



Linkcity & the environment

linkcity

uliving

Sustainable development means considering the needs of the future while meeting those of the present.

It is about long-term thinking, creating places that stand the test of time – socially, economically and environmentally. Linkcity is committed to delivering places and spaces that significantly enhance their communities today and provide a sustainable legacy into the future.

We believe that every project is an opportunity to deliver our sustainability commitments and aspirations. Our unique position as project developer allows us to have a holistic view and influence on the design, build, financing and operation of our projects and embed sustainability at every stage. Our teams work collaboratively alongside our partners, stakeholders, and investors to imagine and build ambitious sustainable solutions. It is an opportunity to shape the future, to support a locality, and bring sustainable benefits to the people who live, work and visit our developments.

As part of the global Bouygues Group, we are guided by the wider group's commitment to rising to the challenges of the climate emergency and meeting ambitious targets to reduce the environmental impacts and legacy of our projects. We can draw from the experience of the group across the property, construction and infrastructure sectors, applying leading international sustainability expertise and innovations to our developments.

This report expands on our environmental ambitions and establishes Linkcity UK Environmental, Social and Governance (ESG) Strategy. In the development of our strategy, we have been mindful of the evolving government regulation for sustainable financial reporting and benchmarking, including GRESB. We are a member of the Green Building Council and we actively support and adhere to their vision for a built environment that enables a high quality of life for people within the limits that our planet can support.

As developers, we are the custodians of the places we create, and it is imperative we lead the way in delivering sustainable futures for our communities. We have established a framework to achieve our environmental targets and how we will play our part in reducing the impact of our work on the planet.

Here we set out our commitments to embedding sustainability in our developments, under the pillars of carbon reduction, biodiversity, the circular economy and health and wellbeing.

Phillippa Prongué, Managing Director



Sustainability Pillars:

Our Sustainability Strategy is organised into the following four pillars;



CARBON

We will reduce our greenhouse gas emissions in line with the objectives of the Paris Climate Agreement that targets limiting global warming to 1.5° above pre-industrial levels



BIODIVERSITY

We will seek effective ways to minimise our impact on the natural environment and seize available opportunities to enhance it



CIRCULAR ECONOMY

We will implement the principles of the circular economy on 100% of our projects from the outset, limiting the environmental impact of our activities and developments.



HEALTH & WELLBEING

We will enhance the value of our developments to end users by incorporating elements that promote health and wellbeing into both the internal and external environments

Our Commitments

We believe that by reducing carbon, energy and waste, improving ecology and the health of our users, our developments will create a sustainable legacy.

At Linkcity we are committed to:

- A fabric first approach to reducing energy consumption and ensuring our buildings are future proofed
- Carbon reduction targets in line with a 1.5°C future approved by the Science Based Targets Initiative
- Applying the principles of the Circular Economy in all stages of our projects to reduce waste and our environmental impact
- Targeting a BREEAM Certification rating of Excellent for all our new projects

We will also continue to support and promote best practice on climate change as shown in our relationships with other property stakeholders, such as our sponsorship of LETI (The London Energy Transformation Initiative) and membership of the UK Green Building Council.

Delivering our targets will require a process of continuous improvement and adjustment. To capture this progress Linkcity will report periodically on our status and where necessary, clarify or enhance our targets.



