

NET ZERO CARBON EMISSIONS BY 2030 – DIOCESAN PROGRESS SO FAR

1. INTRODUCTION

In February 2020, General Synod approved a motion calling on all parts of the Church of England to work towards net zero carbon emissions by 2030, as follows:

That this Synod, recognising that the global climate emergency is a crisis for God's creation, and a fundamental injustice, and following the call of the Anglican Communion in ACC Resolutions A17.05 and A17.06:

- (a) Call upon all parts of the Church of England, including parishes, BMOs, education institutions, dioceses, cathedrals and the NCIs to work to achieve year-on-year reductions in emissions and urgently examine what would be required to reach net zero emissions by 2030 in order that a plan of action can be drawn up to achieve that target;*
- (b) Request reports on progress from the Environment Working Group and the NCIs every 3 years beginning 2022 and;*
- (c) Call on each Diocesan Synod and Cathedral Chapter to address progress towards net zero emissions every 3 years.*

This progress report addresses requirement (c) of the motion.

2. DIOCESAN RESPONSE

2.1 **Net Zero Steering Group**

At their meeting on 7 July 2020, Bishop's Council noted the target of net zero emissions as outlined in the General Synod motion, approved the establishment of the Net Zero Steering Group (NZSG) and appointed the initial members (paper BC 20/49 refers).

The Net Zero Steering Group is chaired by the Diocesan Environment Officer and includes:

- Representative from the Bishop's Core Staff Team
- Representatives from various DBF teams (Church Buildings, Communications, Property)
- Diocesan Environment Officer (DEO), who is also a member of the DAC
- Diocesan Director of Education (DDE)
- Representative from the Diocesan Multi Academy Trust (DMAT)
- Representative from Bishop's House
- Representative from the DBF's glebe agents (Godfrey-Payton)

It has so far not been possible to identify a representative from the Cathedral who will join the NZSG, due to capacity issues.

The NZSG meets four times per year and is tasked with overseeing and encouraging progress towards net zero in their respective areas, as well as reporting on progress across the diocese.

2.2 **Pathway to Net Zero – Diocesan Strategy**

At the 7 July 2021 meeting, Bishop's Council approved the strategy document *Pathway to Net Zero, A Strategy for Coventry Diocese* and recommended the document to the DBE and Cathedral Chapter as key stakeholders (paper BC 21/51 refers).

The key aims of this strategy are to:

- Demonstrate the 'whole diocese' nature of the task and the response that is needed.

- Provide a high-level roadmap outlining where we are, where we need to get to, and how we propose to get there.
- Provide a framework of principles and priorities against which to review more detailed plans and proposals relating to specific net zero projects. These principles and priorities will also be of use in making budgetary and financial decisions.

The strategy includes key principles which will guide the diocesan response to the challenge of working towards net zero. These are:

1. We will underpin all our efforts by sustained prayer.
2. We will seek to ensure that sustainability becomes an embedded consideration in decision-making at all levels and for all activities throughout the diocese. We will move away from the perspective of environmental issues being the work of any particular group, towards an understanding that sustainability is a requirement for all diocesan life.
3. Our primary aim is to reduce emissions to as low a level as reasonably practicable.
4. The offsetting of any remaining emissions will be a last resort.
5. Reductions will be achieved via initially working on management solutions (ie. managing existing systems and processes better).
6. We will invest in technology where management alone will not be sufficient to achieve our net zero targets.
7. We will be mindful of technological advances, scientific understanding and changes to government policy at all stages, seeking to ensure that the timing and nature of any technological investment is best placed to take advantage of these.
8. We will be mindful of those activities which will be in-scope after 2030, and seek to include them earlier wherever this is feasible.
9. We will work in partnership with others wherever possible, seeking to be a catalyst for wider work in our communities.
10. We will seek to increase awareness and engagement with these issues throughout our diocese, ensuring that people are made aware of the reasoning behind what we are trying to achieve, as well as the actions that we are asking people to take.

