THE NET ZERO CARBON FRAMEWORK OF THE CHURCH IN WALES Progressing our net zero ambition



Mindful that we have been called to take care of God's creation, first, let us acknowledge with thanks all that we have been Divinely given, and prayerful reflect on the impact of our activities on our planet and on how with God's guidance we can faithfully sustain all of creation:

Thank you for the wonders of Creation; For the particles and waves that constitute the world around us In an ever expanding universe Of your Love's energy and self giving.

As we value its complexity, beauty and fragility, Help us to feel more responsible for its sustainability.

Help us to notice what we are doing day by day.
to make things [...] better,
to learn from our neighbours
in a global world,
to make our footprint
as light as possible,
to find new solutions
to [old and] new problems,
to reduce our greed,
consumption and dependency [on fossil fuels],
to turn wonder [...]
into practical actions.

We ask in the name of Jesus, The agent of Creation, Through whom all things were made, Our redeemer and hope.

Amen

Taken from The Parish Green Guide Caring for God's Creation. Written by the Revd Canon Robin Morrison



"Never before have we had such an awareness of what we are doing to the planet, and never before have we had the power to do something about that... The future of humanity and indeed, all life on Earth, now depends on us." David Attenborough, February 2018

I. INTRODUCTION

This Framework, a response to the Net Zero Carbon challenge, sets out the position of the Church in Wales in tackling the threat of climate change. It has been prepared by the Representative Body in response to the Governing Body's declaration of a Climate Emergency in April 2021 and was approved unanimously by Governing Body in April 2022. It is our hope that this document offers guidance and a road map for managers, interested parties, and all areas of the church to make the positive steps towards Net Zero Carbon by 2030.

Owing to the independence of decision-making bodies within the Church in Wales and the dynamic and rapidly changing low-carbon context, the framework cannot realistically be a fully-costed and detailed plan. The document does offer, however, a set of measures and approaches that together will encourage the Representative Body, dioceses, churches and church members to make more environmentally informed and sustainable low-carbon choices in the life of the church in the years ahead.

Meeting our net zero target by decarbonising our activities will be a considerable challenge – we will need to decarbonise virtually all our heating systems - and we admit that we do not have all the answers. What we do know is that net zero carbon is the future and doing nothing is not an option. And we certainly cannot afford inaction, thereby, leaving the costly environmental liability to future generations.

We acknowledge that the challenge may seem overwhelming by its sheer enormity and leave us deflated by not knowing where to start; yet, we hope that by setting out in this document gradual and manageable steps the net zero goal will be less daunting and more attainable.

What we do know is that we are all called to care for God's creation, to see the wonder that surrounds us and love our neighbour near and far by living in just and loving relationships with all people. We can help resolve climate injustice in the world by demonstrating our concern for the planet and our sensitivity and care for the most vulnerable in society now and in the future. This means taking immediate and ambitious climate action now.

Why? Because 'the Earth is the Lord's and all that is in it' (Ps 24:1). God delights in the created world (Gen 1:31) which responds to God in praise (Ps 96: 11-12; Isa 6:3; Isa 47:20; Ps 150:6). We recognise God's imprint not only in ourselves (Gen 1:27), but in all creation which reveals God to itself (Ps 19: 1-4) and us (Rom 1:20). Made in God's image we have 'dominion' over creation (Gen. 1:26), but that does not mean domination: our duty is to care for it as God does - to serve and preserve creation.





Part Four of the Church in Wales' Times and Seasons series is devoted to Creationtide and the stewardship of the environment, and it is intended to launch the publication at the September 2022 Governing Body, during the Season of Creation. The liturgies and reflections contained within will guide and underpin our net zero work as we faithfully and practically demonstrate our care for the wellbeing of all of creation.

Our response to climate change, therefore, has to be integral to our daily lives as responsible Christian disciples, and the environment and the love of our neighbour embedded across the Church as a natural expression of who we are and what we represent.

Net zero then becomes a key way of responding as Church to the recognised climate emergency. We must not view net zero as merely an abstract, strategic ambition nor the necessary transition away from fossil-fuels as a cost-benefits burden.

Yet, we appreciate that the task is not straightforward and this paper also outlines the key challenges that we have already identified to date. We also propose a number of solutions in the way of immediate recommendations that will equip us with the necessary knowledge and skills as we embark on our route to net zero. Key practical actions are then outlined, along with suggested completion dates, to guide us, the church at various levels, to take the required steps so that collectively we can realise Net Zero Carbon.

2. CONTEXT

The Governing Body of the Church in Wales declared a Climate Emergency in April 2021 and committed the Church in Wales to divest from fossil fuel production and supply by the end of 2021 and to reach net zero carbon as soon as practically possible with a target date of 2030. Previously, the Church in Wales had divested from thermal coal in 2016 and now, the divestment process from all forms of fossil fuel production and supply, including oil and gas, is complete.

Additionally, the Representative Body has developed a Climate Change/Net Zero policy (see Appendix I) and the trustees of the Representative Body have chosen to designate a specific Climate Change Fund of around £600,000, derived from two specific legacies, to enable early progress on the immediate recommendations set out in this paper. Legacy giving specifically dedicated to net zero may be a future funding source that we might wish to explore and encourage.

Much good work, however, has also already been undertaken at the diocesan and local church levels as part of the A Rocha Eco Church and Eco Diocese schemes. Prior to the April 2021 climate declaration, the Governing Body Eco Diocese motion of September 2017 tasked all six dioceses of the Church in Wales to secure registration with the A Rocha Eco Diocese by September 2020. This was duly accomplished and two dioceses, Dioceses of Llandaff and St Asaph, have since attained Eco Diocese Bronze status. Currently, 13% of the Church in Wales' churches are registered with Eco Church, with 5% of churches having achieved Bronze and 1% Silver status (Appendix 2). We encourage all churches to register with A Rocha Eco Church and aim for the highest Eco award attainable.



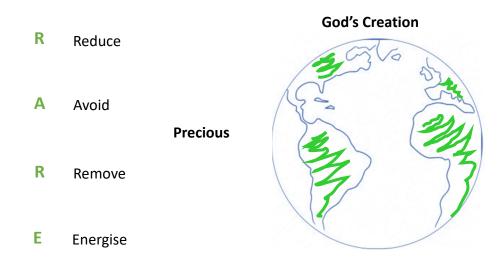
3. CARBON AND CHURCH ACTIVITIES

What does net zero mean to us as a church?

God ensures that all of creation is in harmony and the natural carbon cycle of life is in balance. We, as humans, however, have upset our planet's natural accord by burning fossil fuels, thereby adding extra carbon to the atmosphere and resulting in a warmer, warming world. We use energy in all our church activities – heating and lighting our buildings, undertaking church-related travel, and indirectly, in the production of the goods and services we consume on the premises. Net zero carbon is achieving a balance (net zero) between the carbon dioxide and other greenhouse gases (collectively known as carbon) that we release into the atmosphere and the carbon removed from the atmosphere, thus returning Earth to its harmonious equilibrium which God intended.

What that means for us is that we must reduce our energy use as much possible (REDUCE), then switch from fossil fuels to low-carbon renewable energy as the less energy we consume, the less fossil fuels are burnt and the less emissions we emit (AVOID). And only then, after we have reduced energy and transitioned away from fossil fuels, do we offset the remainder (REMOVE). We must ensure that we, as Church, do not add more carbon than we remove. And then as Church, we will feel truly energised (ENERGISE). RARE = Our planet is unique and precious because it is God's creation (Figure 1).

