



80 GUILFORD STREET
COMPARATIVE PRE-ASSESSMENT REPORT ANALYSIS
BREEAM 2011 DOMESTIC REFURBISHMENT (SD5072 V:2012 I:1.0.2)

GWP-PS_FO.1435_BREEAMDR_80GuilfordStreet_DTR01

DATE: 19.06.2014

BY: DT / BR

GWPPS053.02

1.0 ABOUT

Established for 20 years, GWP Project Services have grown into a leading BREEAM Assessment organisation, working on multiple BREEAM awarding winning schemes in the UK and overseas for the last 8 years. We have also established ourselves as industry leading sustainability Consultants – working closely with internationally renowned Architects and Consultants, on highly sustainable, modern buildings that significantly reduce carbon emissions both during construction and operation.

Our international client base include some of the world's most successful organisations and the UK's most established institutions such as Kings College London, Jaguar Land Rover, Bacardi Martini and DHL.

Our knowledge, experience and contribution to BREEAM and wider sustainable construction has been recognised with the award of BREEAM Assessor of the year 2013, but more importantly further established close links we have with BRE, of which we are a major contributor to their assessor network, providing internal consultancy to the BRE Global organisation and input into the development of current and future BREEAM methods.

We offer a proactive approach to the challenges faced with BREEAM assessment and have developed systems and protocols specifically within the BREEAM market to assist in the complex task of assessing and delivering BREEAM assessed buildings. We work very closely with the Design and Construction teams to ensure communication and organisational skills are adopted from the outset and fed down the supply chain so opportunities are maximised where possible, with risk recognised and averted.

2.0 GWP PROJECT SERVICES

GWP Project Services are a practice of specially trained professionals offering services including BREEAM, LEED, Code for Sustainable Homes assessments– expert advice and consultation on sustainability within construction and design sectors, project management, CDM coordinator roles and other key consultancy including energy analysis, planning support and training. A number of staff are also accredited Passivhaus Assessors.

Alongside the principal head office located in Leeds, GWP-PS also operate from regional offices located in London, Manchester and internationally in Europe through our Prague office.

- ISO 9001 & 14001 Registered Firm
- Construction Line
- Association of Project Safety CDM
- Association for Environmentally Conscious Buildings (AECB)
- PassivHaus Trust Members
- BRE BREEAM & CfSH (STROMA) – Licensed Assessors





3.0 TRACK RECORD AND RELEVANT PROJECT EXPERIENCE

GWP Project Services are one of the UK's leading BREEAM Assessment and Sustainable Design organisations.

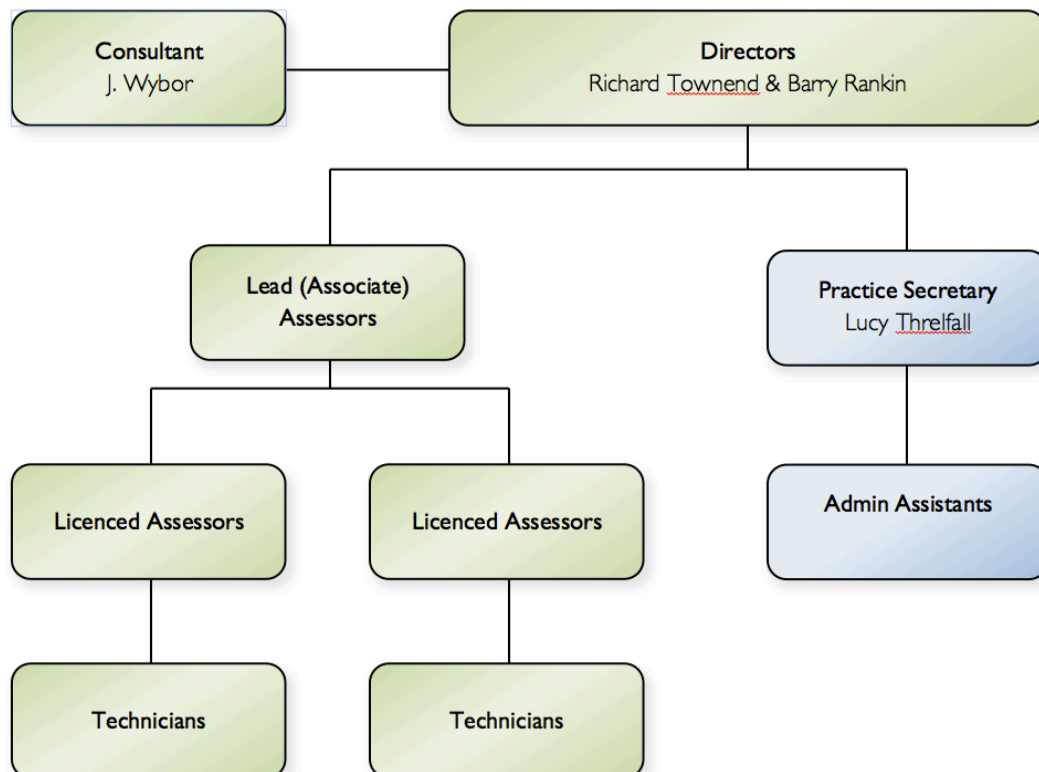
GWP Project Services have successfully delivered BREEAM, Code for Sustainable Homes and Ecohomes certification for a wide variety of building types and uses, including Distilleries, Student Housing, Industrial and Manufacturing Units, Retail, Healthcare buildings and University Faculty buildings. We are also currently involved in LEED assessment within the UK and hold LEED Green Associate qualifications.