3. SCOPE

The definition of Net Zero¹ in use has been agreed by the Environmental Working Group, on behalf of the whole Church. The definition includes areas/activities that are within the current scope, and also activities that will be included after 2030. The diocese will need to be mindful of these next stage aspects when considering how to meet net zero requirements. The diocese needs to establish the actions needed to measure, reduce and mitigate the carbon emitted from the following buildings/activities:

2030 Net Zero – currently in scope
1. The energy use of our buildings • Gas, oil or other fuel use • Electricity purchased (no matter the source it is purchased from – renewable electricity purchased is accounted for later) • For the following buildings; • Churches, including church halls and ancillary buildings. • Cathedrals

¹ <https://www.churchofengland.org/about/environment-and-climate-change>

- Schools where the DBE has a significant degree of influence (generally Voluntary Aided and Diocesan Academy Trusts) - Clergy housing, bishop's housing and other staff accommodation wholly owned by the Church (based on EPC grades and average reasonable use) - Church bodies' offices including diocesan offices and bishops' offices - Other diocesan property including common parts of tenanted properties (this does not include tenants' energy use) - Including the "well to tank" and "transmission and distribution" factors involved in getting energy to the building. - Electricity used to charge electric vehicles will be included within the above. - All work-related travel – eg, the petrol/diesel used by archdeacons on visitations, DAC members on visits to discuss projects, reimbursable clergy and ordinand travel, reimbursable staff and volunteer travel, reimbursable train journeys, staff and clergy making reimbursable flights for work/ministry, coaches hired for school trips, etc. - From this, and on the understanding that real reductions in energy use have been made, the following can be removed: - Excess energy generated on site (eg. from solar PV) and exported to the grid 100% renewable electricity purchased - Green gas - Other reliable offsetting schemes
<i>Net Zero after 2030 – the next phase of work</i> - All the emissions from major building projects. - Emissions generated from the farming/management of Church land (including church yards and glebe land), less emissions sequestered through farming/management such as tree planting, soil improvement and other nature-based solutions. - All the emissions from the procurement of any items we buy (eg. pews for churches, paper and printing for offices, new cars for bishops, catering for events). - Upstream and downstream emissions from water and drainage. - Downstream emissions from waste disposal. - Emissions from building contractors. - Carbon generated from use of emails and the internet in work-based contexts. - Diocesan investments, if they are a material amount. - Air-conditioning gases.

The scope will next be reviewed by the EWG [Environment Working Group] in 2022. There is potential to bring items 4 and 5 into the pre-2030 scope, depending on the outcome of consultation and the development of feasible measurement methodologies.

4. DIOCESAN CARBON FOOTPRINT

4.1 Challenges of Data Measurement and Collection

Establishing a reliable baseline of current emissions is one of the key actions given to the NZSG. This in itself is a huge task, covering as it does various different stakeholders and legal entities under the umbrella of 'Coventry Diocese'. Data is required for churches and associated buildings, for schools, for clergy housing, for staff and volunteer travel, for glebe land and properties and for diocesan and episcopal offices. Some of this data currently exists in some form – eg. DEC (Display Energy Certificate) data for schools, consumption data for offices, parish data via energy audits and the Energy Footprint Tool. Where data does exist it is usually only partial. For some key areas there is currently only minimal data, in particular for clergy housing, where not all properties have a recent EPC (Energy Performance Certificate).

4.2 National Reporting Tools

The Church of England Research and Statistics Team have developed the Energy Footprint Tool (EFT) as part of the online Parish Returns system. Parishes use the EFT to enter details of their annual energy use. Data is then

provided to dioceses. The system has been in use since 2020 and work is being done across the diocese to increase submission rates and provide assistance where required.

Work is also underway on further national tools for submission of travel and housing data. These are currently in the development stages.

