



2021 Carbon Neutral Overview

Within Our Vision 2030 our goal is to play an active role in tackling the global climate emergency. We have validated science-based targets for greenhouse gas emissions reduction to meet by 2030 and are committed to being a net zero business by 2040.

We are proud to have been carbon neutral in our direct operations (Scopes 1 and 2) and our construction sites since May 2017. This documents sets out our approach to carbon neutrality for the period 1 May 2020 to 30 April 2021.

Background

The development of new homes and places involves highly carbon-intensive activities. This is particularly true for the large-scale regeneration schemes undertaken by the Berkeley Group; transforming brownfield sites requires heavy plant and machinery to demolish existing structures that are no longer fit for purpose and to extensively remediate and move soils, especially on our sites which historically housed gas works.

Under our business strategy, Our Vision 2030, we have identified Climate Action as one of 10 strategic priorities for the business and have set short-, medium- and long-term goals in this area. Our first priority is to reduce our emissions, but until we complete this transition we will continue to balance our impacts by investing in projects and partnerships that actively remove carbon from the atmosphere, or that help to produce zero carbon energy. We will maintain carbon neutral direct business operations (scopes 1 & 2) through purchasing verified carbon offsets, as-well-as investigating opportunities to deliver or support nature based carbon capture and renewable energy initiatives.

2021 GHG Emissions

The Berkeley Group's Scope 1 and 2 greenhouse gas (GHG) emissions in 2021 were as follows:

Scope 1	2,351 tCO2e
Scope 2 (location-based)	6,247 tCO2e
Scope 2 (market-based)	196 tCO2e

These are based on our operational boundary (please refer to the Annual Report 2021 Greenhouse Gas Emissions and Energy Consumption Supporting Information available here for details on the methodology adopted to calculate emissions).

Reducing emissions

We acknowledge that the cyclical nature of our business, along with the need to significantly change behaviours, procedures, technology and equipment, mean that fundamentally reducing carbon emissions will be an ongoing process over a number of years. Our science-based targets provide the structure in which we will do this, working towards 2030.

Our project teams continue to draw upon our guidance on how to address out-of-hours electricity consumption together with minimum recommendations for site set up and operation. Sites complete a Carbon Management and Action Plan to detail energy consumption and efficiency measures and many have retrofitted more energy efficient measures or are including these from site start.

During 2020/21 our energy efficiency standards were reviewed and updated for site office compounds, offices and sales and marketing suites. We have implemented a range of energy efficiency measures on our sites in the last year, such as the retrofitting of welfare facilities at Hartland Village with new LED lighting and the use of solar hybrid generators to power the welfare cabins at the Green Quarter. Within St Edward, we have trialled software to raise awareness of machinery usage and help to reduce machinery idling times. Recognising that taking action to reduce non-renewable fuel consumption is a key challenge, we are now trialling the use biodiesel within generators in place of traditional gas oil; in the year, this was used at three of our sites (Green Park Village, Trent Park and Twelvetrees Park).

Procurement of renewable electricity

We procure 100% renewable electricity for our site, office and UK-based sales activities, which is accounted for in the market-based Scope 2 emissions noted above. For 2021, we Retired Deep Green Renewable Energy Guarantee of Origins (REGOs) from an off-shore wind project based in the UK, accounting for 100% of the Berkeley Group's consumption of purchased UK electricity (25,954 MWh).





Procurement of carbon offsets

We are committed to voluntarily supporting verified projects in realising carbon emissions reductions elsewhere to account for our remaining Scope 1 and 2 emissions, together with Scope 3 emissions resulting from fuel purchased by contractors for use on our construction sites. We add a 5% contingency in case of any minor data changes.

We are also currently investigating opportunities to support other schemes in the future to account for our remaining Scope 3 emissions from purchased goods and services (category 1) and use of sold products (category 11).

Emissions offset in 2021

Scope 1	2,351 tCO2e
Scope 2 (location-	196 tCO2e
based)	
Scope 3 (contractor	7286 tCO2e
fuel only)	
5% contingency	492 tCO2e
Total offset	10,325 tCO2e

This year we have supported four verified projects that align to Berkeley Group's priorities within the Our Vision business strategy (e.g. protecting and enhancing nature, supporting communities) and/or provide a multitude of economic and social benefits for the communities in which they operate.

Mangrove Preservation and Restoration Project in Myanmar (10% - 1,033 tCO2e)



Mangrove deforestation in Myanmar is the clearing of mangrove forests, usually for commercial uses or resources extraction, which is occurring mainly in 3 different regions: Rakhine State, Ayeyarwaddy Mega Delta, and Tanintharyi Division. The project is implemented on 2265.47 ha of degraded lands of the Northern part of Ayeyarwady Division of Myanmar. The lands that will be restored under the project belong to Magyi, Thabawkan and Thaegone village tracts and this restoration will create a healthy mangrove ecosystem.

This is the second year that we have supported this project and we are proud to support a carbon sequestration initiative that is recognised as a best practice type of offset on our journey to becoming a true net zero carbon business by 2040.













Cenol and Telha Forte Ceramics Switching Fuel Project (34% - 3,517 tCO2e)



Berkeley has recently started supporting this project, based in Brazil. The project focussed on combatting against exploitation of wood and Amazonian deforestation for brick making. Serragem project has developed a new biomass brick design with two factories located in the municipality of São Miguel do Guamá in Brazil. Willing to reduce their impact on the environment, these companies have chosen to use biomass residues based on Açai seeds and sawdust, thus reducing pressure on the native forest and protecting biodiversity. In addition, the project focuses on the social impact of these plants and the benefits they can provide to local communities.















Madre de Dios REDD Project in Peru (10% - 1,033 tCO2e)





Berkeley continue to support this verified carbon standard project dramatically reduces deforestation and the threat of moving communities and illegal logging by increasing surveillance in the area and establishing sustainable forest management practices. This saves precious habitat relied upon by endangered species and tribal communities.

This is the fourth year that we have supported this project and we are pleased to have been able to provide ongoing funding to reduce deforestation in Peru.











Cula Cookstoves in Bangladesh (46% - 4,742 tCO2e)



In Bangladesh, where nearly 10% of the population live with less than 2\$ per day, uneven access to energy is a real issue. When it comes to cooking, the typical rural Bangladeshi household uses open fires or inefficient stoves which use a significant amount of wood and lead to indoor pollution and adverse health effects for the entire family. This project aims to disseminate cleaner and more efficient cookstoves throughout Bangladeshi households, thereby providing residents with a healthier, and more environmentally friendly cooking solution. The project has so far benefited over 500,000 Bangladeshis and will lead to a reduced 7.5 million tons of CO2e emissions over its lifetime. Additionally, it provides employment and entrepreneurial opportunities for locals in the manufacturing and selling process of the cookstoves.