Figure 1: Our net zero actions to protect God's unique and precious Creation





In August 2021, after wide consultation within the Church in Wales, we agreed the following net zero carbon activities to be included as in-scope for our target of net zero: Bishop's houses; cathedrals and other ancillary buildings; churches; church halls; diocesan offices; glebe land (land within a parish owned by the church); St Padarn's Institute; parsonages, and the Provincial Office.

Clergy, staff and volunteers' reimbursable church-related travel is also included (Figure 2).

It was agreed to exclude church schools, leased and sold properties, and congregational and commuter travel owing to having only influence rather than ownership of these activities. Nevertheless, the Church in Wales will liaise closely with its schools, staff and congregations to encourage sustainable action by all to achieve net zero carbon.

Figure 2: The Net Zero Carbon in-scope activities of the Church in Wales (those areas coloured green and outside the box are currently excluded)







4. THE CARBON FOOTPRINT OF THE CHURCH IN WALES

Using the above agreed operational boundary and the best available data, we have calculated an estimate carbon footprint for the church (Figure 3). Where specific activity data were not available, we have used benchmark estimate data to calculate the carbon emissions.

The total carbon emitted by the Church is approximately 19,150 tons of carbon (tCO2e) per annum and buildings account for our most significant operational energy use with churches alone emitting approximately 10,300 tCO2e (53%) and parsonages a further 5,200 tCO2e (27%). These figures are partly based on our actual energy use but also contain several assumptions. We have also agreed to exclude data for schools, sold and leased properties and congregational and commuter travel.

The above carbon calculation offers a useful baseline and helps identify high-level carbon activities, however, further refinement of the data collection procedure will ensure more accurate, robust monitoring of our progress towards net zero and help identify additional priority areas for action at the local level.

The Representative Body will seek to lead the Province on our net zero journey, yet, the carbon emitted by the Provincial Office alone is only a tiny fraction (1%) of the carbon footprint for churches and therefore, to reach Net Zero Carbon by 2030, the whole church must be active participants to enable us to reduce our emissions by the 20% necessary year-on-year to reach net zero, and we need to start immediately.

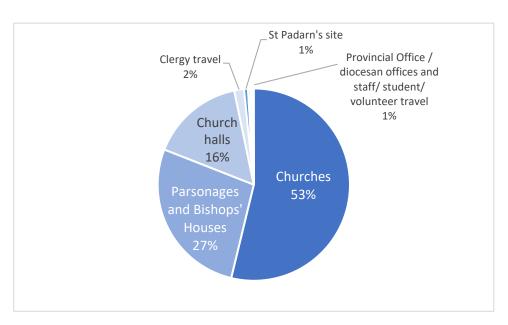


Figure 3: The Carbon Footprint of the Church in Wales (tCO2e) per annum, expressed as percentages



5. KEY FINDINGS AND CHALLENGES TO DATE

Figure 4: Challenges facing the Church in Wales on the net zero path

Levy structure on gas and electricity pricing Regulatory Supply constraints **Demand limitations** Equipment-related Site constraints Market-related Incompatibility of technology and buildings Capital investment and running costs Infrastructural Scale of manufacturing Finance-related Unfamiliar low-carbon technologies Knowledge-related Limited experienced sector contractors Perceptions

Adapted from McKinnon, A.C. (2021), Maximising capacity utilisation in freight transport, in Sweeney, E. and Waters, D. (eds) Global Logistics: New Directions in Supply Chain Management. Kogan Page, London.



Christian discipleship is never easy, and already we have identified several key challenges to achieving net zero in the church context. Figure 4 illustrates ten key issues and each issue can belong to more than one of six broad categories: regulatory, equipment-related, market-related, infrastructural, finance-related and knowledge-related, thus illustrating the complexity of the net zero task. For instance, the issue of 'Capital investment and running costs' has clear links to finance, but also to the type of equipment selected and to the established government and other governing body regulations at the time.

We realise that many of our actions will have cost pressures and churches will need to find much of the funding themselves. Therefore, through this framework, we are encouraging dioceses, ministry/mission areas and churches to start to plan early in anticipation of future expenditures.

INFRASTRUCTURE

Unique characteristics of historic church buildings: We recognise that churches are unique among historic properties; they are often draughty, poorly-insulated and high-ceilinged with large internal spaces and used for only a few hours a week and on occasion, only on a Sunday. Churches are difficult to heat, therefore. Also, many of our places of worship are off the National Grid, in rural settings and reliant on oil as a heating source.

Characterised by large volume and low occupancy, churches require a different decarbonisation approach to other historic buildings, which are either occupied constantly and/or open to the public throughout the week.

Electricity-supply constraints: Most domestic properties with gas central heating have one electricity meter and a single-phase electricity supply. Churches located in residential areas, likewise often have a gas boiler and a single-phase electricity supply; yet, the building may require a three-phase electricity supply when electricity-based alternative energy, such as a heat pump, is the preferred alternative low-carbon option. Aside from cost, such an upgrade may not be possible physically at the specific location or may be dependent on awaiting wider grid upgrades.

KNOWLEDGE

Limited pro-active low-carbon measures: We tend not to consider the longevity of a heating or lighting system until it fails and then we feel left with little choice other than to respond quickly by replacing like with like e.g. a new gas boiler for old, in effect, locking in the church to fossil-fuel use (and its associated emissions) for the next 15 to 20 years. When confronted with the need for a replacement, we are swayed by the initial costs and consider little of the longer-term environmental impact of our decisions.



Such a response, whilst not to be encouraged, is understandable given that we are familiar with the traditional technology, realise that it often offers the lowest upfront replacement costs and, in a position of no heating, we are pressed to replace the system immediately.

Limited awareness of net zero and unfamiliar and uncertain application of low-carbon technology: Net zero is a relatively new and unfamiliar concept used to illustrate the impact of climate change on God's creation and we often have little understanding of the low-carbon options available to us to reduce our carbon emissions at the church level. Therefore, we believe that we are unable to make the most appropriate low-carbon choices and as a result, we may miss the opportunity to reduce our emissions substantially.

It does not help that much of the current emphasis on low-carbon technology focuses on heat pumps; yet, from the sample energy audits we have had undertaken to date, it is clear that heat pumps will be suitable in only a minority of church buildings. Quite apart from issues of cost, they are technologically inappropriate because they work by generating a slow, steady flow of heat, which is not capable of heating the very large volume of air in poorly-insulated churches, particularly when the buildings are used infrequently for not more than few hours a week. Moreover, substantial improvements to the insulation in many cases are unwise as they would generate issues of condensation in historic building structures and may conflict with historic environment regulations.

EXPERTISE

Energy audits and energy auditors: Energy audits would allow us to have a better understanding of emissions-reduction measures and low-carbon options available specifically to a church. Energy audits have been undertaken for a sample of churches so far, most notably in the Diocese of Llandaff.

To undertake wide-spread and numerous energy audits, we would need specialist input and on a large scale; however, there is a shortage, especially in Wales, of suitable energy auditors who are both experienced in auditing historic properties and familiar with the particular context of church buildings. So far, we have relied almost exclusively on the services of Gloucester-based, Inspired Efficiency.

Knowledge and expertise of heating engineers: Invariably, when we need heating advice, we turn to our local heating engineer who has often spent many years installing conventional, fossil-fuel boilers. Most heating engineers like to stay within their comfort-zone – promoting conventional fossil-fuel heating and casting doubt on the efficiency and cost-effectiveness of electric alternatives. Heating engineers perceive the installation of a new fossil-fuel boiler to be the easiest option, and as the renewables market is so highly dynamic, they genuinely may not be aware of the latest technological developments. which may be more suitable.



