

Why focus on net zero carbon, when there are so many other pressures?













What is in scope for our diocese?

- 182 Churches
- 45 Schools
- Cathedral
- 150 Clergy Houses
- Diocesan Office
- Work-related Travel











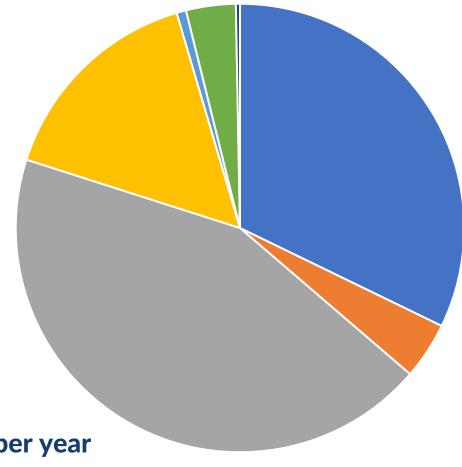


CofE Birmingham sources of emissions



- Church Halls (4%)
- Schools (44%)
- Housing (16%)
- Offices (>1%)
- Other Buildings (4%)
- Travel (>1%)

Total 7,500 CO2e tonnes per year

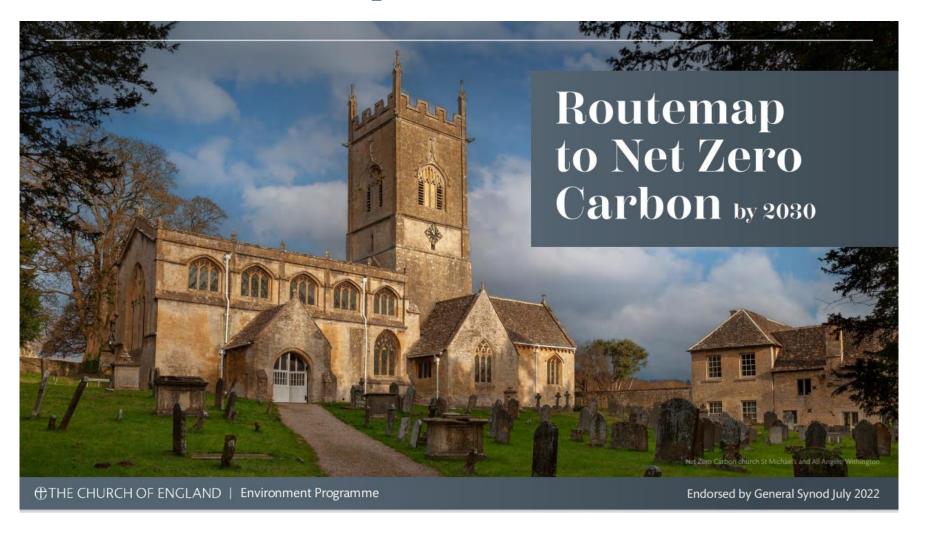


2021 data





CofE Routemap to Net Zero Carbon







What is it?

Allows churches to find out your current 'carbon footprint'

Churches enter previous year's utility bill information

62% of CofE Birmingham churches submitted EFT returns in 2022







Why use it?

Allows you to understand where you are starting from

Submitting annual returns allow you to see year-on-year progress

Allows diocese and national teams to understand the bigger picture and where extra support is needed







How to use it?

Access through the CofE Online Parish Returns System

You will need your 2022 electricity and gas/oil bills to hand

Open until end of July 2023



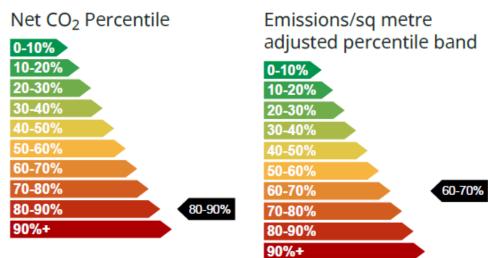




Carbon Footprint

	This Year	Last Year
Gross CO ₂ emissions (Tonnes) ?	20.3	-
Net CO ₂ emissions (Tonnes) ?	12.5	-
Renewables and offsets: non-accredited (tonnes)	0.0	-

Weather Adjusted Energy Efficiency



Church usage adjusted percentile band

0-10%	
10-20%	10-20%
20-30%	
30-40%	
40-50%	
50-60%	
60-70%	
70-80%	
80-90%	
90%+	





What Next?