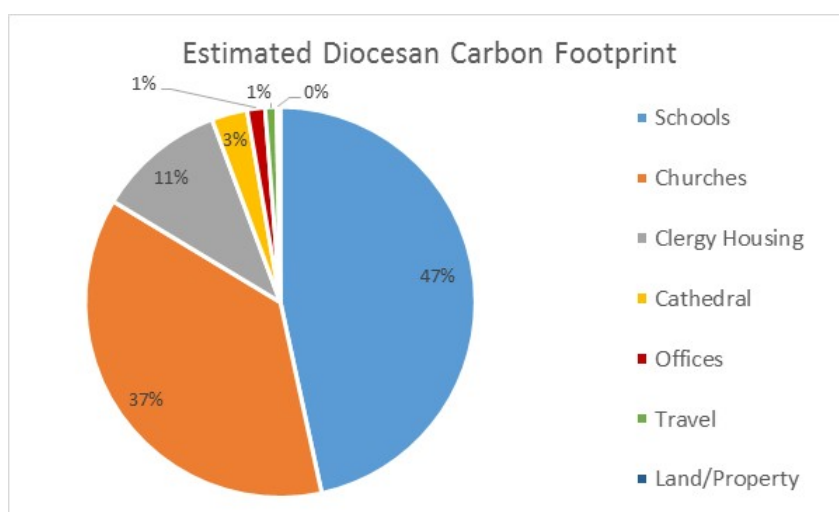
4.3 Current Carbon Footprint

A baseline carbon footprint has been put together using the available data and also estimates, where data is not presently available. This data covers a number of years, mostly 2019 and 2020, as it is recognised that the particular restrictions and conditions in place for much of 2020 mean that emission levels were anomalous. It is thought likely that emissions could increase from 2020 to 2021 as church buildings reopen and more travel takes place. Some data (particularly DPC, EPC and energy audits) is from earlier years, as these surveys are not carried out annually.

Overall, this data gives a current diocesan carbon footprint of around **6751 tonnes CO₂e per year**.

Area / Activity	Tonnes CO ₂ e/year	%	Comments
Schools	3146	47%	Data taken from Display Energy Certificates
Churches	2500	37%	Extrapolated from 2019 Energy Footprint Tool (39% submission) and Green Journey energy audits
Clergy housing	720	11%	Estimated based on UK average household data
Cathedral	200	3%	Estimated based on 2012 CoFE baseline survey
Offices	100	1%	Estimated based on Hill Top data
Travel	65	1%	Estimated based on expense claims and number of meetings
Land/property	20	0%	Estimated, based on the one property currently in-scope
Total	6751		

Further details of how these figures were obtained are outlined in the sections below.



4.4 Limitations of Offsetting

At the present price of £20 per tonne, our current carbon emissions would cost over £135,000 to offset each year.

Our agreed priorities confirm that offsetting should be a last resort, when all other attempts to reduce and minimise emissions have been exhausted. Offsetting does not prevent harmful emissions, and there can be

considerable doubt around the efficiency of many of the schemes in operation. Offsetting can also lead to a mental outsourcing of the problem, meaning individuals and organisations can be unwilling to engage in the behavioural changes needed to bring about meaningful improvements. In addition, offsetting raises questions about climate justice - it can be far cheaper to establish offsetting schemes in poorer countries, which can have further consequences on the land rights of already persecuted groups and also on biodiversity.

The diocese will focus efforts on reducing and minimising emissions wherever possible. Where offsetting is required this will be carefully researched to ensure it is both strategic and accountable.

5. IN-SCOPE FOCUS AREAS

A list of priorities and next steps has been identified for each of the in-scope focus areas. These are listed in the *Pathway to Net Zero* diocesan strategy document.

5.1 Schools - approx. 47% of diocesan carbon footprint

Responsible for decision-making & investment: DBE, DMAT, Academy Trusts

Data comes from: Display Energy Certificates

39 schools have been identified by the DBE as within scope. Of these, 19 are in the Coventry Diocesan Multi-Academy Trust (DMAT) which is a Net Zero Beacon Trust, and seven are currently in other Academy Trusts. Display Energy Certificate (DEC) data for these schools shows gross annual carbon emissions of approximately 3100 tonnes, of which around half comes from electricity use. It is not known at this point how much use is made of renewable energy within these schools.

Whilst making up the largest proportion of the diocesan carbon footprint, it must be stressed that the DBE, DMAT and Academy Trusts have only limited influence over individual schools. Many schools will require additional government funding to undertake the necessary work to meet net zero.

