

**Proposed Development 9 Family dwelling units
30a Highgate Road, London**

**Code for Sustainable Homes Pre Assessment
Planning Preliminary Assessment Report**

Energy Solutions Environmental Consultants

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Report prepared for:
CHASSAY STUDIO LTD

1. Introduction

This report concerns the preliminary Code for Sustainable Homes assessment for the proposed development of 9 dwelling units at 30a Highgate Road

This report follows a meeting with members of the project team, subsequent design development for planning and the completion of predicted credit awards in the Code for Sustainable Homes Assessment tool. It is stressed that at this stage many of the credits are subject to detailed confirmation. Therefore the credits awarded and the associated rating is predicted and not guaranteed.

The Code for Sustainable Homes is an environmental and sustainable assessment method for individual domestic dwellings that allows designers to review and improve the environmental performance of a building. It is the government's designated assessment method and sets a benchmark for environmental performance and provides a wide range of benefits.

The requirement stipulated by Camden Council for the development is to achieve a minimum of code level 3.

3. Code Rating

A predicted points score of 60.73 has been achieved for this development based upon design development to date and review of the development-specific information available.

The development would achieve a 'Code Level 3' rating (≥ 57 points) given this information, on the condition that the required supporting evidence is submitted by the project team demonstrating compliance upon formal assessment.

4. Assessor Comment and Conclusion

Completion of the CSH Pre Assessment tool has confirmed that the proposed dwellings will achieve a Code level 3 with a score of 60.73. The point's score provides some flexibility with regard to the rating with a number of alternative credit options available.

Below is the report output from the Stroma Certification Body's Code for Sustainable Homes pre assessment tool providing details the credits that have been awarded during the undertaking of this assessment.



energy solutions



Report Reference:
Site Registration: 003877-110816-01-1164
Site Name: 30A Highgate Road
Assessor Number: STRO003877
Company: Energy Solutions
Assessor: Elliot Bushay



Site Details

Site Name: 30A Highgate Road
 Site Registration: 003877-110816-01-1164
 Site Address: 30A
 Highgate Road
 Camden
 City/Town: London
 County: Greater London
 Postcode: NW5 1NS
 No. of Dwellings: 1
 No. of Dwelling Types: 2
 Planning Authority: Camden Council
 Funding Body:

Assessor Details

Company: Energy Solutions
 Assessor Name: Elliot Bushay
 Cert Number: STRO003877
 Address: Planet House
 Birchen Grove
 Kingsbury
 City/Town: London
 County:
 Postcode: HA9 8RY
 Tel: 020 8200 4507
 Email: elliott@energysolutions.org.uk

Client Details

Company:
 Contact Name:
 Job Title:
 Email:
 Tel:
 Address:

 City/Town:
 County:
 Postcode:

Architect Details

Company: Chassay Last
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 Tel: 0207 483 7700
 Address: Berkely Works
 Berkely Grove
 Camden
 City/Town: London
 County: Greater London
 Postcode: NW1 8XY

Developer Details

Company:
 Contact Name:
 Job Title:
 Email:
 Tel:
 Address:

 City/Town:
 County:
 Postcode:

Dwelling ID	Plot No.	Address	Social Unit
1	1	House 1 30A Highgate Road	No

Development Summary & Ratings

Dwelling Type	Description	Level	Score
	House 130A	3	60.73

Deviations from Standard

No deviations from standard

Score Sheet for 30A Highgate Road																																					
Dwelling ID	ENE									WAT		MAT			SUR			WAS			POL		HEA				MAN				ECO					Summary	
	1	2	3	4	5	6	7	8	9	1	2	1	2	3	1	2	1	2	3	1	2	1	2	3	4	1	2	3	4	1	2	3	4	5	Score	Level	
1	8.3	0	2	1	2	2	2	2	1	5	1	10	6	3	0	2	4	0	1	1	0	3	4	0	0	3	0	0	2	1	0	1	0	0	60.73	3	

