

LIGHTING



BUILDINGS

ECO  **CHURCH**
AN A ROCHA UK PROJECT



ALLCHURCHES TRUST LIMITED®
OWNERS OF ECCLESIASTICAL INSURANCE GROUP

www.ecochurch.arocha.org.uk



BUILDINGS

Lighting

WHY?

The natural light of the sun is God's provision to us as the foundation of all life through photosynthesis and through providing warmth to live by. God created the rhythm of night and day to give us rest, but at some times of year we prefer more day and less night!

Artificial light running on a national electricity grid has only been around for 100 years and makes modern life possible, extending the hours we can be active and helping us feel safe. Light creates atmosphere, shapes our mood, affects our emotions. We now know too much of it, especially at night, disrupts not only our sleep but also many of the world's ecosystems (and wastes resources). How do we as churches get the balance right? <https://www.darksky.org/light-pollution/wildlife/>

HOW?

There are some quick wins, such as being sure to turn lighting off or down. Switching to LEDs is usually a cost-effective and carbon-saving decision. Sometimes this is as simple as changing the light bulbs we choose; sometimes a larger system change is needed.

<https://energysavingtrust.org.uk/getting-best-out-your-led-lighting/>

If you are considering a new lighting system, take professional advice, including, if you are a Church of England or Anglican Church in Wales, speaking with your architect/DAC. The basic data to consider with your advisor includes:

- Age of existing system
- Type of existing lamp and its expected life
- Cost of current and new lamps
- Cost of any capital works to change
- Light levels required
- Running hours



BUILDINGS

Lighting

Alongside goals to reduce energy use, carbon footprint, running costs and maintenance, consider if the current lighting is fit for purpose:

- Is there the right amount of light in the right places?
- Do you want to add in an ability to zone or dim parts of the building?
- Would you like a better ambience or to highlight specific architectural features?
- Is the electrical infrastructure up to date and suitable for the desired lighting?
- Will the activities in the building change in the future? What impact might that have on lighting needs?

Evaluate the physical, financial and carbon benefits of changes compared to the capital cost of the work, the waste implied in scrapping the existing system, the relative running costs of old and new, and, where relevant, heritage requirements: <https://www.cse.org.uk/advice/advice-and-support/lighting>

FLOODLIGHTING

Do you have a floodlighting policy? This can be a tricky issue. Many churches wish to floodlight to show that the church is a living community or to highlight architectural features. There is growing concern about the impact of night-time lighting on animal and human health. The International Dark Sky Association tells you about the impact of light pollution and considers how to provide dark-sky-friendly outdoor lighting: <https://www.darksky.org/our-work/lighting/lighting-for-citizens/lighting-basics/>

The Diocese of Exeter has issued this helpful floodlighting guidance note: <https://exeter.anglican.org/wp-content/uploads/2018/09/Floodlighting.pdf>

IMPACT OF LIGHT ON THE ENVIRONMENT

Raise the awareness of how lighting affects nature and our planet by joining with 'Earth Hour'. This is an hour a year when you turn off all lights. <https://www.earthhour.org/>



BUILDINGS

Lighting

LONGER READS & OTHER RESOURCES

The Church in Wales has produced a detailed guide of how to assess your lighting requirements and make possible improvements: https://churchinwales.contentfiles.net/media/documents/Property_Dept_-_Lighting_in_Churches_Guidance.pdf

The Church of England has a series of Net Zero Carbon Webinars including one on lighting which discusses these issues noted in more depth as well as giving some helpful case studies: https://www.youtube.com/watch?v=n9u_nK4f_ck 'starts at 4:16'

CASE STUDIES

http://www.medlockhead.co.uk/barnabas/eco-church_files/Lighting%20conversion.pdf

<http://www.cloudesley.org.uk/media/1269/case-study-st-andrews-whitehall-park-lighting-and-wiring.pdf>

STRATEGIC DEVELOPMENT GOALS

Taking action on this topic will contribute to these UN Strategic Development Goals:

