

## **Appendix 2 – Considerate Lighting Charter actions.**

### **1. Manage lighting well**

#### **1.1. Turning lights off when not in use**

In the City of London Corporation buildings covered by the Considerate Lighting Charter with an evening cleaning contract the cleaning staff will be asked to turn off lighting in unoccupied areas once they have finished cleaning the area. This is not applicable for those buildings with a morning cleaning schedule but a change to nighttime cleaning could be considered during contract renewal.

In buildings that have 24-hour security personnel will be asked to turn lights off in unoccupied areas when patrolling the building.

For buildings with manual light switching a 'Switch It Off' campaign will be launched to encourage staff members to turn lights off. Typically, these campaigns are based around saving energy and have a limited impact. As this is based around the Lighting Charter requirements it could get additional 'buy in' from staff however, this would need to be monitored. If existing, suitable sub-metering is available a competitive element with floors competing to save energy could be instigated (or a 'name and shame' nighttime audit process).

#### **1.2. Installing control systems**

For the buildings being considered a number already have automated lighting controls in place. These controls will be Passive Infra-Red (PIR) controls that detect movement and turn lighting on or off accordingly, LUX detection that turns lighting off if sufficient natural lighting already exists or a combination of both. The figures given in Appendix 5 show the likely costs to retrofit these controls into buildings that do not already have them in place either through single controllers that cover an area of the building or, if the luminaires are dated and need replacing, with energy efficient LEDs with individual controls per luminaire to provide more granular control.

This type of lighting control is typical in modern office installations and so would be installed as and when building spaces are refurbished. In non-office spaces these controls might not always be appropriate for the function/use of the space but would be considered for the back of house areas.

#### **1.3. Embedding good lighting management practice**

For the City of London Corporation buildings covered by the Considerate Lighting Charter this commitment will require training employees and on-site staff (security and cleaning) to avoid overriding automated controls. The nature of staff churn in on-site roles means training would need to be refreshed regularly. This training would need to operate alongside embedding a 'Turn It Off' culture throughout the organisation to ensure that all building users work to reduce lighting operation.

### **2. Review our lighting system**

## **2.1. Carrying out an initial review**

Lighting surveys have already been undertaken in a number of the operational buildings that are being reviewed as part of the Cyclical Work Programme, Climate Action Strategy or Build Back Better programme.

For other buildings not yet upgraded a lighting survey will identify existing internal and external lighting and provide costs to replace it with modern LED fittings with controls to reduce operation or turn them off. The lighting survey will identify glare issues and will recommend luminaires with minimal light spillage outside of the intended areas whilst providing a safe, ambient, and characterful space to enhance the intended use.

Specialist Equality, Diversity and Inclusion consultants will be utilised to identify any specific requirements for users with, but not limited to, protected characteristics, intersectional experiences or cultural differences. This requirement is likely to be limited to external lighting of outside spaces as it will have already been considered for inclusion within buildings.

## **2.2. Consulting neighbouring properties**

To allow the City of London Corporation operational buildings to achieve the Lighting Charter commitments the approach to consulting neighbouring properties is being assessed. This may include using building managers to engage with their immediate neighbours to better understand external impacts of their buildings lighting alongside other channels of communication, including email and letters as appropriate. A survey template will be designed to capture responses in a structured way for comparison. Based on these conversations the building manager will provide information to these neighbours about any proposed changes to internal and external lighting and provide contact details should any changes create an unwanted impact.

## **2.3. Considering biodiversity**

To understand the impact of a buildings lighting on local biodiversity an external specialist consultant will be employed to undertake dark period site visits throughout the year to review and assess any impacts of biodiversity from a buildings lighting. Budget costs for this will be requested but are anticipated as between £30-£50k could be required to assess fully the impact on Biodiversity in relation to lighting from City of London operational buildings.

# **3. Minimise the impacts of our lighting**

## **3.1. Reducing glare and light spill for internal and external lighting**

A lighting design survey for a new lighting installation will consider, and mitigate, the impacts of glare for internal users of the building. External lighting, and the impacts of internal lighting on the surrounding external space, will be reviewed as part of a building lighting audit (2.1 Carrying out an initial review) and following feedback from neighbouring properties (2.2. Consulting neighbouring properties).

City of London Corporation buildings covered by the Considerate Lighting Charter that have blinds or curtains installed, and have nighttime cleaning regimes or on-site security, will be required that these staff members check these at a set time each evening and close if required. Additionally, we will use staff networks and COLNET to promote good practice among staff and encourage lights to be turned off where not in use and blinds closed in the evening where fitted. Those buildings without blinds, will be surveyed to assess the cost of installation quotes to purchase and install them with staff required to close them at set periods.

Existing external lighting will be assessed and where necessary replaced with luminaires that have zero upwards light leakage and installed on timers to comply with lighting curfews.

### **3.2. Procuring sustainable light fittings**

The City of London Corporation procurement team will check the market and specify that any luminaire purchased for projects within our buildings are compliant with a sustainability accreditation body that covers all aspects of the luminaire from construction, operation and recycling at its end of life.

### **3.3. Improving the performance of our lighting**

All City of London Corporate buildings that are covered by the Lighting Charter will be assessed for the performance of their lighting regarding the temperature/colour of the light provided (between 2,300K and 4,000K), the illuminance and brightness and the efficiencies to ensure that they are within the recommendations of BREEAM and/or Building regulations.

Improving the performance of our lighting will encompass the findings from reviewing our lighting systems to improve the efficiency, control, effects of glare and spill. This will fall under a project to refurbish non-compliant lighting systems generally to adhere to the lighting charter. The Operations department of City Surveyors has been asked to estimate the cost impact of this with the results shown in Appendix 5. However, it must be noted that due to the size of the estate and the potential variety in systems which may or may not comply, this estimate has necessarily been based on benchmarks and rough cost data from existing projects and therefore will have a wide range of accuracy.

The cost of improving lighting systems to comply with the charter ranges from a best case of £8.5m (where all lights can be simply retrofitted) to £13.2m (where more complex work is required to wiring and distribution). This takes into account (i.e. does not include) funds already spent and planned through Climate Action related projects to bring efficient lighting at Guildhall and Barbican, as well as upcoming funds planned on lighting in the Cyclical Works Programme, which amount to approx. £7m.