Carbon

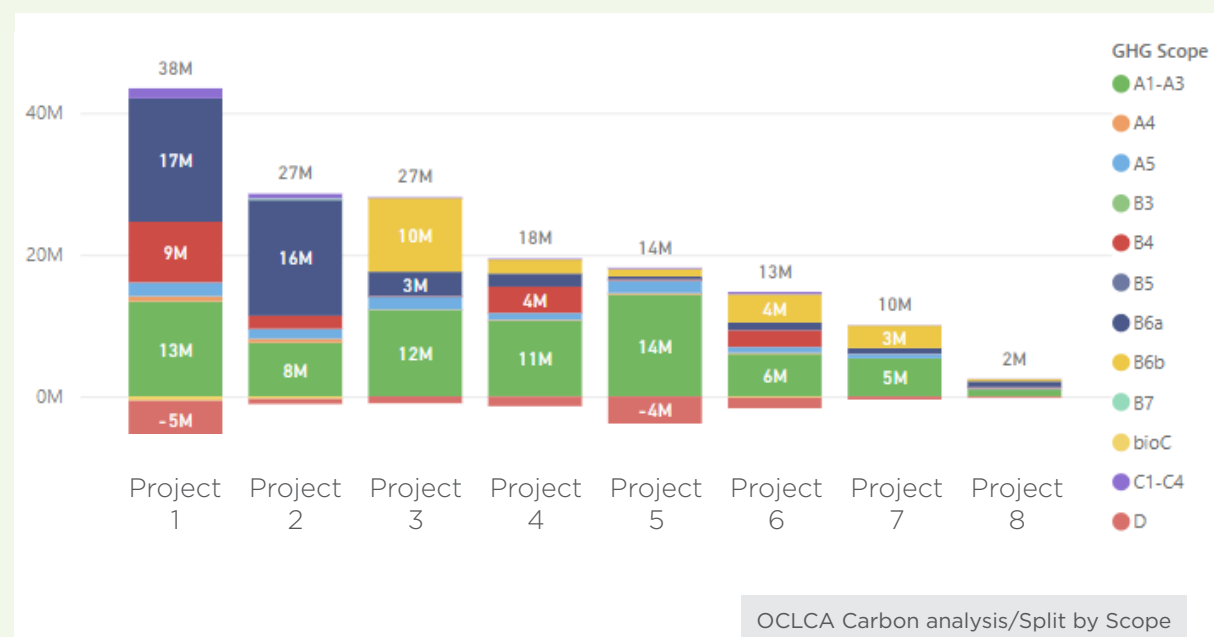
As a responsible and committed company, Linkcity has for many years been innovating and developing sustainable projects that promote the transition to renewable technologies and green energy sources.

The ambitious climate strategy that Linkcity has developed in line with the targets of the Paris Climate Agreement, will reduce our carbon footprint across all our future developments.

With this strategy, we are transforming how we monitor and report on our developments carbon impact and energy performance. Whilst we have been tracking the carbon footprint of our projects for over 6 years, which has been helpful in tailoring our carbon reduction solutions, the detailed methodologies that have evolved during this time are not always comparable. By improving our carbon management and reporting in line with new industry and governmental standards, we can continue to develop responsibly and work towards our goal of whole life carbon neutrality.

One Click LCA

We are now using One Click LCA to assess and optimise the Whole Life Carbon of all our Linkcity projects from the very early stages of the design. One Click LCA generates comprehensive analysis tools and graphics which enable our design teams to test a variety of design options and make informed decisions on the carbon impact of our projects.



OUR CARBON COMMITMENTS

Linkcity is dedicated to reducing our greenhouse gas emissions and we will work proactively with our stakeholders to manage our climate change risks and objectives.