GWP Project Services played a key role in BREEAM Award winning projects in 2008, 2010, 2012 & 2014; as well as the highest ever BREEAM design stage assessed development and the first BREEAM 2011 assessed development to achieve a BREEAM 'Outstanding' rating. A summary of some of our achievements are provided below:

- BREEAM Assessor of the Year 2013 - Barry Rankin, Director - GWP Project Services
- BREEAM Award Winners 2008, 2010, 2012 & 2014
- Assessors of the first BREEAM 2011 'Outstanding' buildings
- Assessors of the first BREEAM 2008 'Outstanding' Industrial building
- Assessors of 'The Green', awarded 94.11% 'Outstanding' (previously the highest design stage rated BREEAM building)

We believe our approach to BREEAM Assessment is unique, we offer strategic consultancy on meeting BREEAM compliance from a knowledgeable and experienced design & construction background. We are pro-active in terms of considering BREEAM compliant design responses, often undertaking our own research and development to assist in the challenges of meeting compliance - particularly essential when aspiring for BREEAM 'Excellent' and 'Outstanding' ratings. We don't see our role as removed from the design team, rather an important member of the design team able to communicate ideas, technical guidance and pragmatic approaches to BREEAM compliance design solutions.

4.0 GWP PROJECT SERVICES COMPANY STRUCTURE



BREEAM Registration Ref: TBA
 Registered BREEAM Assessor: B. Rankin
 BREEAM Bespoke: No

