



Natural



Our approach

“We build in harmony with nature to protect the existing value and make a positive contribution to the environment.”

As a Master Developer, the environmental impact of our operations is a key consideration in everything we do and operating at scale is both a challenge and an opportunity in this regard. We reuse materials on site wherever possible and recycle materials we cannot reuse. We measure and report our greenhouse gas emissions and work to minimise our carbon footprint – all new buildings are designed with efficiency in mind and we are continuously making improvements to increase the operational efficiency of our portfolio.

Across our strategic sites we not only work to preserve and promote biodiversity, we ensure that our developments provide a net biodiversity gain and green infrastructure and access to green spaces are delivered as soon as possible. Another key criteria for us in terms of building sustainable green spaces is to educate the community about their role and their value beyond the obvious visual and amenity benefits. This is so that as the sites mature, the community continues to protect and enhance these assets.

To support our approach within this capital, we consider the following objectives describe what we do and ensure we enhance natural value across our developments:

Create valuable, accessible and educational green and blue infrastructure

Our research into the benefits of green and blue infrastructure investigates how well-planned spaces can provide benefits to both physical and mental health. This directly links back to the physical capital where we discussed “Active Design” and “Healthy New Towns”. In all cases we seek to develop a green infrastructure and movement strategy from the outset which is then given direct effect through each phase’s design codes. We have found that a significant user of our green spaces and therefore people purchasing homes on our developments are dog owners. This is because they can directly access the green spaces and take their dogs for a long walk without leaving the site. We use on-site information boards and events as well as school projects to then provide information on the flora and fauna all around them. Working at scale means that across all of our projects we have already created 88.6ha of public open space and have planted over 136,000 trees, 72,000 of which were planted this year.

Enhance biodiversity and ecological value

Our commitment to increasing ecological value on our developments is not new, but we have refined our approach to measuring the value of nature we provide this year.

CASE STUDY

Treeconomics at Alconbury Weald

Treeconomics is a social enterprise that seeks to highlight the benefits of trees and works to understand how they improve our urban spaces, making them better places to live. Given the number of trees we plant each year, we worked with Treeconomics this year on the data set for Alconbury Weald to assess our projected tree stock for Key Phase 1 and understand its objective value. This was done using a variety of assessment tools and methods, including the most widely used i-Tree Eco model. From this we learnt that once the first phase of Alconbury is complete, 51,130 trees, from 81 different species, will remove over 1.24 tonnes of airborne pollutants, and store over 170 tonnes of carbon, every year. We also found that after rainfall the projected extent of water held in the tree canopy cover of 24.85ha before it evaporates, will divert 1,630m³ of storm water runoff away from local sewer systems, providing annual discharge savings of £2,500.

This data can now be used to provide further education about Alconbury’s trees, assist with mapping the future benefits of further tree planting across future phases and undertake a gap analysis to help inform which trees are needed to optimise ecosystem services. Given that trees grow with the development so does their replacement value which for the trees within Key Phase 1 stands at £4.8 million.



Sample metrics at Alconbury KP1:

100%

of new build commercial buildings achieve an EPC rating of A or B

51,000 trees

will store over 170 tonnes of carbon each year

100%

of our green infrastructure has five-year management plans

3.7%

net gain in biodiversity value to be achieved when completed

CASE STUDY

Waterbeach hosts the launch of Natural Cambridgeshire's Doubling Nature Initiative

Urban&Civic was delighted to host Natural Cambridgeshire Partnership's announcement of ambitious plans to double the area of rich wildlife habitats and natural green space across Cambridgeshire and Peterborough over the next 30 years at Waterbeach in July.

The Doubling Nature initiative has been drawn up by the partnership – which includes local authorities, statutory agencies, conservation charities, community groups and developers like Urban&Civic – with the aim of creating a world-class environment where nature and people thrive, and businesses prosper.

The Doubling Nature Initiative was launched by Tony Juniper, Chair of Natural England and James Palmer, Mayor of the Cambridgeshire and Peterborough Combined Authority, at separate events at Waterbeach Barracks and the Hamptons, Peterborough, both of which have been heralded as outstanding examples of how high-quality housing development can deliver new areas of nature rich landscape.



We have partnered with external consultants BMD to develop our "Healthy Infrastructure Toolkit" using the Warwickshire County Council calculations to assess biodiversity gains. As part of this we have committed to meeting a net gain on two recent outline planning applications – Waterbeach and Wintringham – and at Alconbury Weald with the current design we will achieve a net gain of 3.7 per cent once completed. We are currently looking at ways to better understand the other benefits that our green infrastructure assets are providing and record, measure and communicate those benefits to investors, stakeholders and residents. We have started this process through our research work with Treeconomics at Alconbury Weald, which uses unique software to understand the value of the existing and new tree stock on site. Trees are vital to healthy ecosystems and make them better places to live. We are committed to planting more trees across our developments to improve the environment and wellbeing of the residents. The data we are collecting will allow us to make better management decisions about our natural assets in the future.

Use resources responsibly

We provide a set of minimum standards within our design guides to our housebuilder partners that include a range of features in the homes to enable residents to live comfortable lifestyles with minimal impact on the environment. For example, all homes are designed to minimise water usage and use 110 litres per person per day, which is 15 litres less than the current building regulations from 2013. In addition, all of our commercial properties this year have achieved an Energy Performance Certificate (EPC) of an A or B.

Understand our impacts

We reuse materials on site where possible and recycle materials we cannot reuse. At Alconbury over 31 per cent of the materials used for grey infrastructure works is from recycled content. This is primarily road stone and pipe bedding for drainage created by crushing and recycling the concrete old taxiways. In addition, within our green infrastructure works 86 per cent of materials are recycled for reuse, due to our ability to ameliorate the topsoil directly on site. Across our projects we have already remediated over 150ha of land. Any waste produced from our direct contractors is reused or recycled where possible with 89 per cent of their waste diverted from landfill.

Climate change is a core risk to the business (see page 43), and we are committed to driving down our carbon consumption and alleviating our impact on the warming climate. Our greenhouse gas emissions can be seen on page 62, which details our approach to recording carbon across the Group. At Alconbury, for example, the differential between the energy consumed in the old and new buildings is particularly stark. Whilst the wider estate, which encompasses the inefficient former military buildings, uses 87.5 per cent of the total carbon consumed on site, the modern buildings we have developed represent a significant improvement at 12.5 per cent. Other than the listed buildings, the redevelopment of Alconbury will see the demolition of the former military buildings and the continuance of this trend.