

Appendix Two

Costs from external consultants to achieve the Charter actions

Manage lighting well: Turning lights off when not in use

1. Instruct respective teams to switch lights off as part of a daily routine.

This quote was requested from the Facility Management (FM) contractors providing security and/or cleaning services to the City of London Corporation buildings to provide a benchmark cost for other owners, managers or occupiers.

City of London Corporation FM providers stated that as a signal of their continual improvement within their contract they would instruct their security staff to turn lights off, where safe and possible to do so, in the buildings within their managed contract at no additional cost.

It is recognised that changes such as this to an existing contract may only be applicable with an additional cost, or if included as a component of a retendering exercise. Specific cost will be on a building basis and so cannot be identified for this paper.

For ongoing contracts there may be a delay in implementation until existing FM contracts finish and new ones begin with this requirement added as a new performance indicator.

2. Design and produce publicity for “Switch it Off” campaign.

The City of London Corporation have a ‘Climate Champion Network’ of volunteers across the corporation to help reduce the climate impact of the City of London Corporation activities. Whilst this is unique to the City of London Corporation a number of owners, managers or occupiers of buildings may have something similar, although this might be on a floor-by-floor basis rather than across numerous buildings.

It is proposed to use the network of volunteers to distribute/install and renew a bespoke Switch it Off campaign of leaflets to encourage building users to switch lights off to comply with the Charter.

However, this is to be delivered as part of a wider behaviour change campaign that is being planned for later in the 2024/25/26 period.

3. Install sub metering of lighting circuits to enable monitoring.

At this stage the cost cannot be calculated as it is reliant on the results of the lighting survey 11a. Typically a sub-meter would cost in the region of between £150+ per meter depending on the complexities of installing, monitoring the data and the electrical load being measured.

Manage lighting well: Installing control systems.

4. Conduct lighting surveys to either install additional controls or replace lighting.

Typically, lighting supply companies will provide lighting surveys and designs 'free of charge' on the proviso that the building owner would go onto purchase their products thus indirectly paying for the survey.

Whilst this would work if the installation was going to proceed this is not the case with this project and so consultants were asked to provide quotes to complete lighting surveys that would look at controls, existing luminaires and provide independent costs to replace with luminaires that would be Charter compliant but not necessarily from one supplier.

For the seventeen buildings in scope these surveys would cost **£100k**. These costs are calculated based on building floor area with some of the larger buildings likely to take several days to survey but the smaller ones being completed in one day.

Manage lighting well: Embedding good lighting management practise

5. Mobilisation of staff, regular training sessions, embed a 'Switch if off culture'.

The City of London Corporation have a Climate Champion network of volunteers across the corporation to help reduce the climate impact of the City of London Corporation activities. Whilst this is unique to the City of London Corporation some owners, managers or occupiers of buildings will have something similar although this might be on a floor-by-floor basis rather than numerous buildings.

It is proposed to use the network of volunteers to distribute/install and renew a bespoke Switch it Off campaign of leaflets to encourage building users to switch lights off to comply with the Charter.

However, this is to be delivered as part of a wider behaviour change campaign that is being planned for later in the 2024/25/26 period.

Review our lighting system: Carry out an initial review.

6. Commission lighting survey on existing installation.

This action will be covered by 11a by the same contractor. The two actions could be considered separate as it would be possible to have good quality luminaires that provided all the required lighting installed but for it to be badly controlled e.g. a buildings reception area to be lit 24/7 when there is no receptionist and all office staff have left for the day.

However, for this stage of the project the proposed contractor will be able to consider both actions within the same audit.

For the seventeen buildings in scope these surveys would cost **£100k** (this has already been accounted for in 11a)

7. Commission lighting pollution impact report.

This survey comprises of several nighttime audits to undertake visual appraisal of the following elements of the Charter:

- lighting pollution impact,
- EDI on existing lighting,
- biodiversity impact audit.

Each of the actions will be logged onto a standardised spreadsheet comparable per building and would provide recommended actions to rectify the findings of the audit to make the building Charter compliant.

Cost of £47,600 for all three actions

Cost of £15,866 per action.

8. Commission Equality, Diversity and Inclusion (EDI) on existing lighting.

This survey is already covered in 13b.

A conversation with Oliver Sanandres, CoL Director and Head of Profession (Health & Safety) suggested that whilst EDI needs to be considered for internal lighting it is thought less of an issue with external lighting as this is unlikely to impact on any listed characteristics. It was suggested that an email address could be provided so that any individual who felt that the City of London Corporation's buildings external lighting had impacted on their listed characteristic could report this for further investigation.