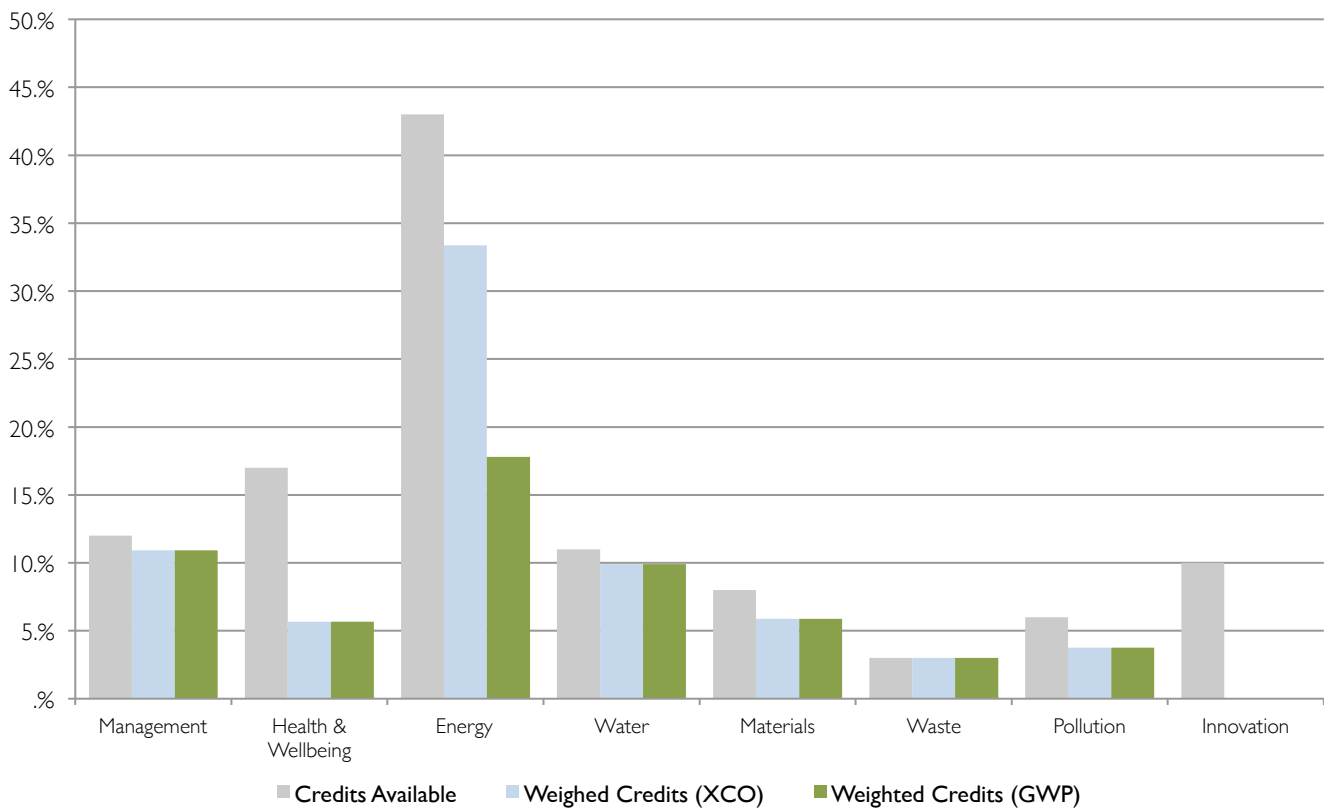
PASS 30%
 GOOD 45%
 VERY GOOD 55%
 EXCELLENT 70%
 OUTSTANDING 85%

5.0 BUILDING PERFORMANCE BY SECTION

Credit Section	Credits Available	XCO Targeted Credits	GWP-PS Targeted Credits	Weighted Credits Available	Weighed Credits (XCO)	Weighted Credits (GWP)
Management	11	10.00	10.00	12%	10.91	10.91
Health & Wellbeing	12	4.00	4.00	17%	5.67	5.67
Energy	29	22.50	12.00	43%	33.36	17.79
Water	5	4.5	4.5	11%	9.9%	9.9%
Materials	45	33	33	8%	5.87%	5.87%
Waste	5	5	5	3%	3%	3%
Pollution	8	5	5	6%	3.75%	3.75%
Innovation	10	0	0	10%	%	.%

XCO Credit Score 72.45% Excellent'
 GWP-PS Potential Credit Score 56.89% Very Good'

6.0 ASSESSED BUILDING PERFORMANCE BY SECTION (COMPARATIVE)



APPENDIX A - DETAILED CREDIT REPORT
BREEAM 2011 DOMESTIC REFURBISHMENT (SD5072 V:2012 I:1.0.2)