Summary Score Sheet
 Dwelling Type: House 1 30A

Dwelling ID: 1

			Score Assessment				
	Credit Score	Credits Available	Sub Total	Credits Available	%	Weighting Factor	Points Score
Energy & CO2 Emissions							
ENE 1 Dwelling Emission Rate	8.3	10	20.3	31	65.48	36.4	23.84
ENE 2 Fabric Energy Efficiency	0	9					
ENE 3 Energy Display Device	2	2					
ENE 4 Drying Space	1	1					
ENE 5 Energy Labelled White Goods	2	2					
ENE 6 External Lighting	2	2					
ENE 7 Low or Zero Carbon Energy Technologies	2	2					
ENE 8 Cycle Storage	2	2					
ENE 9 Home Office	1	1					
Water							
WAT 1 Internal Water Use	5	5	6	6	100	9	9
WAT 2 External Water Use	1	1					
Materials							
MAT 1 Environmental Impact of Materials	10	15	19	24	79.17	7.2	5.7
MAT 2 Responsible Sourcing (Basic Building Elements)	6	6					
MAT 3 Responsible Sourcing (Finishing Elements)	3	3					
Surface Water Run-off							
SUR 1 Management of Surface Water Run-Off from Site	0	2	2	4	50	2.2	1.1
SUR 2 Flood Risk	2	2					
Waste							
WAS 1 Household Waste Storage and Recycling Facilities	4	4	5	8	62.5	6.4	4
WAS 2 Construction Site Waste Management	0	3					
WAS 3 Composting	1	1					
Pollution							
POL 1 Global Warming Potential of Insulants	1	1	1	4	25	2.8	0.7
POL 2 NOx Emissions	0	3					
Health & Wellbeing							
HEA 1 Daylighting	3	3	7	12	58.33	14	8.17
HEA 2 Sound Insulation	4	4					
HEA 3 Private Space	0	1					
HEA 4 Lifetime Homes	0	4					
Management							
MAN 1 Home User Guide	3	3	5	9	55.56	10	5.56
MAN 2 Considerate Constructors Scheme	0	2					
MAN 3 Construction Site Impacts	0	2					
MAN 4 Security	2	2					
Ecology							
ECO 1 Ecological Value of Site	1	1	2	9	22.22	12	2.67
ECO 2 Ecological Enhancement	0	1					
ECO 3 Protection of Ecological Features	1	1					
ECO 4 Change of Ecological Value of Site	0	4					
ECO 5 Building Footprint	0	2					
			Level Achieved: 3		Total Points Scored: 60.73		

Evidence for ENE 1 (Dwelling Emission Rate)

Improvement above Part L Building Regulations 2010. 8.3 credits allocated

Assumptions for ENE 1

Evidence for ENE 2 (Fabric Energy Efficiency)

Not Sought
0 credits allocated

Assumptions for ENE 2

Evidence for ENE 3 (Energy Display Device)

Default Case: Electricity is the primary heating and current electricity. This will be displayed on a correctly specific device.
Correctly specified display device showing current primary heating fuel consumption data.

Assumptions for ENE 3

Evidence for ENE 4 (Drying Space)

Compliant internal & external drying space

Assumptions for ENE 4

Evidence for ENE 5 (Energy Labelled White Goods)

A+ rated fridge & freezers or fridge/freezer
A rated washing machine and dishwasher AND B rated washer-dryers & tumblers dryers, or EU energy efficiency labelling scheme leaflet where washing machines and/or dishwashers not provided

Assumptions for ENE 5

Evidence for ENE 6 (External Lighting)

Dual lamp luminaries with compliant space & security lamps

Assumptions for ENE 6

Evidence for ENE 7 (Low or Zero Carbon Energy Technologies)

Contribution of low or zero carbon technologies greater than or equal to 15%

Assumptions for ENE 7

Evidence for ENE 8 (Cycle Storage)

2 or 3 bedroom dwelling - Storage for 2 cycles per dwelling

Assumptions for ENE 8

Evidence for ENE 9 (Home Office)

Compliant home office

Assumptions for ENE 9

Evidence for WAT 1 (Internal Water Use)

Internal water use less than or equal to 80 litres per person per day

Assumptions for WAT 1

Evidence for WAT 2 (External Water Use)

Compliant communal rainwater collection system

Assumptions for WAT 2

Evidence for MAT 1 (Environmental Impact of Materials)

Mandatory requirements met: At least 3 elements rated A+ to D, 10 credits scored

Assumptions for MAT 1

Evidence for MAT 2 (Responsible Sourcing (Basic Building Elements))

6 credits scored

Assumptions for MAT 2

Evidence for MAT 3 (Responsible Sourcing (Finishing Elements))

3 credits scored

Assumptions for MAT 3

Evidence for SUR 1 (Management of Surface Water Run-Off from Site)

Special Case: Existing infrastructure.