Cost of £47,600 for all three actions

Cost of £15,866 per action.

Review our lighting system: Consult neighbouring properties.

9. Engage with stakeholders.

Building custodians were contacted to ask whether they already had communication with their nearest neighbours. Those that replied typically had communication 'channels' already in place with some, if not all, of their immediate neighbours and suggested that any remaining could be engaged with at little to no cost.

For the sites that did not have any previous communication it would be possible to work with colleagues in the Planning department to use their existing 'residential layer' with the CityMaps Geographical Information System (GIS) to identify the address of these neighbour to arrange a mail-out to proactively engage with them. This would be a similar approach to that already used when making notifications of Planning Permission applications.

Review our lighting system:

10. Considering biodiversity.

Surveys would be conducted to assess whether there are ecological receptors or greenspaces that would be subject to the requirements of the Charter. This will comprise of a desk-based appraisal using publicly available information in

conjunction with a site-based assessment to record both on-site and adjacent habitats (access permitting) using the UK Hab methodology.

A design note statement report presenting the above survey results advising which building complies, or does not comply, with the City of London Corporation SPD, as well as those that require more detailed ecological survey work to assess compliance.

A cost range of **£8,700 to £15,866** depending on which consultancy is used. The higher values are from multi-disciplinary consultants as part of a multiple survey offer with the lower value coming from a smaller consultancy.

Minimise the impacts of our lighting: Reducing Glare and Light Spill.

11. Instigate glare survey.

This survey would be completed at the same time as action 15 if provided by the same consultancy working on both actions during the same site survey.

It would comprise of a nighttime survey to better understand the impact of lighting from the building. This would include measurement of lighting colour temperature (CCT) and colour rendering index (CRI), measurement of illuminance (lux) on areas of sensitive receptors and adjacent the building, visual assessment of uplighting on building that are contributing to sky glow and light pollution and visual assessment of glare from lighting fixtures.

At a cost of **£26,500**

12. Install blinds and curtains.

In order to provide costs to install blinds in each of the seventeen buildings each one would need to be surveyed in depth with each external facing window measured and quoted for. This is not practical at this stage and so blind supplying contractors were invited to the Guildhall to review the windows in the North Wing and provide an indicative quote to install a simple 'dumb' blind such as those already installed, an automated blind that opened and closed according to a time clock and/or external lighting conditions and the cost of supplying a number of windows in one installation.

These numbers can then be used to better understand the order of magnitude to install blinds in buildings that currently don't have any installed.

At a cost of **£94** for a 'dumb' blind

At a cost of **£344** for a single automated blind

At a cost of **£40,924.44** to install 71 automated blinds to the entire 4th Floor, North Building, The Guildhall.

13. Close blinds.

This quote was requested from the Facility Management (FM) contractors providing security and/or cleaning services to the City of London Corporation buildings to provide a benchmark cost for other owners, managers or occupiers.

City of London Corporation FM providers stated that as a signal of their continual improvement within their contract they would instruct their security staff to close blinds, where safe and possible to do so, in the buildings within their managed contract at no additional cost.

It is recognised that changes such as this to an existing contract may only be applicable with an additional cost, or if included as a component of a retendering exercise. Specific cost will be on a building basis and so cannot be identified for this paper.

For ongoing contracts there may be a delay in implementation until existing FM contracts finish and new ones begin with this requirement added as a new requirement.

Minimise the impacts of our lighting:

14. Procuring sustainable light fittings.

The City of London Corporation have developed a Net Zero Design standard for use in their buildings to take their buildings to Net Zero. This document brings together design guide, standards and processes from multiple guides, including the Considerate Lighting Charter, to cover all aspects to achieve a Net Zero Building. The lighting section provides details of procurement processes, recommended luminaires, colour standards, lux levels etc.

15. Replace luminaires.

From September 2023 T8 and T5 fluorescent lamps were banned from being placed into the Europe market which is resulting in a limited time of existing stocks being available in Europe and the UK with the prices of these likely to rise as stock diminish. This means that as existing lamps fail building owners, occupiers and manager will need to decide whether they replace the lamps with LED replacements utilising the existing luminaire (not best practise due to the linear lighting output of LEDs compared to the 360° light output of fluorescents) or replace the entire luminaire with new LED versions that should include in controls to reduce operation.

As such, this charter action is already happening across building portfolios as lamps fail. Building manager, owners and occupiers should decide whether their strategy for replacement is to replace every luminaire at an agreed time (for instance at 20% failure rate) or replace as each lamp fails. As this will be considered a maintenance cost this is within the normal building running costs and so no cost is provided for this action.