

8 Conclusion

It can be concluded that all energy and efficiency related targets have been met and in most cases the design goes over and above certain requirements in order to give the school the best possible product.

In Summary:

- The project will achieve BREEAM 'very good' as per the Camden Sustainability Brief. The design has targeted BREEAM 'Excellent' in line with the Brief requirements.
- Building Regulation part L was achieved and exceeded by 66% meaning that the yet to be implemented Part L (2010) requirement has been achieved
- Predicted EPC rating based on the design proposals was found to be 21 giving an A rating
- UCL Academy achieves by our calculations an emissions reduction of 65% which exceeds the minimum emissions reduction required by the Camden Council Sustainability Brief.
- The use of renewable technologies reduces emissions achieved through implementing passive and active measures by a further 27%, meeting the Sustainability Brief target.
- Water demand reduced to 2.31m³/person/year using water usage efficiency measures

Table below show the reduction in emission rate and annual energy cost that can be achieved

UCL: 10813m ² GIFA	Emission Rate including equipment (kgCO ₂ /m ²)	Annual energy cost (£)		
		Gas (£0.023/kWh)	Electricity (£0.075/kWh)	Total
Part L 2006 TER	35.77	13615.82	52302.22	65918.04
Passive Measures BER	22.02	9392.54	30687.63	40080.17
Passive and Active Measures BER	17.07	5315.97	26729.32	32045.29
Passive, Active and Renewables Measures BER	12.46	3877.83	19515.64	23393.47

Appendix A – BREEAM Pre Assessment



BREEAM Scheme: BREEAM Education 2008
Building Name: UCL Academy
BREEAM Registration No.: 0
BREEAM Assessor: 0
Licensed Assessor organisation: 0

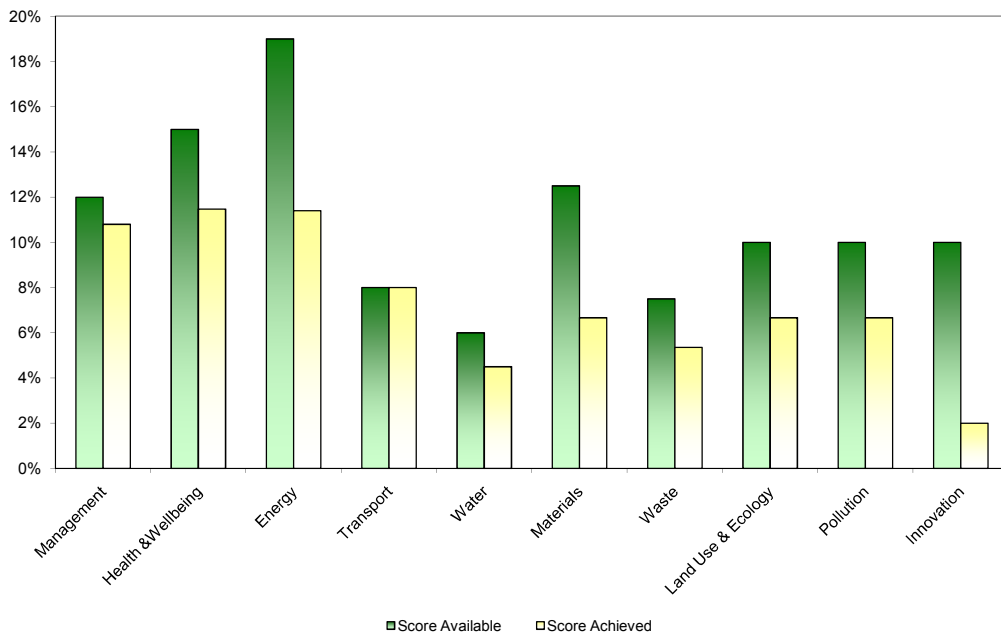
Pass	30%
Good	45%
Very Good	55%
Excellent	70%
Outstanding	85%

Stage of Assessment	BREEAM Score	BREEAM Rating
0	73.53%	EXCELLENT

Minimum BREEAM Standards					
Rating Level	Pass	Good	Very Good	Excellent	Outstanding
Minimum Standards Achieved	YES	YES	YES	YES	NO

