



Eaton Court, 104-112 Oxford Road Reading

Energy Statement for Planning

Job No: 6510

Issue February, 2026

Issue No: 2

Contents

1.0 Introduction..... 3

2.0 Project Summary 4

3.0 Policy Requirements and Drivers..... 5

4.0 Energy Strategy and Approach 6

5.0 Baseline Emissions 7

6.0 Energy Efficiency Strategy 8

7.0 Decentralised Energy 9

8.0 Renewable Energy Strategy 10

9.0 Summary Of Results..... 11

10.0 Conclusions 12

Appendix A – SAP Calculations 14

Document Prepared By:

Jim Westover

Document Authorised By:

Sam Westover

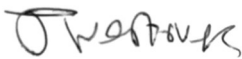
Dated:

02.02.26

Dated:

02.02.26

Signed:



Signed:



This report has been prepared for the exclusive use of the commissioning party and may not be reproduced without prior written permission from T16 Design.

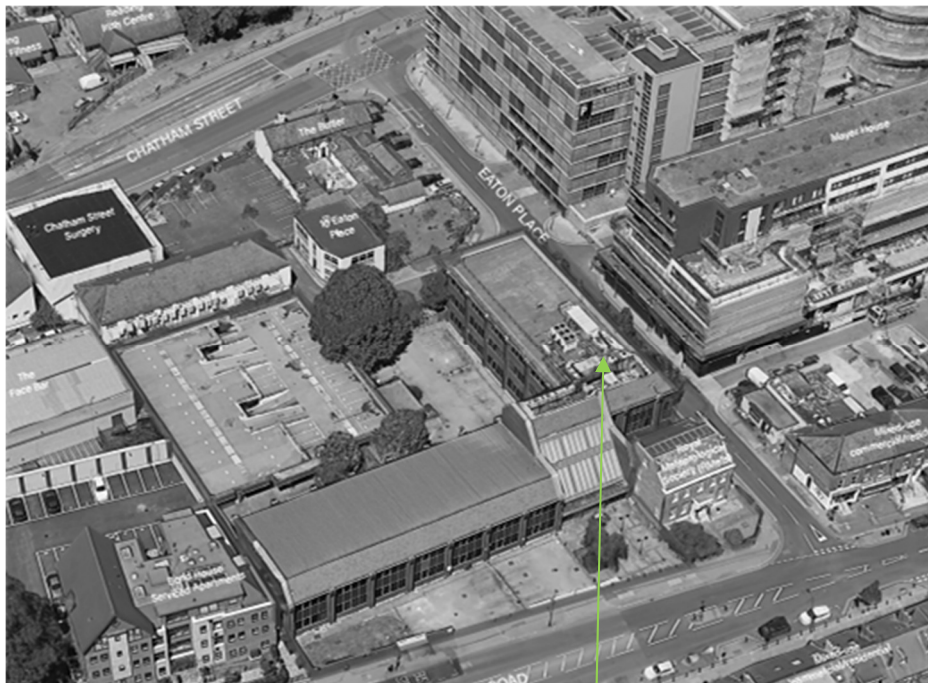
All work has been carried out within the terms of the brief using all reasonable skill, care, and diligence. No liability is accepted by T16 Design for the accuracy of data or opinions provided by others in the preparation of this report, or for any use of this report other than for the purpose for which it was produced.

1.0 Introduction

- 1.1 This Energy Statement has been prepared in relation to a planning application for the proposed development at Eaton Court, 104-112 Oxford Road, Reading, RG1 7LL.
- 1.2 The report assesses the predicted energy performance and carbon dioxide emissions of the proposed development.
- 1.3 The methodology used to demonstrate the effects of the proposed energy efficiency measures through passive design and renewable technologies.
- 1.4 The overall effect of these policies is:
 - A minimum of 35% reduction in carbon emissions over Building Regulations standards.

2.0 Project Summary

- 2.1 The proposal site is at Eaton Court, 104-112 Oxford Road, Reading, RG1 7LL. There is currently a two to three-storey vacant office building on the site and a car parking block.
- 2.2 The proposal is for a part 1, part 2-storey extension to the existing building to create twelve new dwellings.
- 2.3 The site location is shown below.



Site Location

3.0 Policy Requirements and Drivers

3.1 The relevant planning policy documents for this site, relating to energy are:

- Policy CC2 'Sustainable Design & Construction'
- Policy CC4 'Decentralised Energy'.
- Policy H5 'Housing Standards'.
- Reading Borough Local Plan (2019).

3.2 Local Plan policies states that all major new-build residential development should achieve a minimum of 35% reduction in on-site CO2 emissions.

3.3 Policy H5 of the Local Plan requires that 'all major new-build residential developments should be designed to achieve zero carbon homes.'

3.4 In light of these policy requirements, and through the developer and design team's commitment to reducing the impact of the development on the environment, this report sets out the measures that will be adopted to meet the policy targets.

