



Target 2030

Net zero carbon routemap

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The Routemap is a plan for how the Church of England can be net zero carbon by 2030. It will be presented to General Synod for approval in July 2022.

Our plan for net zero carbon by 2030

[View the Routemap \(PDF download\)](#)

General Synod voted in February 2020 for the whole of the Church of England to achieve net zero carbon by 2030. The vote recognised that the global climate emergency is a crisis for God's creation and a fundamental injustice.

The Synod asked for a plan to be made, setting out how to get to net zero carbon. That plan of action, called the Routemap, was approved by General Synod in July 2022 in a Motion that asked for the Routemap to be endorsed, requested every Diocesan Synod to debate the Routemap as it applies to them, requested high energy users within the Church to draw up a programme of action based on the Routemap, and called for progress reports to Synod every three years.

The Routemap was written by the Net Zero Carbon sub-committee of the national Environmental Working Group. It went to consultation from October 2021 to February 2022 and the responses received shaped this final version.

Routemap supporting documents

- [Young peoples views on why net zero matters](#) (282.59 KB)
- [Theological perspectives on care for creation and net zero](#) (331.54 KB)
- [EFT 2019 Data](#) (161.11 KB)
- [EnergyFootprintTool2020](#) (339.06 KB)
- [Definition of net zero carbon \(GSMisc1262\)](#) (2.11 MB)
- [Net Zero Carbon Progress Report June 2022](#) (172.47 KB)
- [Summary Sheet - Milestones from the Routemap to Net Zero Carbon by 2030](#) (405.96 KB)
- [Glossary and Abbreviations for the Routemap](#) (186.09 KB)

Key themes from the Executive Summary

It is possible to **reduce** carbon emissions from nearly every building by relatively easy and cheap methods that reduce energy consumption, improve energy efficiency and make the building more comfortable. Eliminating **all** carbon emissions from a building is more challenging and costly, although it can be done with existing technologies. The Routemap therefore prioritises identifying high energy-consuming, high carbon-emitting buildings, and developing plans to tackle carbon emissions from them. The key themes that are applicable to most of our buildings are:

Understand

How, where and when does your building use energy and why?

Can it be reduced?

What can be improved with the building?

Consider getting an energy audit.

Review our guidance on heating principles, and on energy efficiency and consider viewing our Net Zero Carbon webinars.

Plan

Review your buildings/estate, identify scheduled works and what needs to be done for net zero, and in what order.

Use this to plan suitable times for work, identify if projects can be aggregated for cost-saving or to obtain funding and to optimise funds, skills and resources.

Maintain

Keep on top of routine maintenance and keep the building in good condition to reduce energy consumption and hence carbon emissions.

For our smaller churches, used only occasionally, maintenance is the key. Damp buildings feel colder when it is cold and hotter when it is hot.

Reduce

Consider where and why you are using energy. Can you identify areas where energy is being wasted? Are lights on when they aren't needed?

Are you heating the whole building when only part of it is being used? Are the temperature settings right?

Are there other ways to reduce energy consumption and travel to eliminate carbon emissions? This includes changes in behaviour and ways of working as well as changes to heating and lighting systems and the use of different means of travel.

Identify Opportunities

Look for actions that reduce carbon emissions and also generate income (for example solar PV panels, [electric vehicle](#) charging points).

Also investigate interventions that can deliver multiple benefits (for example reduced air pollution, community use, prevention of overheating in a warming climate, making the building work better).