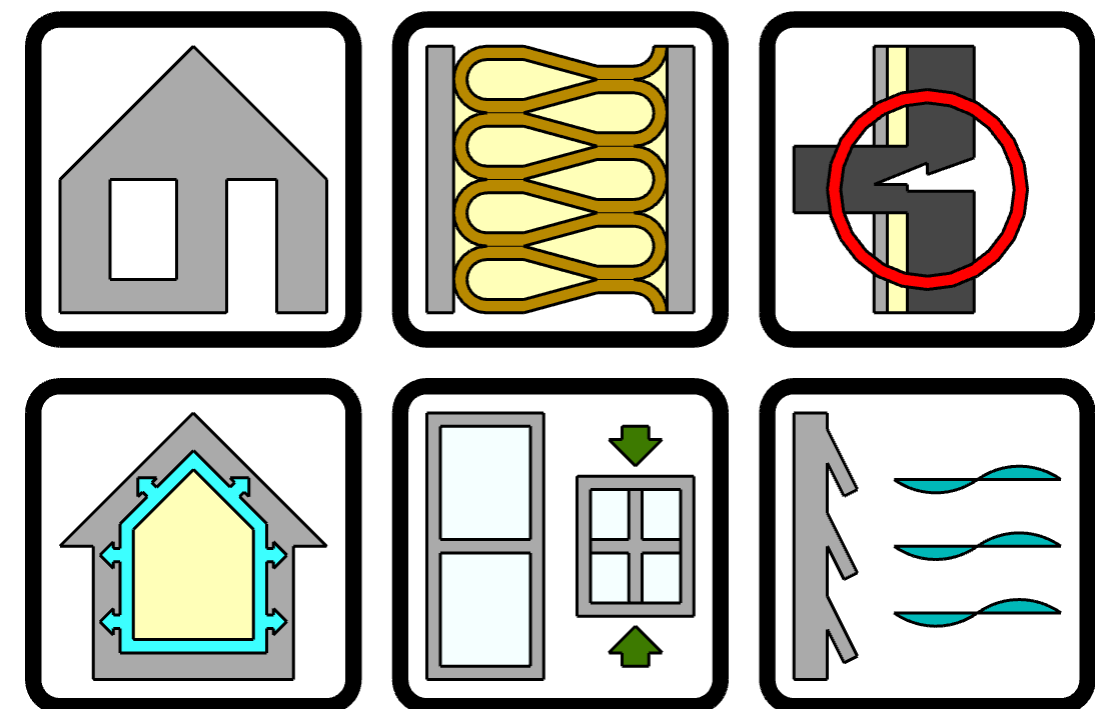
On our journey to whole-life **net zero carbon developments**, we will prioritise the reduction of upfront embodied carbon and energy in use, in the short to medium term. We understand the need and urgency to reduce our carbon footprint now, and are committed to prioritising the retrofit of existing buildings over demolition, or when this is not viable, the delivery of new buildings that are resilient to our evolving environment.

We will align with the Bouygues Construction Group's target to **reduce upfront embodied greenhouse gas emissions by 20% in 2025 and 30% by 2030** (from 2019 levels) on all our developments, with the long-term target of achieving net zero embodied carbon by 2040. We are working with the Science Based Targets initiative (SBTi) to reduce the carbon emissions in line with climate science.

We believe in buildings that are sustainable for the long-term and will adopt a **fabric first approach, based on Passivhaus Fabric Efficiency Levels**. To make our energy target clear and measurable, we will set fabric efficiency values for each development and measure performance against it.