GWP-PS_PA.1423_Causewayside_REV 1

XCO Rating **72.45%**
GWP-PS Rating **56.89%**

Credit Name	Available Credits	XCO Potential	GWP-PS Potential	Item	Compliance Notes	Credit Responsibility	At Risk?	XCO Targeted	GWP-PS Targeted	
MANAGEMENT	11	10	10	Weighting 0.120				10.91	10.91	
MAN1	3	3	3	Home User Guide To recognise and encourage the provision of guidance for the home owner / tenant so they can understand how to operate their home efficiently and effectively					Comments	
	3	3	3	Provision of a home users guide	Where a HUG containing the information listed in the 'User Guide Contents List' has been produced and supplied to all homes.	Contractor				
MAN2	2	2	2	Responsible Construction Practices To recognize and encourage construction sites which are managed in an environmentally and socially considerate, responsible and accountable manner.						
	2	2	2	Where the principal contractor uses the Considerate Constructors Scheme (CCS) or Checklist A-3	Credits are awarded depending on the CCS Code of Considerate Practice score achieved / Compliance with Checklist A-3	Contractor				
MAN3	1	1	1	Construction Site Impacts To recognize and encourage construction sites managed in an environmentally sound manner in terms of resource use, energy consumption and pollution.						
	1	1	1	Where there is evidence to demonstrate that 2 or more of the sections a-d/e in Checklist A-6 are completed.		Contractor				
MAN4	2	2	2	Security To encourage domestic refurbishment projects where people feel safe and secure; where crime and disorder, or the fear of crime, does not undermine quality of life or community cohesion.						
	1	1	1	One Credit – secure windows and doors	Where retained external doors and accessible windows comply with the minimum security requirements as set out in CN6	Architect				
	1	1	1	Two Credits – Secured by design	Where the principles and guidance of Secured by Design Section 2 – Physical Security are complied with.					
MAN5	1	1	1	Protection and Enhancement of Ecological Features To protect existing ecological features from substantial damage during refurbishment and enhance the ecological value of a site.						
	1	1	1	Where a site survey is carried out by a member of the project team or a Suitably Qualified Ecologist to determine ecological features.		Contractor				
MAN6	2	1	1	Project Management To ensure delivery of a functional and sustainable refurbishment, designed and built in accordance with performance expectations.						
	1	1	1	Where all of the project team are involved in the project decision making						
	1	0	0	Where a handover meeting is arranged						
HEALTH & WELLBEING	12	4	4	Weighting 0.150				5.67	5.67	
HEA1	2	0	0	Daylighting To improve the quality of life in homes through the provision of good daylighting and to reduce the need for energy to light the home.					Comments	
	1	0	0	First credit—maintaining good daylighting						
	1	0	0	Second credit—minimum daylighting						
HEA2	4	2	2	Sound Insulation To ensure the provision of acceptable sound insulation standards and so minimise the likelihood of noise complaints.						
	1	1	1	No worse than the values determined pre-refurbishment		Acoustician				
	1	1	1	3dB higher than before refurbishment		Acoustician				
	1	0	0	5dB higher than before refurbishment						
	1	0	0	8dB higher than before refurbishment						

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HEA3	1	0	0	Volatile Organic Compounds To recognise and encourage a healthy internal environment through the specification of internal finishes and fittings with low emissions of volatile organic compounds (VOCs).								
	1	0	0	Where all decorative paints and varnishes used in the refurbishment have met the requirement in Table - 14.								
HEA4	2	0	0	Inclusive Design Adopting an inclusive design approach to optimise the accessibility of the home and its future adaptability to cope with changing needs of a household, such as old age, frailty, a short or long-term disability or a debilitating illness.								
	1	0	0	An access expert or suitably qualified member of the design team (CN6) has completed section 1 of Appendix A: Hea 04	The access statement demonstrates reasonable provision to provide accessibility to the dwelling covering section 1	Architect						
	1	0	0	An access expert or suitably qualified member of the design team (CN6) has completed sections 1 and 2 of Appendix A: Hea 04	The access statement demonstrates reasonable provision to provide accessibility to the dwelling covering sections 1 and 2	Architect						
HEA5	2	1	1	Ventilation To recognise and encourage a healthy internal environment through the provision of appropriate ventilation levels to provide fresh air and avoid problems associated with the build up of pollutants and humidity levels without excessive heat loss.								
	1	1	1	One credit—minimum ventilation requirements	A minimum level of background ventilation is provided	M+E						
	1	0	0	Two credits—advanced ventilation	Ventilation is provided for the dwelling that meets the requirements of Section 5 of Building Regulations Part F in full							
HEA6	1	1	1	Safety To reduce the risks to life, health and property resulting from fire and exposure to carbon monoxide.								
	1	1	1	One Credit—fire and carbon monoxide (CO) detection and alarm systems	Where a compliant fire detection and fire alarm system is provided in accordance with compliance notes 2-8.	M+E						
ENERGY	29	22.5	12	Weighting 0.190							33.36	17.79
ENE1	6	4	2	Improvement in Energy Efficiency Rating To recognise and encourage a reduction in CO2 emissions through improved energy efficiency of the dwelling and its services as a result of refurbishment.							Comments	
	6	4	2	Where the refurbishment results in an improvement to the dwellings Energy Efficiency Rating, in accordance with CN2.		M+E						
ENE2	4	3.5	1	Energy Efficiency Rating Post Refurbishment To encourage high levels of Energy Efficiency in the refurbished dwellings, thus reducing CO2 emissions, running costs and fuel poverty.								
	4	3.5	1	Where as a result of refurbishment, the dwelling meets a minimum Energy Efficiency Rating, credits can be awarded		M+E						
ENE3	7	7	1	Primary Energy Demand To encourage a reduction in the absolute total regulated energy demand of a dwelling as a result of refurbishment, thus saving CO2 emissions, running costs and reducing fuel poverty.								
	7	7	1	Where as a result of refurbishment the dwelling meets the Primary Energy Demand targets		M+E						
ENE4	2	0	0	Renewable Technologies To encourage local energy generation from renewable sources to supply a significant proportion of the dwellings energy demand and to encourage homes to reduce the total energy demand, prior to the specification of renewable technologies.								
	1	0	0	Where at least 10% of the dwellings Primary Energy Demand per annum is supplied by low or zero carbon technologies		M+E						
	1	0	0	Where for mid to high rise flats at least 15% of each dwellings Primary Energy Demand per annum is supplied		M+E						
ENE5	2	2	2	Energy Labelled White Goods To encourage the provision or purchase of energy efficient white goods, thus reducing the CO2 emissions from appliance use in the dwelling.								
	1	1	1	First credit – Fridges, freezers and fridge-freezers + EU Leaflets		Contractor						
	1	1	1	Second credit – washing machines, dishwashers, tumble dryers and washer dryers - EU Leaflets		Contractor						
ENE6	1	1	1	Drying Space To provide a reduced energy means of drying clothes and so encourage reductions in energy demands.								