FINANCE

Capital investment and initial fund raising: We expect that when technologies are scaled up over the coming years the relative cost per unit will come down; however, virtually every religious establishment in Wales will be looking to upgrade to low carbon technologies at some point in the near future. Accordingly, there will be significant demand for finance streams and pressure on the existing, limited funding sources.

We do not deny that the financial challenge is substantial. Initial energy audits on the sample churches undertaken thus far suggest that the average capital cost to move churches to a net zero position is around £38,000 per church and that excludes the necessary investments to church halls and diocesan parsonages. Cathedrals will cost more again. The energy audit for Llandaff Cathedral indicates a capital investment of £250,000 to upgrade the Cathedral complex.

For all the Church in Wales' churches to approach net zero, with extrapolation the capital input could be around £5 million per annum over the next ten years. Interestingly, this is the same level of building repair expenditure recorded in the Membership and Finance Returns in 2019. Energy savings will help to offset these costs to some degree and there would be costs going forward anyway as systems naturally reach the end of their operative lives and need replacing, but clearly congregations will be required to raise the bulk of the finances (which is already the case currently). It is worth noting that it will often be possible to undertake work as part of a wider reordering or repairing scheme and some funds may be derived from the sale of surplus assets. However, the funding challenge is clear.

Ongoing running costs: Unit pricing of gas is far cheaper than for electricity, and investing in electric heating seems, therefore, financially unattractive for most. Yet, to decarbonise we will be required to transition away from fossil fuels and towards the more expensive electric heating. The challenge will be for us to look beyond financial running costs to the environmental incentives.

Future technological development: Green hydrogen, produced by the electrolysis of water, is seen by many, and especially by heating engineers, as the future fuel panacea. However, the prospect of green hydrogen is uncertain. If it becomes available on a cost-effective basis – green hydrogen is expected to be more expensive than gas today (BEUC, 2021) – and it may be restricted only to certain geographical areas of the country thereby denying many non-urban churches access to any of the as yet unproven potential. We need to remain wary of being sold the story of 'hydrogen-ready' gas boilers.



6. IMMEDIATE RECOMMENDATIONS

'We are financially literate, we need to be carbon literate'

This section specifically outlines the three immediate 'take away' messages or recommendations that would support and equip managers in the net zero task (Figure 5).

We must acknowledge that to tackle the challenges of net zero carbon, we need to be equipped with the right knowledge, skills and approaches to be able to do so. The Church must offer ways for people to better understand climate-related issues and gain confidence in knowing the most appropriate actions to take to progress net zero.

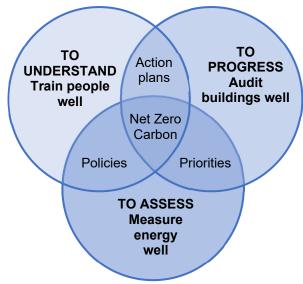


Figure 5:
Three immediate recommendations of the Church in Wales towards net zero

RECOMMENDATION ONE

TRAIN PEOPLE WELL TO UNDERSTAND NET ZERO Carbon literacy training

Climate change and more especially net zero can appear highly technical, its language bewildering and its application to church life rather abstract. To ensure the greatest involvement of everyone at all levels, it is essential that key people within the Church in Wales gain an understanding of the environmental implications of our church activities and consequently, feel sufficiently confident to take action and in so doing, generate momentum for the whole church to engage with the net zero goal.

To achieve such an outcome, net zero training, known as 'carbon literacy' training, would be offered to key church people. At the end of the training, each participant would have acquired a sound understanding of the net zero concept and be fully aware of the reasons why we are taking the net zero approach, would be equipped to tackle the challenges presented at an individual and church level, and could lead and inspire others to initiate low-carbon, practical church action.



Recommendation One: Train People Well

The Representative Body will offer externally-delivered carbon literacy training to key church people.

<u>Approach:</u> The six-hour Carbon Literacy training programme would explore carbon reduction in the context of church and offer a detailed look at taking carbon reduction measures forward. With expert delivery by staff of the Centre for Alternative Technology and accredited by the Carbon Literacy Project <u>Home - The Carbon Literacy Project</u>, the training would explore solutions offered by the Zero Carbon Britain vision <u>Home | zerocarbonbritain</u>, alongside materials for faith groups developed by the Carbon Literacy Project.

It is intended that the interactive course would be offered to five or six different cohorts across the church and for the course to be conducted remotely. Each cohort of people would consist of up to 30 participants and it is hoped that each participant would have a similar role and/or position of responsibilities to others in the group. Participants will be expected to attend each of the three separate two-hour sessions that make up the course. Such split, weekly delivery will allow for further reflection and development between individual sessions.

By training people together who have comparable responsibilities and work in similar settings across the Church in Wales shared experiences and group support can be offered that will enable church-specific obstacles to net zero to be assessed and overcome collectively.

Once the initial key cohorts have been trained, it is also hoped that the training will act as a catalyst for knowledge sharing more widely across the church and that the whole church community will then be galvanized into taking action. A follow-up training of trainers course would therefore be vital to ensure greater dissemination and engagement at the local level, so that all are aware and committed. The training will be delivered to:

- The Representative Body Trustees
- The Standing Committee
- The Bench of Bishops, and Archdeacons
- Senior Staff of the Representative Body (Provincial Office and St Padarn's) and Diocesan Secretaries
- Key diocesan staff from all six dioceses
- Diocesan Advisory Committees

<u>Financial implication</u>: Cost: £20,000 including follow-up workshop and certification. This will be funded from the Representative Body's Climate Change Fund.



RECOMMENDATION TWO

AUDIT BUILDINGS WELL TO PROGRESS NET ZERO

Energy audits

For churches to progress net zero, and to be able to identify immediate energy savings and appropriate low-carbon options going forward, what seems to be needed is a step-by-step plan to help local church managers engage at a building-specific level.

A detailed assessment of the context and energy use of a building, known as an 'energy audit' - sitting alongside the quinquennial inspection process - would provide local churches with a comprehensive overview of the building(s) needs and enable local managers to plan for all building maintenance and upgrade work at the same time, and, importantly, in advance of the need for any renewal of the existing heating and/or lighting system.

A standardised energy audit and suite of suitably qualified and experienced energy auditors, is seen as a vital early step for each church to progress net zero.



We will need to develop with dioceses a methodology on prioritising the energy audits, so that those churches that will take action first are selected early on. In so doing, as the work progresses, exemplar churches that have successfully implemented the recommendations of the energy audit are established and can act as good-practice examples of different types of low-carbon approaches and renewable energy use.

Recommendation Two: Audit Buildings Well

The Representative Body will fund one energy audit per church, and to scope a regularised energy-audit format as guidance for use across the Church in Wales.



<u>Approach</u>: An energy audit will sit alongside quinquennial inspection reports so that all building work can be planned together. Therefore, by 2027 with the rolling quinquennial programme, all churches will have had the opportunity to arrange an energy audit, which will be carried out in accordance with the scoping requirements and by a professional with experience of historic places of worship.

At the practical level, the energy audit will consider current and future use of a building to ensure that any proposals are not only practical but also reflect the end use of the building over the coming years.