Easy Wins

Consider the easy wins to reduce emissions in all buildings. Easy wins cost little and are low or no risk: many of these can deliver big benefits:

- Establish working groups, develop understanding of the issues and communicate them, share experience, and identify and implement policy changes. Working collectively can help you to think through all the issues and helps when it comes to communicating the changes to the wider church community.
- Gather data, such as energy use and carbon emissions, to enable the benefits and year-on-year reductions to be demonstrated. Use the church [Energy Footprint Tool | The Church of England](#) and the [Energy Toolkit | The Church of England](#) for other buildings.
- Encourage people actions such as switching off unneeded lighting and equipment, turning down the thermostat, not making unnecessary journeys and choosing low-carbon travel options.
- Switch to green electricity and gas tariffs at point of contract renewal. See [Parish Buying - Energy](#) for options.
- Upgrade lighting to LEDs.
- Encourage walking, cycling, public transport and lift-sharing.
- Develop replacement plans for equipment before they are urgently necessary, especially for ageing heating systems: that way you can take the time to make sure you have chosen the right solution for your needs.

Plan more challenging changes

These are longer term, more expensive actions for those high energy consuming/high carbon emitting buildings, or actions where the outcome is less clearly beneficial without further investigation. These could reduce energy use significantly but require may require substantial work (which itself has a carbon cost) and have a longer payback – they are likely to require professional advice, including input from your DAC.

- For schools and clergy housing - develop an estates strategy.
- Create business cases, so you are ready to apply when funding opportunities arise.
- Identify alterations to the building – ensure these are appropriate to the nature and use of the building and that it is proportionate. A door curtain or porch on a church can retain heat, blinds on school windows can reduce overheating in summer and reduce heat loss in winter.

Consider travel

Consider how the emissions from travel can be reduced:

- Develop a travel plan for your building
- Review the need to travel – is it necessary? – Can two or more visits be combined to reduce mileage? Can you car share?
- Incentivise lower carbon methods of travel

Share

Use your experience to inspire others.

Can you contribute to our [case studies](#)?

Net zero carbon planning principles

Seven planning principles – need to guide all our work if we are to achieve year-on-year reductions in our greenhouse gas emissions and, ultimately, reach net zero carbon. We hope these principles will inform the action of all parts and levels of the Church of England across the country.

1. Based in theology: treasuring God's creation

We recognise that the global climate emergency is a crisis for God's creation, and unjust to the poor and future generations. It is the context into which we are called to live and preach the Gospel.

We will link all our actions on net zero carbon to our Christian mission, as expressed in the Five Marks of Mission.

We will grow the Church while reducing our environmental footprint; Christ's Gospel message will reach and engage new people, particularly the young.

2. Urgent, relevant and widely understood

Net zero is needed by 2030 but it starts now. We aren't waiting; a significant reduction is needed every year, year-on-year.

We will communicate clearly the reasons for action, and for acting now recognising the existential threat that we all face.

We embrace the call to net zero carbon as an integral part of our mission; caring for creation, achieving climate justice, ending poverty, creating a viable future for ourselves and coming generations, and increasing engagement with our communities.

We will implement only tried and tested technology.

3. Data-driven, focused and transparent

We recognise this work covers all of our activities as a Church, as set out in the scope agreed by Synod.

We will gather good data on major sources of emissions, to inform our decisions e.g. energy consumption, EPC surveys and travel data.

We will be strategic, using our data to focus effort on the large, busy buildings such as secondary schools and our busiest churches. We know most small, rural churches already have a very small carbon footprint and the onus for action does not lie with them.

We will learn from others, sharing resources and collaborating.

We will estimate costs for the changes and actively seek funding.

4. Embedded in all we do

We will aim to integrate ethical environmental principles into everything we are doing as the CofE.

We will encourage every level and part of the Church to take a formal decision to answer the call from General Synod e.g. a motion by the PCC, school governors, cathedral chapter, diocesan synod. Leaders at all levels will need to prioritise action.

We will identify those things directly in our control, and the things we influence, and discern appropriate strategies for both (including co-benefits for wildlife, social value, health, community etc).

We will encourage each part of the Church to gather a team to work on this, including a champion in a leadership position.

We will include carbon footprints into our reporting systems, both nationally and locally, e.g. APCM reports.

We will also include climate adaptation/resilience to protect our buildings and communities in increasingly extreme weather.

5. Using less energy, and from cleaner sources

We will aim for quick wins, whilst planning ahead for the harder actions such as moving away from oil and gas.

