



**Ecohomes 2006 Pre-Assessment of
172a Arlington Road, London**

Pre-Assessment Guidance Report

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Rev 3



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Executive Summary

The development at 172a Arlington Road consists of six refurbished units under EcoHomes (Very Good).

A pre-assessment exercise has been carried out, and based on current design intent the units equate to 63.26% which comfortably achieves EcoHomes Very Good.

Details of the credits that are considered to be achievable have been listed in section 2.0, and 3.0.

1.0 Introduction

This report covers the EcoHomes pre-assessment works that have been carried out to identify a route to achieving Very Good based on the current design intent. This has been completed at the request of KSR, in order to fulfil requirements from the London Borough of Camden.

The development has been registered under EcoHomes 2006 for the six refurbished units as BREEAM-0045-8083.

It is recommended that the information contained within this pre-assessment be included in any specifications and contractor or supplier tenders, in order to ensure that the obligations discussed are implemented. This should prevent the score from reducing significantly during the formal design stage and post construction stage assessments.

1.0 The EcoHomes Rating

2.1 Introduction

EcoHomes is a voluntary scheme in the UK that aims to quantify and reduce the environmental burden of buildings by rewarding designs and operational procedures that take positive steps to minimise their environmental impact. The scheme is now only applicable for the refurbishment of existing dwellings, after being replaced by the Code for Sustainable Homes for new build dwellings.

Projects are assessed using a system of credits. These credits are grouped into the following categories (including the EcoHomes 2006 addition of a management category):

- Energy
- Transport
- Pollution
- Materials & Waste
- Water
- Land & Ecology
- Health & Wellbeing
- Management

The assessment process results in a report covering the above credit categories. The full assessment is required to be submitted to the Building Research Establishment (BRE) for quality assurance checking and certification. Certificates are awarded depending on a rating scale and will result in a building being awarded a PASS, GOOD, VERY GOOD or EXCELLENT rating.

2.2 EcoHomes 2006 Scoring

In order for an EcoHomes score to give an appropriate balance across such a broad selection of issues, the BRE have developed a weighting system through consultation with a range of industry representatives. This weighting system provides a relative importance to each of the credit categories. The current weightings are as follows:

Category	Weighting for EcoHomes
Energy	22%
Transport	8%
Pollution	10%
Materials and Waste	14%
Water	10%
Land Use and Ecology	12%
Health and Well Being	14%
Management	10%

The number of environmental criteria within each of the categories varies and as a result, there are a different number of credits within each category. Due to the different number of credits within each category and the differing category weightings, the overall value of each individual credit (as a percentage of the total number of credits in the assessment) is different depending on the category.

In order to achieve credits, information must be submitted to the assessor who will then award credits based on the current EcoHomes compliance criteria. The EcoHomes weightings are then applied to the sum total for each credit category to achieve an overall score. In the case of a pre-assessment, this is an informal process; for the full assessment, this information needs to be provided in full as confirmation of commitment to achieve each credit. This score is then used to identify the overall EcoHomes rating using the following ranges:

Rating	EcoHomes Score
Pass	36 – 47
Good	48 – 57
Very Good	58 – 69
Excellent	70 - 100

Once the final assessment has been carried out, based on information submitted to the assessor, a report is written which describes which credits have been awarded. This report then goes to the BREEAM team at the BRE for QA procedures. If the QA is passed then a certificate is issued.

2.0 EcoHomes Report

2.3 Credit Summary

The following table gives a summary of credits identified:

Energy		Credits Available	Credits Targeted
Ene 1	Carbon Dioxide* CO2 emissions (kg/m2/yr), 40 - 0	15	7
Ene 2	Building Fabric* Heat Loss Parameter less than 1.1 or 1.3	2	0
Ene 3	Drying Space External/internal drying space, line over bath with vent.	1	1
Ene 4	Eco labelled Goods A rated white goods, 1 credit for info on purchasing.	2	2
Ene 5	Internal Lighting 75% have dedicated energy efficient fittings	2	2
Ene 6	External Lighting Space lighting CFL, Security lighting efficient and controlled	2	2
		24	14
Transport			
Tra 1	Public Transport 500m every 15 mins/half hourly or 1000m every half hourly or hourly	2	2
Tra 2	Cycle Storage 50% of dwellings have safe provision of cycle storage for 1/2/4 cycles	2	1
Tra 3	Local Amenities 500m to post box, shop, also others, safe pedestrian routes to them.	3	3
Tra 4	Home Office Two double sockets, two phone points, window, vent, 1.8m wall	1	1
		8	7
Pollution			
Pol 1	Insulant GWP ODP zero, GWP <5 for roof, wall, floors cylinder and pipe insulation	1	1
Pol 2	NOx Emissions Boiler class 4, 5, 5+ must not be open flue	3	0
Pol 3	Reduction of Surface Runoff Porous paving, soak-aways for roof, holding ponds	2	0
Pol 4	Renewable and Low Emission Energy Source Feasibility study plus 15%+ of either heat or electric demand	3	3
Pol 5	Flood Risk Low flood probability/buildings above flood line	2	2
		11	6
Materials			