The resultant energy-audit report will provide quantifiable information about carbon emissions and make recommendations on energy and carbon reduction measures, including immediate low or no-cost adjustments and the installation of low-carbon, renewable technologies, where appropriate. The report can form the basis of a detailed heating strategy and focused net zero action plan for each church, outlining short (within two years), medium (two to five years) and longer-term (five years plus) actions.

Being presented with the options and likely future upfront costs in advance when considering the replacement of a heating or lighting system will also enable budgeting and any fundraising to be arranged so that costs can be staggered over a period of time. The report can also prove a useful document to accompany any funding proposal.

Whilst the expectation is that all churches will take up the Representative Body funding at the time of the quinquennial inspection, some churches may find that they would benefit from an earlier energy audit. In particular, we are thinking of those churches that:

- · are considering replacing their heating and lighting system either through choice or circumstance
- are about to submit an imminent faculty application
- are busy during the week with a series of scheduled activities
- use an oil heating system
- plan major renovations or modifications to the building

Churches wishing to request a pre-quinquennial inspection energy audit should contact the Diocese Office in the first instance. Diocesan energy audit enquiry form will be available for those churches wishing to request an energy audit in advance of the scheduled quinquennial inspection. Further, we will need to develop a methodology for prioritising churches, and with time, as audits are undertaken and lessons learnt accumulate, we may be in a position that not every building will need an energy audit as exemplars will exist to help illustrate suitable net zero approaches.

<u>Financial implication</u>: Approximately £750,000 over a five-year period. The RB's Climate Change Fund could make a start but further funding will be needed. The Representative Body will be asked to consider funding the cost of one energy audit per church to be undertaken alongside the quinquennial inspection process, unless agreed to be earlier. Additional energy audits will be undertaken at the expense of the individual church.

RECOMMENDATION THREE

MEASURE ENERGY WELL TO ASSESS NET ZERO

Energy Footprint Tool (EFT): Before we can assess with confidence progress towards net zero, we need to know how much carbon we are emitting each year so that we can compare year-on-year progression.

The high-level carbon footprint of the Church in Wales (Section 4 of this report) generates a useful baseline footprint and has enabled the identification of high-carbon activities at the Provincial level; however, the technique does not allow for the input and involvement of local churches and dioceses nor does it let us know disaggregated, church-specific emissions at the local level.

A reliable method is needed at the local level, therefore, that is simple to use and generates clear and accurate carbon values for a specific church when energy consumption data are input.

An online calculator, known as the 'Energy Footprint Tool' (EFT), has been developed that will enable churches to enter utility bills information and attendance data to generate a carbon footprint specific to the church.



Recommendation Three: Measure Energy Well

The Representative Body will provide access to the electronic, online Energy Footprint Tool (EFT) for all churches and cathedrals.



Approach: The Energy Footprint Tool will be made available this year, 2022, and will sit alongside the annual Church Membership Return. The easy-to-use tool requires local managers to input information from the previous year's energy bills (all 12-months). The energy consumed in the use of the building will be converted automatically to a carbon footprint and the information graphically presented. If church halls or other buildings have independent meters and separate utility bills, the data for those buildings could be input as well. The EFT will also require a best-estimate of how many people use the building and for approximately how many hours over the course of the year.

Once all the information is submitted, the EFT generates the carbon footprint based on the energy consumed by the use of the buildings(s) and displays two energy-efficiency graphs (similar to those found on electrical appliances) for carbon emissions based on building size and per person hours.

Individual churches and cathedrals would then be able to monitor progress year-on-year, and with the aggregated data, the Representative Body would have a much better understanding of our church-wide progress towards net zero.

<u>Financial implication</u>: Cost: £10,000 set up plus an annual cost of £2,500. This has already been budgeted within the Representative Body's Climate Change Fund.

7. KEY ACTIONS

This section outline potential key actions, with suggested completion target dates to guide the various decision-making bodies across the Church in Wales. The action points have been developed with input from a wide range of stakeholders, including Representative Body officers, clergy, church membership, other denominations and partner organisations, government agencies and other relevant environmental organisations and individuals. The actions and dates are offered as guidance only as we all journey and encourage each other along the net zero path.

Specific actions will be outlined for churches, dioceses, parsonages and Bishops' Houses, and the Representative Body (St Padarn's Institute and Provincial Office). At each level, the six themes listed below will be considered – St Padarn's Institute also has a Teaching section:

Communications

Travel

Buildings

Procurement and finances

Energy use

Land

We acknowledge that some of the actions outlined will have already been implemented or are ongoing at the various levels of the church; however, the following tables present the case as if no action has commenced thus far. For churches, much of the net zero work overlaps with the A Rocha Eco Church scheme and therefore, we encourage churches to continue to work towards the Eco Church awards.



CHURCHES CHURCH HALLS AND CATHEDRALS

CHURCHES, CHURCH HALLS AND CATHEDRALS									
Liturgy, preaching and teaching	2022	2023	2024	2025	2026	2027	2028	2029	2030
Hold a dedicated annual Climate Sunday service during the Season of									2030
Creation or at the end of March to coincide with Earth Hour or									
World Environment Day, on 5 th June									
Incorporate the new 'Creationtide and the stewardship of the		2023							
environment' publication, Part 4 of the Church in Wales' Times and									
Seasons series, into worship – to be launched at September 2022									
Governing Body.									
Access eco- / environmental worship resources at the Climate Sunday		2023							
website (Climate Sunday Home Worship Commit Speak Up)									
and A Rocha Eco Church (Worship and Teaching - Eco Church									
(arocha.org.uk)									
Communications	2022	2023	2024	2025	2026	2027	2028	2029	2030
Establish a church eco-group to motivate action at the local level	2022								
Declare a climate emergency, write an environmental policy and develop	2022								
an action plan (See the Environmental Policy guide, Appendix 3, and the									
Cross of Climate Action, Appendix 4)									
Register with Eco Church, achieve bronze award and work towards		2023							
silver and gold awards. Work closely with new Eco Church Welsh									
Regional representative									
Arrange an energy audit, carried out by a professional with experience					2026				
of historic places of worship, to enable planning and budgeting for									
carbon reduction. Align with a Quinquennial Inspection or before if									
more urgent									
Engage with the Energy Footprint Tool and input energy data annually	2022								
going forward									
Incorporate eco-tips messages in church newsletters and websites	2022								





Buildings	2022	2023	2024	2025	2026	2027	2028	2029	2030
Work through steps in Section A of the Practical Path to Net		2023							
Zero document (Appendix 5)									
Develop an Action Plan and Roster for church routine maintenance and		2023							
repair. The Energy Hierarchy model may offer a starting guide									
(Appendix 6)									
Examine routinely gutters and downpipes for blockages, especially									2030
important after autumn leaf fall									
Repair broken windows, fixtures and fittings to reduce heat loss and		2023							
improve use									
Draught-proof doors with 'sausage dogs', key hole covers and gaps plugged	2022								
Energy Use	2022	2023	2024	2025	2026	2027	2028	2029	2030
Switch from standard electricity tariffs to 'green electricity' tariffs and		2023							
green biogas tariffs either immediately or at end of fixed-term contracts									
Install smart meter(s), where feasible, and monitor and analysis energy	2022								
use									
Equip light system with energy-efficient (LED) lighting when					2026				
replacement required									
Develop a heating strategy and funding campaign for implementation			2024						
when replacing heating system									
Incorporate soft changes, such as soft furnishings such as breathable-		2023							
backed rugs and carpets									
Review and optimise energy use to enhance comfort levels and energy		2023							
savings									
Consider rescheduling meetings and services to warmer middle-of-day			2024						
hours during winter months									
Consider signing up to Parish Buying's centrally-procured Green		2023							
Energy Basket Parish Buying - Energy Basket, and watch out for other									
services that Parish Buying will soon be offering to assist churches									
reach net zero carbon									