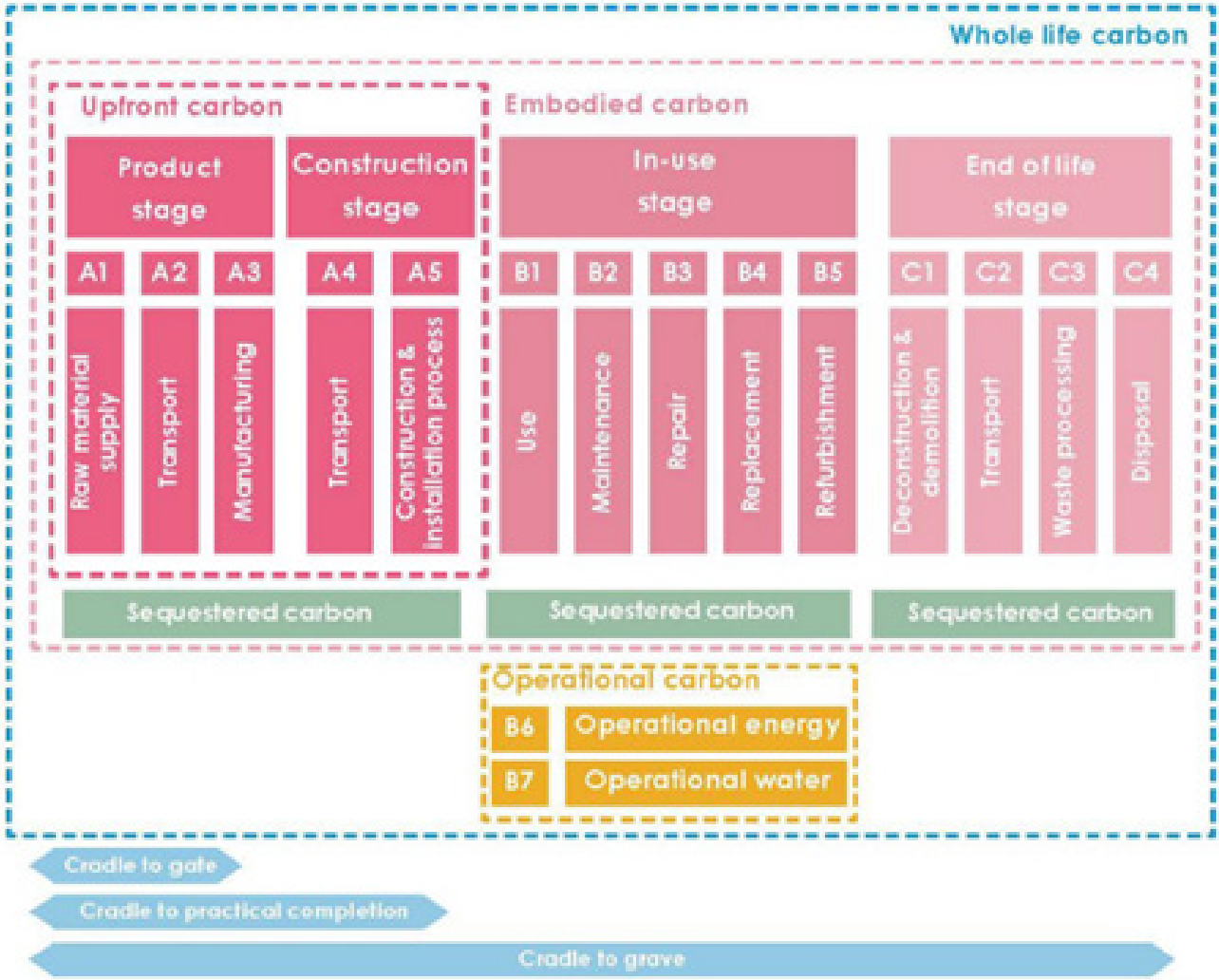
With this emphasis on fabric, maximising the efficiency of our systems and the deployment of on-site renewable sources of energy, from 2022 all new Linkcity projects will target **Net Zero Operational Carbon**.

Many of our projects are in dense urban locations where not all the operational energy can be generated from on-site renewables. To achieve net zero in these cases, we will target the delivery of new project specific off-site renewables through **Power Purchase Agreements** or other similar mechanisms, to ensure a genuine increase in renewable energy generation.



Passivhaus Fabric Efficiency

At Linkcity we have been improving the monitoring tools used to understand our climate change risks and opportunities. We will continue to evolve these tools over time to enhance our knowledge of the impacts of greenhouse gas emissions, from cradle to cradle, on all our developments. A **Project Carbon Plan** will be produced for all our projects so that the predicted carbon of each design stage can be understood and influence the design development. We will use industry standard methodologies and tools to calculate our carbon footprint from early design development through to construction and potentially beyond for those projects where we have management services agreements.



Life Cycle Modules adapted from BS EN 15978

To improve the building performance and maximise value to our stakeholders, we will undertake **post-occupancy evaluations (POE)** on all newly completed projects, covering both the technical performance and qualitative user experience. The evaluations will be carried out by independent third parties and in addition to our new projects, we will also analyse two of our completed / historic projects . These studies will compare the design intent and actual operation of the building for energy use, water consumption and operational carbon.