Building Performance by Section					
	Environmental weighting	Credits available	Credits achieved	% Achieved	Weighted Score
Management	12.00%	20.00	18.00	90.00%	10.80%
Health & Wellbeing	15.00%	17.00	13.00	76.47%	11.47%
Energy	19.00%	25.00	15.00	60.00%	11.40%
Transport	8.00%	9.00	9.00	100.00%	8.00%
Water	6.00%	8.00	6.00	75.00%	4.50%
Materials	12.50%	15.00	8.00	53.33%	6.67%
Waste	7.50%	7.00	5.00	71.43%	5.36%
Land Use & Ecology	10.00%	12.00	8.00	66.67%	6.67%
Pollution	10.00%	12.00	8.00	66.67%	6.67%
Innovation	10.00%	10.00	2.00	20.00%	2.00%
Total BREEAM Score					73.53%

Assessed Building's BREEAM Performance by Section





BREEAM Scheme: BREEAM Education 2008

Building Name: UCL Academy

BREEAM Registration No.: 0

BREEAM Assessor: 0

Minimum BREEAM Standards

	Pass	Good	Very Good	Excellent	Outstanding
Achieved?	YES	YES	YES	YES	NO

Minimum required credits by BREEAM issue and rating

Ref	Title	Schools Criteria	Number of BREEAM credits available	Total BREEAM credits achieved	Minimum required credits by BREEAM issue and rating					Comments/Actions
Management										
Man 1	Commissioning	One credit where evidence provided demonstrates that an appropriate project team member has been appointed to monitor commissioning on behalf of the client to ensure commissioning will be carried out in line with current best practice. Two credits where, in addition to the above, evidence provided demonstrates that seasonal commissioning will be carried out during the first year of occupation, post construction (or post fit out).	2	2	1	1	1	1	2	
Man 2	Considerate Constructors	One credit where evidence provided demonstrates that there is a commitment to comply with best practice site management principles. Two credits where evidence provided demonstrates that there is a commitment to go beyond best practice site management principles.	2	2	-	-	-	1	2	
Man 3	Construction Site Impacts	One credit where evidence provided demonstrates that 2 or more of items a-g (listed below) are achieved. Two credits where evidence provided demonstrates that 4 or more of items a-g (listed below) are achieved. Three credits where evidence provided demonstrates that 6 or more of items a-g are achieved: a. Monitor, report and set targets for CO2 or energy arising from site activities b. Monitor, report and set targets for CO2 or energy arising from transport to and from site c. Monitor, report and set targets for water consumption arising from site activities d. Implement best practice policies in respect of air (dust) pollution arising from the site e. Implement best practice policies in respect of water (ground and surface) pollution occurring on the site f. Main contractor has an environmental materials policy, used for sourcing of construction materials to be utilised on site g. Main contractor operates an Environmental Management System. One additional credit where evidence provided demonstrates that at least 80% of site timber is responsibly sourced and 100% is legally sourced.	4	4	-	-	-	-	-	
Man 4	Building user guide	One credit where evidence provided demonstrates the provision of a simple guide that covers information relevant to the tenant/occupants and non-technical building manager on the operation and environmental performance of the building.	1	1	-	-	-	1	1	
Man 5	Site Investigation	One credit where evidence provided demonstrates that the design team has carried out a detailed site investigation of the selected site.	1	1	-	-	-	-	-	

