

Environmental Economics Ltd

Old Town, Newbury BREEAM 6.1 pre-assessment

Revision history

REVISION	ISSUE DATE	PREPARED BY	CHECKED BY
1	09/07/2024	Matthew Cooke BSc	Tim James C.Eng MCIBSE BSc MSc

About Environmental Economics

Our team of experienced consultants specialise in construction and building energy. We have qualifications in sustainability, energy, engineering, building physics and construction as well as environmental, quality management and auditing.

For over 20 years, we have provided assessments and consultancy for some of the largest UK house builders, including Barratt Developments, David Wilson Homes, Bellway Homes, Abbey New Homes and Davidsons. We develop flexible, practical, cost-effective specifications for our clients through identifying solutions and delivering design advice. This includes the following disciplines:

- *Overheating Analysis (dynamic thermal modelling)*
- *Energy Reports*
- *Compliance assessments and advice covering*
 - *Part L (SAP)*
 - *Part F (ventilation)*
 - *Part G (water)*
- *BREEAM*
- *SBEM (existing and new build)*
- *Minimum Energy Efficiency Standards (MEES)*
- *Thermal Bridging (Psi value calculations)*

Contents

1.0 Executive Summary	1
Introduction	2
BREEAM schemes.....	2
BREEAM New Construction	3
BREEAM New Construction V6.1.....	3
Overview.....	3
BREEAM New Construction V6.1 Minimum Standards.....	4
BREEAM New Construction Pre-assessment	5
Pre-assessment Summary	5
APPENDIX A – Retail Credit Summary	6
APPENDIX B – Issue Scores.....	7
APPENDIX C – Ground floor showing non-domestic areas	10
APPENDIX D – Detailed BREEAM pre-assessment.....	11
1. Figure 1	2
2. Table 1.....	3
3. Table 2.....	4
4. Table 3.....	5

1.0 Executive Summary

- 1.1 Environmental Economics have been commissioned by Lochailort Newbury Limited to undertake a BREEAM (BRE Environmental Assessment Method) New Construction pre-assessment to support the redevelopment of Old Town, Newbury, comprising the partial demolition of the existing building on site and the development of new residential dwellings and shell only retail units; and associated works, henceforth referred to as Old Town.
- 1.2 The proposed redevelopment includes demolition of the existing building and construction of five shell retail units.
- 1.3 The West Berkshire Core Strategy states that a BREEAM rating of Excellent is required. The pre-assessment illustrates a potential mix of credits which can achieve 73.98%.
- 1.4 As the development is currently going through planning, it is assumed that the development is at RIBA Stage 2. It has been assumed that the construction will be completed as shell only.
- 1.6 Appendix A contains drawings showing the floor plan of the site.

The potential rating must be subject to constant review as the development progresses. To achieve the predicted BREEAM ratings described by this report, extra effort will be required by the design team and main contractor to implement the required strategies. It is recommended that detailed attention is given to each credit, and all members of the design team should be required to update project information accordingly.

The pre-assessment set out in this report is based on current version of BREEAM UK New Construction, Version 6.1 (V6.1), and it should be noted that future versions of BREEAM may introduce new criteria or alter the existing technical requirements.

It is recommended that the project team consider the requirements of BREEAM V6.1 during concept design as several credits become unavailable after this period, which limit the credits available to achieve an Excellent rating. Credits which require formal design information during concept design have been avoided where possible.

Introduction

BREEAM schemes

BREEAM is a sustainability and certification scheme applicable to the construction industry. All BREEAM schemes endeavour to encourage continuous improvement and innovation within the construction industry.

In return for monitoring and reducing the environmental impact of projects within the built environment, BREEAM provides recognition via formal audit and certification.

The certificate issued will indicate a rating from pass to outstanding, where the better the rating, the lower the environmental impact of the project.

The BREEAM rating is compiled through achieving credits from within ten categories. The categories are split into several issues, where each of these issues awards credits based on different sustainability criteria.

Please see Figure 1 for a breakdown of the categories covered in BREEAM.



Figure 1: BREEAM Categories

BREEAM New Construction

BREEAM New Construction assessments are based on the category of building use, and then according to the level building services fit-out. The four construction scopes are: Fully Fitted, Simple Building, Shell and Core and Shell Only.

The proposed development includes multiple buildings with different uses. This BREEAM pre-assessment focuses on the retail units, to be completed to shell only.

BREEAM New Construction V6.1

Overview

This section will detail the minimum credits required to achieve the desired rating and the credits that can be targeted as determined by the pre-assessment.

The credits chosen during the pre-assessment are an estimate based on current information, the credits that contribute to the final certification may differ.

Table 1. Minimum percentage score required to achieve each BREEAM Rating.