Once our data is robust, we will report on our predicted carbon emissions for the life cycle stages A–C on our projects (please refer to the life cycle modules table above), as well as our real-world operational energy use.

Off-site manufacture has been demonstrated to provide up to 10% carbon reduction savings through reduced waste on our developments. All the Student Accommodation beds at our recent Canterbury Riverside project **were delivered with a Volumetric Modular solution** and at Linkcity nearly all our projects use some form of off-site manufacture, such as bathroom pods or pre-fabricated utility cupboards.

We are assessing the overall impact of this approach, alongside a wide range of technologies, to reduce the embodied carbon on our developments. We are also considering utilising low carbon materials on our projects, such as **timber structures** which have the potential to save 50% of carbon emissions. The Bouygues Construction Group has set a target to deliver 30% of our building projects in timber by 2030.

OUR COMMITMENTS IN SUMMARY

Carbon and Energy Performance	<ul style="list-style-type: none">• 20% reduction in upfront embodied carbon (A1-A5) by 2025• Reduction in greenhouse gas emissions in line with 1.5°C global warming and approved by the Science Based Targets Initiative• Operational Net Zero Carbon (B6 Energy)• Fabric first approach based on Passivhaus Fabric Efficiency Levels
Report on predicted Embodied Carbon and Energy Use Intensity	<ul style="list-style-type: none">• Measure and report Whole life Carbon and Operational Carbon• Embodied Carbon - Scope 3A* (kgCO2 e/m2)• Measure and report operational Energy Use (kWh e/m2/yr)
Post-Occupancy Evaluation and energy performance	<ul style="list-style-type: none">• Full Post-Occupancy Evaluation (POE) for all new accommodation• Energy Performance Assessments for all new projects and performance compared with two existing projects
Off-site Renewable Power	<ul style="list-style-type: none">• Implement a PPA (or equivalent) where this is required to bridge the gap between on-site renewable capacity and Net Zero Carbon

* Refer to the 'Greenhouse Gas Protocol' <https://ghgprotocol.org/>



Biodiversity

There are multiple environmental impacts to consider when we create a masterplan for an area or construct a new building, with natural ecosystems and wildlife often significantly affected.

With careful consideration, Linkcity looks for the most effective ways to maximise the positive impact of our developments on the natural environment, and we target the available opportunities to enhance it.

The importance of biodiversity is recognised on a global scale, with progress made at the recent United Nations Biodiversity Conference COP15, where over 100 members signed the Kunming Declaration. This committed to implementing a Global Biodiversity Framework to reverse the current loss of biodiversity and to develop an action plan to transform society's relationship with biodiversity and ensure that, by 2050, the shared vision of living in harmony with nature is fulfilled. **At Linkcity we believe we need to act today so that all our developments have a positive impact on ecological systems affecting the natural world.**

We understand the ecological challenges faced by development in urban areas and believe our response needs to go further than preservation. We will aim for our developments to restore ecological continuity, increase species diversity, and provide new habitats for wildlife.

BEEODIVERSITY

Over the past two years at Linkcity, our projects have had an overall **net positive impact on biodiversity**. We have achieved this by targeting meaningful initiatives that not only preserve biodiversity but enhance it. An excellent example of this has been at Hallsville Quarter, where we have partnered with **BeeODiversity and Bushwood Bees** to provide beehives at the site. The information analysed from the hives has helped us to understand the air quality in the local area, as well as adapt the planting at Hallsville Quarter to enhance the local flora and biodiversity. This innovative project won the Construction Phase Award at the **BIG Biodiversity Challenge hosted by CIRIA**.



