Greencore Homes describe their homes as *Better Than Net Zero*.

This is Why.

Buildings are responsible for 49% of the UK's greenhouse gas (GHG) emissions.

These emissions come from:

1. a building's use; and
2. its construction

Across the UK, most of these emissions are produced in a building's use from heating, hot water and power – four tonnes a year for the average UK home.

But Greencore homes are designed to reduce these emissions. We do this by achieving best practice: designing our homes to Passivhaus standards means they have an ultra-low energy demand in use. Across any given development, our homes achieve a net-zero energy balance. This is because the amount of Solar PV we install on our roofs is designed to match the predicted, total energy demand of those homes across the year. This makes them *Net Zero.*

The remainder of a building's GHG emissions are released during the manufacture, production and transportation of construction materials. This is called its embodied carbon.

At Greencore, our mission is to reduce the embodied carbon of our homes as far as possible. We achieve this through our sustainable approach to construction and the materials we use which are predominantly bio-based. For example, we use timber and timber products, hemp, wood-fibre and recycled cellulose. Plants are carbon sequestration in nature: through the process of photosynthesis, plants have played a vital role in capturing carbon dioxide from the atmosphere as they grow. By using bio-based materials, our homes perform as carbon stores, significantly reducing their embodied carbon.

We measure the embodied carbon of all our homes and developments and look at the whole home when we do. This includes its superstructures, foundations, mechanical, electrical and plumbing (MEP) and internal finishes.

Our assessment accounts for all emissions linked to the supply and processing of raw materials. It covers the transport linked to their manufacture, the manufacturing stage itself and the installation and assembly of materials once they reach site and our homes are built[i].

Within this scope, we can demonstrate that our homes are *Better Than Zero* in the upfront embodied carbon, as a development average. Please refer to the below data summary for The Canopies and block typology reports appended.

As a business, we are continually striving to go beyond housebuilding norms and act as leaders in sustainable construction. We aim to improve and reduce our environmental impact through construction and our embodied carbon even further through R&D, ongoing detailed Life Cycle Assessment and careful materials selection.

[i]

- Our embodied carbon assessment, referred to as a Life Cycle Assessment, includes A1, A2, A3 & A5 building modules and life cycle stages of construction
- We use Madaster which allows us to complete calculations in line with RICS WLCA guidance, 2nd edition
- The sequestration properties of materials, referred to as the biogenic carbon, are included in our calculations
- Our models assume a 60-year building lifetime