chapmanbdsp

2018 scheme energy hierarchy review

Project Name New City Court Author HW

Project No 55287

Date 17/06/2022

1. Introduction

This statement has been prepared by chapmanbdsp to support the planning appeal in respect of the 2018 Scheme for the proposed redevelopment of New City Court, 4-26 St Thomas Street. London SE1 9RS. This statement has been prepared to understand how the 2018 Scheme performs against current energy standards and policy as required below:

- A 15% reduction in regulated CO₂ emissions through energy efficiency measures alone (be lean), below those of a development compliant with Part L 2013 of the Building Regulations (The London Plan 2021).
- Major non-residential development must reduce carbon emissions on site by a minimum of 40% on 2013 Buildings Regulations (The Southwark Plan 2022)

2. Results

The design proposal for the 2018 Scheme is supported by a robust energy strategy which demonstrates a firm commitment to the London Plan and Southwark Council policies whilst refurbishing existing building stock and contributing to lowering the borough's carbon emissions from existing buildings.

With GPE's requirement that its new buildings are fossil fuel free, and with the decarbonisation of the grid, the design can be adapted to an all-electric design strategy. On that basis, if the scheme follows the GLA's energy hierarchy i.e., being 'lean, clean and green', across the whole site carbon dioxide emissions reductions at each stage of the energy hierarchy are given in the tables below.

Table 1 - Carbon dioxide emissions after each stage of the energy hierarchy.

	Carbon dioxide emissions (tCO ₂ /year)	
	Regulated	Unregulated
Part L 2013 compliant building	574.2	361
Be Lean	404.5	361
Be Clean	404.5	361
Be Green	346.8	361

Table 2 - Regulated carbon dioxide savings from each stage of the energy hierarchy.

	Regulated carbon dioxide savings	
	tCO ₂ /year	%
Be Lean Savings from demand reduction	169.7	30%
Be Clean Savings from CHP	0	0%
Be Green Savings from renewable energy	57.8	10%
Total cumulative savings	227.4	40%

The 2018 Scheme has targeted demand reduction measures, giving priority to the optimisation of the building fabric to reduce the need for heating and cooling. The design is focused on achieving a low-energy building rather than relying on carbon offsetting mechanisms, committing to the priorities set in the London Plan as well as the Southwark Plan.

The 2018 Scheme can therefore clearly demonstrate a commitment to a 40% reduction in regulated carbon emissions. Change to electric would be via a centralised energy centre and would result in no changes to external appearance or massing (there would be plant changes at roof level but these would be within the same plant enclosure). The requirement to submit a revised detailed Energy Strategy detailing the required 40% reduction in regulated carbon emissions is expected to be secured by planning condition.