BREEAM Rating	% Score
Outstanding	≥85
Excellent	≥70
Very Good	≥55
Good	≥45
Pass	≥30
Unclassified	<30

BREEAM New Construction V6.1 Minimum Standards

Table 2: BREEAM UK New Construction V6.1 Minimum Standards

BREEAM Issue	Minimum Standards by BREEAM rating Level				
	PASS	GOOD	VERY GOOD	EXCELLENT	OUTSTANDING
Man 03 - Responsible Construction Practices	None	None	None	1 Credit – (responsible construction management)	2 Credits – (responsible construction management)
Man 04 – Commissioning and handover	None	None	1 Credit (commissioning – test schedule and responsibilities)	1 Credit (commissioning – test schedule and responsibilities)	1 Credit (commissioning – test schedule and responsibilities)
Man 04 – Commissioning and handover	None	None	Criterion 11 (building user guide)	Criterion 11 (building user guide)	Criterion 11 (building user guide)
Man 05 – Aftercare	None	None	None	1 Credit (commissioning – implementation)	1 Credit (commissioning – implementation)
Ene 01 - Reduction of CO2 Emissions	None	None	None	4 Credits (energy performance or prediction of operational energy consumption)	6 credits (energy performance) and 4 credits (prediction of operational energy consumption)
Ene 02 - Energy monitoring	None	None	1 Credit (first sub-metering credit)	1 Credit (first sub-metering credit)	1 Credit (first sub-metering credit)
Wat 01 - Water Consumption	None	1 Credit	1 Credit	1 Credit	2 Credits
Wat 02 - Water monitoring	None	Criterion 1	Criterion 1	Criterion 1	Criterion 1
Mat 03 - Responsible sourcing of construction products	Criterion 1	Criterion 1	Criterion 1	Criterion 1	Criterion 1
Wst 01 - Construction waste management	None	None	None	None	1 Credit
Wst 03 - Operational waste	None	None	None	1 Credit	1 Credit

BREEAM New Construction Pre-assessment

This report is a summary of the BREEAM New Construction retail pre-assessment conducted, designed to show a selection of available credits that may be targeted to achieve Excellent for this project.

Pre-assessment Summary

Table 3 shows the available credits for the building type and construction scope, the category weighting, and the targeted credits for this development. The chosen credit distribution achieves an Excellent rating with 73.98%.

This should be considered as a potential rating and requires immediate action from the developer to implement additional strategies due to the current stage of the project. Detailed attention should be given to each issue. The credit distribution is subject to the project being registered under the BREEAM New Construction V6.1 scheme. This pre-assessment is based on the assumption that the buildings works fall in to RIBA stage 5.

Appendix A covers the credits that have been recommended to achieve Excellent, including a summary of the targeted criteria from the BREEAM V6.1 manual. For full context and more detailed information on the credit requirements, please refer to the BREEAM V6.1 manual.

The Ene 01 credits have been calculated using the sample calculation created for the energy report. This achieved 9 credits, exceeding the BREEAM Excellent minimum standard of 4 credits.

Table 3: Retail pre-assessment summary

Category	Available Credits	Category score	Targeted Credits
Management	15	7.19%	9
Health and Wellbeing	7	6.00%	6
Energy	13	8.03%	11
Transport	12	12.08%	10
Water	2	2.00%	2
Materials	14	15.71%	10
Waste	10	4.80%	6
Land Use and Ecology	13	13.15%	9
Pollution	6	5.00%	5
Innovation	10	0.00%	0
Total		73.98%	
Rating		EXCELLENT	

APPENDIX A – Retail Credit Summary

BREEAM Rating							
	Credits available	Credits achieved	Credits targeted	% Credits achieved	Weighting	Category score	Target score
Man	15.0	9.0	9.0	60.00%	12.00%	7.19%	7.19%
Hea	7.0	6.0	6.0	85.71%	7.00%	6.00%	6.00%
Ene	13.0	11.0	11.0	84.62%	9.50%	8.03%	8.03%
Tra	12.0	10.0	10.0	83.33%	14.50%	12.08%	12.08%
Wat	2.0	2.0	2.0	100.00%	2.00%	2.00%	2.00%
Mat	14.0	10.0	10.0	71.43%	22.00%	15.71%	15.71%
Wst	10.0	6.0	6.0	60.00%	8.00%	4.80%	4.80%
LE	13.0	9.0	9.0	69.23%	19.00%	13.15%	13.15%
Pol	6.0	5.0	5.0	83.33%	6.00%	5.00%	5.00%
Inn	10.0	0.0	0.0	0.00%	10.00%	0.00%	0.00%
Total	102.0	68.0	68.0	66.67%	-	73.98%	73.98%
Rating	-	-	-	-	-	★★★★☆ Excellent	Excellent

