

Net Zero Carbon by 2030

An introduction and milestones for Dioceses



Flourish House, office for the Diocese of Bath and Wells

Net zero carbon by 2030, an introduction

By 2030, the buildings of the Church of England can be bright and welcoming, and consume much less energy and emit less carbon than they do now.

That would be good for the people who use the buildings, and good for the whole of creation.

We can do it together, in stages. We've got a plan called the 'Routemap'.

This leaflet explains the background, what we're inviting you to do in the first few years of the plan, and the kind of support you will get.



Why does reducing carbon emissions matter for the whole Church of England today?

Responding to the climate crisis is an essential part of our responsibility to safeguard God's creation and achieve a just world.

Climate change hits hardest on the poorest countries and poorest people of the world. Meanwhile, the widespread destruction of the natural world is a crisis for creation.

Tackling climate change also supports our local mission. It witnesses to our communities that we are people who care about climate justice, now and for the future. Also, many of the steps needed to reduce energy use will make our buildings warmer and more welcoming, so they are suitable to be used more often by more people, and can save us money on our running costs.

Net zero carbon: what does it mean?

For the Church of England, being net zero carbon means that the carbon emissions of our buildings and travel will be reduced, to less than 10 per cent of our baseline levels. The remaining emissions will be offset in verified schemes that reduce carbon. That means overall, our buildings and travel will not contribute to rising carbon emissions: their contribution will be 'net zero'.

How was the Routemap agreed?

The General Synod, the representative body of the Church of England, including Bishops, Clergy, and lay people, voted in 2020 for the Church to become Net Zero Carbon by 2030 and asked for a plan of action. In 2022, General Synod approved this Routemap – the plan of action for how we will get there.

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Jesus taught us to love our neighbour, and in a globalised world, the church needs to be steadfast in reaching net-zero 2030 to show that love. Young people are key drivers of climate action and will be those most affected by the legacy of the climate crisis. Listen to us when we call for ambition and action. Don't drag your heels. Get on with it, in love, grace and humility.”

Young People's perspectives on why net zero carbon matters.

Why the focus on buildings?

The Routemap focuses on areas under our control or significantly under our influence. Of the areas directly under our control, the energy used by our buildings creates the most emissions, so this is the primary focus. The Routemap also considers one smaller area directly under our control: work-related travel that is paid for by the relevant part of Church. This includes flights, ferries, trains and expense payments for mileage.

Other areas of climate action are vital and very much part of our mission, such as influencing the lifestyles of parishioners and school families. However, the Routemap focuses only on ‘getting our own house in order’; cutting the carbon emissions the Church itself creates, so we can be credible in our call to the wider world to take action. We are concentrating on changing what we can. In this way we hope to be a role model for parishioners and school families to take climate action too.

To succeed, we must all understand more fully the importance and possibility of making all kinds of changes that protect and support all of God’s creation. There are steps in the Routemap about communication and understanding, which we hope will help deliver net zero carbon and support the other actions we need to take for biodiversity, climate resilience and lifestyle choices. Participating in Eco Church, a wider environment programme run by A Rocha, can make a significant difference in these areas, and so this is included in the Routemap milestones.

Which buildings are included in the net zero carbon goal?

The buildings in scope for the Routemap are:

- churches and church buildings
- cathedrals
- most Church of England schools
- clergy housing
- Theological Education Institutions (TEIs)
- central and diocesan offices



Jesus talks about stewards... I think this business of stewardship is very important. Stewardship of a church building but also stewardship of the creation that we live in and the planet that we live on.”

Rev Patrick Gerard, Rector of Baddesley Clinton and Lapworth, and the Bishop’s Advisor for the Environment in the Diocese of Birmingham

Can we really get there?

Yes, we know this is possible because some of our buildings are already net zero carbon. You can watch videos about their stories and read their detailed case studies at cofe.io/Environment.

Most switched to a low carbon heating method. Many simply found ways to use less energy, for example by changing their lightbulbs, excluding draughts, or improving insulation. A few started generating their own renewable energy on-site. Some introduced better heating controls. Most obtain electricity via a renewable energy tariff.

We also ran a research project to inform the Routemap. It found that all of the buildings studied could reach net zero carbon using existing technologies.

Different buildings, different journeys

Not all buildings emit the same amount of carbon, so not all buildings will need to do the same thing to become net zero carbon.