Man 6	Consultation	<p>One credit where evidence provided demonstrates that consultation has been, or is being, undertaken and feedback given to the local community and building users.</p> <p>Two credits where, in addition to the above, evidence provided demonstrates that the consultation process is being, or has been, undertaken using an independent method such as DQI, DQM or School Works, facilitated by a third party.</p>	2	2	-	-	-	-	-	
Man 7	Shared Facilities	<p>One credit where evidence provided demonstrates that shared facilities have been provided as a consequence of consultation feedback.</p> <p>Two credits where, in addition to the above, evidence provided demonstrates that these facilities can be accessed without compromising the safety and security of the building and its occupants.</p>	2	1	-	-	-	-	-	
Man 8	Security	One credit where evidence provided demonstrates that an Architectural Liaison Officer (ALCO) or Crime Prevention Design Advisor (CPTDA) from the local police force has been consulted at the design stage and their recommendations incorporated into the design of the building and its parking facilities (if relevant).	1	1	-	-	-	-	-	
Man 9	Publication of building information	One credit where evidence provided demonstrates that the design team are committed to publicising information about the environmental performance of the new development via the internet, newsletters, site visits, presentations etc.	1	1	-	-	-	-	1	
Man 10	Development as a learning resource	One credit where evidence provided demonstrates that the proposed building AND landscape design provides a learning resource that can be used to facilitate development of environmental issues within the school curriculum.	1	1	-	-	-	-	1	
Man 11	Ease of Maintenance	One credit where evidence provided demonstrates that specifications for the building and the building services/systems and landscaping have considered ease and efficiency of maintenance in line with best practice.	1	1	-	-	-	-	-	
Man 12	Life Cycle Costing	<p>One credit where evidence provided demonstrates that a Life Cycle Cost (LCC) analysis based on the feasibility study proposals has been undertaken on the building design at a strategic and system level.</p> <p>Two credits where, in addition to the above, evidence provided demonstrates that the results of the feasibility study and consideration of LCC have been implemented.</p>	2	1	-	-	-	-	-	
Health & Wellbeing										
Hea 1	Daylighting	One credit where evidence provided demonstrates that at least 80% of floor area in each occupied space is adequately daylight.	1	0	-	-	-	-	-	
Hea 2	View Out	One credit where evidence provided demonstrates that all relevant building areas have an adequate view out.	1	1	-	-	-	-	-	

Hea 3	Glare Control	One credit where evidence provided demonstrates that an occupant-controlled shading system (e.g. internal or external blinds) is fitted in relevant building areas.	1	1	-	-	-	-	-	
Hea 4	High frequency lighting	One credit where evidence provided demonstrates that high frequency ballasts are installed on all fluorescent and compact fluorescent lamps.	1	1	1	1	1	1	1	
Hea 5	Internal and external lighting levels	One credit where evidence provided demonstrates that all internal and external lighting, where relevant, is specified in accordance with the appropriate maintained illuminance levels (in lux) recommended by CIBSE.	1	1	-	-	-	-	-	
Hea 6	Lighting zones & controls	One credit where evidence provided demonstrates that, in all relevant building areas lighting is appropriately zoned and occupant controllable with the option for common required lighting settings to be selected quickly and easily.	1	1	-	-	-	-	-	
Hea 7	Potential for natural ventilation	One credit where evidence provided demonstrates that fresh air is capable of being delivered to the occupied spaces of the building via a natural ventilation strategy, and there is sufficient user-control of the supply of fresh air.	1	1	-	-	-	-	-	
Hea 8	Indoor air quality	One credit where air intakes serving occupied areas avoid major sources of external pollution and recirculation of exhaust air.	1	0	-	-	-	-	-	
Hea 9	Volatile Organic Compounds	One credit where evidence provided demonstrates that the emissions of VOCs and other substances from key internal finishes and fittings comply with best practice levels.	1	1	-	-	-	-	-	
Hea 10	Thermal comfort	One credit where evidence provided demonstrates that thermal comfort levels in occupied spaces of the building are assessed at the design stage to evaluate appropriate servicing options, ensuring appropriate thermal comfort levels are achieved.	1	1	-	-	-	-	-	
Hea 11	Thermal zoning	One credit where evidence provided demonstrates that local occupant control is available for temperature adjustment in each occupied space to reflect differing use demands.	1	1	-	-	-	-	-	
Hea 12	Microbial contamination	One credit where evidence provided demonstrates that the risk of waterborne and airborne legionella contamination has been minimised.	1	1	1	1	1	1	1	
Hea 13	Acoustic Performance	Three credits where evidence provided demonstrates that all spaces in the building achieve, and for the relevant areas exceed, the performance standards required by Building Bulletin 93 for indoor ambient noise levels and reverberation times.	3	1	-	-	-	-	-	
Hea 16	Drinking Water	One credit where evidence provided demonstrates that mains-fed point of use water coolers are provided for building occupants use throughout the day.	1	1	-	-	-	-	-	
Hea 17	Specification of Laboratory Fume Cupboards	One credit where evidence provided demonstrates that fume cupboards and microbiological safety cabinets (where specified) have been designed in accordance with the appropriate British Standard.	1	1	-	-	-	-	-	
Energy										
Ene 1	Reduction of CO2 Emissions	Up to fifteen credits where evidence provided demonstrates an improvement in the energy efficiency of the building's fabric and services and therefore achieves lower building operational related CO2 emissions.	15	6	-	-	-	6	10	

