with you if you share the same ambition to reduce our collective impact on our planet.