

Major Refurbishment Non-Dwelling																																																	
<b>Details of Refurbishment Non-Dwelling proposals:</b> Name of applicable buildings / blocks / units: 81 Belsize Park Gardens, Belsize Park, London, NW3 4NJ Floor area (GIA) m <sup>2</sup> : 1,441																																																	
Energy Statement				Location of justification / supporting Information		Further notes																																											
<b>1. Carbon Reductions</b> <table border="1"> <thead> <tr> <th colspan="4">SAP10.2</th> </tr> <tr> <th></th> <th>Total tCO<sub>2</sub>e per annum</th> <th>Stage reduction, tCO<sub>2</sub></th> <th>Stage reduction, %</th> </tr> </thead> <tbody> <tr> <td>Baseline</td> <td>7.48</td> <td></td> <td></td> </tr> <tr> <td>Be Lean</td> <td>5.19</td> <td>2.29</td> <td>30.6%</td> </tr> <tr> <td>Be Clean</td> <td>0.00</td> <td>5.19</td> <td>100.0%</td> </tr> <tr> <td>Be Green</td> <td>4.98</td> <td>4.98</td> <td>0.0%</td> </tr> <tr> <td>TOTAL</td> <td>4.98</td> <td>2.50</td> <td>33.4%</td> </tr> <tr> <td>Target</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> </tr> <tr> <td>Shortfall</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> </tr> <tr> <td>Offset payment</td> <td colspan="3">N/A</td> </tr> </tbody> </table>				SAP10.2					Total tCO <sub>2</sub> e per annum	Stage reduction, tCO <sub>2</sub>	Stage reduction, %	Baseline	7.48			Be Lean	5.19	2.29	30.6%	Be Clean	0.00	5.19	100.0%	Be Green	4.98	4.98	0.0%	TOTAL	4.98	2.50	33.4%	Target	N/A	N/A	N/A	Shortfall	N/A	N/A	N/A	Offset payment	N/A			Document: Page/ section reference:		<b>See GLA Energy Assessment Guidance &amp; Camden Planning Guidance (CPG) on Energy Efficiency for detailed guidance.</b>  Referables should also complete GLA Carbon emission reporting spreadsheet			
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<b>2. Regulated and whole life carbon emissions</b> Regulated and whole life carbon: Yes / No a. Worksheets provided (BRUKL for each stage): Yes b. Whole Life Carbon Assessment provided: Yes				MEP Sustainability: P15 - Modelling Results MEP Sustainability: P15 - Modelling Results MEP Sustainability: P15 - Modelling Results MEP Sustainability: P15 - Modelling Results MEP Sustainability: P15 - Modelling Results		Should not increase. 15% reduction in CO <sub>2</sub> at be lean Relevant if connecting to or creating a Heat Network only (London Plan Policy SI 3) Greatest possible reduction after energy efficiency measures incorporated Major refurbishments should aim for the greatest possible reduction, as close to zero carbon as possible.																																											
<b>3. Be Lean</b> a. Building Fabric: Yes / No i. Meets all Building Regulation part L2 Limiting Fabric Parameters: Yes ii. Meets all Part L2 Notional Non-Dwelling Specification: Yes iii. What is the proposed Air permeability?: 3 m <sup>3</sup> /(h.m <sup>2</sup> ) @ 50Pa b. Active design measures: Yes / No i. Efficient centralised MVHR or individual units next to external wall: Yes				MEP Sustainability: P8 - Table 1 MEP Sustainability: P8 - Table 1 MEP Sustainability: P8 - Table 1		Clearly justify if not met Clearly justify if not met																																											
<b>4. Be Clean</b> Potential decentralised energy network: Yes / No a. Is the site within 500m of existing network?: No b. If no to a) Within 1km of existing or potential network?: Yes c. If yes to b) Future proofing checklist completed?: No d. Is a site wide heat network proposed?: No f. CHP and District Heating Feasibility Checklist completed?: No				MEP Sustainability: P9 - Ventilation and Passive Cooling MEP Sustainability: Appendix 1 MEP Sustainability: Appendix 1		<b>Camden Local Plan Policy CC1, London Plan SI 3, CPG Energy Efficiency and Adaptation Chapter 4 (includes link to Camden's Borough Wide Heat Demand and Heat Source Mapping)</b> State location & detail feasibility of connection. State location & detail future proofing of connection. See Appendix 3 of CPG Energy Efficiency and Adaptation																																											
<b>5. Be Green</b> <table border="1"> <thead> <tr> <th>Minimum 20% reduction in CO<sub>2</sub> from on-site renewable energy technologies</th> <th>Viable (Yes / No)</th> <th>Proposed (kW)</th> <th>Expected tCO<sub>2</sub> saved per annum</th> <th>COP (at rating conditions in BS EN 14511)</th> </tr> </thead> <tbody> <tr> <td>a. Solar PV (photovoltaics)</td> <td>Yes</td> <td>6.075</td> <td>612</td> <td></td> </tr> <tr> <td>b. Solar Thermal (water heating)</td> <td>No</td> <td></td> <td></td> <td></td> </tr> <tr> <td>c. Air source heat pump (air to water)</td> <td>Yes</td> <td>150</td> <td>1548</td> <td>3.2</td> </tr> <tr> <td>d. Air source heat pump (air to air)</td> <td>No</td> <td></td> <td></td> <td></td> </tr> <tr> <td>e. Ground source heat pump</td> <td>No</td> <td></td> <td></td> <td></td> </tr> <tr> <td>f. Other please state</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>g. Other please state</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				Minimum 20% reduction in CO <sub>2</sub> from on-site renewable energy technologies	Viable (Yes / No)	Proposed (kW)	Expected tCO <sub>2</sub> saved per annum	COP (at rating conditions in BS EN 14511)	a. Solar PV (photovoltaics)	Yes	6.075	612		b. Solar Thermal (water heating)	No				c. Air source heat pump (air to water)	Yes	150	1548	3.2	d. Air source heat pump (air to air)	No				e. Ground source heat pump	No				f. Other please state					g. Other please state					MEP Sustainability: P16-17 - Carbon MEP Sustainability: P16-17 - Carbon		<b>London Plan Policy SI 2, Camden Local Plan Policy CC1 and section 8.11</b>  A robust renewable feasibility assessment should be completed and installation of renewable technologies should be maximised. See Chapter 5 of the CPG on Energy Efficiency and Adaptation.  Detail array size, layout drawings, estimated generation, CO <sub>2</sub> savings, overshadowing assessment.  Details required include type of system / details of the Coefficient of Performance (COP) and Energy Efficiency Ratio (EER) / CO <sub>2</sub> savings / noise and visual effects / commitment to monitoring the performance post-construction / information to and control by end-users  Details required technical details, CO <sub>2</sub> savings, air quality impacts, visual or noise implications			
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<b>6. Be Seen</b> a. Building management, metering and monitoring: Yes / No i. Will there be a whole-building energy management system (BEMS)? Yes ii. Will all units be individually metered? Yes iii. Will key plant be monitored post construction? Yes b. Be Seen reporting requirements to Greater London Authority (GLA): Yes / No i. Required data will be uploaded to GLA 'Be Seen' portal: Yes				MEP Sustainability: P10 - 4.4 Be Seen MEP Sustainability: P10 - 4.4 Be Seen MEP Sustainability: P10 - 4.4 Be Seen		<b>London Plan Policy SI 2, Camden Local Plan section 8.28, CPG Energy Efficiency and Adaptation Cht 5</b>  See GLA Be Seen Energy Monitoring Guidance.																																											
Sustainability Statement				Location of justification / supporting Information		Further notes																																											
<b>7. Overheating</b> Overheating / Yes / No a. Applied cooling hierarchy, passive design measures included? Yes c. Overheating - dynamic thermal modelling completed? Yes d. Is active cooling proposed? Yes Passive measures: Yes / No i. Orientation and site layout optimised: Yes ii. Units at least dual aspect and designed to allow natural ventilation: No iii. Solar shading incorporated into the design: Yes				Document: Page/ section reference:		<b>Local Plan Policy CC2, London Plan Policy SI 4, GLA Energy Assessment Guidance Chapter 8.</b>  See GLA Energy Assessment Guidance Chapter 8. Design must be informed by the cooling hierarchy, passive design measure should be incorporated before any active cooling. <b>CPG Energy Efficiency and Adaptation Cht 3</b> MEP Sustainability: P8 - 4.1 Be Lean (Reduce Energy Demand) MEP Sustainability: P8 - 4.1 Be Lean (Reduce Energy Demand)																																											

iv. Exposed internal thermal mass and night time purge ventilation		Yes	
v. Other please state			