Ene 2	Sub-metering of Substantial Energy Uses	One credit where evidence provided demonstrates the provision of direct sub-metering of energy uses within the building.	1	1	-	-	1	1	1	
Ene 3	Sub-metering of high energy load Areas and Tenancy	Secondary Schools only One credit where evidence provided demonstrates sub-metering of energy consumption by tenancy/building function area is installed within the building.	1	1	-	-	-	-	-	
Ene 4	External Lighting	One credit where energy-efficient external lighting is specified and all light fittings are controlled for the presence of daylight.	1	1	-	-	-	-	-	
Ene 5	Low zero carbon technologies	One credit where evidence provided demonstrates that a feasibility study considering local (on-site and/or near site) low or zero carbon (LZC) technologies has been carried out and the results implemented. Two credits where evidence provided demonstrates that the first credit has been achieved and there is a 10% reduction in the building's CO2 emissions as a result of the installation of a feasible local LZC technology. Three credits where evidence provided demonstrates that the first credit has been achieved and there is a 15% reduction in the building's CO2 emissions as a result of the installation of a feasible local LZC technology. Or alternatively: A maximum of one credit where evidence provided demonstrates that a contract with an energy supplier is in place to provide sufficient electricity used within the assessed building/development to meet the above criteria from a 100% renewable energy source. (Note: a standard Green Tariff will not comply)	3	3	-	-	-	1	1	
Ene 8	Lifts	Up to two credits are available where evidence provided demonstrates the installation of energy-efficient lift(s).	2	2	-	-	-	-	-	
Ene 10	Free Cooling	One credit where evidence provided demonstrates the building incorporates a free cooling strategy that completely displaces the need for conventional mechanical cooling systems (excluding exceptional localised circumstances with small scale systems, for example server rooms) and the thermal comfort requirements of credit Hea 10 are achieved.	1	0	-	-	-	-	-	
Ene 11	Energy Efficient Fume Cupboards	One credit where evidence provided demonstrates that, where fume cupboards are specified, a study has been carried out to determine the most energy-efficient strategy for ventilation of the fume cupboards in the laboratory, whilst maintaining adequate containment.	1	1	-	-	-	-	-	
Transport										
Tra 1	Provision of public transport	Up to five credits are awarded on a sliding scale based on the assessed buildings' accessibility to the public transport network.	3	3	-	-	-	-	-	
Tra 2	Proximity to amenities	One credit where evidence provided demonstrates that the building is located within 500m of accessible local amenities appropriate to the building type and its users.	1	1	-	-	-	-	-	
Tra 3	Cyclist Facilities	One credit where evidence provided demonstrates that covered, secure and well-lit cycle storage facilities are provided for all building users. Two credits where, in addition to the above, adequate changing facilities are provided for staff use.	2	2	-	-	-	-	-	
Tra 4	Pedestrian and cycle safety	One credit where evidence provided demonstrates that the site layout has been designed in accordance with best practice to ensure safe and adequate pedestrian and cycle access.	1	1	-	-	-	-	-	

