

Diocese of London



Shrinking the Footprint LIGHTING IN CHURCHES

This guidance note is an introduction to how a church's lighting can be run efficiently. For fuller information and guidance, visit the Diocese's web page on Generic Building Solutions, at www.london.anglican.org/Shrinking-the-Footprint-Generic-Building-Solutions.

Lighting consumes 10-15% of domestic energy, and accounts for most of a church's electricity. Church buildings like any others require artificial lighting in order to function effectively. But there are several simple steps you can take to significantly reduce both your energy consumption and your bills.

Changing the lightbulbs

An easy thing you can do is change your lighting fittings, using the various ways outlined below:

- Replace your old-fashioned incandescent light bulbs with low energy light bulbs.
- Low energy light bulbs cost more money initially, but consume less electricity because less is wasted as heat. They also have a much longer life (up to 15,000 hours) and can save £100 over the lifetime of a 100W bulb. A long lasting bulb is also useful where inaccessible light fixtures in church buildings are concerned.
- As a general rule, to choose a bulb, take the wattage of the current old-fashioned bulb and divide by five. Low energy bulbs are now readily available in the shops and come in various sizes and shapes designed to fit the standard bayonet and screw fittings. See the page from which this note was downloaded for information on how to source and select light bulbs.
- Use dimmable low energy light bulbs, where they are required.
- Replace failing fluorescent lighting tubes with tri-phosphor coated ones. These give more natural, brighter light and save up to 30% on bills. If replacing fluorescent tube lighting, opt for the smallest diameter on lighting tubes as they use less energy.
- Replace tungsten halogen display and security lights with high pressure sodium or metal halide lamps to reduce energy use.

Housekeeping tips

Simple housekeeping can go a long way so why not consider the following tips?

- Do not leave lights on in an area of the building which is not in use; put up notices to remind people to turn lights off.
- Consider installing movement sensors or timer switches in entrances and toilets to reduce lights being left on unnecessarily.
- If you have a dimmer system, why not turn the lights down?
- Remember to regularly clean your light bulbs and fittings – as well as your windows and skylights – to ensure that you allow as much natural light in as possible.

New lighting

If you intend to install a new internal lighting system remember to make it as environmentally friendly as possible – which basically means saving energy and carbon emissions.

You will need to seek professional advice and gain permission for such work. Please see [Generic Building Solutions](#) and [Making Changes and Faculties](#) for further information.

External floodlighting

External floodlighting of church buildings has become popular over recent years. However, such schemes can consume significant amounts of energy, contribute to sky glow and be expensive to run.

It is important that parishes have a serious debate, involving their congregation and the local community, about the ecological impact of implementing such schemes. There may be greater justification for a scheme involving external lighting for security reasons rather than just for visual enhancement.

Floodlighting requires a faculty and may well require planning permission. As part of any such proposal for faculty it is important that a Statement of Need is submitted, justifying the scheme in terms of furthering the mission and ministry of the church. See [Making Changes and Faculties](#).

If it is resolved to proceed with a floodlighting scheme, low energy light fittings should be used and an appropriate management system for the lighting should be established. If the reason for the scheme is visual enhancement, rather than floodlighting the exterior of a church every evening in the year, why not only light it for limited hours or on special occasions? Selective floodlighting will probably have a greater impact, as well as being better for the environment and saving on energy bills.

Sources

For Creed and Creation: A simple guidebook for running a greener church, Gillian Straine & Nathan Oxley, Aldgate Press, 2007

www.shrinkingthefootprint.cofe.anglican.org

www.ecocongregation.org/englandwales/index.html

www.christian-ecology.org.uk/noah/index.htm

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