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Credit Name	Available Credits	XCO Potential	GWP-PS Potential	Item	Compliance Notes	Credit Responsibility	At Risk?	XCO Targeted	GWP-PS Targeted		
	1	1	1	An adequate, secure internal or external space with posts and footings, or fixings		Architect					
ENE7	2	2	2	Lighting To encourage the provision of energy efficient lighting, thus reducing CO2 emissions associated with the dwelling.							
	1	1	1	One credit – External lighting	Where Energy Efficient Space lighting (including lighting in communal areas) and Energy Efficient Security lighting is provided	M+E					
	1	1	1	One credit - Internal Lighting	The energy required for internal lighting is minimised through the provision of a maximum average wattage	M+E					
ENE8	2	2	2	Energy Display Devices To encourage the provision of accessible equipment to display energy consumption data to dwelling occupants, thereby encouraging them to reduce energy use.							
	1	1	1	Where current electricity consumption data is displayed to occupants by a compliant energy display devices		M+E					
	1	1	1	AND primary heating fuel consumption data are displayed to occupants by a compliant correctly specified Energy Display Devices.		M+E					
ENE9	2	1	1	Cycle Storage To encourage occupants to cycle by providing adequate and secure cycle storage facilities, thus reducing the need for short car journeys.							
	1	1	1	Where individual or communal compliant cycle storage is provided for the following number of cycles:		Architect					
	1	0	0	Where individual or communal compliant cycle storage is provided for the following number of cycles:							
ENE10	1	0	0	Home Office To reduce the need to commute to work by ensuring residents have the necessary space and services to be able to work from home.							
	1	0	0	Where sufficient space and services have been provided which allow the occupants to set up a home office		Architect					
WATER	5	4.5	4.5	Weighting 0.060						9.90	9.90
WAT1	3	2.5	2.5	Internal Water Use To minimise the consumption of potable water in sanitary applications by encouraging the use of low water use fittings and water recycling systems.						Comments	
	3	2.5	2.5	Where terminal fittings meet the equivalent terminal fitting consumption standards as detailed in Table-20 or are calculated		M+E					
WAT2	1	1	1	External Water Use To encourage the recycling of rainwater and reduce the amount of mains potable water used for external water uses.							
	1	1	1	Where a compliant rainwater collection system for external/internal irrigation use has been provided to dwellings		Architect					
WAT3	1	1	1	Water meter Where an appropriate water meter for measuring usage of mains potable water has been provided to dwelling/s in accordance with CNI							
	1	1	1	Where an appropriate water meter for measuring usage of mains potable water has been provided		M+E					
MATERIALS	45	33	33	Weighting 0.125						5.87	5.87
MAT1	25	18	18	Environmental Impact of Materials To encourage the retention and enhancement of existing elements and where new materials are required the use of materials with lower environmental impacts over their lifecycle whilst optimising the thermal performance of key building elements.						Comments	
	25	18	18	The BREEAM Domestic Refurbishment Mat1 calculator is used to determine the number of credits awarded.		Architect					
MAT2	12	7	7	Responsible Sourcing of Materials To recognise and encourage the reuse of materials and the specification of responsibly sourced materials for use where required in the refurbishment process.							
	12	7	7	Where the applicable new materials for refurbished building elements are assigned a responsible sourcing tier level		Contractor					