Average Biodiversity Net Gain for Linkcity projects completed in past 2 years (20/21) = +1.4

OUR COMMITMENTS

Linkcity has already implemented **Biodiversity Action Plans** across several of its developments. Our Action Plans evolve during the design and delivery phases to maximise the potential of each project in line with its individual environmental and wildlife characteristics. From 2022, we commit to developing a Biodiversity Action Plan on all our developments to ensure that we maximise the ecological value we deliver.

To preserve the biodiversity of a development into the future, the Biodiversity Action Plan must go beyond the delivery phase and include the management of the development once in operation. We will provide **Operational Management Plans** to enable the building operators to maintain and enhance the ecological value.

Moving forward, we are committed to delivering a **minimum biodiversity net gain of 10%** on all our future projects. This will include all projects submitted to planning in 2022 and will ensure that our biodiversity performance is future proofed against anticipated forthcoming regulation.

We believe it is important to both maintain existing and introduce **new native species** where possible, to preserve the heritage and resilience of our neighbourhoods. Although landscapes with only native species do not necessarily maximise biodiversity, we understand their ecological importance and will prioritise the specification of native species by allowing a designated area for them in all our developments.

The importance of trees in biodiversity lies in their ability to sequester carbon and improve the local micro-environment, and they have also been shown to improve psychological wellbeing. With this in mind, Linkcity pledges to **plant one tree for every new dwelling we develop**. We will use a mix of species and aim to plant as many as possible on our development sites, with any remaining balance planted in urban areas elsewhere in the UK. This simple pledge will not only improve our carbon footprint but also enhance biodiversity.

OUR COMMITMENTS IN SUMMARY

Biodiversity Action Plan	Develop a Biodiversity Action Plan including Operation Management for all new development
Biodiversity Net Gain	Biodiversity Net Gain of 10% on all new development
Native Species	Dedicated area for native species on each new development
Tree Planting	1 tree for every new dwelling



Health & Wellbeing

There is a strong, tangible link between the sustainable design, construction and operation of buildings and the subsequent improvement on the Health and Wellbeing of building users.

Linkcity can dramatically enhance the lives of those who live in and use our developments by having a more considered approach to improving the internal and external environments we create. Whilst we may not always have direct control over the wide-ranging determinants of health and wellbeing, the principles of health and wellbeing can be embedded in developments from the outset in the design briefs, to provide the most favourable environments in which people can thrive both now and in the future.

At Linkcity we act as an advocate for good design focusing on three key principles of health and wellbeing of our residents: **physical, social, and psychological**. We design our buildings and neighbourhoods to maximise residents' health, whether through the internal air quality, thermal comfort, daylighting or acoustic environment.

Acoustic environment, thermal comfort and air quality are inextricably interlinked; each variable has the potential to impact the other and so is collectively analysed and carefully considered in order to arrive at the optimum solution.

OUR COMMITMENTS

Indoor air quality is crucial to the building occupants' wellbeing, focus and enjoyment. To deliver a healthy internal environment we will develop **Indoor Air Quality Plans** for all our projects. The plans will guide the design, specification and installations required to minimise indoor air pollution, including ventilation requirements and specifying finishes with low or no volatile organic compounds (VOCs).

To maximise opportunities to improve air quality, we will **empower residents** with simple guidance on how to best utilise the spaces we create. We will provide honest and transparent information about our building performance and, where possible, provide occupants with data to enable them to personally improve their environment in an informed and meaningful way.

At Linkcity we recognise the impact of the living environment on mental health and wellbeing. Combatting loneliness is key for good mental health, so incorporating opportunities for users to connect and socialise at our developments will be maximised. Access to nature, as well as a visual connection to it, has been shown to reduce stress levels. It is important we implement the principles of **biophilic design** into our developments to help our users connect to the natural environment. Facilitating healthy sleep is another ingredient of good mental health and we will focus on designing bedroom spaces that are quiet and do not overheat in summer to enable this.

We promote the physical fitness of our building users and will implement **Fitness Action Plans** on all new developments. These action plans will be reviewed throughout the life of a project to maximise the opportunities to promote occupant fitness; these could include providing gyms facilities or external gym equipment on site, or utilising signage in our buildings to guide occupants to the stairs and public transport.