APPENDIX B – Issue Scores

Issue scores

Please Note: X means the exemplary credit for the relevant issue

Management		
Man 01 Project Brief and design 0 / 4	Man 02 Life cycle cost and service life planning 2 / 4	Man 03 Responsible construction practices 6 / 6 X: 0 / 1
Man 04 Commissioning and handover 1 / 1	Man 05 Aftercare N/A	
Health and Wellbeing		
Hea 01 Visual comfort 4 / 4 X: 0 / 1	Hea 02 Indoor air quality N/A	Hea 04 Thermal comfort N/A
Hea 05 Acoustic performance 1 / 1	Hea 06 Security 0 / 1 X: 0 / 1	Hea 07 Safe and Healthy Surroundings 1 / 1
Energy		
Ene 01 Reduction of energy use and carbon emissions 9 / 9	Ene 02 Energy monitoring N/A	Ene 03 External lighting 1 / 1
Ene 04 Low carbon design 1 / 3	Ene 05 Energy efficient cold storage N/A	Ene 06 Energy efficient transportation systems N/A
Ene 07 Energy efficient laboratory systems N/A	Ene 08 Energy efficient equipment N/A	

Transport		
Tra 01 Transport assessment and travel plan 2 / 2	Tra 02 Sustainable transport measures 8 / 10	
Water		
Wat 01 Water consumption N/A	Wat 02 Water monitoring 1 / 1	Wat 03 Water leak detection 1 / 1
Wat 04 Water efficient equipment N/A		
Materials		
Mat 01 Life cycle impacts 4 / 7 X: 0 / 2	Mat 02 Environmental impacts from construction products 1 / 1	Mat 03 Responsible sourcing 4 / 4 X: 0 / 1
Mat 05 Designing for durability and resilience 1 / 1	Mat 06 Material efficiency 0 / 1	
Waste		
Wst 01 Construction waste management 5 / 5 X: 0 / 1	Wst 02 Use of recycled and sustainably sourced aggregates 0 / 1 X: 0 / 1	Wst 03 Operational waste 1 / 1
Wst 04 Speculative finishes (Offices only) N/A	Wst 05 Adaptation to climate change 0 / 1	Wst 06 Design for disassembly and adaptability 0 / 2

Land use and ecology		
LE 01 Site selection 1 / 2	LE 02 Ecological risks and opportunities 2 / 2 X: 0 / 1	LE 03 Managing impacts on ecology 3 / 3
LE 04 Ecological change and enhancement 1 / 4 X: 0 / 1	LE 05 Long term ecology management and maintenance 2 / 2	
Pollution		
Pol 01 Impact of refrigerants N/A	Pol 02 Local air quality N/A	Pol 03 Flood and surface water management 4 / 5
Pol 04 Reduction of Night Time Light Pollution 1 / 1	Pol 05 Noise attenuation N/A	
Innovation		
Inn 01 Innovation 0 / 0 X: 0 / 10		