Tra 5	Travel plan	One credit where evidence is provided to demonstrate that a travel plan has been developed and tailored to the specific needs of the building users.	1	1	-	-	-	-	-	
Tra 8	Deliveries & manoeuvring	One credit where evidence provided demonstrates that vehicle access areas have been designed to ensure adequate space for manoeuvring delivery vehicles and provide space away from manoeuvring area for storage of refuse skips and pallets.	1	1	-	-	-	-	-	
Water										
Wat 1	Water Consumption	Up to three credits where evidence provided demonstrates that the specification includes taps, urinals, WCs and showers that consume less potable water in use than standard specifications for the same type of fittings.	3	2	-	1	1	1	2	
Wat 2	Water meter	One credit where evidence provided demonstrates that a water meter with a pulsed output will be installed on the mains supply to each building/unit.	1	1	-	1	1	1	1	
Wat 3	Major leak detection	One credit where evidence provided demonstrates that a leak detection system is specified or installed on the building's water supply.	1	0	-	-	-	-	-	
Wat 4	Sanitary supply shut off	One credit where evidence provided demonstrates that proximity detection shut-off provided to the water supply to all toilet areas.	1	1	-	-	-	-	-	
Wat5	Water recycling	One credit where evidence provided demonstrates the specification of systems that collect, store and, where necessary treat, rainwater or greywater for WC and urinal flushing purposes.	1	1	-	-	-	-	-	
Wat 6	Irrigation systems	One credit where evidence provided demonstrates that a low-water irrigation strategy/system has been installed, or where planting and landscaping is irrigated with rainwater or reclaimed water.	1	1	-	-	-	-	-	
Materials										
Mat 1	Materials Specification (major building elements)	Up to six credits are available, determined by the Green Guide to Specification ratings for the major building/finishing elements.	6	3	-	-	-	-	-	
Mat 2	Hard landscaping and boundary protection	One credit where evidence provided demonstrates that at least 80% of the combined area of external hard landscaping and boundary protection specifications achieve an A or A+ rating, as defined by the Green Guide to Specification.	1	1	-	-	-	-	-	
Mat 3	Re-use of building façade	One credit is awarded where evidence provided demonstrates that at least 50% of the total façade (by area) is reused and at least 80% of the reused façade (by mass) comprises in-situ reused material.	1	0	-	-	-	-	-	
Mat 4	Re-use of building structure	One credit is awarded where evidence provided demonstrates that a design reuses at least 80% of an existing primary structure and for part refurbishment and part new build, the volume of the reused structure comprises at least 50% of the final structure's volume.	1	0	-	-	-	-	-	
Mat 5	Responsible sourcing of materials	Up to 3 credits are available where evidence provided demonstrates that 80% of the assessed materials in the following building elements are responsibly sourced: a. Structural Frame b. Ground floor c. Upper floors (including separating floors) d. Roof e. External walls f. Internal walls g. Foundation/substructure h. Staircase Additionally 100% of any timber must be legally sourced.	3	2	-	-	-	-	-	

Mat 6	Insulation	One credit where evidence provided demonstrates that thermal insulation products used in the building have a low embodied impact relative to their thermal properties determined by the Green Guide to Specification ratings. One credit where evidence provided demonstrates that thermal insulation products used in the building have been responsibly sourced.	2	1	-	-	-	-	-	
Mat 7	Designing For Robustness	One credit where protection is given to vulnerable parts of the building such as areas exposed to high pedestrian traffic, vehicular and trolley movements.	1	1	-	-	-	-	-	
Waste										
Wst 1	Construction Site Waste Management	Up to three credits are available where evidence provided demonstrates that the amount of non-hazardous construction waste (m3/100m2 or tonnes/100m2) generated on site by the development is the same as or better than good or best practice levels. One credit where evidence provided demonstrates that a significant majority of non-hazardous construction waste generated by the development will be diverted from landfill and reused or recycled.	4	3	-	-	-	-	-	
Wst 2	Recycled aggregates	One credit where evidence provided demonstrates the significant use of recycled or secondary aggregates in 'high-grade' building aggregate uses.	1	0	-	-	-	-	-	
Wst 3	Recyclable waste storage	One credit where a central, dedicated space is provided for the storage of the building's recyclable waste streams. One credit where, in addition to the above, policies/procedures have been established which: a. Include procedures for collection and recycling of consumables b. Are endorsed at the school governor level c. Will be operational at a local level.	2	2	-	-	-	1	1	
Land Use & Ecology										
LE1	Re-use of land	One credit where evidence provided demonstrates that the majority of the footprint the proposed development falls within the boundary of previously developed land.	1	1	-	-	-	-	-	
LE2	Contaminated land	One credit is awarded where evidence provided demonstrates that the land used for the new development has, prior to development, been defined as contaminated and where adequate remedial steps have been taken to decontaminate the site prior to construction.	1	0	-	-	-	-	-	
LE3	Ecological value of site AND Protection of ecological features	One credit is awarded where evidence provided demonstrates that the construction zone is defined as land of low ecological value and all existing features of ecological value will be fully protected from damage during site preparation and construction works.	1	1	-	-	-	-	-	
LE4	Mitigating Ecological impact	One credit where evidence provided demonstrates that the change in the site's existing ecological value, as a result of development, is minimal. Two credits where evidence provided demonstrates that there is no negative change in the site's existing ecological value as a result of development.	2	1	-	-	1	1	1	
LE5	Enhancing Site Ecology	One credit where the design team (or client) has appointed a suitably qualified ecologist to advise and report on enhancing and protecting the ecological value of the site; and implemented the professional's recommendations for general enhancement and protection of site ecology. Two credits where, in addition to the above, there is a positive increase in the ecological value of the site of up to (but not including) 6 species. Three credits where, in addition to the above, evidence is provided to demonstrate a positive increase in the ecological value of the site of 6 species or greater.	3	2	-	-	-	-	-	

