

**BB01 Energy use and energy saving opportunities**

Current estimated energy use and split of energy uses

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Electricity** |  |  |  |  |
| **Significant Electricity User** | **Consumption** |  | **Cost** |  |
| **[kWh]** | **[% of Billed Consumption]** | **[£]** | **[% of Billed Cost]** |
| Lighting | 6,715 | 46% | £805.82 | 46% |
| HVAC | 4,680 | 32% | £561.60 | 32% |
| ICT | 881 | 6% | £105.75 | 6% |
| Other Electrical Equipment | 2,448 | 17% | £293.76 | 17% |
| **Total (Significant Energy Users)** | **14,724** | **100%** | **£1,766.93** | 100% |

**Key energy efficiency opportunities**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Location/opportunity type** | **Current equipment** | **Current annual energy cost** | **Proposed replacement/ alternative option** | **New annual energy cost** | **Replacement cost (£ Inc VAT)** | **Estimated annual energy savings** | **Investment break even (years)** |
| Shop floor spot lights | 70w metal halide GU12 spotlights (x22) | £670 (approx..) | 12w (22w equivalent) LED spotlights[[1]](#footnote-1) | £100 (approx.) | £830 (approx.) (£37.79 per lamp) | **£570 (approx.)** | 1.5 years |
| Shop floor | Limited natural ventilation to shop rear | TBC | Improved ventilation | TBC | TBD | **£200 approx.** | TBD |
| Shop front | Floor to ceiling window glass (and new door) | TBC | Replace window glass with Low E glass. Replace awning with | TBC | TBC (significant) | **TBC** | TBC |

1. Note, the maximum brightness LED equivalents are less bright than the current metal halide bulbs (22w vs. 70w), which may mean that for some or all of the lights, the replacement will not be suitable. It is recommended to test one bulb before committing to purchase of other bulbs. It may be that they are suitable for lamps nearer the front of the shop where the natural light is brighter than at the rear of the shop. If they are not suitable, it is worth checking LED G12 developments as brighter models are becoming available. [↑](#footnote-ref-1)