APPENDIX C – Ground floor showing non-domestic areas



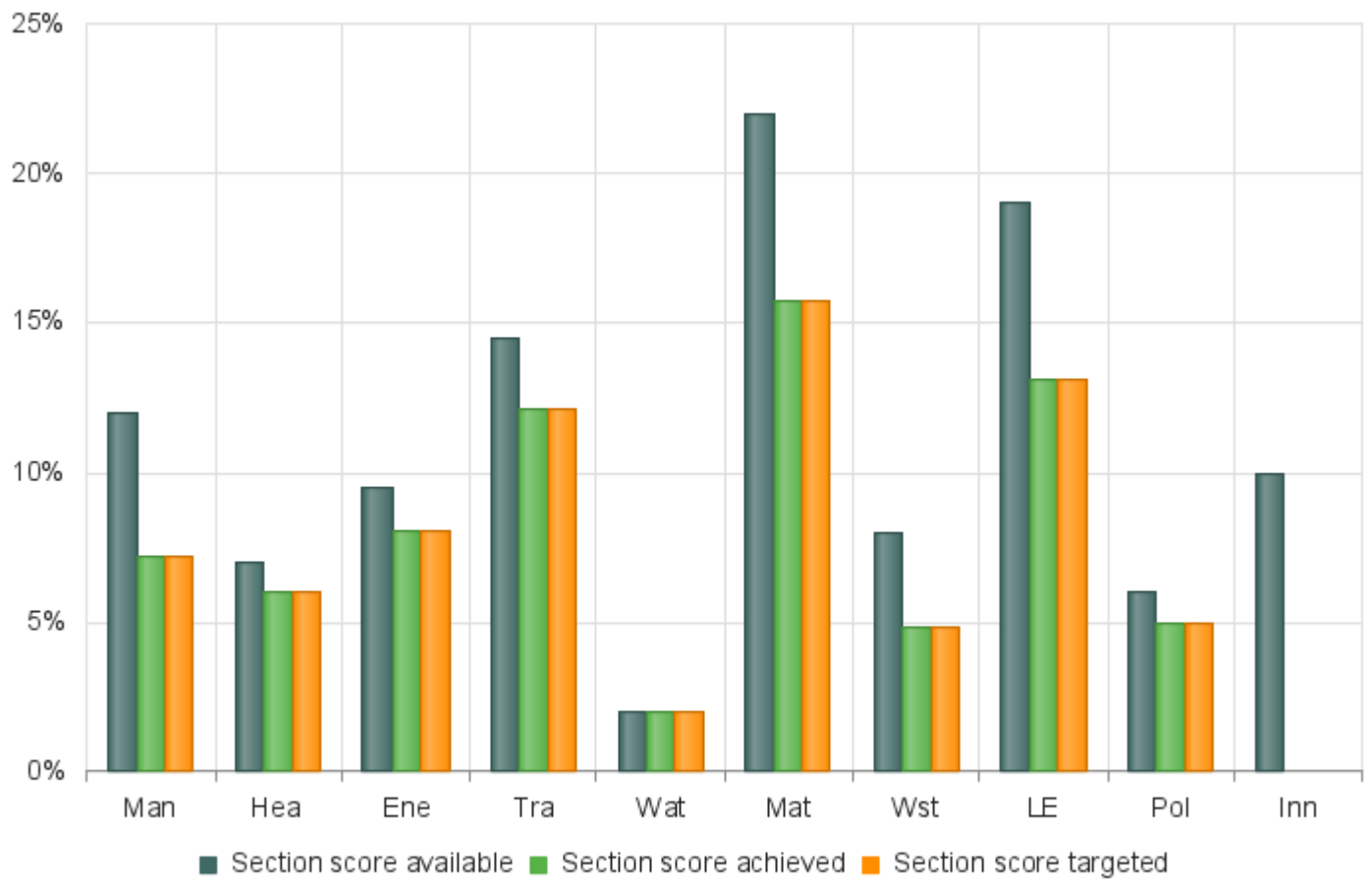
APPENDIX D – Detailed BREEAM pre-assessment

This page is intentionally left blank

BREEAM Rating

	Credits available	Credits achieved	Credits targeted	% Credits achieved	Weighting	Category score	Target score
Man	15.0	9.0	9.0	60.00%	12.00%	7.19%	7.19%
Hea	7.0	6.0	6.0	85.71%	7.00%	6.00%	6.00%
Ene	13.0	11.0	11.0	84.62%	9.50%	8.03%	8.03%
Tra	12.0	10.0	10.0	83.33%	14.50%	12.08%	12.08%
Wat	2.0	2.0	2.0	100.00%	2.00%	2.00%	2.00%
Mat	14.0	10.0	10.0	71.43%	22.00%	15.71%	15.71%
Wst	10.0	6.0	6.0	60.00%	8.00%	4.80%	4.80%
LE	13.0	9.0	9.0	69.23%	19.00%	13.15%	13.15%
Pol	6.0	5.0	5.0	83.33%	6.00%	5.00%	5.00%
Inn	10.0	0.0	0.0	0.00%	10.00%	0.00%	0.00%
Total	102.0	68.0	68.0	66.67%	-	73.98%	73.98%
Rating	-	-	-	-	-	 Excellent	Excellent