Key progress: The DMAT have secured £185k of SALIX funding for LED lighting at two schools (this work has been completed). An application for £37k to fund the drafting of the decarbonisation strategy across the 19 DMAT schools was not successful.

5.2 Churches – approx. 37% of diocesan carbon footprint

Responsible for decision-making & investment: PCCs

Data comes from: Energy Footprint Tool (EFT) returns, Green Journey audits

There are 244 churches within the diocese, 83% of which are listed. 50% of churches engaged with the online Energy Footprint Tool (EFT) for their 2019 energy consumption, with 39% submitting their data. Early results from the 2020 submissions suggest a similar rate of data entry.

The 2019² national EFT report shows an average carbon footprint for our diocese of 9.76 tonnes CO₂ per church, with an estimated total gross footprint for the diocese of 2600 tonnes. The total estimated net footprint is 2500 tonnes. Data from the 69 completed Green Journey energy audits is in line with this.

Further work will now be focused on churches who have not so far engaged with either the EFT or the Green Journey audits. The NZSG are looking at what support and guidance could be provided to encourage those churches who have not yet engaged with either tool.

Key progress: the free energy audits provided by Green Journey have been rolled out across the diocese, following a successful pilot in Rugby deanery. Parishes have been encouraged to submit their energy data via

² 2020 report not yet available from the Research and Statistics Team.

the online EFT. The Quinquennial checklist has been revised to include the EFT checklist, following a vote in favour at the November 2020 Diocesan Synod meeting.

A stage 1 feasibility study has been carried out by IPV Flexgen, looking at the potential for renewable energy generation across church buildings and glebe land and properties. The Church Buildings Team are now liaising with interested parishes about a potential bid for a Rural Community Energy Fund grant, to undertake more detailed feasibility studies. This stage is being focused on those parishes which were shown to have a high potential during the initial stage 1 study.

5.3 Clergy Housing – approx. 11% of diocesan carbon footprint

Responsible for decision-making & investment: DBF

Data comes from: estimates based on average UK household energy use

The DBF is responsible for around 160 clergy houses. Energy use within those houses is the responsibility of the incumbent, including the selection of energy supplier and tariff. No current data on energy consumption or emissions is available. Taking the UK average carbon emissions of around 4.5³ tonnes per year, the DBF housing stock could be emitting in the region of 720 tonnes CO₂e/year. Decarbonising these properties will be a huge undertaking for the DBF – based on current technologies such as heat pumps, photovoltaic cells, insulation, etc. the cost per vicarage could be in the region of £40-50k. Including DBF staffing/administrative costs/management overheads, this could be an estimated cost of around £8.5million. Another consideration is the difficulty in securing contractors and building materials, which can also increase costs. Technological advances and increases in production levels may reduce some of these costs over time, but it is clear that the DBF is facing a very large outlay in order to work to the 2030 target.

Key progress: funding has been agreed in the 2022 budget to carry out EPCs across the housing portfolio. This will help give a much clearer idea of the current level of emissions, as well as providing recommendations and actions for work needed to reduce this. Permission has been given for two EV charging points to be installed in vicarages (current subsidies are only available to the householder (not the DBF) and only once cars have been purchased/ordered).

5.4 Cathedral – approx. 3% of diocesan carbon footprint

Responsible for decision-making & investment: Cathedral Chapter

Data comes from: estimate based on 2012 Church of England study

There is no data currently available for energy consumption within the Cathedral, or subsequent emissions. A representative has not yet been identified to join the NZSG due to staff being furloughed during the pandemic and the resulting lack of capacity. The 2012 Church of England baseline study estimated emissions from a 'medium Cathedral' at around 200 tonnes CO₂e per year and this figure has been used within the diocesan carbon footprint.

5.5 Diocesan and Episcopal Offices – approx. 1% of diocesan carbon footprint

Responsible for decision-making & investment: DBF, DBE, Cathedral Chapter, Church Commissioners

Data comes from: diocesan office meter readings, estimates

This includes Hill Top (Diocesan office), Youell House (Cathedral office), the DBE offices in Rugby and Warwick House. Hill Top has a footprint of around 26 tonnes CO₂e per year. Emissions data has not yet been collected for the other offices and an estimate is used here.