Assumptions for SUR 1

Evidence for SUR 2 (Flood Risk)

Low flood risk - zone 1

Assumptions for SUR 2

Evidence for WAS 1 (Household Waste Storage and Recycling Facilities)

Mandatory requirements met: Adequate storage of household waste with accessibility in line with checklist WAS 1. Local authority collection: Before collection sorting with appropriate internal storage of recyclable materials

Assumptions for WAS 1

Evidence for WAS 2 (Construction Site Waste Management)

Credit not sought

Assumptions for WAS 2

Evidence for WAS 3 (Composting)

Local authority green waste collection scheme
Local authority kitchen waste collection scheme

Assumptions for WAS 3

Evidence for POL 1 (Global Warming Potential of Insulants)

All insulants have a GWP of less than 5

Assumptions for POL 1

Evidence for POL 2 (NOx Emissions)

Credit(s) not sought

Assumptions for POL 2

Evidence for HEA 1 (Daylighting)

Kitchen: Average daylight factor of at least 2%

Living room: Average daylight factor of at least 1.5%

Dining room: Average daylight factor of at least 1.5%

Home office: Average daylight factor of at least 1.5%

All rooms (kitchen, living, dining and where applicable the home office) have 80% of the working plane with direct light from the sky

Assumptions for HEA 1

Evidence for HEA 2 (Sound Insulation)

Robust details have been incorporated

Airborne 8dB higher, impact 8dB lower

Assumptions for HEA 2

Evidence for HEA 3 (Private Space)

Credit not sought or no compliant space provided

Assumptions for HEA 3

Evidence for HEA 4 (Lifetime Homes)

Credits not sought

Assumptions for HEA 4

Evidence for MAN 1 (Home User Guide)

All criteria inline with checklist MAN 1 Part 1 - Operational Issues will be met

All criteria inline with checklist MAN 1 Part 2 - Site and Surroundings will be met

Assumptions for MAN 1

Evidence for MAN 2 (Considerate Constructors Scheme)

Credits not sought

Assumptions for MAN 2

Evidence for MAN 3 (Construction Site Impacts)

Credit(s) not sought

Assumptions for MAN 3

Evidence for MAN 4 (Security)

Secure by design section 1 & 2 compliant

Assumptions for MAN 4

Evidence for ECO 1 (Ecological Value of Site)

Land of low ecological value, achieved through checklist ECO 1. Development site has been identified as low ecological value by a suitably qualified ecologist

Assumptions for ECO 1

Evidence for ECO 2 (Ecological Enhancement)

Credit not sought or no compliant enhancement

Assumptions for ECO 2

Evidence for ECO 3 (Protection of Ecological Features)

Land of low ecological value as identified under ECO 1

Assumptions for ECO 3

Evidence for ECO 4 (Change of Ecological Value of Site)

Credit not sought

Assumptions for ECO 4

Evidence for ECO 5 (Building Footprint)

Credit not sought

Assumptions for ECO 5

Assessor Declaration

I Elliot Bushay, can confirm that I have compiled this report to the best of my ability, I have based all findings on the information that is referenced within this report, and that this report is appropriate for the registered site.

To the best of my knowledge all the information contained within this report is correct and accurate. I have within my possession all the reference material that relates to this report, which is available for inspection by the client, the clients representative or Stroma Certification for Quality Assurance monitoring.

Signed:



Elliot Bushay
Energy Solutions
06 September 2011

Information about Code for Sustainable Homes

The Code for Sustainable Homes (the Code) is an environmental assessment method for rating and certifying the performance of new homes. It is a national standard for use in the design and construction of new homes with a view to encouraging continuous improvement in sustainable home building. The Code is based on EcoHomes®.

It was launched in December 2006 with the publication of 'Code for Sustainable Homes: A stepchange in sustainable home building practice' (Communities and Local Government, 2006), and became operational in England from April 2007.

The Code for Sustainable Homes covers nine categories of sustainable design. Each category includes a number of environmental issues. Each issue is a source of impact on the environment which can be assessed against a performance target and awarded one or more credits. Performance targets are more demanding than the minimum standards needed to satisfy Building Regulations or other legislation. They represent good or best practice, are technically feasible, and can be delivered by the building industry. The issues and categories are as follows:

- Energy & CO2 Emissions
 - Dwelling Emission Rate
 - Building Fabric
 - Internal Lighting
 - Drying Space
 - Energy Labelled White Goods
 - External Lighting
 - Low or Zero Carbon Technologies
 - Cycle Storage
 - Home Office
- Water
 - Internal Water Use
 - External Water Use
- Materials
 - Environmental Impact of Materials
 - Responsible Sourcing of Materials - Basic Building Elements
 - Responsible Sourcing of Materials - Finishing Elements
- Surface Water Run-off
 - Management of Surface Water Run-off from the Development
 - Flood Risk
- Waste
 - Storage of Non-Recyclable Waste and Recyclable Household Waste
 - Construction Site Waste Management
 - Composting
- Pollution
 - Global Warming Potential of Insulants
 - NOx Emissions