Performance by environmental category



Issue scores

Please Note: X means the exemplary credit for the relevant issue

Management

Man 01 Project Brief and design

0 / 4

Man 03 Responsible construction practices

6 / 6 X: 0 / 1

Man 05 Aftercare

N/A

Man 02 Life cycle cost and service life planning

2 / 4

Man 04 Commissioning and handover

1 / 1

Health and Wellbeing

Hea 01 Visual comfort

4 / 4 X: 0 / 1

Hea 04 Thermal comfort

N/A

Hea 06 Security

0 / 1 X: 0 / 1

Hea 02 Indoor air quality

N/A

Hea 05 Acoustic performance

1 / 1

Hea 07 Safe and Healthy Surroundings

1 / 1

Energy

Ene 01 Reduction of energy use and carbon emissions

9 / 9

Ene 02 Energy monitoring

N/A

Ene 03 External lighting

1 / 1

Ene 04 Low carbon design

1 / 3

Ene 05 Energy efficient cold storage

N/A

Ene 06 Energy efficient transportation systems

N/A

Ene 07 Energy efficient laboratory systems

N/A

Ene 08 Energy efficient equipment

N/A

Transport

Tra 01 Transport assessment and travel plan

2 / 2

Tra 02 Sustainable transport measures

8 / 10

Water

Wat 01 Water consumption

N/A

Wat 02 Water monitoring

1 / 1

Wat 03 Water leak detection

1 / 1

Wat 04 Water efficient equipment

N/A

Materials

Mat 01 Life cycle impacts

4 / 7 X: 0 / 2

Mat 02 Environmental impacts from construction products

1 / 1

Mat 03 Responsible sourcing

4 / 4 X: 0 / 1

Mat 05 Designing for durability and resilience

1 / 1

Mat 06 Material efficiency

0 / 1

Waste

Wst 01 Construction waste management

5 / 5 X: 0 / 1

Wst 02 Use of recycled and sustainably sourced aggregates

0 / 1 X: 0 / 1

Wst 03 Operational waste

1 / 1

Wst 04 Speculative finishes (Offices only)

N/A

Wst 05 Adaptation to climate change

0 / 1

Wst 06 Design for disassembly and adaptability

0 / 2

Land use and ecology

LE 01 Site selection

1 / 2

LE 02 Ecological risks and opportunities

2 / 2 X: 0 / 1

LE 03 Managing impacts on ecology

3 / 3

LE 04 Ecological change and enhancement

1 / 4 X: 0 / 1

LE 05 Long term ecology
management and
maintenance

2 / 2

Pollution

Pol 01 Impact of refrigerants

N/A

Pol 02 Local air quality

N/A

Pol 03 Flood and surface
water management

4 / 5

Pol 04 Reduction of Night
Time Light Pollution

1 / 1

Pol 05 Noise attenuation

N/A

Innovation

Inn 01 Innovation

0 / 0 X: 0 / 10

Initial details

Technical manual issue number : 6.1

Project scope : Shell only

Building type (main description) : Retail

Sub-group : Shop or shopping centre

Assessment stage : Design (interim)

Building floor area (GIA) :

Building floor area (NIFA) :

Is the building designed to be untreated? :

Does the building have external areas within the boundary of the assessed development? :

Are commercial or industrial-sized refrigeration and storage systems specified? :

Are building user lifts present? :

Are building user escalators or moving walks present? :

Are there any water demands present other than those assessed in Wat 01? :

Are there statutory requirements, or other issues outside of the control of the project, that impact the ability to provide outdoor space :

Are there any systems specified that contribute to the unregulated energy load? :

Are the Post-occupancy evaluation credits targeted in Ene 01 issue? :

Are laboratories present? :

Are there fume cupboard(s) and/or other containment devices present? :

Category assessment

Management (Man)

Man 01 Project Brief and design

To optimise final building design through recognising and encouraging an integrated design process and robust stakeholder engagement.

Assessment criteria

Stakeholder consultation (interested parties) : No

Project delivery planning : No

Prerequisite: Have the client and the contractor formally agreed performance targets? : No

Credits awarded : 0

Man 02 Life cycle cost and service life planning

To promote the business case for sustainable buildings and to deliver whole life value by encouraging the use of life cycle costing to improve design, specification, through-life maintenance and operation.

Assessment criteria

Elemental LCC : No

Component level LCC options appraisal : Yes

Capital cost reporting : Yes

Capital cost of the project : 1000 Â£k/m²

Credits awarded : 2

Man 03 Responsible construction practices

To recognise and encourage construction sites which are managed in an environmentally and socially considerate, responsible and accountable manner.

Assessment criteria

Prerequisite: Are all timber and timber-based products used during the construction process of the project 'legally harvested and traded timber'? : Yes

Environmental management : Yes

Prerequisite: Have the client and the contractor formally agreed performance targets? :	Yes
BREEAM Advisory Professional (site) :	Yes
Responsible construction management :	2
Monitoring of construction site impacts :	Yes
Utility consumption :	Yes
Transport of construction materials and waste :	Yes
Exemplary level criteria - Responsible construction management :	No

Key Performance Indicators: Construction site energy use

Energy consumption (total) - site processes :	10000 kWh
Energy consumption (intensity) - site processes :	1000 kWh/project value

Key Performance Indicators: Construction site greenhouse gas emissions

Process greenhouse gas emissions (total) - site processes :	10000 KgCO ₂ eq
Carbon dioxide emissions (intensity) - site processes :	1000 KgCO ₂ eq/project value

Credits awarded : 6

Man 04 Commissioning and handover

To encourage a properly planned handover and commissioning process that reflects the needs of the building occupants.

Assessment criteria

Testing and inspecting building fabric :	Yes
--	-----

Credits awarded : 1

Man 05 Aftercare

To ensure the building operates in accordance with the design intent and operational demands, through providing aftercare to the building owner and occupants during the first year of occupation.