Travel	2022	2023	2024	2025	2026	2027	2028	2029	2030
Explore installation of EV charging points in church car park. Located		2023							
in an area with limited off-road parking, consider overnight EV chargers									
to offer a community facility									
Consider cycle storage or the installation of cycle racks			2024						
Use Church in Wales Excel carbon meetings tool (CMT) to compare		2023							
carbon emissions for physical versus virtual meetings to better inform									
meeting schedules. Available to download from the Church in Wales'									
Climate Change webpage									
Procurement and finances	2022	2023	2024	2025	2026	2027	2028	2029	2030
Encourage church bodies and individuals to switch their banking		2023							
facilities to an ethical bank									
Give preference to local and Fairtrade products for refreshments and									2030
catering									
Land	2022	2023	2024	2025	2026	2027	2028	2029	2030
Enhance biodiversity of church yard by reduced mowing, rewilding					2026				
manicured areas and planting native trees									
Register and participate in annual nature-recording project, Churches			2024						
Count on Nature, promoted by Care for God's Acre, A Rocha,									
Church of England and Church in Wales									





PARSONAGES and BISHOPS' HOUSES

Communications	2022	2023	2024	2025	2026	2027	2028	2029	2030
Parsonage Board to have a Maintenance and Retrofit Priority Plan, with		2023							
Parsonage Improvement Funds targeting heating improvements									
Parsonage Board and parishes to develop an Acquisition and Disposal		2023							
Strategy									
Ensure that Net Zero is added as fixed agenda item to Parsonage	2022								
Inspectors' meetings									
Parsonage inspectors and building advisors to undertake carbon literacy		2023							
training and ongoing professional development in net zero developments -									
to be organised by the Representative Body - so that knowledge reflects									
new technologies and energy efficient equipment and approaches									
Communicate net zero ambition to all contractors and suppliers and	2022								
encourage their proactive engagement									
Buildings	2022	2023	2024	2025	2026	2027	2028	2029	2030
Incorporate sustainability and energy-efficiency measures into new-build					2026				
projects									
Ensure new-build houses built to highest practical environmental	2022								
standards and where appropriate, incorporate 'Passivhaus' standards									
into build. Include eco-build options in all new-build projects									
Guarantee either that new house acquisitions have EPC rating of C or	2022								
above or could reasonably be adapted to achieve such a rating soon									
after purchase									
Ensure each parsonage has current EPC reports, with resurveying	2022								
where necessary									
Develop detailed environmental improvement plan for Bishop's House	2022								
and office									
Develop a comprehensive retrofit programme for all parsonages to				2025					
raise performance standards and improve the overall asset base									
Prioritise parsonages in order of ease of retrofit to enhance overall				2025					
building stock standards									



Ensure all retrofit and refurbishment projects incorporate sustainability	2022								
and energy-efficient measures									
Install or upgrade of draught-proofing and roof/cavity wall insulation for				2025					
all parsonages, where feasible									
Energy Use	2022	2023	2024	2025	2026	2027	2028	2029	2030
Switch from standard electricity tariffs to 'green electricity' tariffs and	2022								
green biogas tariffs either immediately or at end of fixed-term contracts									
Investigate the installation of smart meters to enable occupants to	2022								
accurately monitor energy consumption at the household level									
Equip with energy-efficient (LED) lighting when replacement required	2022								
Explore the installation of thermostat controls to enable occupants					2026				
control over heating in different parts of the property dependent on									
time and type of use									
Travel	2022	2023	2024	2025	2026	2027	2028	2029	2030
Arrange installation of an Electric Vehicle (EV) charging point at		2023							
Bishop's House									
Explore installation of an EV charging point at all houses			2024						
Review outcome of Bishop's EV pilot and going forward, select most		2023							
appropriate EV/hybrid/fuel-powered vehicle for Bishop at end of									
current contracts									
Procurement	2022	2023	2024	2025	2026	2027	2028	2029	2030
Ensure the integration of environmental and sustainability	2022								
considerations into building procurement procedures									
Give preference to environmentally and sustainably-suitable products		2023							
and services that offer evident (best) value for money									
Support, where practical, the local economy and ensuring that goods		2023							
are from certifiable sustainable sources, where appropriate									
Land	2022	2023	2024	2025	2026	2027	2028	2029	2030
Incorporate land management practices that consider carbon reduction					2026				1
measures							1		1



DIOCESAN OFFICES and DIOCESAN BOARDS OF FINANCE

Communications	2022	2023	2024	2025	2026	2027	2028	2029	2030
Declare a climate emergency and commit to net zero, if not already	2022								
done so									
Adopt an environmental/sustainability policy at Diocesan Conference	2022								
Develop a net zero action strategy with appropriate carbon reduction		2023							
targets and costs									
Ensure that Net Zero progress and plans is a standing item on all	2022								
diocesan meeting agendas									
Create a diocesan eco group of skilled and experienced people	2022								
Identify and train key Diocesan Climate Change Champions to embed		2023							
Net Zero Carbon awareness and action across diocese									
Identify a diocesan administrator as contact and for climate-news	2022								
dissemination									
Review existing policies and ensure that net zero features in all	2022								
decision-making processes									
Establish and maintain a Climate Change/Net Zero section on the	2022								
diocesan website									
Ensure regular climate-change/net -zero column/feature in diocesan		2023							
newsletter									
Promote and champion best practice and commit to publishing data and				2025					
lessons learnt through case studies									
Encourage all churches to register with A Rocha Eco-church scheme		2023							
and work towards Bronze, Silver and Gold awards									
Work towards A Rocha Eco-Diocese Bronze, Silver and Gold awards									2030
Buildings	2022	2023	2024	2025	2026	2027	2028	2029	2030
Consider shared use of office space and buildings to economise and		2023							
reduce space requirements, in conjunction with development of a smart									
working policy (see Travel)									
Ensure diocesan grant aid supports carbon savings and net zero agenda			2024					1	



Energy use	2022	2023	2024	2025	2026	2027	2028	2029	2030
Office to switch from standard electricity tariffs to 100% 'green		2023							
electricity' tariffs and to green biogas tariffs either immediately or at									
end of fixed -term contracts									
Office to install smart meters, where feasible	2022								
Identify list of qualified and experienced energy auditors and establish	2022								
mechanism to prioritise churches with urgent heating and lighting									
system needs									
Implement energy audits programme to accompany quinquennial					2026				
inspection regime									
Run renewable-energy pilot schemes to generate understanding and act				2025					
as exemplar									
Travel	2022	2023	2024	2025	2026	2027	2028	2029	2030
Develop smart working policy to encourage travel reductions with	2022								
flexible working									
Encourage staff and visitors to use non-car based means to access the			2024						
diocesan office with better charging infrastructure - installation of EV									
points - and cycle racks/storage									
Maintain, where feasible, remote working practices with the use of	2022								
laptops and video conferencing									
Schedule virtual meetings rather than physical meetings when gathered	2022								
attendance would involve extensive travel or mitigate the need to									
travel by empowering local decision making									
Select venue and timing of physical meetings to allow for active travel	2022								
and public transport and include 'getting to' instructions when meeting									
details distributed									
Consider car-pooling/shared travel, where practical and safe	2022								
Encourage setting appropriate carbon reduction targets for church-			2024						
related work mileage									