LE6	Long term impact on biodiversity	One credit where the client has committed to achieving the mandatory requirements listed below and at least two of the additional requirements. Two credits where the client has committed to achieving the mandatory requirements listed below and at least four of the additional requirements.	2	1	-	-	-	-	-	
LE7	Consultation with students and staff	One credit where evidence provided demonstrates that the design team consulted with staff and pupils, to determine (i) their educational and social requirements for the school grounds, (ii) their ideas for the school ground's design and (iii) where the design team kept students and staff informed of how their ideas were built into the design.	1	1	-	-	-	-	-	
LE8	Local Wildlife Partnership	One credit where evidence provided demonstrates that the design team set up a partnership with a local group that has wildlife expertise (e.g. the local wildlife trust).	1	1	-	-	-	-	-	
Pollution										
Pol 1	Refrigerant GWP - Building services	One credit where evidence provided demonstrates the use of refrigerants with a global warming potential (GWP) of less than 5 or where there are no refrigerants specified for use in building services.	1	0	-	-	-	-	-	
Pol 2	Preventing refrigerant leaks	One credit where evidence provided demonstrates that refrigerant leaks can be detected AND that the provision of automatic refrigerant pump down is made to a heat exchanger (or dedicated storage tanks) with isolation valves. Or where there are no refrigerants specified for the development.	1	0	-	-	-	-	-	
Pol 3	Refrigerant GWP - Cold storage	One credit where evidence provided demonstrates the use of refrigerants within cold storage systems with a global warming potential (GWP) of less than 5.	1	0	-	-	-	-	-	
Pol 4	NOx emissions from heating source	One credit where evidence provided demonstrates that the maximum dry NOx emissions from delivered space heating energy are ≤ 100 mg/kWh (at 0% excess O ₂). Two credits where evidence provided demonstrates that the maximum dry NOx emissions from delivered space heating energy are ≤ 70 mg/kWh (at 0% excess O ₂). Three credits where evidence provided demonstrates that the maximum dry NOx emissions from delivered space heating energy are ≤ 40 mg/kWh (at 0% excess O ₂) and emissions from delivered water heating energy are 100 mg/kWh or less (at 0% excess O ₂).	3	2	-	-	-	-	-	
Pol 5	Flood risk	Two credits where evidence provided demonstrates that the assessed development is located in a zone defined as having a low annual probability of flooding. One credit where evidence provided demonstrates that the assessed development is located in a zone defined as having a medium or high annual probability of flooding AND the ground level of the building, car parking and access is above the design flood level for the site's location. One further credit where evidence provided demonstrates that surface water run-off attenuation measures are specified to minimise the risk of localised flooding, resulting from a loss of flood storage on site due to development.	3	3	-	-	-	-	-	