Assessment criteria - N/A

Health and Wellbeing (Hea)

Hea 01 Visual comfort

To encourage best practice in visual performance and comfort by ensuring daylighting, artificial lighting and occupant controls are considered.

Assessment criteria

Daylighting (building type dependent) :	2
View Out :	Yes
External lighting for Shell and core, and Shell only assessments :	Yes
Exemplary level criteria - Daylighting :	No

Credits awarded : 4

Hea 02 Indoor air quality

To encourage and support healthy internal environments with good indoor air quality.

Assessment criteria - N/A

Hea 04 Thermal comfort

To ensure the building is capable of providing an appropriate level of thermal comfort.

Assessment criteria - N/A

Hea 05 Acoustic performance

To ensure the building is capable of providing an appropriate acoustic environment to provide comfort for building users.

Assessment criteria

Criteria performance requirements or SQA bespoke requirements? :	SQA bespoke requirements
Indoor ambient noise level :	Yes

Credits awarded : 1

Hea 06 Security

To encourage the planning and implementation of effective measures that provide an appropriate level of security to the building and site.

Assessment criteria

Security of site and building :

Exemplary level criteria :

Credits awarded : 0

Hea 07 Safe and Healthy Surroundings

To encourage the provision of safe access around the site and outdoor space that enhances the wellbeing of building users. .

Assessment criteria

Safe Access : Yes

Credits awarded : 1

Energy (Ene)

Ene 01 Reduction of energy use and carbon emissions

To minimise operational energy demand, primary energy consumption and CO2 emissions.

Energy performance

Country : England

Select how many files need to be uploaded. If more than one BRUKL output has been produced for a single assessment select the number required. : 1

File 1 :

Upload building '_brukl.inp' file :

Is space heating provided by a district (network) heating? : No

Energy performance - Building score

Heating and cooling demand energy performance ratio (EPRdem) : 0.9

Overall building energy performance ratio (EPRnc) : 0.9

Total BREEAM credits achieved : 9.0

Is the primary energy consumption the same or lower than that of the notional building? : Yes

Is the primary energy consumption at least 10% lower than that of or higher than that of the notional building? : Yes

Towards carbon negative (exemplary credits)

Zero net CO₂-eq emissions : No

Credits awarded : 9

Ene 02 Energy monitoring

To encourage the installation of energy sub-metering that facilitates the monitoring of operational energy consumption. To enable managers and consultants post-handover to compare actual performance with targets in order to inform ongoing management and help in reducing the performance gap.

Assessment criteria - N/A

Ene 03 External lighting

To reduce energy consumption through the specification of energy efficient light fittings for external areas of the development.

Assessment criteria

External lighting has been designed out? : No

Is external lighting specified in accordance with the relevant criteria? : Yes

Credits awarded : 1

Ene 04 Low carbon design

To encourage the adoption of design measures, which reduce building energy consumption and associated carbon emissions and minimise reliance on active building services systems.

Assessment criteria

Passive design analysis :

Free cooling :

Low and zero carbon technologies : Yes

KPI

Total on-site and/or near-site LZC energy generation :

Expected energy consumption and CO₂-eq emissions reduction resulting from passive design measures :

Energy consumption :

CO₂-eq emissions :

Expected energy consumption and CO₂-eq emissions reduction resulting from passive design measures as a percentage :

Energy consumption :

CO₂-eq emissions :

Expected reduction in CO₂-eq emissions resulting from the LZC technologies as a percentage :

Expected reduction in CO₂-eq emissions resulting from the LZC technologies :

: 1

Credits awarded

Ene 05 Energy efficient cold storage

To encourage the installation of energy efficient refrigeration systems, in order to reduce operational greenhouse gas emissions resulting from the system's energy use.

Assessment criteria - N/A

Ene 06 Energy efficient transportation systems

To encourage the specification of energy efficient transport systems within buildings.

Assessment criteria - N/A

Ene 07 Energy efficient laboratory systems

To encourage laboratory areas that are designed to minimise their operational energy consumption and associated CO2 emission

Assessment criteria - N/A

Ene 08 Energy efficient equipment

To encourage installation of energy efficient equipment to ensure optimum performance and energy savings in operation

Assessment criteria - N/A

Transport (Tra)

Tra 01 Transport assessment and travel plan

To reward awareness of existing local transport and identify improvements to make it more sustainable.

Assessment criteria

Travel plan : Yes

Credits awarded : 2

Tra 02 Sustainable transport measures

To maximise the potential for local public, private and active transport through provision of sustainable transport measures appropriate to the site.

Assessment criteria

Prerequisite : Yes

Location type (based on existing AI) : AI <25

Number of points achieved overall : 8

Credits awarded : 8

Water (Wat)

Wat 01 Water consumption

To reduce the consumption of potable water for sanitary use in new buildings through the use of water efficient components and water recycling systems.