Procurement and finances	2022	2023	2024	2025	2026	2027	2028	2029	2030
Encourage church bodies and individuals to switch their banking		2023							
facilities to an ethical bank									
Ensure the integration of environmental and sustainability		2023							
considerations into building procurement procedures									
Give preference to environmentally and sustainably-suitable products		2023							
and services that offer evident (best) value for money									
Support, where practical, the local economy and ensuring that goods		2023							
are from certifiable sustainable sources, where appropriate									
Formalise procurement processes that maximise reuse, refurbishment			2024						
and waste recovery of IT and office machinery									
Land	2022	2023	2024	2025	2026	2027	2028	2029	2030
Encourage churches to participate in the annual nature-recording				2025					
project, Churches Count on Nature, promoted by Care for God's									
Acre, A Rocha, Church of England and Church in Wales									
Promote church yard management that incorporates carbon reduction						2027			
measures									
Work with church schools to identify tree planting opportunities on			2024						
school grounds									



REPRESENTATIVE BODY - ST PADARN'S INSTITUTE

Teaching and Learning	2022	2023	2024	2025	2026	2027	2028	2029	2030
Review teaching content across all programmes, to identify where changes		2023							
can be made to highlight and explore themes of environmental theology									
and best practice in mission and ministry given the climate emergency.									
Work with university and church partners to incorporate appropriate				2025					
changes to curricula									
Explore with Dioceses their needs for discipleship courses relating to			2024						
environmental theology and mission and ministry given the climate									
emergency, linking to existing resources or producing new resources									
as appropriate.									
Communications	2022	2023	2024	2025	2026	2027	2028	2029	2030
Play a full part in the network of Theological Education Institutions in									2030
the UK driving towards Carbon Zero by 2030.									
Institute staff to receive ongoing environmental and Net Zero training									2030
Review of existing policies to incorporate net zero targets and ensure	2022								
that net zero features in all decision-making processes									
Ensure that Net Zero progress and plans is a standing item on all	2022								
St Padarn meeting agendas									
Train all senior staff and decision-makers in carbon literacy		2023							
Continue drive to reduce use of paper and printing, except when there	2022								
is a clear pedagogical benefit, or other clearly identified reason.									
Net zero part of all job descriptions and incorporate environmental	2022								
awareness training in induction programme for new staff									
Ensure carbon zero is on the agenda at least once a year of each		2023							
student consultative group, or committee on which there is student									
representation, to ensure learners are fully involved in the carbon zero									
agenda.									
Review net zero progress and report performance to Governing Body			2023						
annually									



Buildings 2022 2023 2024 2025 2026 2027 2028 2029 2030 Create a new long-term maintenance plan for the St Padarn's Cardiff 2023 site, taking into account environmental targets Communicate net zero ambition to all staff and learners, and expect 2022 adherence and clear sign action Communicate net zero ambition to all suppliers and encourage their 2022 proactive engagement Report on carbon emissions in Annual Report 2023 2022 2023 2024 2025 2026 2027 2028 2029 2030 **Energy Use** Develop a Net Zero Carbon Action Plan based on 2021 Energy Audit 2022 report Institute to switch from standard electricity and gas tariffs to 'green 2022 electricity' and 'green biogas' tariffs at end of fixed-term contracts, subject to agreement of budgetary implications 2022 Institute to commission heating consultant to create plan to move away from existing antiquated heating system, with particular reference to energy efficiency, smart meters and zoning different parts of the St Padarn's Cardiff site Fit energy-efficient (LED) lighting when applicable as existing bulbs fail 2030 2022 2023 2024 2025 2026 2027 2028 2029 2030 Travel Investigate the installation of electric vehicle (EV) charging points in 2023 St Padarn's main car park Ensure at least 50% of all governance and consultative meetings are 2022 held online. 2023 Participate fully in RB cycle to work scheme 2022 Encourage staff to use active travel/public transport for commute 2028 2022 2023 2024 2025 2026 2027 2029 2030 **Procurement and finances** Encourage church bodies and individuals to switch their banking 2023 facilities to an ethical bank Ensure the integration of environmental and sustainability 2023 considerations into building procurement procedures



Give preference to environmentally and sustainably-suitable products and services that offer evident (best) value for money		2023							
Support, where practical, the local economy and ensuring that goods are from certifiable sustainable sources, across St Padarn's but particularly in our catering operation		2023							
Land	2022	2023	2024	2025	2026	2027	2028	2029	2030
Maintain and enhance biodiversity of St Padarn's grounds									2030



REPRESENTATIVE BODY - PROVINCIAL OFFICE

Communications	2022	2023	2024	2025	2026	2027	2028	2029	2030
Review of existing policies to incorporate net zero targets and ensure	2022								
that net zero features in all decision-making processes									
Re-launched Church in Wales' environment group, chAse (Church									2030
Action to Sustain the Environment) to be given scope to oversee									
implementation of the net zero target within time scales set, to act as a									
sounding board for the Representative Body project staff and to engage									
/ lobby, as appropriate, with external partners such as CADW and									
Welsh Government									
Train all senior staff and decision-makers in carbon literacy		2023							
Ensure that Net Zero progress and plans is a standing item on all	2022								
Representative Body meeting agendas									
Adopt paperless communications and reduce printing needs with use of	2022								
technology and digitisation programme. Applies equally to off-site									
meetings									
Net zero part of all job descriptions and incorporate environmental	2022								
awareness training in induction programme for new staff									
Develop an ongoing net zero awareness campaign. Include net zero in		2023							
monthly RB Staff Communications and drive Energy Footprint Tool,									
green energy and energy audit campaigns									
Launch the Energy Footprint Tool and analysis initial results		2023							
Update the faculty rules to incorporate net zero			2024						
Collaborate with other denominations and organisations to share net									2030
zero knowledge and experience									
Work with dioceses, individuals and others to explore innovative			2024						
approaches to enable wider engagement with 'creative carbon'									
programme									
Review net zero progress and report performance to Governing Body		2023							
annually									



Buildings	2022	2023	2024	2025	2026	2027	2028	2029	2030
Develop a net zero office plan including bishops houses and offices		2023							
Undertake an office sustainability audit	2022								
Communicate net zero ambition to all staff and visitors, and expect	2022								
adherence and clear sign action									
Communicate net zero ambition to all office suppliers and encourage	2022								
their proactive engagement									
Investigate options to better utilise office space/facilities post-Covid	2022								
Energy Use	2022	2023	2024	2025	2026	2027	2028	2029	2030
Commit to the roll out of energy efficient measures in Representative									2030
Body-managed buildings									
Measure and report carbon emissions of the Provincial Office to		2023							
Governing Body									
Seek to influence Callaghan Square landlord to maintain 100% 'green	2022								
electricity' tariff and investigate switching to a green biogas tariff either									
immediately or at end of fixed -term contract									
Request installation of smart meter and monitor office use.	2022								
Immediately and ongoing									
Influence landowner to fit energy-efficient (LED) lighting when	2022								
applicable. Immediate and ongoing									
Influence landlord to investigate more energy-efficient communal boiler	2022								
Cease all non-essential utilities for closed churches and switch									2030
remaining essential energy supplies to 100% 'green electricity' tariff									
where possible									
Travel	2022	2023	2024	2025	2026	2027	2028	2029	2030
Launch cycle to work scheme		2023							
Encourage staff to use active travel/public transport for commute	2022								
Seek to influence landlord to install electric vehicle charging points in		2023							
staff carpark									
Advertise cycling mileage rate and encourage staff to use a bicycle to	2022								
attend local meetings									