Mat 1	Environmental Impact of Materials A' rating from Green Guide of roof (3), external walls (3), internal walls (3), floors (3), windows (2), external surfacing (1), boundary protection (1)	16	12
Mat 2	Responsible Sourcing of Basic Building Elements	6	3
Mat 3	Responsible Sourcing of Finishing Building Elements	3	2
Mat 4	Recycling Facilities Local collection or external bins, plus 3 internal bins of 30 litres total capacity	6	6
		31	23
Water			
Wat 0-1	Internal Water Use More than standard fittings eg 4/2l dual flush toilet and 9l/min < flow rate < 12 shower	5	3
Wat 0-2	External Water Use Water butts or other rainwater collection	1	0
		6	3
Land Use and Ecology			
Eco 1	Ecological Value of Site No ecological value eg ponds, streams, trees, hedges, marsh, meadows, heathland	1	1
Eco 2	Ecological Enhancement External consultant used and all key recommendations plus 30% optional adopted	1	1
Eco 3	Protection of Ecological Features During clearing/construction or by default if site is of no ecological value	1	1
Eco 4	Change of Ecological Value of Site Minimise reduction and encourage improvement. 2 credits for no change.	4	4
Eco 5	Building Footprint Where more than three/four floors are specified in 80% buildings or block of flats	2	0
		9	7
Health and Wellbeing			
Hea 1	Daylighting BS daylighting met in kitchen (1), living rooms, dining rooms, studies (1) and view of sky in all (1)	3	0
Hea 2	Sound Insulation Sets of tests and achieve standards in Approved Doc E (2003)	4	3
Hea 3	Private Space Outside space, eg private garden, communal garden, balcony, roof terrace	1	0
		8	3
Management			

Man 1	Home User Guide Provision of, including a number of categories	3	3
Man 2	Considerate Contractors Commitment to going beyond best practice procedures	2	1
Man 3	Construction Site Impacts Monitoring construction waste, CO2 or energy, water consumption, pollution, 80% site timber responsibly sourced	3	2
Man 4	Security Work with an Architectural Liaison Officer to achieve Secured By Design award, and/or achieve minimum security standards	2	2
		10	8
	Total Credits	107	71
	Ecohomes Rating	63.26 %	

2.4 EcoHomes Pre-assessment Scores

Following the application of the environmental weightings, the above credit totals equate to an EcoHomes score of 63.26% and a rating of 'Very Good'. The following sections provide detail on the achievable credits.

3.0 Key Features of the EcoHomes Pre-assessment – Very Good

3.4 Energy

Ene 1 – Carbon Emissions

The building fabric will be a mix of existing and improved existing. Preliminary modeling based on the assumptions found below indicate that there is an average of 23.25 CO₂/sqm/year therefore seven credits can be targeted.

Ene 3 – Drying Space

The design team will provide a compliant internal retractable line in the bathroom, and ensure that adequate humidistat ventilation is provided.

Ene 4 – Energy Efficient White Goods

A The developer will supply white goods and they will be fully energy efficient (A+ rated fridge/freezers, A rated washing machines and B rated tumble dryers).

Ene 5 – Energy Efficient Internal Lighting

More than 75% of the fixed internal light fittings will be energy efficient.

Ene 6 – Energy Efficient External Lighting: The space lighting will be specified which is 100% energy efficient and so the first credit can be achieved. Security lighting will be provided as follows to achieve the second credit; a maximum of 150W, and fitted with a PIRs and daylight cut-off sensors.

3.5 Transport

Tra 1 – Public Transport

The scheme is within 500m of Camden Town tube station and many bus routes which provide frequent services sufficient to achieve both credits.

Tra 2 – Cycle Storage

In the development there are currently 3 one bed flats, 2 two bed flats and 1 three bed flat, therefore 8 secure and covered cycle spaces would need to be provided. There is a cycle store as part of the development which provides space for 6 cycle spaces and will be secure and covered. As this caters for at least 50% of the development, then 1 credit can be awarded. If an extra 2 cycle spaces are installed, and extra credit can be awarded.

Tra 3 – Local Amenities

The site has a post box and shop within 500m and at least five of the relevant local amenities (e.g. postal facility, pub, primary school, pharmacy, place of worship, medical centre) are within 1km of the site since it is in central Camden, to achieve the full 3 credits.