Most small, rural churches already have a smaller carbon impact than larger churches. A typical small church, not used every day, has an annual carbon footprint that is significantly less than an average UK household. Routine maintenance and switching off unnecessary heat and light will reduce carbon emissions further. Switching to green energy tariffs will allow such buildings to be net zero carbon for minimal additional cost.

We should focus bigger efforts and investment on large, busy buildings which will include our schools, offices, TEIs, cathedrals and busier churches. Once reductions in energy consumption have been made, suitable buildings can consider on-site renewable energy generation and low-carbon heating, as well as switch to renewable energy tariffs.



Taking it step by step: some actions now, other actions later

The Routemap breaks down the journey into milestones to be completed by a particular year.

The themes of the milestones for 2022-25, for all types of buildings covered, are:

- data collection
- communication and planning
- good maintenance of buildings
- looking for energy reduction opportunities
- switching to green energy tariffs.

These are the necessary first steps and easy wins, and lay the groundwork for the long-term, more expensive investments that high-carbon emitting buildings will need to make after 2025.

For more about the principles behind the Routemap, read the full document at cofe.io/Environment.

How can we fund this?

Some of the actions needed won't cost much at all or will be offset by lower energy bills. Others will need significant investment.

We envisage that the actions set out in the Routemap will be funded in a mixture of ways, depending on the building. These may include:

- savings that can be made on current energy and fuel bills by adopting more energy efficient heating methods
- existing building maintenance or refurbishment budgets
- local fundraising
- grant sources, such as trusts, funds, government schemes, and some central funding via the national Church
- the potential for borrowing, to invest in those works which pay back.

The bulk of the costs are likely to come later this decade. The Routemap sets out initial actions to build finance and fundraising capacity for what will come later.

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We were using thousands of pounds of fuel each year. We realised if we could heat the people, rather than the building itself that would be much more efficient and beneficial all round. People have found the heated seat cushions very useful.”

Rev Canon Janice Ward, Vicar for the Parish of Marown, Foxdale and Baldwin, Diocese of Sodor and Man

“

The hope for the future is that we can do this, but we must start now.”

Rachel Keil, St Cuthbert's Church, Diocese of Liverpool

Milestones for Dioceses



By the end of 2022

GENERAL

Convene a working group

The Net Zero Carbon working group should include senior representatives, bishops, archdeacons and key stakeholders from all departments. Review existing commitments and deliver policy change.

Begin carbon emissions reporting

Promote the Energy Footprint Tool to churches, and the Energy Toolkit to other buildings, to enable data collection.



Develop a communication strategy

All dioceses develop a communication strategy to churches and schools - focus on the 'why', the theology, and make it positive. Dioceses to create a Routemap to Net Zero Carbon by 2030 Communications Strategy. Net Zero Carbon messages to be incorporated in ongoing communications by Diocesan Comms Officers, Schools communications teams and Church communications, throughout the decade, with interest groups (e.g. DEOs) providing feedback.

Review tenancy agreements

Dioceses to review with their land agents the terms of tenancy agreements to include net zero and biodiversity ambitions.

Identify your 20%

Identify your top 20% of energy-consuming churches and invite them to create a Net Zero Carbon Action Plan.

DIOCESAN OFFICE(S), IF APPLICABLE

Register for Eco Church

All offices to register for Eco Church during 2022 and aim to achieve a bronze Eco Church award by 2023 and silver by 2026.

SUPPORTING SCHOOLS

Collect data

Diocesan Board of Education to take the lead in the promotion of the Energy Toolkit in their schools to commence data collection from utility bills.

Set up regional groups

Establishment of 'Regional School Environment Groups' (school leaders, diocesan buildings officers, diocesan environmental officers, local authorities, consultants, local champions, people with technical expertise).

By the end of 2023

GENERAL

Write a Net Zero Carbon Action Plan

All dioceses provide an outline of their decarbonisation plans to Diocesan Synod as a Net Zero Carbon Action Plan, to include estimates of costs for different options, as well as the policy changes and levers for change required. To be reviewed annually by senior staff. The plan should make reference to the Practical Path to Net Zero and actively consider implementation of 'quick wins', how to decarbonise heat, how to reduce energy consumption and how to encourage behaviour change.

Collect energy data

Every diocese has a 90%+ completion rate for the Energy Footprint Tool, and 100% of cathedrals complete the Energy Toolkit.

