

# Net zero carbon: action plan



## What is Net Zero Carbon?

The Church of England defines Net Zero Carbon as the reduction as far as possible of all in-scope carbon emissions (from the oil, gas and electricity we use in our buildings and petrol and diesel transport) and the removal of an equivalent amount of carbon from the atmosphere for the remaining in-scope emissions by use of accredited offsetting schemes.

# Introduction

The pie chart to the right shows our starting point. In 2021 we generated just under 10,000 tonnes of carbon. Just over a half came from schools, just over a quarter from churches and church halls and about a sixth from clergy housing. However, much of this information is based on estimates. For example, only one third of churches supplied their energy usage. This baseline will change as we get better estimates and more data, but it is the best picture of where we start our journey towards becoming carbon net zero by 2030.

This plan sets out how we might achieve our goal. When General Synod and Diocesan Synod adopted this goal, it was clear that it would be very challenging - and expensive! However, the significant changes in global weather events in recent years have underlined the urgency of tackling the amount of carbon we produce. The leadership shown by the Church of England is important.

This action plan takes a positive approach to working towards this ambitious target. It focusses on the processes, actions, resources and funding that will be required to make significant yearly progress towards achieving the target. It does not analyse or comment on whether the target is achievable. Nor could it, given that the availability of resources and funding is unknown at present and the significant dependence on the energy market, advances in technology, availability of qualified trades to undertake the works and the national grid etc.

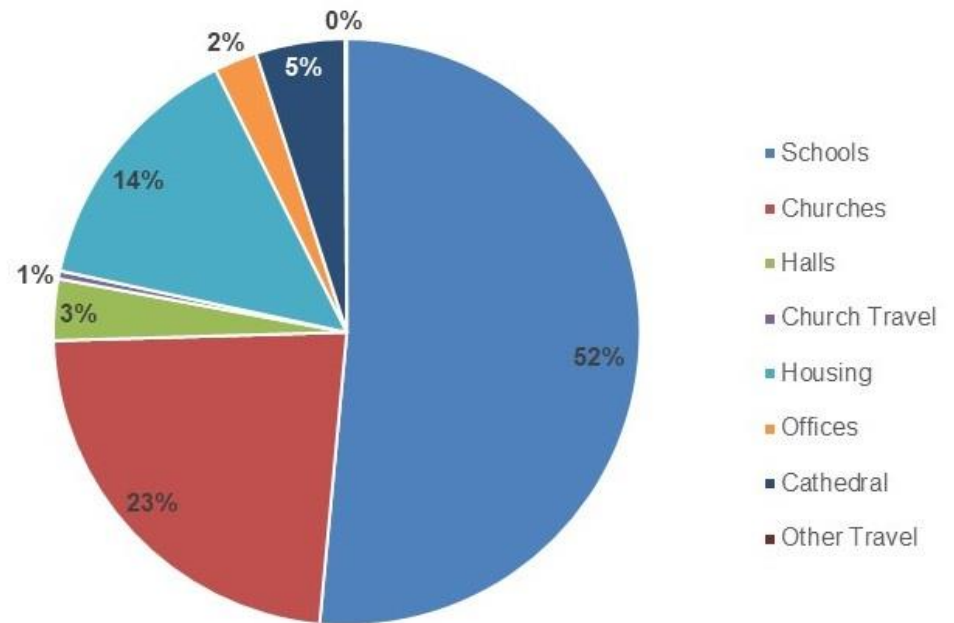
This plan sets out how our diocese will work towards implementing the [Church of England Routemap to Net Zero Carbon by 2030](#). We will simply refer to this as the Routemap.

The Routemap commits dioceses to a reduction of at least 90% emissions compared to the baseline by 2030. A maximum of the remaining 10% will then be offset from 2030 onwards.

## Please Note:

**Pages 1 to 7 of this document provide a summary of our plan. The remaining pages provide further detail for each area.**

