

Proposed development at:
Kings College Court
55 Primrose Hill Road
London
NW3 3EA

1.0 INTRODUCTION

This statement sets out the measures taken by the proposed development to reduce the energy, water and materials used in its design, construction and occupation.

To this end, the development has been designed in accordance with the 3 Steps of the energy hierarchy:

- (a) Be Lean - use less energy
- (b) Be clean - supply energy efficiently
- (c) Be green - use renewable energy.

Given the restriction of building on top of an existing building on an inner city site, the opportunities for using renewable energy are restricted, and therefore the emphasis has been on reducing energy use.

Officer's pre-application advice is that *"for the creation of 5 or more dwellings from an existing building, they will be required to meet as a minimum an EcoHomes rating of "very good"."*

2.0 ENERGY STATEMENT

The baseline energy demand has been calculated on the basis of no consequential improvements to the existing building, to which is then added the energy requirements of the 5 new apartments, excluding any renewable energy sources.

Baseline CO₂ emissions of existing building = 2945.5 kg/m²/year
 Baseline CO₂ emissions of new apartments = 150.1 kg/m²/year

The introduction of an insulated rainscreen and double glazed replacement windows to the existing building, along with solar thermal water heating to the new apartments reduces the CO₂ emissions as follows:

Design CO₂ emissions of existing building = 2295.3 kg/m²/year (a reduction of 22%)
 Design CO₂ emissions of new apartments = 141.2 kg/m²/year (a reduction of 6%)

The figures for new apartments are likely to be further reduced as part of the detailed design and selection of specific heat recovery units.

It should be noted that the figures given above are for the total CO₂ emissions of the development. The introduction of an insulated rain screen cladding and replacement double glazing reduces the heat loss from the building fabric by just under 1/3.

4.0 ECOHOMES PRE-ASSESSMENT

A pre-assessment has been undertaken using the EcoHomes Pre Assessment Estimator - 2006/1.3 for each of the new apartments, and the following scores recorded:

Apartment	10.1	10.2	11.1	11.2	12.1
Score (%)	63.7	61.8	63.7	61.8	63.7

A score of 58% or above is required to achieve a "Very Good" rating. All the proposed new apartments will meet this designation, with better scores likely upon detailed design.

Kings College Court - CO2 emissions of existing building					
Reference		Existing	Proposed	Difference	Percentage
		kg/m ² /year	kg/m ² /year	kg/m ² /year	
1st Floor	Flat 01	63.8	50.4	13.4	21.0%
	Flat 02	75	62.4	12.6	16.8%
	Flat 03	75.2	65.2	10	13.3%
	Flat 04	75.4	62.4	13	17.2%
	Flat 05	78.8	64.6	14.2	18.0%
	Flat 06	75.2	65.02	10.18	13.5%
2nd Floor	Flat 07	55.1	40.6	14.5	26.3%
	Flat 08	57.1	42.3	14.8	25.9%
	Flat 09	56	44.7	11.3	20.2%
	Flat 10	57.3	42.1	15.2	26.5%
	Flat 11	61.8	44.8	17	27.5%
	Flat 12	56	44.6	11.4	20.4%
3rd Floor	Flat 13	55.1	40.6	14.5	26.3%
	Flat 14	57.1	42.3	14.8	25.9%
	Flat 15	56	44.7	11.3	20.2%
	Flat 16	57.3	42.1	15.2	26.5%
	Flat 17	61.8	44.8	17	27.5%
	Flat 18	56	44.6	11.4	20.4%
4th Floor	Flat 19	55.1	40.6	14.5	26.3%
	Flat 20	57.1	42.3	14.8	25.9%
	Flat 21	56	44.7	11.3	20.2%
	Flat 22	57.3	42.1	15.2	26.5%
	Flat 23	61.8	44.8	17	27.5%
	Flat 24	56	44.6	11.4	20.4%
5th Floor	Flat 25	55.1	40.6	14.5	26.3%
	Flat 26	57.1	42.3	14.8	25.9%
	Flat 27	56	44.7	11.3	20.2%
	Flat 28	57.3	42.1	15.2	26.5%
	Flat 29	61.8	44.8	17	27.5%
	Flat 30	56	44.6	11.4	20.4%

6th Floor	Flat 31	55.1	40.6	14.5	26.3%
	Flat 32	57.1	42.3	14.8	25.9%
	Flat 33	56	44.7	11.3	20.2%
	Flat 34	57.3	42.1	15.2	26.5%
	Flat 35	61.8	44.8	17	27.5%
	Flat 36	56	44.6	11.4	20.4%
7th Floor	Flat 37	55.1	40.6	14.5	26.3%
	Flat 38	57.1	42.3	14.8	25.9%
	Flat 39	56	44.7	11.3	20.2%
	Flat 40	57.3	42.1	15.2	26.5%
	Flat 41	61.8	44.8	17	27.5%
	Flat 42	56	44.6	11.4	20.4%
8th Floor	Flat 43	59.8	46.3	13.5	22.6%
	Flat 44	62.2	48.1	14.1	22.7%
	Flat 45	79.4	70.1	9.3	11.7%
	Flat 46	79	66.9	12.1	15.3%
	Flat 47	82.4	69.2	13.2	16.0%
	Flat 48	79.5	70.1	9.4	11.8%
TOTAL VALUES		2945.5	2295.32	650.18	22.1%
10th Floor	Flat 10.1	29.5	28.0		
	Flat 10.2	32.9	30.6		
11th Floor	Flat 11.1	29.5	28.0		
	Flat 11.2	32.9	30.6		
12th Floor	Flat 12.1	25.3	24.0		
TOTAL VALUE		150.1	141.2		