Pol 6	Minimising watercourse pollution	One credit here evidence provided demonstrates that effective on site treatment such as Sustainable Drainage Systems (SUDs) or oil separators have been specified in areas that are or could be a source of watercourse pollution.	1	1	-	-	-	-	-	
Pol 7	Reduction of Night Time Light Pollution	One credit where evidence provided demonstrates that the external lighting design in compliance with the guidance in the Institution of Lighting Engineers (ILE) Guidance notes for the reduction of obtrusive light, 2005.	1	1	-	-	-	-	-	
Pol 8	Noise Attenuation	One credit where evidence provided demonstrates that new sources of noise from the development do not give rise to the likelihood of complaints from existing noise-sensitive premises and amenity or wildlife areas that are within the locality of the site.	1	1	-	-	-	-	-	
Innovation - Exemplary Level Criteria										
Innovation	Man 2: Considerate Constructors	Where post construction, a Considerate Constructors Scheme certificate can be provided demonstrating that the site achieved CCS Code of Considerate Practice with a score of at least 36. OR Where post construction, the site has complied in full with the alternative, independently assessed scheme, and the alternative scheme addresses all the mandatory and optional items in Checklist A2.	1	0						
Innovation	Hea 1: Daylighting	At least 80% of the floor area (for the building spaces/room identified above in the standard requirements) has an average daylight factor of 3% in multi-storey buildings and 4% in single-storey buildings.	1	0						
Innovation	Ene 1: Reduction of CO2 emissions	One additional innovation credit can be awarded where evidence provided demonstrates the building is designed to be a carbon neutral building as defined by the NCM (i.e. in terms of building services energy demand), as follows: a. A new building achieves a CO2 index less than 0 on the benchmark scale. b. A refurbished building achieves a CO2 index equal to or less than 0 on the benchmark scale. Two additional innovation credits can be awarded where evidence provided demonstrates the building is designed to be a True zero carbon building (in terms of building services and operational energy demand).	2	0						
Innovation	Ene 5: Low or Zero Carbon Technologies	A local LZC energy technology has been installed in line with the recommendations a compliant feasibility study and this method of supply results in a 20% reduction in the building's CO2 emissions.	1	0						
Innovation	Wat 2: Water Meter	Where sub meters are fitted to allow individual water-consuming plant or building areas to be monitored such as cooling towers, car washes, catering areas, etc. If the building does not have any major water consuming plant this exemplar credit is not available. Each sub meter has a pulsed output to enable connection to a Building Management System (BMS) for the monitoring of water consumption. In addition to the above, for sites with multiple departments e.g. large health centres or acute hospitals, separate pulsed sub meters are fitted on the supply to the following areas where present: a. Staff and public areas b. Clinical areas and wards c. Letting areas: On the water supply to each tenant unit d. Laundries e. Main production kitchen f. Hydrotherapy pools g. Laboratories h. CSSD/HSDU, pathology, pharmacy, mortuary and any other major process water user.	1	0						

Innovation	Materials Specification	<p>One exemplary BREEAM credit can be awarded as follows:</p> <p>a. Where assessing four or more applicable building elements, the building achieves at least two points additional to the total points required to achieve maximum credits under the standard BREEAM requirements.</p> <p>b. Where assessing fewer than four applicable building elements, the building achieves at least one point additional to the total points required to achieve maximum credits under the standard BREEAM requirements.</p>	1	0	
Innovation	Responsible Sourcing of Materials	Where, in addition to the standard BREEAM requirements, 95% of the applicable materials, comprised within the applicable building elements, have been responsibly sourced.	1	0	
Innovation	Wst 1 Construction Site Waste Management	<p>Where non-hazardous construction waste generated by the building's development meets or exceeds the resource efficiency benchmark required to achieve three credits (as outlined in the guidance).</p> <p>Where at least 90% by weight (80% by volume) of non-hazardous construction waste and 95% of demolition waste by weight (85% by volume) (if applicable) generated by the build has been diverted from landfill and either:</p> <p>a. Reused on site (in-situ or for new applications)</p> <p>b. Reused on other sites</p> <p>c. Salvaged/reclaimed for reuse</p> <p>d. Returned to the supplier via a 'take-back' scheme</p> <p>e. Recovered from site by an approved waste management contractor and recycled</p> <p>Where all key waste groups are identified for diversion from landfill at pre-construction stage SWMP.</p>	1	0	
Innovation - BREEAM Accredited Professional or Suitably Qualified BREEAM Assessor					
Innovation	BREEAM Accredited Professional / Suitably Qualified Assessor	Up to two credits are available for the comprehensive use of a BREEAM Accredited Professional (AP) or Suitably Qualified BREEAM Assessor (SQA) throughout project work stages.	2	2	
Innovation - BRE Global Approved Innovation credits					
Innovation	Approved Innovations	Additional BREEAM Innovation Credits can be awarded where an application is made to, and approved by the BREEAM office using the Innovation Application Form and the assessor confirms compliance with the criteria set out within the Innovation Application Form.			

Appendix B – DCSF Carbon Calculator Output

Carbon Calculator

department for
children, schools and families

CARBON CALCULATOR - A PRE DESIGN TOOL V 1.2

Before using the calculator read section 2 of the accompanying [guidance document](#) and then fill in the white cells (only 3 questions)

1. Project name:	Adelaide Road site - UCL Academy
2. Date (DDMMYYYY):	19/02/2010
3. Stage of project:	Selecting preferred bidder ▼

After you have answered all 3 questions select [CALCULATOR](#) from the tabs at the bottom

Author: 