Review capacity

Individually, or in regional groups, all dioceses to review their capacity to respond to the Routemap and identify gaps. The review should cover (i) the capacity to engage schools, archdeacons, deaneries, and churches across the diocese, (ii) the project management skills needed to initiate and support local action, (iii) the technical input needed and (iv) the local fundraising capacity needed.

Create or update your Travel Plan

All dioceses to develop or update a Travel Plan.

Develop a land management plan

All dioceses audit their landholdings and develop a land management plan.

CLERGY HOUSING, IF APPLICABLE

Audit clergy housing

All dioceses audit clergy property (where possible) by 2023, in preparation for a property retrofitting plan.

Write retrofitting and maintenance plan

All dioceses to have retrofitting and maintenance plans in place. These should include a Heating Resilience Plan which should consider how to manage heat should the existing system fail to avoid needing a quick like-for-like fossil-fuel replacement.

Complete stock surveys for sample of clergy housing

All dioceses to have commissioned stock surveys such as EPC+ reports for at least a representative sample of clergy housing





By the end of 2023

SUPPORTING SCHOOLS

Review school boilers

Dioceses to identify schools with boilers approaching end-of-life and support schools through funding feasibility to identify opportunities for a more sustainable solution and apply for grant funding from the Department for Business, Energy and Industrial Strategy to deliver those by 2023.

Promote smart meters

Diocesan Board of Education to take the lead in the promotion of smart meter installations in schools and be undertaking data analysis from the information provided.

For further information on schools milestones and actions, see the Routemap Section 4.3

DIOCESAN OFFICE(S), IF APPLICABLE

Measure and report on office carbon emissions

All offices to measure and report on their carbon emissions by inputting utility bill information and floor area into the Energy Toolkit.

Write a Net Zero Carbon Action Plan

All offices have at least a high level Net Zero Carbon Plan, including some consideration of space availability and needs. The plan should make reference to the Practical Path to Net Zero and actively consider implementation of ‘quick wins’, how to decarbonise heat and how to reduce energy consumption. The Action Plan should also contain a Heating Resilience Plan which should consider how to manage heat should the existing system fail to avoid needing a quick like-for-like fossil-fuel replacement.

Consider electric car charging at offices

Offices to review the potential for installation of electric vehicle charging points and the provision of dedicated car parking spaces for electric cars. If appropriate, then move ahead to installation.

By the end of 2024

GENERAL

Run diocesan switching campaign, supported by national switching campaign

All dioceses to have run switching campaigns to encourage occupiers to switch to 'green' electricity and, having reviewed options to replace fossil fuels, any building remaining with gas heating should be encouraged to switch to green gas tariffs at the point of contract renewal*, based on national advice about the criteria to apply.

Timing of this milestone to be kept under review, depending on stabilisation of the energy markets and / or government action.

Review and update travel policies

All dioceses to review and update travel and expenses policies to encourage sustainable transport.

Ensure new cars are EVs

All pool cars to be electric vehicles (EVs) after this date (assuming a minimum range of 250 miles). If appropriate, E-bikes should form part of any pool of vehicles available for work-related travel.

DIOCESAN OFFICE(S), IF APPLICABLE

Switch to green energy tariffs

All offices, at the point of contract renewal, switch to 100% green electricity tariff. Having reviewed options to replace fossil fuels, all offices that remain with gas heating switch to a 'green' gas tariff at the point of contract renewal, based on national advice about the criteria to apply.

Timing of this milestone to be kept under review, depending on stabilisation of the energy markets and / or government action.

Engage with landlords of rented offices

Where offices are rented, initial engagement to take place with landlords with the aim of implementing a net zero carbon plan over the coming years. Determine what changes you can make under the lease and what changes they may be willing to make.

Install electrical car charging where appropriate

If office review is positive for EV charging points then move ahead to installation.

CLERGY HOUSING, IF APPLICABLE

Switch to green energy tariffs

All dioceses to have run switching campaigns to encourage occupiers to switch to 'green' electricity and, having reviewed options to replace fossil fuels, any building remaining with gas heating should be encouraged to switch to green gas tariffs at the point of contract renewal, based on national advice about the criteria to apply.

Timing of this milestone to be kept under review, depending on stabilisation of the energy markets and / or government action.