Assessment criteria - N/A

Wat 02 Water monitoring

To reduce the consumption of potable water in new buildings through the effective management and monitoring of water consumption.

Assessment criteria

Water meter on the mains water supply to each building : Yes

Pulsed output or other open protocol communication output and BMS connection : Yes

Credits awarded : 1

Wat 03 Water leak detection

To reduce the consumption of potable water in new buildings through minimising wastage due to water leaks.

Assessment criteria

Leak detection system : Yes

Credits awarded : 1

Wat 04 Water efficient equipment

To reduce water consumption for uses not assessed under Wat 01 by encouraging specification of water efficient equipment.

Assessment criteria - N/A

Materials (Mat)

Mat 01 Life cycle impacts

To reduce the burden on the environment from construction products by recognising and encouraging measures to optimise construction product consumption efficiency and the selection of products with a low environmental impact (including embodied carbon), over the life cycle of the building.

Assessment criteria

Total Mat 01 credits achieved - taken from the Mat 01/02 Results 4

Submission Tool :

Total Exemplary credits achieved - taken from the Mat 01/02 Results 0

Submission Tool :

Credits awarded : 4

Mat 02 Environmental impacts from construction products

To encourage availability of robust and comparable data on the impacts of construction products through the provision of EPD.

Assessment criteria

Mat 02 credit achieved - Taken from the Mat 01/02 Results Submission 1

Tool. :

Credits awarded : 1

Mat 03 Responsible sourcing

To facilitate the selection of products that involve lower levels of negative environmental, economic and social impact across their supply chain including extraction, processing and manufacture.

Assessment criteria

Prerequisite: All timber and timber based products are 'Legally harvested and traded timber' : Yes

Has the enabling sustainable procurement credit been achieved? : Yes

Mat 03 minimum scope level : plus Substructure and hard landscaping / Internal Finishes

Percentage of available for percentage of RSM points achieved : 30 %

Credits awarded : 4

Mat 05 Designing for durability and resilience

To reduce the need to repair and replace materials resulting from damage to exposed elements of the building and landscape.

Assessment criteria

Protecting vulnerable parts of the building from damage and exposed parts of the building from material degradation : Yes

Credits awarded : 1

Mat 06 Material efficiency

To avoid unnecessary materials use arising from over specification without compromising structural stability, durability or the service life of the building.

Assessment criteria

Material optimisation measures investigated and implemented at all relevant stages :

Credits awarded : 0

Waste (Wst)

Wst 01 Construction waste management

To reduce construction waste by encouraging reuse, recovery and best practice waste management practices to minimise waste going to landfill.

Assessment criteria

Is demolition occurring under the developer's ownership for the purpose of enabling the assessed development? :	Yes
Pre-demolition audit :	Yes
Compliant Resource Management Plan :	Yes
Have waste materials been sorted into separate key waste groups? :	Yes
Exemplary level criteria :	No

KPI

Measure/units for the data being reported :	tonnes
Non-hazardous construction waste (excluding demolition/excavation) - fill in to award 'Construction resource efficiency' credits :	0 tonnes/100m2
Total non-hazardous construction waste generated :	0 tonnes
Non-hazardous non-demolition construction waste diverted from landfill - fill in to award diversion from landfill credit :	100 %
Total non-hazardous non-demolition construction waste diverted from landfill :	0 tonnes
Non-hazardous demolition waste diverted from landfill - fill in to award diversion from landfill credit :	100 %
Total non-hazardous demolition waste generated :	1 tonnes
Total non-hazardous demolition waste to disposal :	1 tonnes
Non-hazardous excavation waste diverted from landfill - fill in to award credit :	10 %
Material for reuse :	
Material for recycling :	
Material for energy recovery :	
Hazardous waste to disposal :	

Credits awarded : 5

Wst 02 Use of recycled and sustainably sourced aggregates

To encourage the use of more sustainably sourced aggregates, encourage reuse where appropriate and avoid waste and pollution arising from disposal of demolition and other forms of waste.

Assessment criteria

Is demolition occurring under the developer's ownership for the purpose of enabling the assessed development? : Yes

Pre-requisite: pre-demolition audit : Yes

Projects Sustainable Aggregate points :

KPI

Total quantity of aggregate :

% of high - grade aggregate that is recycled/ secondary aggregate by application :

Credits awarded : 0

Wst 03 Operational waste

To encourage the recycling of operational waste through the provision of dedicated storage facilities and space.