Start to plan actions to reduce carbon emissions for your church buildings

- 'Practical Path to Net Zero Carbon' document
- 'Practical suggestions to help parishes save energy and money' document
- CofE 'Net Zero Carbon' webinar programme





A tool to identify possible actions to reduce church carbon emissions

Starts with relatively simple 'quick wins' that nearly all churches can benefit from

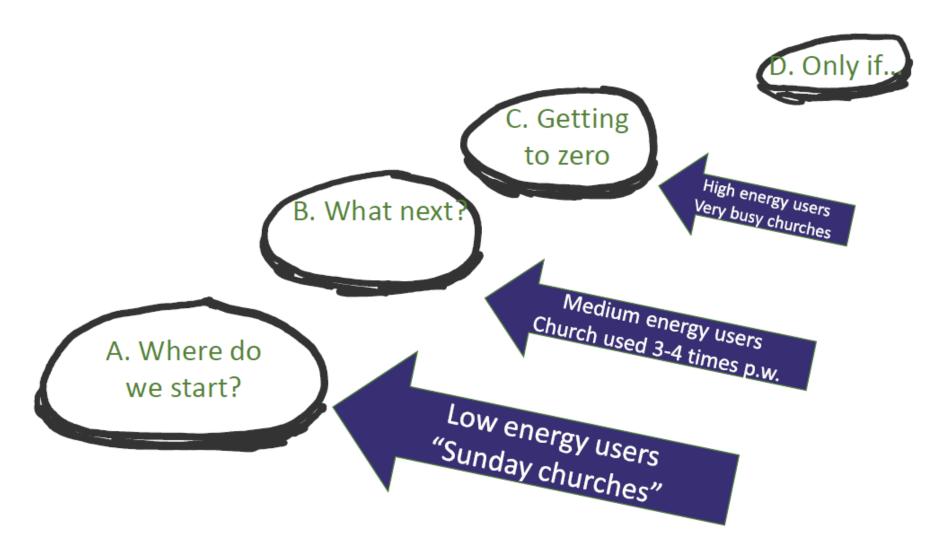
Up to bigger, more complex projects

CHECKLIST

Pa	rt A - Where do we start?	_				_
even They	e are actions that nearly all churches can benefit from, those primarily used only on a Sunday. are relatively easy and are a good place for churches rt, when trying to move towards 'net zero'.	Already done / up-to-date	Not applicable	Not a priority right now	Explore further / get advice	Priority
The	building itself:					
A1.	Maintain the roof and gutters, to prevent damp entering the building and warm air escaping.					
A2	Fix any broken window panes* and make sure opening windows shut tightly, to reduce heat loss.					
A3	Insulate around heating pipes to direct heat where you want it, this may allow other sources of heat to be reduced in this area.					
A4	If draughts from doors are problematic, draught-proof the gaps or put up a door-curtain*.					
A5	Consider using rugs/floor-coverings (with breathable backings) and cushions on/around the pews/chairs.					
Heat	ing and lighting:					
A6	Switch to 100% renewable electricity (for example through Parish Buying's energy basket) and 'green' gas.					
A7	Match heating settings better to usage, so you only run the heating when necessary*.					
A8.	If you have water-filled radiators, try turning off the heating 15 minutes before the service ends; for most churches this allows the heating system to continue to radiate residual warmth*.					
A9.	If you have radiators, add a glycol based 'anti-freeze' to your radiator system and review your frost setting.					
A10.	Replace lightbulbs with LEDs, where simple replacement is possible.					
A11.	Replace floodlights with new LED units.					
A12.	If you have internet connection, install a HIVE- or NEST-type heating controller, to better control heating.					
A13.	If your current appliances fail, then replace with A+++ appliances.					
Peop	ole and policies:					
	Complete the Energy Footprint Tool each year, as part of your Parish Return, and communicate the results.					
A15.	encourages people to turn things off when not needed.					
A16.	Write an energy efficiency procurement policy; commit to renewable electricity and A+++ rated appliances.					
A17.	Consider moving PCC meetings elsewhere during cold months, rather than running the church heating.					