- Health & Wellbeing
 - Daylighting
 - Sound Insulation
 - Private Space
 - Lifetime Homes
- Management
 - Home User Guide
 - Considerate Constructors Scheme
 - Construction Site Impacts
 - Security
- Ecology
 - Ecological Value of Site
 - Ecological Enhancement
 - Protection of Ecological Features
 - Change in Ecological Value of Site
 - Building Footprint

The Code assigns one or more performance requirements (assessment criteria) to all of the above environmental issues. When each performance requirement is achieved a credit is awarded (with the exception of the four mandatory requirements which have no associated credits). The total number of credits available to a category is the sum of credits available for all the issues within it.

Mandatory minimum performance standards are set for some issues. For four of these, a single mandatory requirement is set which must be met, whatever Code level rating is sought. Credits are not awarded for these issues. Confirmation that the performance requirements are met for all four is a minimum entry requirement for achieving a level 1 rating. The four un-credited issues are:

- Environmental Impacts of Materials
- Management of Surface Water Run-off from Developments
- Storage of Non-Recyclable Waste and Recyclable Household Waste
- Construction Site Waste Management

If the mandatory minimum performance standard is met for the four un-credited issues, four further mandatory issues need to be considered. These are agreed to be such important issues that separate Government policies are being pursued to mitigate their effects. For two of these, credits are awarded for every level of achievement recognised within the Code, and minimum mandatory standards increase with increasing rating levels.

The two issues with increasing mandatory minimum standards are:

- Dwelling Emission Rate
- Indoor Water Use

For one issue a mandatory requirement at Level 5 or 6:

- Fabric Energy Efficiency

The final issue with a mandatory requirement for Level 6 of the Code is:

- Lifetime Homes

Further credits are available on a free-choice or tradable basis from other issues so that the developer may choose how to add performance credits (converted through weighting to percentage points) achieve the rating which they are aiming for.

The environmental impact categories within the Code are not of equal importance. Their relative value is conveyed by applying a consensus-based environmental weighting factor (see details below) to the sum of all the raw credit scores in a category, resulting in a score expressed as percentage points. The points for each category add up to 100.

The weighting factors used in the Code have been derived from extensive studies involving a wide range of stakeholders who were asked to rank (in order of importance) a range of environmental impacts. Stakeholders included international experts and industry representatives.

It is also important to note that achieving a high performance in one category of environmental impact can sometimes result in a lower level of performance for another. For instance, if biomass is used to meet heating demands, credits will be available for performance in respect of energy supplied from a renewable source, but credits cannot be awarded for low NOX emission. It is therefore impossible to achieve a total percentage points score of 100.

The Code uses a rating system of one to six stars. A star is awarded for each level achieved. Where an assessment has taken place by where no rating is achieved, the certificate states that zero stars have been awarded:

Code Levels	Total Points Score (Equal to or Greater Than)
Level 1 ★☆☆☆☆	36 Points
Level 2 ★★☆☆☆	48 Points
Level 3 ★★★☆☆	57 Points
Level 4 ★★★★☆	68 Points
Level 5 ★★★★★	84 Points
Level 6 ★★★★★★	90 Points

Formal assessment of dwellings using the Code for Sustainable Homes may only be carried out using Certified assessors, who are qualified 'competent persons' for the purpose of carrying out Code assessments.

Energy & CO2 Emissions

ENE 1:Dwelling Emission Rate

Available Credits:10

Aim:To limit CO2 emissions arising from the operation of a dwelling and its services in line with current policy on the future direction of regulations.

ENE 2:Fabric Energy Efficiency

Available Credits:9

Aim:To improve fabric energy efficiency performance thus future-proofing reductions in CO2 for the life of the dwelling.

ENE 3:Energy Display Device

Available Credits:2

Aim:To promote the specification of equipment to display energy consumption data, thus empowering dwelling occupants to reduce energy use.

ENE 4:Drying Space

Available Credits:1

Aim:To promote a reduced energy means of drying clothes.

ENE 5:Energy Labelled White Goods

Available Credits:2

Aim:To promote the provision or purchase of energy efficient white goods, thus reducing the CO2 emissions from appliance use in the dwelling.

ENE 6:External Lighting

Available Credits:2

Aim:To promote the provision of energy efficient external lighting, thus reducing CO2 emissions associated with the dwelling.

ENE 7:Low or Zero Carbon Technologies

Available Credits:2

Aim:To limit CO2 emissions and running costs arising from the operation of a dwelling and its services by encouraging the specification of low and zero carbon energy sources to supply a significant proportion of energy demand.