Tra 4 – Home Office

Home office facilities will be provided. These consist of 1.8m of wall space (to allow a desk and filing cabinet, there is a 2.6m wall for this purpose), ventilation in the form of an openable window, two double power sockets and a phone point. NOTE- Apartment one, the home office is not situated next to a window, to achieve this credit the office area will need to be moved in front of a window.

3.6 Pollution

Pol 1 – Insulant GWP

All new insulation specified will have an ODP of zero and a GWP of less than 5.

Pol 4 – Low and Zero Carbon Technologies

A compliant feasibility study has been undertaken which has resulted in PVs to be provided, and it is hoped there will be at least a 20% carbon emissions reduction due to renewables, and so all 3 credits are achievable.

Pol 5 – Flood Risk

The Environment Agency flood risk map shows that the site lies in an area of low flood risk, achieving both credits (see Appendix 1).

3.7 Materials

Mat 1 – Environmental Impact of Materials

All existing building elements achieve a Green Guide rating of A by default, however some of the new build materials may not achieve an A rating. It is currently assumed that the following will achieve an A rating (where new elements are provided) and therefore achieve a total of 12 credits:

- Roof (timber with tiles)
- External walls (wall board on existing brick)
- Internal walls (timber stud, or wall board)
- Windows (timber)
- Boundary Protection (timber fencing)

Mat 2 – Responsible Sourcing of Basic Building Elements

The existing structure achieves the highest tier of responsible sourcing, therefore only the new basic build materials need to be responsibly sourced and it assumed that three out of the six credits should readily be achieved here.

Mat 3 – Responsible Sourcing of Finishing Elements

It is assumed that two out of the three credits could be achieved for responsibly sourcing a large portion of the finishing elements.

Mat 4 – Recycling Facilities

One internal bin, with a minimum total capacity of 30 litres, will be provided in a dedicated position in each kitchen. The development is covered by Camden Council's curbside collection scheme which includes paper, glass and plastic, collected in one green box (see Appendix 2).

3.8 Water

Wat 1 – Internal Water Use

Sanitary fittings will be specified with reduced flow rates in order to reduce the level of internal potable water use. Three credits would be achievable using the following fittings: 4/2 dual flush WCs, aerating taps, standard baths (overflow to 120l), showers with a maximum of 12 litres/min and dishwashers and washing machines with best practice water consumption of 40 and 12 litres/use respectively (since they are to be provided by the client).

3.9 Land Use & Ecology

Eco 1 – Ecological Value of Site

The site has low ecological value.

Eco 2 – Ecological Enhancement

If an ecologist is to be employed and recommendations carried forward in the landscape design, this credit could be targeted.

Eco 3 – Protection of Ecological Features

As it is assumed that the site has no ecological features, this credit is awarded by default.

Eco 4 – Change in Ecological Value of the Site

An ecologist will be employed, and their recommendations taken forward (improving the biodiversity of the development by enhancing the planting in the courtyards and green roof). This could result in all four credits being targeted.

3.10 Health & Wellbeing

Hea 1 – Sound Insulation

Pre completion testing program will be carried out to achieve airborne sound insulation values that are at least 3dB higher, and impact sound insulation values that are at least 3dB lower, than the performance standards set out in the Building Regulations Approved Document E.

3.11 Management

Man 1 – Home User Guide

A Home User Guide will be produced to target the full credits, providing information on the operation of each dwelling, as well as further information on the site and surrounding area

Man 2 – Considerate Constructor Scheme

The contractor employed will achieve a score between 24 and 31.5 points under the Considerate Constructors Scheme. One credit is targeted here.

Man 3 – Construction Site Impacts

The contractor will implement the following points (or substitute others from the list under Man 3 of the CSH guidance) to mitigate construction site impacts and achieve both credits:

- Monitor and report CO2/energy use from site activities,
- Monitor and report water consumption from site activities
- Air (dust) pollution from site activities
- Water (ground and surface) pollution from site activities

Man 4 – Security

The architect will work with an Architectural Liaison Officer to achieve the Secured by Design award for the first credit. For the second credit, security standards for external doors and windows will achieve a minimum of either:

- LPS1175 SR1 (All doors and windows) OR
- PAS24-1 (All external pedestrian doorsets falling within scope of PAS24-1) AND BS7950 (All windows falling within the scope of BS7950).

4.0 EcoHomes – At Risk and Potential

There is a credit at risk in the Travel section, Tra 4.

The home office in apartment 1 is located away from a window. To ensure this credit is achieved, all home offices areas in each apartment must be next to a window, as well as having two double sockets, two phone points, vent, and at least 1.8m wall space.

There is an extra credit available in the pollution section, Pol 2.

Up to 3 credits can be awarded if new boilers are to be installed which fall in classes 4, 5 and 5+.

There is an extra credit available in the Transport section, Tra 2.