We will first reduce demand for energy by maintaining our buildings well (tackling damp, fixing broken windows etc) and by reducing heat loss as appropriate. Then we will increase energy efficiency through steps such as LED lighting, zoning and controls.

We will ensure energy is supplied from cleaner sources: switching to "green" tariffs and increasing renewables on our buildings.

We recognise the vital importance of decarbonising heat since any new oil/gas boiler installed now will outlast 2030. We acknowledge the challenge and will strive to ensure options appraisals take place for all heating replacements of fossil oil and gas systems.

We recognise that some decisions will need to wait until later in the decade, for more certainty on technologies, funding and regulation.

We will aim to avoid maladaptation and to remember the embodied carbon in our building projects; we will avoid carrying out big interventions for small savings, while recognising the need to future-proof buildings to comply with potential future legislation.

6. Travelling sustainably

We will avoid unnecessary travel.

We will encourage sustainable transport and remember the travel hierarchy: walking, cycling, public transport, shared journeys, electric cars, fuel efficient cars, less efficient cars, ferries, flights.

7. Offsetting only what we cannot reduce

We will reduce all the carbon emissions we can, offsetting should be a last resort.

There will however be some role for offsetting and sequestration, towards 2030, and we will explore viable options whilst recognising most will not sequester carbon in the timescale of our target.

Where excess renewable energy is generated on our sites (e.g. from solar PV) we can export to the national grid as a valid offset.

We will protect and nurture the trees, soils and wild spaces we already have and the carbon they store. There are a range of nature-based climate interventions which are to be encouraged in appropriate places, but which will take time to come to maturity and do not offset the effect of the carbon we are producing now.



Get inspired and see what is possible.

Watch our new videos and browse our bank of case studies. They show practical action around the country by churches, schools, cathedrals and clergy housing.

Projects include solar panels, heat pumps, pew heating and far more, with many on listed buildings.

[Explore the case studies](#)

Diocesan Environment Officers holding up banners with the fifth mark of mission

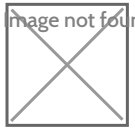
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Learn how to get started with our free net zero carbon webinars.Â

Book onto a webinar or watch the videos of past topics (heating, solar panels, EV car charging, and far more).Â

[View webinars](#)

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"There is no question that achieving Net Zero Carbon by 2030 is an almighty challenge, but this detailed Routemap, that has been developed in partnership across the whole Church, sets out a practical and pragmatic way to making this a reality.

*This is a crucial decade for the planet, and I want to approach the challenge of Net Zero Carbon with a hope-filled realism that we **can** achieve this together.*

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Bishop Graham Usher, lead bishop for the Environment

Find more net zero carbon information

A diagram showing the outside of a net zero carbon church.

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Net zero carbon church guidance

[Find advice on how to move towards net zero carbon at your church](#)



Practical path to net zero carbon for churches

[Information for churches on reducing your carbon footprint](#)

Chedworth school with solar panels and heat pumps

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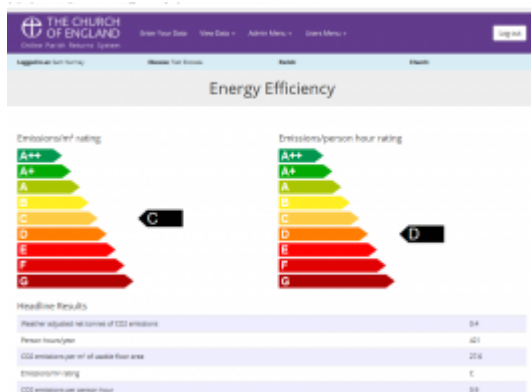
Net zero carbon schools

[Information and resources for schools](#)



Energy Toolkit

[The Energy Toolkit for schools, housing, cathedrals, offices and TEs](#)



Energy Footprint Tool

[The Energy Footprint Tool for churches](#)

Environment Programme image hexagons

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Environment Programme

[Addressing climate change through faith, mission and practice](#)

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