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MAT3	8	8	8	Insulation To recognise and encourage the use of thermal insulation which has a low embodied environmental impact relative to its thermal properties and has been responsibly sourced.							
	Pre-requisite		Y	Any new insulation specified for use within the following building elements must be assessed:		Architect					
	4	8	8	Embodied Impact		Where Green Guide ratings, required by the BREEAM Domestic Refurbishment Mat3 Insulation Calculator	Architect				
	4	0	0	Responsible Sourcing		Where ≥ 80% of the new thermal insulation used in the building elements is responsibly sourced.					
POLLUTION	8	5	5	Weighting 0.100						3.75	3.75
POL1	3	3	3	Nitrogen Oxide Emissions To reduce the emission of nitrogen oxides (NOx) into the atmosphere.						Comments	
	3	3	3	Up to 3 credits – Low NOx space heating and hot water systems			M+E				
POL2	3	0	0	Surface Water Runoff To encourage domestic refurbishments to have a neutral impact upon site run-off and recognise refurbishments that adopt opportunity measures to reduce and delay the discharge of rainfall to the public sewers and watercourses.							
	1	0	0	First credit – neutral impact on surface water		Where any new hard standing areas are permeable, this must include all new pavements, driveways	Civils				
	1	0	0	Second credit – reducing run-off from site: basic		Where all run-off from the roof for rainfall depths up to 5 mm, have been managed on site using source control methods					
	1	0	0	Third Credit – reducing run-off from site: advanced		An appropriately qualified professional should be used to design an appropriate drainage strategy for the site.					
POL3	2	2	2	Flooding To reward dwellings located in low flood risk areas and where dwellings are located in medium to high flood risk zones, to recognise where they are refurbished in accordance with a flood resilience/resistance strategy.							
	1	1	1	Option 1 – Low flood risk (2 credits)		Where a Flood Risk Assessment has been carried out the assessed dwellings are defined as having a low annual probability of flooding.	Civils				
	1	1	1	Option 2 – Medium/High Flood Risk (1 credit)		Where a FRA has been carried out and the assessed dwellings are defined as having a medium or high annual probability of flooding.	Civils				
WASTE	5	5	5	Weighting 0.075						3.00	3.00
WST1	2	2	2	Household Waste To recognise and encourage the provision of dedicated storage facilities for a dwellings recyclable or compostable waste streams, so that waste is diverted from landfill or incineration.						Comments	
	1	1	1	First credit – Recycling facilities		One credit can be awarded where the dwelling complies with one of the scenarios detailed in Table-31 below.	Architect				
	1	1	1	Second credit – Composting Facilities		Dwellings with significant external private space - all of the following are met:					
WST2	3	3	3	Refurbishment Site Waste Management To promote resource efficiency via the effective management and reduction of waste related to the refurbishment process.							
	3	3	3	Projects up to £300k: three credits are awarded:		Where a compliant Level 1; Site Waste Management Plan See Criteria (SWMP) is in place in accordance with CN3.	Contractor				
INNOVATION	10	0	0	1/11% Weighting (Maximum 10)						0.00	0.00
INN1	2	0	0	Ene 2 Energy Efficiency Rating						Comments	
	1	0	0	Ene 8 Display Energy Devices							

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GWP Project Services

BREEAM Domestic Refurbishment - Pre-Assessment Tracker

Credit Name	Available Credits	XCO Potential	GWP-PS Potential	Item	Compliance Notes	Credit Responsibility	At Risk?	XCO Targeted	GWP-PS Targeted
	I	0	0	Wat 1 Internal Water Use					
	I	0	0	Was 2 Refurbishment Site Waste Management					
	I	0	0	Pol 2 Surface Water Run-off					
	I	0	0	Man 2 Responsible Construction Practices					
	I	0	0	Man 5 Protection and Enhancement of Ecological Value					
	I	0	0	Man 6 Project Management					
	I	0	0	Hea 4 Inclusive Design					



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PART OF THE GWP GROUP OF COMPANIES

www.gwp-ps.com | info@gwp-ps.com | T: +44(0)113 266 6044

