

# Camden Planning Application

## Installation of heating and cooling system

**F**lat 1 has been completed renovated for my parents to live in and whilst doing so a lot of work has been undertaken to make it a fully sustainable apartment to live in, that uses less energy and help support the governments position with achieving net zero by 2050.

The United Nations's scientific group "Intergovernmental Panel on Climate Change (IPCC) " is forecasting the world to be on track to reach a temperature level increase of 3 degrees. Number of extreme heat days forecasted to be above 40 in London and extreme heat periods over above 35 consecutive days will affect 70% of the UK population ( source: UK governments National risk register 2025 report). Forecasted 26 days per year of extremely hot days (source: World Resource institute).

The latest IPCC report identifies this means longer, more frequent and more intense extreme heat days. The vulnerable are at significant risk of heat-related mortality, and the Department of meteorology is forecasting this. My parents are 77 and vulnerable.

We have therefore taken action to insulate the apartment to insulate it from the cold and extreme heat. We've learnt from living in Sydney Australia where days over 40 degrees are common, the steps that need to be taken.

In an effort to reduce energy use, new insulation has been installed along with underfloor heating. The gas boiler and radiator system had reached end of life and the entire system needed replacing at the advice of experts and all gas appliances and gas removed from the dwelling.

With energy efficiency in mind we chose to install electric, which is the modern standard and future proofed as we move towards renewable sources of electricity over gas, and in line with Englands plan to phase out gas and gas boilers. We installed an electric heating and cooling system that represents the primary method of both heating and cooling the apartment. Combined with the uplift in insulation, along with passive heating from the underfloor heating and cooling from standard airflow from the new doors and existing windows, we believe this is by far the most efficient way to both heat and cool the apartment. As the UK continues to decarbonise its electricity production this will only become more sustainable, rather than less as with the old gas system.