Write stock improvement plan

All dioceses to have stock improvement plans in place, having regard to the timing of when properties become vacant. The plan should make reference to the Practical Path to Net Zero and actively consider implementation of 'quick wins', how to decarbonise heat and how to reduce energy consumption.

By the end of 2025

GENERAL

Review land management agreements

All dioceses to align land management agreements going forward with the diocesan environmental policy objectives.

Explore EV coach charging

Review opportunities to install electric charging for coaches for those churches that are tourist destinations.

Report on progress

Prepare a report on progress on the milestones detailing the successes and explaining the reasons for any delays to progress. To be submitted to the National Environment Team in Q1.

DIOCESAN OFFICE(S), IF APPLICABLE

No oil boilers

No new or replacement oil boilers to be installed after this date.



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My prayer is always for wisdom, my prayer is always for knowing what the right thing to do is, and my prayer is always for energy, especially in this as well, because we need to work hard to make the changes to achieve net zero. We all need to work hard together”.

Cannon Giles Goddard, St John's church, Waterloo, Diocese of Southwark



By the end of 2026

GENERAL

Audit landholdings

Audit landholdings and develop a land management plan.

By the end of 2029

GENERAL

Achieve Eco Church Gold

All dioceses reach Gold Eco Diocese standard.



By the end of 2030

GENERAL

Implement carbon offsetting (if necessary)

Implement carbon offsetting with an approved supplier to offset those emissions that have been impossible to eliminate.

For further information on general diocesan milestones and actions, see the Routemap Section 4.1, and for travel milestones and actions, see the Routemap Section 5.3

DIOCESAN OFFICE(S), IF APPLICABLE

Complete Action Plan

All owned offices to deliver the actions in their net zero carbon action plans.

For further information on diocesan office milestones and actions, see the Routemap Section 4.6

CLERGY HOUSING, IF APPLICABLE

Install smart meters

At change of tenancy, and no later than 2030, install smart meters to assist with monitoring and management of energy consumption.

For further information on housing milestones and actions, see the Routemap Section 4.4

What else can we consider?

Additional actions are suggested throughout the Routemap. These are supplementary to the milestones and offer other ideas for your journey to net zero carbon.

Dioceses can also offer leadership at all levels, by taking up training opportunities and keeping up-to-date with the challenges and solutions.

Read the Routemap at cofe.io/Environment.

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Net Zero needs to be central and prioritised in every decision made, embedded throughout the entirety of the church”

consultation response from a diocese

What support is available?

The Church Commissioners are funding a national support and capacity building programme, to help us all reach net zero carbon together.

Already available on the Church of England website (at cofe.io/Environment):

- recordings of webinars with new topics being regularly added
- guidance on energy efficiency, renewable energy, EV charging, heating and much more, plus the Practical Path to Net Zero for churches (which has useful ideas for most buildings)
- case studies
- Energy Toolkit (for recording your building energy use and travel miles to calculate your carbon emissions)
- criteria for procurement of true green tariffs.

By the end of 2023, the national church will provide:

- a template for a Net Zero Carbon Action Plan for offices and schools, with guidance
- training for diocesan heating and sustainability advisors
- training to support the establishment of 'Regional School Environment Groups' (school leaders, diocesan buildings officers, diocesan environmental officers, local authority, consultants, local champions, people with technical expertise)
- guidance for schools, cathedrals and clergy housing, similar to what is already available for churches (known as the Practical Path to Net Zero for Churches)
- resources to support Diocesan engagement with their family of schools and wider communities
- continuously updated information about new sources of funding, as they become available
- template legal documents for funding via affordable lending, community energy or Power Purchase Agreements.

Through Parish Buying, the national church will expand its net zero product offering, which already includes solar panels, heating solutions, 'green' gas tariff, energy audits and the green energy basket

The national church will also carry out research and pilots to select and establish the best tools for measuring emissions, carbon sequestration and lifecycle carbon assessments in different circumstances.

The church will support fundraising capacity for the Routemap by:

- investigating a centrally approved financing structure for the installation of solar PV panels and LED lighting for schools and larger, daily used churches.
- seeking match-funding for the Net Zero Carbon Demonstrator Grant Programme
- implementing the national fundraising strategy
- piloting an investment scheme for projects with high enough Return on Investment.

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www.churchofengland.org
2022



THE CHURCH
OF ENGLAND
Environment Programme