We have often found that although current planning guidance in most urban areas promotes significant levels of cycle storage in new developments, the local neighbourhood does not provide adequate facilities to support the use of those bicycles. We believe that a small but effective solution is to provide space for a **bike repair station** in our new developments. By providing the facilities to maintain bicycles, we are encouraging residents to stay active and travel sustainably whilst maintaining their physical health.

Linkcity will research and implement one new partnership each year that improves the Health and Wellbeing of the communities who utilise our developments. The result of our first partnership with Airlite paint, will see the inclusion and specification of this innovative paint on our projects.

Airlite paint is mixed from powder on-site, contains no VOC's, has a smaller carbon footprint compared to standard paints and ultimately delivers a healthier internal air quality and environment for end-users.

 **Airlite** is an innovative and environmentally friendly paint that actively purifies the air. Airlite copies nature to breakdown pollutants, acting as a catalyst, rather than absorbing or filtering them out.

We selected a school in east London as a trial for rolling out Airlite on our projects. This specific school experienced high levels of air pollution due to the close proximity of busy roads. Through this trial, we found Airlite produced the following results:

96% NO₂ concentration was 96% less in the classroom painted with Airlite.

88.8% Airlite reduces NO₂ levels by up to 88.8% after 60 minutes.

 Airlite significantly reduces the CO₂ footprint, VOCs and waste.

99.9% Airlite's naturally anti-microbial properties have been proven to kill 99.9% of bacteria

OUR COMMITMENTS IN SUMMARY

Air Quality Monitoring	Monitor External Air Quality and provide results to residents on all new development. Monitor Internal Air Quality and report on all new managed development
Innovation	Implement one new partnership per year to improve Health and Wellbeing
Fitness Action Plans	Develop a Fitness Action Plan on all new developments
Cycle Maintenance Facilities	Provide the space for a bike repair station on all new developments