Procurement and finances	2022	2023	2024	2025	2026	2027	2028	2029	2030
Present and future stock exchange Fund Managers of the RB to report									2030
annually to the Investment Committee and the Ethical Investment									
Group on progress towards net zero related to the Church's									
investment portfolio									
Encourage church bodies and individuals to switch their banking		2023							
facilities to an ethical bank									
Ensure the integration of environmental and sustainability		2023							
considerations into building procurement procedures									
Give preference to environmentally and sustainably-suitable products		2023							
and services that offer evident (best) value for money									
Support, where practical, the local economy and ensuring that goods		2023							
are from certifiable sustainable sources, where appropriate									
Formalise procurement processes that maximise reuse, refurbishment	2022								
and waste recovery of IT and office machinery									
Land	2022	2023	2024	2025	2026	2027	2028	2029	2030
Undertake a comprehensive review of land holdings to investigate		2023							
potential									
Work with land holdings leasing agents to explore and deliver						2027			
opportunities for renewable-energy generation projects to contribute									
towards carbon offsetting such as small and medium-sized solar									
photovoltaic (PV) and wind projects, for carbon capture /									
sequestration, such as afforestation and habitat restoration, for									
affordable housing and wider community benefits etc.									
Develop carbon generation targets on church land					2026				



INDIVIDUALS AND CONGREGATIONS

Communications	2022	2023	2024	2025	2026	2027	2028	2029	2030
Remember to take our net zero message home									2030
Tell our neighbours and local communities what actions our churches				2025					
are taking to tackle climate change									
Invite the local community to our churches to show case eco-actions in					2026				
our church yards and buildings, and introduce our eco groups									
Contact our MSs / MPs and let them know of our actions and concerns			2024						
Buildings		2023	2024	2025	2026	2027	2028	2029	2030
Look at ways to draught-proof our homes		2023							
Energy Use	2022	2023	2024	2025	2026	2027	2028	2029	2030
Reduce energy use in our homes. It will save money and cut emissions									2030
Turn down our heating (Thermosat) by one degree and see if we									
notice the difference									
Buy energy-efficiency appliances when we need to replace them as they									2030
are cheaper to run and produce fewer emissions									
Travel	2022	2023	2024	2025	2026	2027	2028	2029	2030
Consider travelling by more sustainable means, such as walking or cycling		2023							
for short distances and using public transport for longer journeys									
Consider car-pooling/shared travel, where practical and safe	2022								
Procurement and finances		2023	2024	2025	2026	2027	2028	2029	2030
Consider switching your banking facilities to an ethical bank		2023							
Question our use of our God-given and precious resources. Are we						2027			
wasteful of what we have and do we really need our next purchase?									
Land	2022	2023	2024	2025	2026	2027	2028	2029	2030
Use our window sills and gardens to grow vegetables, salad leaves and		2023							
herbs									

Owing to rapid developments in climate legislation and low-carbon technologies and our ensuing progress towards net zero the key actions will need to be reviewed and refined regularly.



8. KEY ISSUES FOR FUTURE DEVELOPMENT

Elevate our Net Zero Carbon Campaign

Our three immediate Net Zero Carbon messages – train people well, assess buildings well and measure carbon well - now need to be promoted across the dioceses and churches so that we each feel informed and empowered to take the first steps and be the difference.

We are developing materials and events to accompany the three-message Net Zero Carbon campaign.



Create our Creative Carbon Campaign

Wider engagement with the climate change issue beyond net zero is also necessary to involve and energise as many people as possible to take positive environmental action.

We are investigating the development of a creative carbon perspective, so that positive, people-led change can be introduced by a creative interpretation of the climate situation. There may be opportunities for joint events with other organisations and Welsh Government.

A creative carbon festival or series of events where people can express their understanding of climate change in different ways and thus generate a new climate narrative based on visual and performing arts and creative writing, could deepen our commitment and ignite our imaginations.

9. FRAMEWORK REVIEW

The Net Zero Carbon Framework is a working document and as such, the recommendations and action points contained within will be reviewed regularly in order to ensure that they remain current and relevant. We are only at the start of the net zero journey and we will be learning, reflecting and adjusting as we go.

The **chAse** group (Church Action to Sustain the Environment) with representatives across all Dioceses, as well as input from specialist advisors, will specifically review and inform the Framework's evolution and report, as necessary, to the Governing Body. It is suggested that the Framework be a standing item at each April Governing Body meeting.



10. KEY MESSAGE

This framework, and its recommendations, is a starting point. We do not yet know all the answers or solutions and new technologies and opportunities will develop in the future. We have to start our journey to net zero and the immediate recommendations are seen as the first three crucial steps to progress. We will need to regularly review and update the framework in the light of new and better information and will, no doubt, develop new key actions to help us keep moving forward but we hope this Framework gives us the positive start we need.

"Do your little bit of good where you are; it's those little bits of good put together that overwhelm the world."

Archbishop Desmond Tutu



GLOSSARY OF TERMS

Carbon footprint: Amount of carbon emitted by an individual or organisation during a given time period, measured in tonnes of carbon dioxide equivalent (tCO_2e).

Carbon dioxide (CO₂): Carbon dioxide is one of the greenhouse gases that occurs naturally in the atmosphere and also is produced by human activity through the burning of fossil fuels.

Carbon dioxide equivalent (CO₂e): The six greenhouse gases each have a different global warming potential. Carbon dioxide equivalent is a means of comparing the different greenhouse gases on a like-for-like basis by expressing the amount of carbon dioxide that would cause the same amount of warming. Carbon dioxide equivalent, therefore, is often a catch-all term used to indicate carbon dioxide and the other greenhouse gases.

Carbon emissions: Amount of carbon dioxide equivalent released into the atmosphere when fossil fuels are burned from buildings, vehicles and industrial processes.

Carbon offsetting: The process of removing carbon dioxide already in the atmosphere either by participating in, or funding, sequestration projects. Offsetting often involves paying another party somewhere else, to save emissions equivalent to those produced by an activity. There are significant concerns about the effectiveness and fairness of carbon offsetting and therefore, carbon offsetting should be a last resort and not used as a substitute for reducing our carbon emissions.

Decarbonisation: The reduction of carbon emissions produced by the burning of fossil fuels.

Greenhouse gas: There are six greenhouse gases according to the Kyoto Protocol: Carbon dioxide (CO2), Methane (CH4), Nitrous oxide (N2O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs) and Sulphur hexafluoride (SF6). Carbon dioxide is the primary greenhouse gas produced by human activity.

Net Zero Carbon: Net Zero Carbon refers to achieving an overall balance between the carbon emissions produced and the carbon emissions removed from the atmosphere. First, carbon emissions are reduced as much as possible and then, any remaining carbon emissions are offset.

Sequestration: Long-term removal of carbon dioxide from the atmosphere, often in the form of organic materials, such as trees and peatlands.



APPENDICES

Appendix I: Representative Body's Climate change and net zero policy

REPRESENTATIVE BODY OF THE CHURCH IN WALES CLIMATE CHANGE AND NET ZERO CARBON POLICY

Introduction

The Representative Body fully acknowledges the motion of the Governing Body of the Church in Wales in April 2021:

That the Governing Body declares a Climate Emergency as follows:

We acknowledge that that an urgent and rapid global response to global warming is now necessary.

We welcome the fact that solutions to alleviate the climate crisis are widely available including renewable technology, sustainable transport options and zero-carbon buildings.

