252 Finchley Road
Residential Development

Sustainability & Energy Strategy
Background Summary

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1.0 SUMMARY

This report summarises a study of the sustainability and renewable energy options for the residential development in 252 Finchley Road, London.

Measures that will benefit the development in respect of CO2 emission reductions have been reviewed, in line with the London Plan.

We anticipate with all the energy saving measures proposed and the 'be lean, be clean, be green' approach the development will improve carbon emissions from Part L 2013 by 27%. This is below the 35% required.

The proposed scheme has incorporated the use of Photovoltaic (PV) electricity generation as much as practicable, without impacting the visual appearance of the building in it's sensitive setting.

The flat roof has been allocated 40m² of PV, which is the maximum possible whilst allowing access for maintenance. Supplementing this, the bike store roof has been allocated 20m² of PV, which again is the maximum possible while allowing access for maintenance.

Further PV could be added to the pitched slate roof; however, this would have a detrimental effect on the aesthetics of the building. We have therefore not to include PV outside of the flat roof.

This total of 60m² of PV will provide 12.5kW has created an average improvement of 43.6% over the project.

The building U-Values have also been improved as described within the energy and sustainability report and a lower than required air tightness is targeted, similarly defined.

Within the apartments, high efficiency boilers have been proposed, no less than 90% seasonal efficiency. A centralized plant room/energy center is considered inappropriate for a small development further inclusion of a sufficiently sized plant area would have a planning impact. Our investigations indicate no future plans for district heating in this area.

Mechanical Ventilation Heat Recovery Units (MVHR) have been proposed to serve the supply and extract ventilation to each apartment. With thermal efficiencies of 90% optimizing energy use due to ventilation..

Even though the carbon emission reduction fails to meet the 35% minimum requirement it is clear from the above and energy and sustainability report previously issued that we have explored all reasonable options and products to meet the requirement.