

YR EGLWYS
YNG NGHYMRU



THE CHURCH
IN WALES

**Corff Cynrychiolwyr Yr Eglwys yng Nghymru
The Representative Body of The Church in Wales**

Guidance Note to help Churches Develop a Heating Strategy, Towards Net Zero 2023

Date: 08/11/23
Version: 1.1

Guidance Note to help Churches Develop a Heating Strategy, Towards Net Zero 2023

This guidance note is intended to help Church Committees and MA/LMA Trustees to become informed about their carbon impact, and the steps they can take to develop a heating strategy, as we work towards the net zero target in 2030. Further support and guidance is available from your Diocesan Churches Inspector, Parsonages Inspector, and from the Climate Change Champion and Ecclesiastical Property Team at the RB

Step 1 – sign up to Eco Church and register to gain access to the Energy Footprint Tool

The Church in Wales has partnered with Arocha UK to establish the Eco Church programme, and there are helpful resources available through their website, which can be accessed via the Church in Wales Climate Change area on the website here <https://www.churchinwales.org.uk/en/about-us/our-campaigns/environment/>.

The starting point is to understand what you are currently doing, what your carbon footprint is, and what your plans are for using the building.

The Practical Path to Net Zero Carbon for our Churches resource is very simple to use and can be accessed here [https://churchinwales.contentfiles.net/media/documents/2209 -
A practical path to net zero carbon.pdf](https://churchinwales.contentfiles.net/media/documents/2209-_A_practical_path_to_net_zero_carbon.pdf)

The Eco Church questionnaire is also a useful way to assess where you are on your Eco journey currently <https://ecochurch.arocha.org.uk/wp-content/uploads/2022/09/Eco-Church-Survey-printable-copy-September-2022.pdf>. You can sign up here <https://app.ecochurch.org/user/login?destination=/signup>.

Registering for the Energy Footprint Tool is the essential starting point and can be done here <https://eft-wales.parishreturns.info/>. **Your Diocesan Office will be able to give you your password to enable you to activate your unique account.** Every Church is being asked to register and to complete this as part of your annual returns.

The Energy Footprint Tool will give you a figure to indicate what your estimated annual net carbon emissions are.

Step 2.1 – for Churches where the net CO2 emissions are less than 3 tonnes pa.

For smaller Churches, and those that have very low CO2 emissions of around 3 tonnes pa or less, the immediate thing that you can do is register with a suitable and reputable **Carbon Offset scheme** such as that operated by **Climate Stewards** www.climatestewards.org

For around £100pa (as at June 2023) you can make a payment that invests in initiatives that help to offset the carbon that you currently produce.

Alongside this your other opportunities to reduce carbon emissions and energy use are simple things such as:

1. Switch to a 100% renewable energy tariff for your electricity consumption.
2. Review your most recent QI report and instigate simple building repairs – clean and maintain gutters, repair missing or broken roof slates, repair cracked or draughty windows, and service your heating plant.
3. Renew light bulbs with low energy LED bulbs.
4. Make a plan for the renewal of plant and equipment before it actually fails. Renewal should be with simple, low-cost, electrical heating systems such as under-pew heaters, pew runner heaters, heating coronas, or modern radiant heaters. The Church of England has a number of helpful case studies which can be viewed here https://www.churchofengland.org/about/environment-and-climate-change/towards-net-zero-carbon-case-studies?search=&sort_bef_combine=created_DESC

Step 2.2 – for Churches with annual Carbon Emissions of between 3 and 10 tonnes pa

As above, your immediate solution is to consider investing in a carbon offset scheme whilst you consider other options and put other plans in place. This is likely to cost around £300pa (June 2023).

Next steps are **as above in step 2.1** but also think about

1. Energy efficiency – well maintained boilers, and well maintained and dry buildings, are more energy efficient and every unit of energy used has more effect. Not only does this save carbon, it also saves money in operation.
2. Energy reduction – better controls, such as time switches, controllable heating zones, and low energy lighting can further reduce the amount of energy that you use.
3. Renewal of plant and equipment – plan for end-of-life renewal before it becomes a crisis! Between now and 2030 this will mean some form of **electric** heating system.

If you intend to use your building for worship only, pewed seating has been shown to be more easily heated than individual flexible seating. For buildings largely filled with pews, a system based on electric underpew heaters or heated pew runners,

supplemented with other local heaters such as clay-core, radiant, or overhead corona light heaters is the optimal solution.

If you have a flexible space without pews, other electric options are available and proven to work well, including electric radiators, corona heaters, and radiant units and further advice should be sought from your Diocesan Churches Inspector at your Diocesan Office. The Church of England also has some helpful case studies which can be viewed here https://www.churchofengland.org/about/environment-and-climate-change/towards-net-zero-carbon-case-studies?search=&sort_bef_combine=created_DESC

It might be that incorporating the installation of a solar array and battery storage system could help offset some of your running costs, but careful consideration must be given not only to the impact on the fabric of historic buildings, but also to the viability of investment in terms of energy generated versus capital cost before committing to the investment. You should seek advice from your DAC Secretary and Diocesan Churches Inspector (or equivalent) prior to committing time and money to investigating these options.

Step 2.3 – for Churches with annual Carbon Emissions of more than 10 tonnes pa

This is likely to be a larger Church and/or one that is in use during the whole week for various activities.

As above, your immediate solution is to consider investing in a carbon offset scheme whilst you consider other options and put other plans in place. This is likely to cost upwards of £500pa (June 2023).

Next steps are **as above in step 2.1** but also think about

1. Energy efficiency – well maintained boilers, and well maintained and dry buildings, are more energy efficient and every unit of energy used has more effect. Not only does this save carbon, it also saves money in operation.
2. Energy reduction – better controls, such as time switches, controllable heating zones, and low energy lighting can further reduce the amount of energy that you use.
3. Make a plan for plant and equipment replacement and renewal prior to that equipment failing! Prior to planning capital investment in new plant and equipment, an **Energy Audit** should be commissioned to help to inform the decision-making process. The RB CinW has agreed to pay for Energy Audits as appropriate. Support and further advice is available from your Diocesan Church Inspectors, the RB Climate Change Champion and from the RB Ecclesiastical Property Team.

Funding help

Where it is deemed that an externally produced Energy Audit would be appropriate and helpful, the RB CinW has agreed to fund these. Please liaise with your Diocesan Office and the RB Ecclesiastical Property Team accordingly.

The criterion for the Diocese-administered Improvement Grants available to Churches have been changed and the focus is now on assisting Churches to deliver projects that will help reduce energy use and carbon emissions, and increase energy efficiency, as well as enhancing bio-diversity in Churchyards and responding to climate change. Please speak to your Diocesan Office or the RB CinW Ecclesiastical Property Team.

Alex Glanville & Michael Plane

September 2023