

# Response to London Borough of Camden's additional Sustainability and Energy comments

13 Blackburn Road

Project No: 55186

Rev: 00

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This note has been prepared in response to additional comments received 18/01/2023 from the London Borough of Camden on the Sustainability and Energy Statements prepared in support of the Clockwork Factory (2020/2940/P) planning submission, following chapmanbdsp's response (dated 10/03/2021) to Camden's original Sustainability and Energy requirements comments.

This note intends to address the following issue raised by the London Borough of Camden.

**Issue 1:** Consider viability of installing Solar PV integrated with the blue/green roof.

A feasibility study has been carried out to identify the available roof areas to incorporate photovoltaic panels. This study suggests that the roof of the residential blocks has the potential to accommodate up to a total number of 53 PV panels, providing an electrical output of 14.7 kWp. The potential allocation of the PV panels is presented in the figure below.

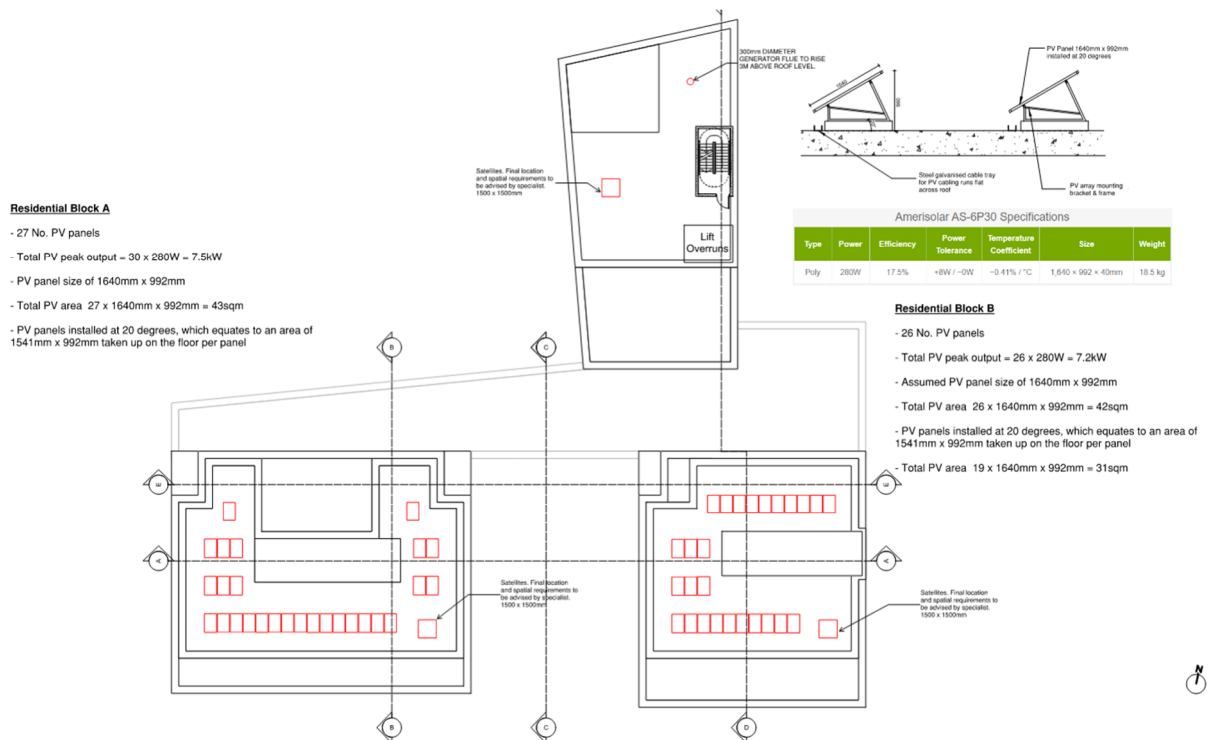


Figure 1 - Potential PV allocation on the residential blocks

The study suggests that the roof space of the commercial block is occupied by plants. Therefore, no available area has been identified for PV installation. Please refer to the following figure for the commercial block roof layout.

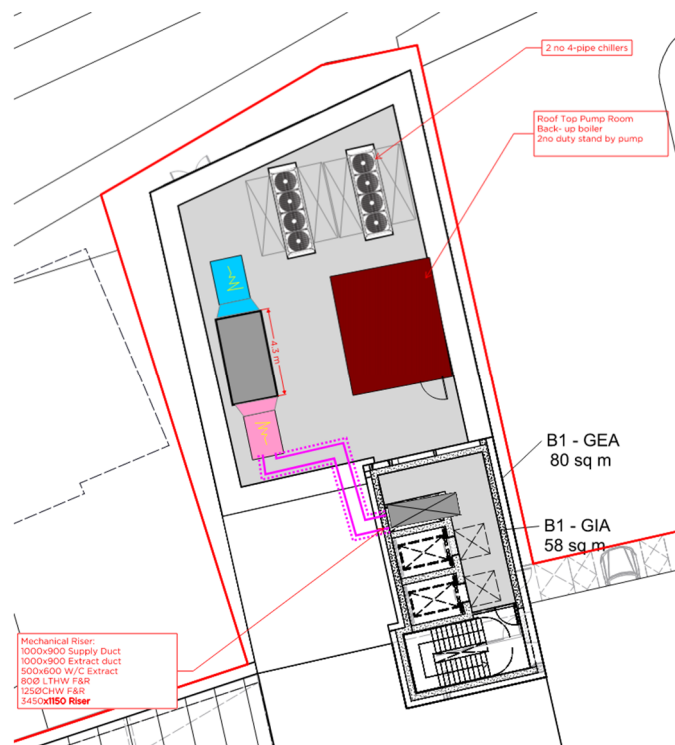


Figure 2 – Roof layout of the commercial block

The anticipated performance of the potential PV identified is summarised in the table below.

No. of panels	Total output	Annual electricity generation	Annual carbon offset
53	14.7 kWp	11,179.24 kWh	2,604.76 kgCO <sub>2</sub>

Table 1 - Anticipated performance of the potential PV identified

The site-wide energy hierarchy, specifically at the Be Green stage, has been updated to illustrate the impact of the potential PV identified.

### Site-wide energy hierarchy

	Carbon dioxide emissions (Tonnes CO <sub>2</sub> per annum)		
	Regulated	Unregulated	Total
	Part L 2013 compliant building	106.2	56.1
Be Lean	83.7	56.1	139.7
Be Clean	83.6	56.1	139.7
Be Green	46.2	56.1	102.3

Table 2 - CO<sub>2</sub> emissions after each stage of the energy hierarchy for the proposed development

	Carbon dioxide savings (Tonnes CO <sub>2</sub> per annum)				
			%		
	Regulated	Total	Regulated	Total	
Be Lean	Reduce demand	22.6	22.6	21.2%	13.9%
Be Clean	Deliver energy efficiently	0.0	0.0	0.0%	0.0%
Be Green	Maximise renewable energy	37.4	37.4	35.2%	23.0%
Total cumulative savings		60.0	60.0	56.5%	37.0%

Carbon shortfall	46.2
Cash-in-lieu contribution	£131,783

Table 3 - Regulated & unregulated CO<sub>2</sub> savings from each stage of the energy hierarchy for the proposed development