ENE 8:Cycle Storage

Available Credits:2

Aim:To promote the wider use of bicycles as transport by providing adequate and secure cycle storage facilities, thus reducing the need for short car journeys and the associated CO2 emissions.

ENE 9:Home Office

Available Credits:1

Aim:To promote working from home by providing occupants with the necessary space and services thus reducing the need to commute.

Water

WAT 1:Indoor Water Use

Available Credits:5

Aim:To reduce the consumption of potable water in the home from all sources, including borehole well water, through the use of water efficient fittings, appliances and water recycling systems.

WAT 2:External Water Use

Available Credits:1

Aim:To promote the recycling of rainwater and reduce the amount of mains potable water used for external water uses.

Materials

MAT 1:Environmental Impact of Materials

Available Credits:15

Aim:To specify materials with lower environmental impacts over their life-cycle.

MAT 2:Responsible Sourcing of Materials - Basic Building Elements

Available Credits:6

Aim:To promote the specification of responsibly sourced materials for the basic building elements.

MAT 3:Responsible Sourcing of Materials - Finishing Elements

Available Credits:3

Aim:To promote the specification of responsibly sourced materials for the finishing elements.

Surface Water Run-off

SUR 1:Management of Surface Water Run-off from developments

Available Credits:2

Aim:To design surface water drainage for housing developments which avoid, reduce and delay the discharge of rainfall run-off to watercourses and public sewers using SuDS techniques. This will protect receiving waters from pollution and minimise the risk of flooding and other environmental damage in watercourses.

SUR 2:Flood Risk

Available Credits:2

Aim:To promote housing development in low flood risk areas, or to take measures to reduce the impact of flooding on houses built in areas with a medium or high risk of flooding.

Waste

WAS 1:Storage of non-recyclable waste and recyclable household waste

Available Credits:4

Aim:To promote resource efficiency via the effective and appropriate management of construction site waste.

WAS 2:Construction Site Waste Management

Available Credits:3

Aim:To promote resource efficiency via the effective and appropriate management of construction site waste.

WAS 3:Composting

Available Credits:1

Aim:To promote the provision of compost facilities to reduce the amount of household waste sent to landfill.

Pollution

POL 1:Global Warming Potential of Insulants

Available Credits:1

Aim:To promote the reduction of emissions of gases with high GWP associated with the manufacture, installation, use and disposal of foamed thermal and acoustic insulating materials.

POL 2:NOx Emissions

Available Credits:3

Aim:To promote the reduction of nitrogen oxide (NOX) emissions into the atmosphere.

Health & Wellbeing

HEA 1:Daylighting

Available Credits:3

Aim:To promote good daylighting and thereby improve quality of life and reduce the need for energy to light the home.

HEA 2:Sound Insulation

Available Credits:4

Aim:To promote the provision of improved sound insulation to reduce the likelihood of noise complaints from neighbours.

HEA 3:Private Space

Available Credits:1

Aim:To improve quality of life by promoting the provision of an inclusive outdoor space which is at least partially private.

HEA 4:Lifetime Homes

Available Credits:4

Aim:To encourage the construction of homes that are accessible and easily adaptable to meet the changing needs of current and future occupants.

Management

MAN 1:Home User Guide

Available Credits:3

Aim:To promote the provision of guidance enabling occupants to understand and operate their home efficiently and make the best use of local facilities.

MAN 2:Considerate Constructors Scheme

Available Credits:3

Aim:To promote the environmentally and socially considerate, and accountable management of construction sites.

MAN 3:Construction Site Impacts

Available Credits:2

Aim:To promote construction sites managed in a manner that mitigates environmental impacts.

MAN 4:Security

Available Credits:2

Aim:To promote the design of developments where people feel safe and secure- where crime and disorder, or the fear of crime, does not undermine quality of life or community cohesion.

Ecology

ECO 1:Ecological value of site

Available Credits:1

Aim:To promote development on land that already has a limited value to wildlife, and discourage the development of ecologically valuable sites.

ECO 2:Ecological enhancement

Available Credits:1

Aim:To enhance the ecological value of a site.

ECO 3:Protection of ecological features

Available Credits:1

Aim:To promote the protection of existing ecological features from substantial damage during the clearing of the site and the completion of construction works.

ECO 4:Change in ecological value of site

Available Credits:4

Aim:To minimise reductions and promote an improvement in ecological value.

ECO 5:Building footprint

Available Credits:2

Aim:To promote the most efficient use of a building's footprint by ensuring that land and material use is optimised across the development.

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