  

8. Reducing Waste and the Circular Economy			
Material and waste		Response	
a. Pre-demolition audit completed?		No	
b. Whole life carbon assessment submitted? (see note)		No	
c. % of construction & demolition waste be reused/recycled?		95	%
d. % of excavation waste be put to beneficial use?		95	%
e. Circular economy statement submitted (see note)		No	

  

9. Green infrastructure			
Green infrastructure and biodiversity		Area m <sup>2</sup>	
a. Green/blue roof		0	
b. Green roof		282	
c. Green wall			
d. Vegetated SuDs features i.e. Rain Gardens, Tree pits		33	
e. Other Green infrastructure please state:		17	

  

10. Water			
Water efficiency		Response	
a. Greywater/rainwater harvesting system feasibility assessment?		No	
b. Greywater harvesting capacity proposed		0	m <sup>3</sup>
c. Rainwater harvesting capacity proposed		0	m <sup>3</sup>

  

11. Adapting to Climate Change			
BREEAM - Overall		Score	
a. Overall rating		Excellent	
b. Overall % score		71.69	
BREEAM - Categories		Available credits	Targeted %
c. Energy		26	18 69.2%
d. Water		8	6 75.0%
e. Materials		13	8 61.5%

  

Additional comments / notes:			

MEP Sustainability P8 - Solar Shading & Glazing Positions	
	Details should be set out as in 7.5 & 7.6 of GLA Energy Assessment Guidance
	<b>Local Plan Policy CC1, London Plan SI 7, CPG Energy Efficiency and Adaptation Cht 9</b>
N/A - conversion of existing building	Significant demolition must justify why the existing buildings can't be retained Local Plan policy CC1.
N/A - conversion of existing building	Required if referable to the Mayor <b>and/or</b> there is significant demolition. Local Plan CC1, London Plan SI7
MEP Sustainability Page 18	95% of construction and demolition waste should be reused/recycled London Plan Policy SI7
MEP Sustainability Page 18	95% beneficial use of inert excavation waste London Plan Policy SI7
N/A - scheme not referable	Required if referable to the Mayor, London Plan policy SI7
	<b>Camden Local Plan CC2, London Plan Policy G5, CPG Energy Efficiency and Adaptation Cht 10</b>
MKA Ecology Ur Page 15	The Council will expect all developments to incorporate green infrastructure unless it is demonstrated this is not possible or appropriate. This includes new and existing buildings. Please refer to CPG Energy Efficiency and Adaptation chapter 10 & London Plan Guidance on Urban Greening Factors (London Plan Policy G5)
MHA Flood Risk Chapter 5	
MHA Flood Risk Chapter 5	
	<b>Local Plan CC3 + section 8.55, London Plan SI 13</b>
	The Camden Local plan section 8.55 states 'Major developments and high or intense water use developments, such as hotels, hostels and student housing, should include a grey water and rainwater harvesting system. Where such a system is not feasible or practical, developers must demonstrate to the Council's satisfaction that this is the case.'
	<b>Local Plan Policy CC2 and section 8.46 to 8.49 CPG Energy Efficiency Cht 11</b>
EightVersa BREEAM Pre-Assessm	At least BREEAM Excellent is required for 500sqm or more floorspace
EightVersa BREEAM Pre-Assessm	More than 70% required to meet 'Excellent'
EightVersa BREEAM Pre-Assessm	At least 60% of unweighted credits
EightVersa BREEAM Pre-Assessm	At least 60% of unweighted credits
EightVersa BREEAM Pre-Assessm	At least 40% of unweighted credits