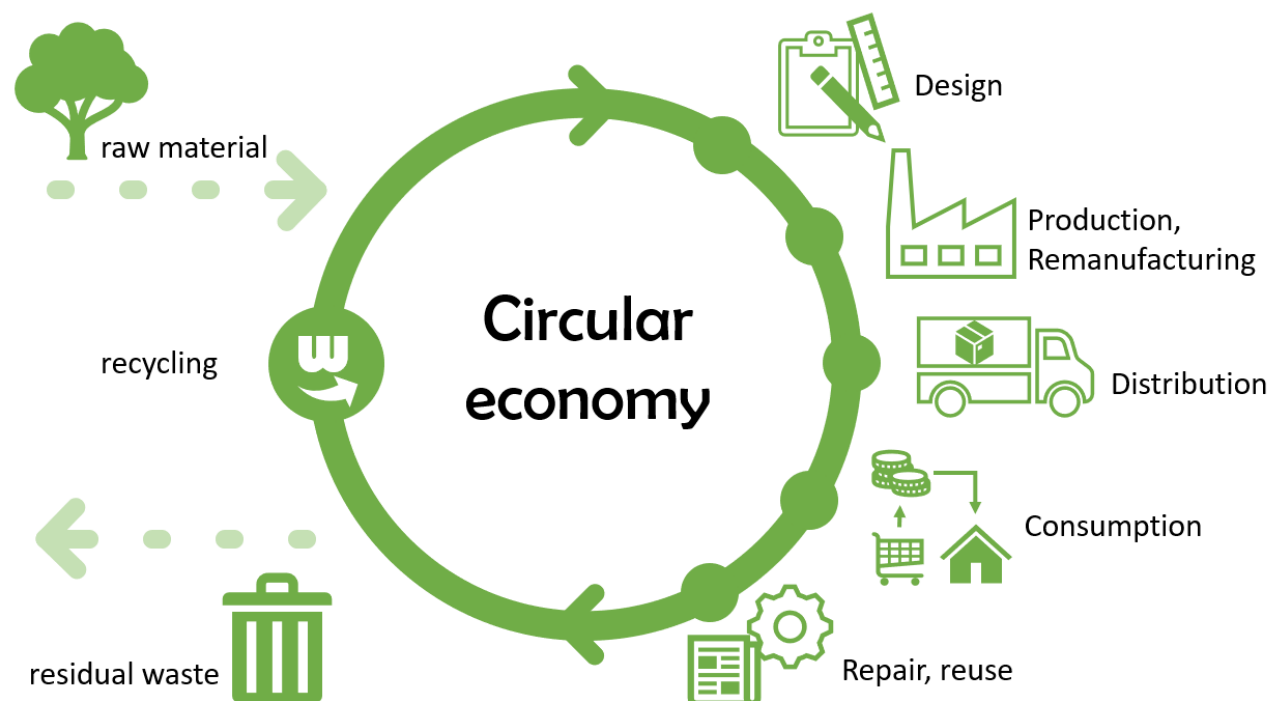


Circular Economy

Our challenge as a developer is to ensure we move away from the traditional linear economic model (take, make, use, dispose) to a circular one; a model which breaks with traditions and ensures our schemes are adaptable and re-useable from inception.

Establishing a Circular Economy is **one of the most important targets that we have set to achieve in the coming years**, and it will be a defining feature of the industry moving forwards. We have a duty to the future needs and occupants of our developments to be adaptable and resilient. As developers we are best placed at the start of this cycle to implement and drive this change, which can be realised through the building's life cycle.

Our approach to circular economic principles **strongly aligns with our commitments to carbon reduction**. Carbon reduction is driving Linkcity and the wider Bouygues Construction Group to move away from the traditional linear economic model which has been dominant for so many years. **Our approach is multi-phased in establishing and embedding these circular economic principles** as we adapt to a changing development environment.



OUR COMMITMENTS

We commit to producing a **Circular Economy Statement** for each of our projects in the context of our stakeholder requirements. This will be far reaching and cover key considerations including the retrofit and refurbishment of existing assets, rethinking the design to reduce materials, reusing existing materials on-site in the new development, recycling waste from our developments, design for adaptability, flexibility and much more. This wholistic approach to our projects is crucial, as we predominately develop on inner-city brownfield sites with clients whose aim, like ours, is to see lasting regeneration that **minimises waste in the whole life cycle** of our built environment.

For certain projects where we transfer the ownership of the asset(s) at completion to others, such as institutional investors or local authorities, we will **provide guidance for the building owners or managers to enable the circular economic solutions incorporated to be realised at a later date**. These documents will be based on “the 9 R’s of Sustainability” principles.

Guidance will be included in the **Project Operational Maintenance Plan**. Where previously this plan and the approach to building maintenance would traditionally be based on the simplest solution, it will now consider the environmental impact of maintenance and make alternative suggestions, such as promoting elemental refurbishment before replacement. This strategy will ensure our developments are not only built with circular economic principles but allow them to also be maintained by these principles during their lifespan.

As the construction industry is changing to meet the climate emergency, we will continue to improve our **circular economy toolkit, to ensure our leading position is maintained**. Change is needed and we see an industry which is waking up to this, with clients and institutional finance prioritising long-term sustainability. We will drive the circular mindset through our all our schemes and establish a new standard for our developments in the process.

The 9Rs of sustainability



OUR COMMITMENTS IN SUMMARY

Circular Economy Statement	Develop a Circular Economy Statement for each of our projects
Operational Guidelines	Develop guidance on circular economic solutions in the operational management of all new developments



CONTACT US

London office

Becket House,
1 Lambeth Palace Road,
London, SE1 7EU

T: +44 (0)20 7401 0020

F: +44 (0)20 7401 0030

E: info@linkcity.com



twitter.com/LinkcityUK



linkedin.com/company/linkcity-uk