4.0 Energy Strategy and Approach

- 4.1 The energy strategy for the development is to firstly introduce energy efficient measures, and secondly to provide on-site renewable technology.
- 4.2 This is done using SAP (Standard Assessment Procedure) for residential elements.
- 4.3 The energy efficient measures show how proposed development will reduce the energy demand of the building through architectural and building fabric measures (passive design) and energy efficient services (active design).
- 4.4 The introduction of renewable technology will provide the majority of the reduction in emissions. This will involve the consideration of PV panels, Air source heat pumps (ASHPs) or Ground source heat pumps (GSHPs) and wind.

5.0 Baseline Emissions

- 5.1 The baseline emissions on which reduction figures are based are calculated using SAP for residential dwellings.
- 5.2 The emissions are based upon the minimum target U-values set out in Part L of the building regulations.
- 5.3 The baseline emissions are as follows.

Baseline Emissions	
Regulated Emissions	SAP 10 (Tonnes CO ₂ /Year)
	16.2 Tonnes CO ₂

Table 1 – Baseline Emissions

6.0 Energy Efficiency Strategy

- 6.1 The next stage, once the baseline has been established, is to make improvements through energy efficiency measures. This includes improving the U Values and the reduction of thermal bridging.
- 6.2 The U value improvements for each element, with the relevant Part L notional value are shown below.
- 6.3 Improved thermal bridging is also proposed.
- 6.4 Lighting will be provided by energy efficient lighting with an efficacy of 110 lumen per circuit watt.

Fabric Specification		
Element or system	Backstop Value	Proposed Value
External Walls	$U = 0.18 \text{ W/(m}^2\text{k)}$	$U = 0.18 \text{ W/(m}^2\text{k)}$
Roof	$U = 0.11 \text{ W/(m}^2\text{k)}$	$U = 0.10 \text{ W/(m}^2\text{k)}$
Glazing	$U = 1.2 \text{ W/(m}^2\text{k)}$	$U = 1.2 \text{ W/(m}^2\text{k)}$
Air Permeability	$5\text{m}^3/(\text{hm}^2) \text{ at } 50 \text{ Pa}$	$5\text{m}^3/(\text{hm}^2) \text{ at } 50 \text{ Pa}$

Table 2 – Be Lean Fabric Specification

7.0 Decentralised Energy

- 7.1 Policy CC4 'Decentralised Energy' states that where there is existing decentralised energy provision present within the vicinity of an application site, developments of more than 10 dwellings will be expected to connect to it or demonstrate why this is not feasible.
- 7.2 From the information we have the proposal site is not near any existing or proposed decentralised energy network.
- 7.3 It is not considered feasible for the proposed development to connect to a decentralised energy network as it is not located on the ground floor and there is no available space for a plant room.

8.0 Renewable Energy Strategy

- 8.1 The renewables section of the energy strategy requires the consideration of renewable technologies to reduce emissions.
- 8.2 The technologies that are considered here are wind power and solar panels photovoltaic (PV) and renewable heating technology.
- 8.3 Wind power is not suitable in a location such as this. Wind turbines tend to perform poorly in built-up areas.
- 8.4 Any wind that is received on the site would be too intermittent and turbulent to provide any meaningful reduction in emissions.
- 8.5 Air Source Heat Pumps are considered suitable here. It is proposed that individual ASHPs with an efficiency of 252% will be installed at each apartment, providing heating and hot water.
- 8.6 PV panels may be considered suitable here but are not required to achieve a substantial reduction in emissions.

9.0 Summary Of Results

- 9.1 The table below give the percentage improvement in emissions at each stage of the hierarchy and the overall savings made over Part L of the Building Regulations.
- 9.2 The building will be provided with increased U values (as shown above) and individual Air Source Heat Pumps.

Eaton Court	Carbon Dioxide Emissions (tonnes)	% Reduction
Baseline: Part L 2021 of the Building Regulations Compliant Development	16.2	
After renewable energy	5.1	68.1%
Total Savings	11.1	68.1%

Table 3- Summary of Results

10.0 Conclusions

- 10.1 This report has been set out to demonstrate how the proposed development at Eaton Court, 104-112 Oxford Road, Reading, will meet the policy requirement of achieving a minimum of 35% reduction in emissions.
- 10.2 In doing so, preliminary SAP calculations have been undertaken using the information available and sensible assumptions on construction and M&E parameters.
- 10.3 The baseline figures have been calculated and improvements made to the fabric of the scheme, in addition to other measures listed below.
- 10.4 The measures proposed are detailed above but summarise as:
- Improved fabric
 - Individual ASHPs
- 10.5 The results in Section 9 show that there will be a 68% reduction in CO₂ emissions. This is a substantial improvement over the 35% minimum requirement. The remaining emissions will be offset in order to meet zero carbon Homes standard.
- 10.6 The total remaining regulated emissions for the site are 5.1 tonnes.
- 10.7 The offset payment requires £60 per tonne over 30 years. Therefore, the total offset payment is $(5.1 \times 30 \times 60 = \text{£}9,180$.



T16 Design Ltd.

T: 01206 572452

E: info@t16design.com

W: www.t16design.com

© 2026



Appendix A – SAP Calculations