Energy and Water Statement

Holborn Tower, High Holborn, London Borough of Camden
Ground Floor, Basement and Mezzanine, 2nd to 6th floors

1.1. This Statement is prepared on behalf of EC English London Ltd. and accompanies the planning application at the above site for:

> *The change of use of ground (including mezzanine and basement) to flexible B1/A1/A2/A3/D1 use and change of use of 2nd - 6th floor from B1 to flexible B1/D1 use.*

1.2. The purpose of this statement is to provide further detail in the provision of energy and water savings for the proposed development in order to mitigate against climate change. This statement clearly outlines the applicants commitments in terms of CO2 savings and identifies measures by which to reduce emissions.

1.3. Measures typically include both architectural and building fabric measures (passive design) and energy efficient services (active design). Introducing demand reduction features is encouraged at the earliest design stage of a development.

1.4. Given that the proposed development is to change the use of the premises from office to education and a small quantity of other uses, no passive design elements will be possible as the building fabric will not be altered. This statement sets out active design measures of demand management.

Active Design Measures

Energy Reduction Measures

Energy Saving Light-bulbs

1.5. Inefficient tungsten filament bulbs will be replaced with energy saving lightbulbs throughout the application premises wherever possible. Lightbulbs in corridors, in communal areas and in teaching areas would all be replaced wherever practical.

White Reflective Blinds to Keep Rooms Cool in the Summer and Reduce Need for Air Conditioning

1.6. The building has windows on all four elevations, and with one of the longer elevations facing almost due south, solar heating is likely to occur during sunny summer days. We propose installing white reflective blinds to keep rooms cool during these periods and reduce the need for air conditioning.

Insulating Hot Water Pipes

1.7. During the internal refit, new hot water pipes can be installed in order to carry hot water to locations at which it is needed. We propose to insulate all new hot water piping to facilitate a reduction in heat loss and energy wastage.

Refurbish Existing Secondary Glazing

1.8. Small gaps and cracks in windows and window fittings are a major source of heat and energy loss in buildings. Since the existing building has a high level of glazing, we propose that all secondary glazing is refurbished and replaced where necessary. This will considerably reduce the U-value numbers (heat loss) of the building.

Motion Detector Light Switches

1.9. Light switches in public areas, for example, in kitchens and toilets will be fitted with motion detectors. This will allow lights to switch only when people are using those areas. Lights will remain switched off at all other times and will thereby further save energy.

Computers all Set on Auto Shutdown

1.10. Computers shall form an integral part of the learning environment to supplement development. To avoid unnecessary energy consumption, all computers will be set to automatically shutdown following a period of inactivity. They will also be set to shutdown automatically overnight.

Signage in Classrooms Reminding Staff to Switch off Lights

1.11. All staff will be reminded of the importance of reducing energy consumption and lowering CO2 production. To support this drive, there will be signage in classrooms to remind staff (and students) to switch of lights and all non-essential electrical equipment when not in use. This will reduce energy consumption significantly.

Hot Water Turned Off 1 Hour Early

1.12. We propose that water heating is turned off one hour before lectures end. This will be subject to the suitability of this measure in regard to other building users. For example, if the building has the capacity to heat water on floors separately, a considerable amount of energy can be saved cumulatively across the year. In combination with well insulated tanks, this would mean little heat loss would occur and water would remain hot when needed. If this measure would not affect other building uses, it would be implemented and would contribute to overall energy saving.

<u>Water Reduction Measures</u>

Small, 6-Litre Cisterns with Dual Flush in Toilets

1.13. Toilets are to be refurbished as part of the internal refit. Businesses have been shown to reduce their water consumption by up to 30% by using small 6 litre cisterns. In addition, most modern toilets feature a dual flush option to help save water. These types of toilets give the user the choice of pressing a small button, or a large button depending on how much water is required to clear the toilet bowl. As part of the water saving initiative we propose that small cisterns with dual flush are fitted in the existing toilets.

Non-Concussive Taps in Washrooms

1.14. Self closing, non-concussive taps and showers close the flow of water automatically, reducing overall usage considerably. A running tap can quickly waste a considerable amount of water and energy, as well as cause damage by flooding. Non-concussive fittings will be installed to ensure that taps are turned off and water usage reduced.

Conclusion

1.15. The active design measures proposed as part of this application will contribute to the overall reduction of energy consumption, CO2 generation and water usage. The measures proposed here will be cumulative in their effect, and EC English limited are committed to reducing energy and water as part of their development.

1.16. Informing users of initiatives is a key factor, which is something EC English aim to undertake. This will enable the overall efficiency of the existing building to be considerably improved and will align with climate change initiatives set out by Camden and by the Mayor of London.