³ Based on [CCC](#) figures of 8.1 tonnes CO₂ annual household consumption, 54% of which comes from gas, electricity and waste. The remaining 46% of the annual household emissions come from travel.

The Church Commissioners (specifically the Bishops and Cathedrals Department) have oversight of the living accommodation and office areas of Bishop's House. Work is being done with external consultants to undertake surveys in order to determine the actions required to meet the net zero target. Actions and priorities will be decided by the See House Operations Team.

Key progress: 100% renewable electricity in use within the diocesan office (Hill Top) by October 2021, gas use offset from October 2020.

5.6 Travel - approx. 1% of diocesan carbon footprint

Responsible for decision-making & investment: DBF, DBE, PCCs, Cathedral Chapter, Church Commissioners

Data comes from: estimates

This includes reimbursable travel undertaken by DBF, DBE and Cathedral staff, as well as the Bishops and their staff, and clergy and ordinands. It does not include travel to and from an employee's usual place of work. It also includes reimbursable volunteer travel such as members travelling to committee meetings.

Around 49,000 miles were reimbursed by the DBF in 2019 (16,115 in 2020 – reflecting the impact of lockdown). We do not currently have a breakdown of this data by car size or fuel type. Estimates for in-scope volunteer travel have been based on the number of committee meetings per year (over 80). Estimates have also been used for flights, train travel and reimbursable clergy travel. There is no data available from other dioceses to benchmark our estimate against at this time.

Key progress: a DBF Sustainable Travel Policy has been drafted and is currently going through the approval process. This mainly relates to employee and applicable volunteer travel (reimbursable by the DBF) but it is hoped that other bodies such as PCCs could look to adopt the principles within the policy. The expense claim form has been amended to allow capture of vehicle size and fuel type. The committee-sign in sheet has also been revised to capture travel details. These changes allow for greater accuracy of emissions data collection. The data will be collected from autumn 2021 onwards as we return to more in-person meetings and travel.

5.7 Glebe land and Other Diocesan Properties – *within the current scope there is no material impact on the diocesan carbon footprint. This will increase once in-scope.*

Responsible for decision-making & investment: DBF

Data comes from: Godfrey-Payton

The pre-2030 definition does not include tenants' energy use, or emissions generated from the farming/management of church and glebe land. The diocese's Glebe agents, Godfrey-Payton, have reviewed our portfolio and identified just one property that is currently in-scope. This is the common part of a tenanted area (entrance hall and stairway) and energy use comprises lighting only.

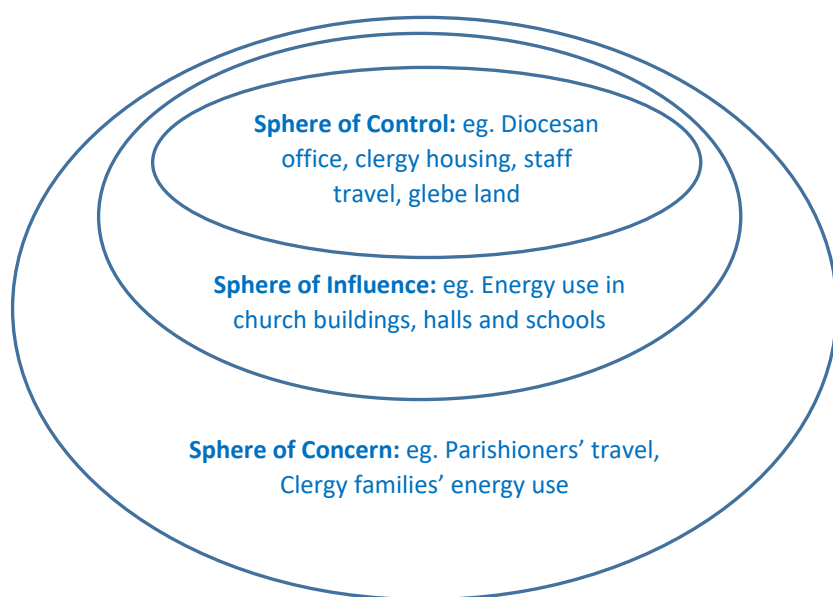
Post 2030, land will play a much bigger part in our footprint and will require further resources and focus in order to reduce emissions. It should be noted that the potential inclusion of emissions from land prior to 2030 will be reviewed again by the EWG in 2022. A close eye will need to be kept on the outcome of this review.