Assessment criteria

Compliant recycling and non-recyclable waste storage allocated : Yes

Static waste compactor(s) or baler(s) : N/A

Vessel(s) for composting suitable organic waste and water outlet : N/A

Credits awarded : 1

Wst 04 Speculative finishes (Offices only)

To minimise the wastage associated with the installation of floor and ceiling finishes in lettable areas in speculative buildings where tenants have not been involved in their selection.

Assessment criteria - N/A

Wst 05 Adaptation to climate change

To minimise the future need of carrying out works to adapt the building to take account of more extreme weather changes resulting from climate change and changing weather patterns.

Assessment criteria

Resilience of structure, fabric, building services and renewables installation

:

Credits awarded : 0

Wst 06 Design for disassembly and adaptability

To avoid unnecessary materials use, cost and disruption arising from the need for future adaptation works as a result of changing functional demands and to maximise the ability to reclaim and reuse materials at final demolition in line with the principles of a circular economy.

Assessment criteria

Design for disassembly and functional adaptability - recommendations :

Credits awarded : 0

Land use and ecology (LE)

LE 01 Site selection

To encourage the use of previously occupied or contaminated land and avoid land which has not been previously disturbed.

Assessment criteria

Percentage of proposed development's footprint on previously occupied land: :	100 %
Contaminated land :	No

Credits awarded : 1

LE 02 Ecological risks and opportunities

To determine the existing ecological value associated with the site and surrounding areas, and the risks and opportunities for ecological protection and enhancement.

Assessment criteria

Assessment route selection :	Comprehensive
Prerequisite - Statutory obligations :	Yes
Survey and Evaluation :	Yes
Determining ecological outcomes :	Yes
Exemplary level - Wider site sustainability :	No

Credits awarded : 2

LE 03 Managing impacts on ecology

To avoid, or limit as far as possible, negative ecological impacts associated with the site and surrounding areas resulting from the project.

Assessment criteria

Assessment route :	Comprehensive
Prerequisite - Ecological risks and opportunities :	Yes

Credits awarded : 3

LE 04 Ecological change and enhancement

To enhance ecological value of the area associated with the site in support of local, regional and national priorities.

Assessment criteria

Assessment route :	Comprehensive
Prerequisite - Managing negative impacts on ecology :	Yes
Ecological enhancement (Comprehensive route only) :	Yes
Change and enhancement of ecology (Comprehensive route only) :	0

Credits awarded : 1

LE 05 Long term ecology management and maintenance

To secure ongoing monitoring, management and maintenance of the site and its habitats and ecological features, to ensure intended outcomes are realised for the long term.

Assessment criteria

Assessment route :	Comprehensive
At least one credit achieved under LE 04 for 'Change and Enhancement of Ecology' :	Yes
Prerequisite - Statutory obligations, planning and site implementation :	Yes
Management and maintenance throughout the project :	Yes
Landscape and ecology management plan :	Yes

Credits awarded : 2

Pollution (Pol)

Pol 01 Impact of refrigerants

To reduce the level of greenhouse gas emissions arising from the leakage of refrigerants from building systems.

Assessment criteria - N/A

Pol 02 Local air quality

To contribute to a reduction in local air pollution through the use of low emission combustion appliances in the building.

Assessment criteria - N/A

Pol 03 Flood and surface water management

To avoid, reduce and delay the discharge of rainfall to public sewers and watercourses, thereby minimising the risk and impact of localised flooding on-site and off-site, watercourse pollution and other environmental damage.

Assessment criteria

Prerequisite: Has an appropriate consultant demonstrated and confirmed the development's compliance with all criteria? :	Yes
Has a site-specific flood risk assessment been conducted? :	Yes
Annual probability of flooding :	Low
Has the pre-requisite for the Surface Water Run-Off credits been achieved? :	Yes
Has the Surface Water Run-Off - Rate credit been achieved? :	Yes
Flooding of property will not occur in the event of local drainage system failure :	Yes
Has the Surface Water Run-Off - Volume credit been achieved? :	Yes
Minimising watercourse pollution :	No

Credits awarded : 4

Pol 04 Reduction of Night Time Light Pollution

To ensure that external lighting is concentrated in the appropriate areas and that upward lighting is minimised, reducing unnecessary light pollution, energy consumption and nuisance to neighbouring properties.

Assessment criteria

External lighting has been designed out? : No

Does external lighting meet all relevant criteria? : Yes

Credits awarded : 1

Pol 05 Noise attenuation

To reduce the likelihood of noise arising from fixed installations on the new development affecting nearby noise-sensitive buildings.

Assessment criteria - N/A

Innovation (Inn)

Inn 01 Innovation

To support innovation within the construction industry through the recognition of sustainability related benefits which are not rewarded by standard BREEAM issues.

Assessment criteria

Number of 'approved' innovation credits achieved? : 0

Credits awarded : 0