There are currently 6 spaces designed into the development, if a further 2 spaces were added, and an extra credit can be awarded, so long as they comply with the cover and security requirements.

Appendix 1 – Environment Agency map

Environment Agency - What's in your backyard?

<http://maps.environment-agency.gov.uk/wiyby/wiybyController>

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Other topics for this area...


Risk of Flooding from Rivers and Sea


Map legend


Click on the map to see what is the Risk of Flooding at a particular location.


☒ Flood Maps [?](#)

 Flooding from rivers or sea without defences

 Extent of extreme flood

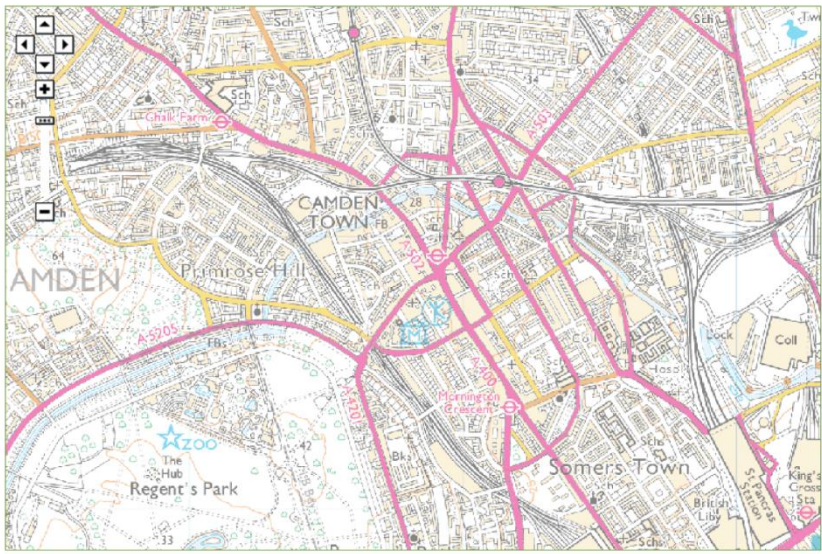
 Flood defences

 Areas benefiting from flood defences

 Main rivers

NW1 7HL at scale 1:15,000

[Data search](#) [Text only version](#)



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Flood Map – Information Warnings

Manchester Ship Canal

Flood Mapping of the Manchester Ship Canal in Trafford, Salford and Warrington may be subject to revision as a result of representations. For further information please contact the Environment Agency on 03708 506 506. Users of the Flood Zone Map should be aware that we have received a Judicial review challenge to the mapping of the Manchester Ship Canal at Trafford, Salford and Warrington on the ground that the preparation of the map is flawed in respect of our consideration of the role of the sluice gates in preventing flooding. We are defending the challenge and believe and are advised that it is ill-founded. Nevertheless, pending determination of the challenge, users of the map need to consider whether the existence of the Challenge, and the basis of it, affects the weight they judge may be given to the zoning of the Manchester Ship Canal within the Flood Map.

Staveley, Derbyshire

Revisions to the Flood Mapping for the River Rother near Staveley in Derbyshire are planned for delivery as part of our next update in August 2012. For further information please contact the Environment Agency on 03708 506 506.

More about flooding:

Appendix 2 – Camden's Recycling Policy

<http://www.camden.gov.uk/ccm/content/environment/waste-and-recycling/recycling-your-waste/doorstep-waste-and-recycling-collections.en>

Recycling collection - Camden Council

<http://www.camden.gov.uk/ccm/content/environment/waste-and-recycl...>



Recycling collection

Door-step recycling collections / Communal recycling / Blue bag collection

Door-step recycling collections

We offer all residents who live in a house or a flat with less than six flats to one front door a recycling collection service.



What day is my recycling collected

[Find out when your recycling is collected](#)

How do I get a recycling box or bag?

You can [request for a recycling box online](#)

Where and when do I put out my recycling box/bag?

Please place your box or bag outside your property where it can be easily seen from the road, but not on the public footpath. Your box or bag needs to be out for collection before 7am. You can place it out the night before.

Please note that times of collection may vary. We will inform you of bank holiday arrangements

If you have difficulty lifting and require assistance [please contact street environment services](#)

The new face of Camden recycling

A new weekly food and garden waste recycling collection service has now been introduced to help you recycle even more.

What has changed and why?

We recently delivered you a new recycling kit so you can recycle all your food and garden waste, which will be turned into compost instead of ending up in landfill. Your kit contained a brown and green caddy for your food waste and a white sack for your garden waste.

We also delivered you a blue bag for all your paper and card recycling. Your paper and card will need to be separated from the rest of your recycling in the green bag or box. This will help to ensure a better quality material for reprocessing.

The rest of your green box/bag recycling services will remain the same.

To find out more visit [The new face of Camden recycling](#)