We support the decisions of governments, councils and organisations across Wales to pass motions declaring a climate emergency and setting net zero carbon emissions targets for their local areas.

We should endeavour, through an action plan, to reach a net zero carbon emission position for the activities of the Church in Wales as soon as is practically possible.

Requests that the Representative Body prepares an action plan, for consideration by the Governing Body at or before its meeting in April 2022, that sets out how the whole of the Church in Wales can reach a net zero carbon emission position by 2030 or as soon as practically possible thereafter.

This policy sets out how the Representative Body will respond to this motion.

Overall Policy

The Representative Body will now:

fully embed considerations of climate change and reaching net zero carbon within its decision making by its trustees, committees and staff ensure, as far as possible, that its decisions positively impact on the carbon footprint of the organisation's directly controlled activities with the aim of reaching a net zero carbon position for them by 2030 or sooner.

use its influence both within the Church in Wales and outside to achieve the ambitions of the Governing Body motion.



Implementing the Overall Policy

This policy will need action in the following key areas:
Reducing energy use
Use of the right kind of power
Greener travel
Meeting arrangements
Sustainable Use of land
Procurement of goods and services
Using influence to promote the agenda
Investment policy

This will involve:

- resourcing the Action Plan requested by the Governing Body to help every organisation within the Church in Wales church develop a clear framework for action
- reviewing activities, through the Committees of the Representative Body to develop specific action plans for undertaking Committee work, including policy development, to facilitate a net zero position and combat climate change
- making environmental performance a key factor in the procurement of goods and services including property acquisition, repair and improvement
- considering whether grant aid to encourage progress by others might be possible either through existing or new streams
- encouraging and supporting the whole church to achieve net zero. This could include training, guidance etc.
- developing new and innovative ways to enable local churches to move to net zero and combat climate change
- resisting proposals for change that do not move the church towards net zero or help combat climate change
- working with staff to plan work patterns and activities around net zero carbon and climate change
- carefully considering the environmental impact of meetings and only holding face-to-face meetings when it is truly advantageous to do so
- seeking to limit business travel to essential travel and then by the most sustainable means possible and practical.





Appendix 2: Eco Church Motion to the Governing Body, September 2017 and Summary of the Church in Wales' Churches registered with A Rocha Eco Church Awards, between 2016-2021

Motion 17/40 Climate Change

The Bishop of Bangor proposed and the Reverend Dominic McClean seconded the motion:

That the Governing Body recognise the importance of caring for God's creation, both as an essential part of the stewardship of our own resources, and as part of our mission to the world:

- i. through CHASE members and others, promote A Rocha's Eco-Church and Eco-Diocese scheme across the Church in Wales;
- ii. secure Eco-Diocese award registration for each diocese by September 2020; and
- iii. receive periodic progress reports from CHASE.

Summary of registered Eco Churches in the Church of Wales and awards attained from 2016 by the end of 2021

Current Award achieved from 2016 by end of 2021	Total number of churches
Bronze	52
Bronze and Silver	4
Silver	10
Silver and Gold	0
Gold	0
Total number of churches with awards	66
Total number of churches with no awards	100
Total number of Registered Churches	166

Source: A Rocha Eco Church



Appendix 3: Guidance notes for writing an Environmental Policy

Where to start?

A good starting point for any awareness raising and actions would be to make an climate emergency declaration and outline an environmental policy to guide the activities of your church or eco group.

Your environmental policy should be a concise and easily understood document that outlines your key commitments. You could use the document also to make a climate declaration. Once the environmental policy is approved, it should be promoted amongst church membership and made available publicly. You could pin up a copy in the church and promote the document on your church website. Your policy should also be reviewed regularly.

What to include?

Foreword - from the Diocesan Bishop / senior church leader.

Introduction – Outline of the climate emergency and theological underpinning to the document.

Context - Reference to Net Zero Carbon target of the Church in Wales, relevant Diocesan Conference statements / commitments, your environmental declarations, commitments and if relevant, activities already undertaken at the local level.

Outline key commitments/objectives to protect the environment – themes and targets with ongoing improvements.

You may wish to list, in tabular form, the key actions under each objective that you intend to take, along with a specific target output, target date(s) and the person(s) responsible.

Objective I

	Action	Target	Date	Whom		
Ī						

Plan also to indicate how the environmental policy will be promoted.

Monitoring and review process for the environmental policy.



SIDEWAYS ACTION

Work with our partners

Lead by example

Work with other denominations

Share experience

Appendix 4: Cross of Climate Action

The 'cross for climate action' can be used as a basis for each part of the church to think about and plan the actions it can take to reach a net zero carbon position.

UPWARDS ACTION

Making a wider impact

Lobby those in power Influence decision-makers

Advocate for action

INWARDS ACTION

Get our house in order

Train our people

Measure our performance

Set new policies

Zero carbon-based decision making

Energy purchasing

Energy generation opportunities

Use/Upgrade of buildings including heating systems

Travel and Transport

DOWNWARDS ACTION

Help those who depend on us

Support and guidance to others

Grants and Financial

Policies to encourage change

SIDEWAYS ACTION

Support our friends

Discuss with networks

Learn from others

Talk to neighbours





Appendix 5: Practical Path to Net Zero

The four-page booklet lists some easy actions that nearly every church can start with to progress towards net zero (see Section A of the booklet). Then, medium-sized churches may wish to consider the actions in Section B and for bigger, busier churches Section C lists more complex projects that are aimed at high energy users.

The document, listing the practical actions that churches can take, can be downloaded from the Church in Wales 'Climate Change Website Climate change - The Church in Wales.



A practical path to "net zero carbon" for our churches

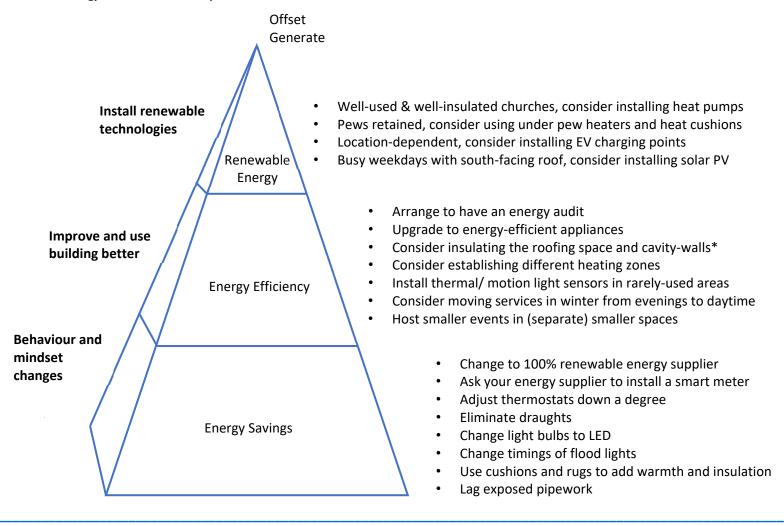
Recommendations that aim to help churches reduce their energy use and associated carbon emissions.





Appendix 6: Energy hierarchy: An approach for churches

The energy hierarchy is an alternative approach for churches to visualise the practical actions needed to achieve net zero. Starting at the base of the triangle by implementing broad 'Energy Savings' measures, once actions that are relatively straightforward to undertake have been accomplished, priorities can then turn to 'Energy Efficiency' measures, before, towards the apex of the triangle, the more complex 'Renewable Energy' actions, can be planned for and executed.





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