C. Getting to zero

B. What next?

A. Where do we start?

Maintain roof, gutters, broken windows
Insulate around pipes
Deal with draughts
Rugs, floor coverings, cushions
100% renewable electricity
Match heating timings to use
Get timers and 'smart' controllers
Add anti-freeze and anti-sludge filter
Easy LED replacements
Behaviour changes: e.g. turning off







C. Getting to zero

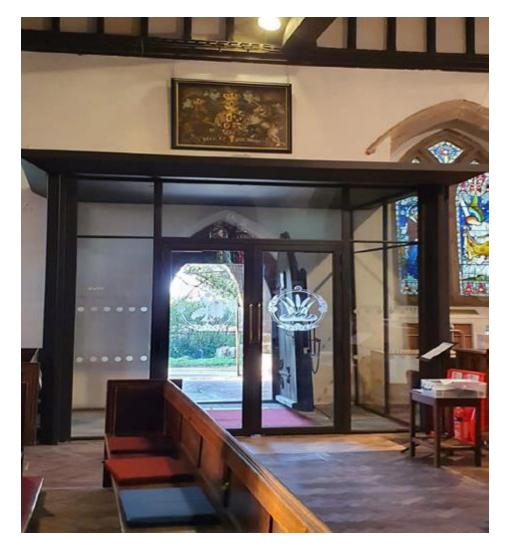
B. What next?

A. Where do we start?

Insulate easy-to-access lofts
Partition-off smaller areas
Install a draught lobby
Use data loggers & smart meters
Improve zoning, install TRVs
Set boiler temps correctly
Install thermal or motion sensors
Replace gas/oil space heating with
electric pew/panel heaters











D. Only if..

C. Getting to zero

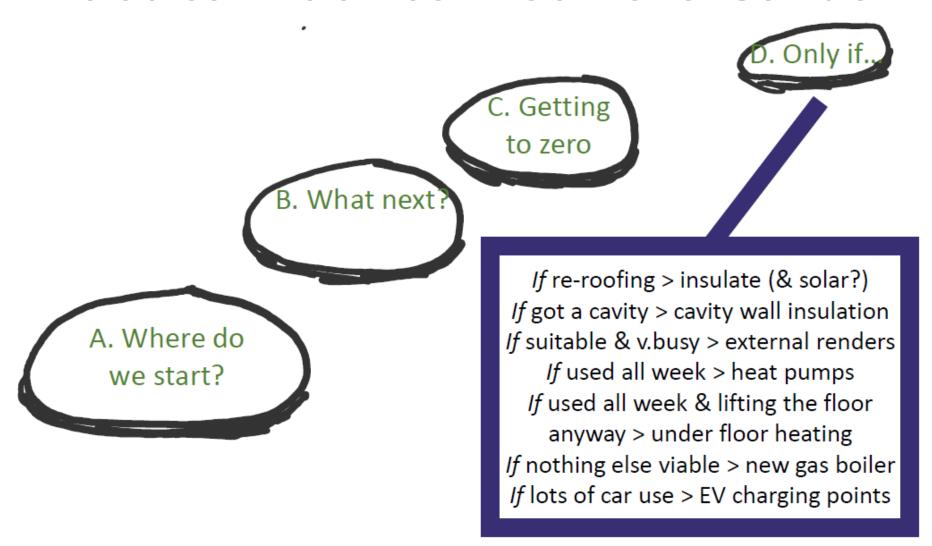
B. What next?

A. Where do we start?

Draught-proofing windows
Secondary/double glazing suitable
windows in busy areas e.g. office/ hall
Draught-proof the tower ceiling
Insulate under pew platforms
Internally insulate suitable areas
Reinstate ceilings
New lighting systems
Solar PV panels











Further Links

- Online Parish Returns Tool to complete Energy Footprint Tool
 - https://parishreturns.churchofengland.org/login
- CofE Net Zero Carbon church webpage
 - https://www.churchofengland.org/resources/churchcare/net-zero-carbon-church
- Practical suggestions to help parishes save energy and money
- https://www.churchofengland.org/sites/default/files/2022-11/PO0518%20COFE%20PRACTICAL%20SUGGESTIONS%20DOCUMENT%20%28INTERACTIVE%29%20V2%202.pdf
- Green Energy Companies and the Energy Footprint Tool
 - https://www.churchofengland.org/sites/default/files/2023-01/Green%20Energy%20Companies%20and%20the%20Energy%20Footprint%20Tool%20Jan%202023.pdf
- A practical path to "net zero carbon" for our churches
 - https://www.churchofengland.org/sites/default/files/2021-01/the-practical-path-to-net-zero-carbon-numbered-Jan2020.pdf
- A practical path to net zero carbon (A checklist for your church)
 - https://www.churchofengland.org/sites/default/files/2021-01/PP2NZC_SelfGuidedChecklist_print_version.pdf