Key progress: Several speculative approaches have been received from developers who are interested in exploring energy generation and storage schemes on glebe land and properties. The Glebe Committee is preparing a strategy to ensure that these are assessed in an intentional manner. As part of this, a number of feasibility studies have been undertaken. The results of these are being reviewed. The outcome of the Archbishop's Commission *Coming Home* report is also being closely reviewed, to establish if there are principles within the report which can be applied to the future use of glebe land in a sustainable manner.

6. COMMUNICATION, EDUCATION AND ENGAGEMENT

Underpinning all of this is the need for communication, education and engagement across the diocese. There needs to be a focus on increasing awareness of the reasons that actions are required, as well as what needs to be done – the *why*, as well as the *how*. It is recognised that a better understanding of the impact that climate change is already having (both in other countries and closer to home) will help to embed a sense of urgency and ownership of what needs to happen within the diocese.

A key challenge facing the NZSG has been to balance the ideas of control and influence over the actions that will be needed to reduce emissions. Very little of the in-scope areas come under the direct control of the DBF or DBE. Far more lies within their spheres of influence and/or concern.



The differing spheres give an indication of what can be directly controlled, and the much greater area where the diocese (via the DBF) has only influence or concern.

Communication and building engagement will be vital to create the lasting behavioural changes required to meet our net zero target across the whole diocese.

Much work is already being done by the Diocesan Environment Group (DEG) and by various committed local individuals and churches. This grassroots action can be built upon to further spread awareness.

Key progress: the 'Creation Care' BCDM module has been updated and an additional leader has been found for the course, increasing the capacity to offer this across the diocese. DEG information and guidance has been transferred to the new diocesan website and is kept up to date. Details of initiatives such as Climate Sunday, events surrounding COP26, the Count on Nature and the national net zero webinars etc. are circulated via the website, social media and other networks. Members of the DEG are part of the Rugby Green Christian group.

As of April 2021 there are 62 registered Eco Churches across the diocese, with the number of awards steadily increasing. A mentoring scheme is being developed to help share advice and resources between parishes.

7. GOVERNANCE

Work is underway across several DBF functions to ensure that our governance structures and procedures reflect our net zero ambition. This includes an evaluation of grant application criteria to ensure that environmental impact is taken into account as part of the application process. As we return to more in-person meetings, consideration is also being given as to how best to balance the need to build relationships with the need to minimise the environmental impact of meetings/conferences/training. This is being looked at in conjunction with the development of the Sustainable Travel Policy.

8. 2030 AND BEYOND

Thought is also being given to those areas that will come into scope after 2030. This widening scope will require changes in behaviour relating to:

- Building projects
- Land use
- Waste
- Procurement and consumables
- Use of email and the internet
- Contractors
- Investments, etc.

Actions are being taken to help towards this, such as putting principles in place around diocesan committee meetings eg. default electronic meeting papers, moving away from disposable plates/cups (subject to covid restrictions), choice of lower-impact catering options, etc. The research being done by the Glebe Committee around potential energy generation schemes is also seeking to include post-2030 considerations in current thinking and planning.

9. REPORTING AND ACCOUNTABILITY

Feedback from the NZSG is shared with the Bishop's Core Staff Team, through the presence on the steering group of the Archdeacon Missioner. The NZSG also regularly liaises with other groups such as the DEG and provides feedback and reports for Bishop's Council.

The next full progress report for Diocesan Synod is scheduled for November 2024, in line with the three-yearly requirement set out in the General Synod motion and the NZSG terms of reference.

*Net Zero Steering Group
October 2021*