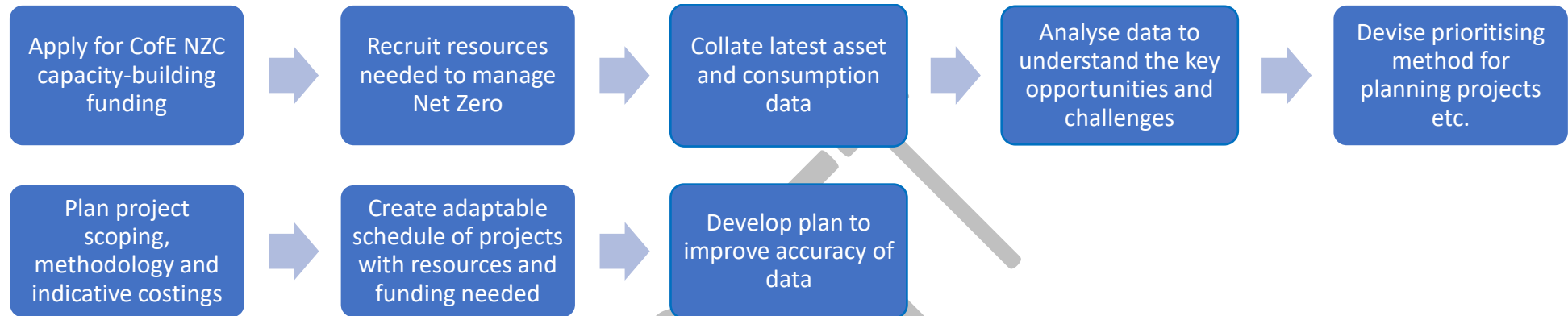
2021 Diocesan Carbon Footprint : 9968 tonnes



# Outline approach

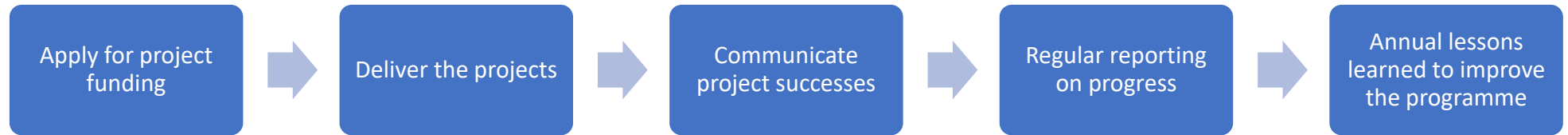
This section provides a broad overview of the two key phases of the programme. These phases may overlap to some extent.

## Programme set-up



Key activities	Owner	'23	'24	'25	'26	'27	'28	'29	'30
Apply for Church of England Net Zero Carbon capacity-building funding.	Net Zero Lead	*							
Recruit resources needed to manage Net Zero	Managers	*	*						
Collate latest asset and consumption data (as accurately as possible)	NZ staff	*	*	*					
Analyse data to understand the key opportunities and challenges	NZ staff		*	*	*				
Devise prioritising method for planning projects etc.	NZ staff		*	*	*	*			
Plan project scoping, methodology and indicative costings. Use a methodology that is repeatable and efficient wherever feasible.	NZ staff		*	*	*	*	*	*	
Create adaptable schedule of projects with resources and funding needed.	NZ staff			*	*	*	*	*	
Develop plan to improve the accuracy of data (e.g. Energy Footprint Tool)	NZ staff	*	*	*	*	*			

## Programme funding and delivery



Key activities	Owner	'23	'24	'25	'26	'27	'28	'29	'30
Apply for project funding	NZ staff +		*	*	*	*	*	*	*
Deliver the projects/activities	NZ staff +		*	*	*	*	*	*	*
Communicate project successes	Media & Eng.		*	*	*	*	*	*	*
Regular reporting on progress to Net Zero Programme Manager and NZ Working Group	NZ staff		*	*	*	*	*	*	*
Annual lessons learned to improve the programme	NZ staff		*	*	*	*	*	*	*

Note: Applying for funding and delivery of projects will be a joint activity with NZ staff and the responsible body e.g. church, school etc.

# Carbon reduction plans summary

## Schools

There are 52 schools in scope in which our diocese has Church Majority influence. 16 are Voluntary Aided (VA) schools and 36 are academies.

The Diocesan Board of Education (DBE) is directly responsible for the capital funding for the 16 VA schools and will prepare and bid for government funding for a large proportion of the decarbonisation.

The other 36 schools in scope are part of either single or multi-academy trusts. The academies are responsible for their own capital funding programmes and will therefore need to prepare and bid for government funding themselves. DBE will work proactively with these academies to seek to ensure that these plans are put in place.

It should be noted that the Government is working towards a 2050 net zero target. Furthermore, government funding is currently significantly oversubscribed. We were not successful in attracting funding in 2023 and at present bids can only be submitted annually.

DBE has already commissioned work on decarbonisation planning for the VA schools. The recommendations have been made available to these schools which includes some low-cost energy reduction measures as well as behaviour change.

The DBE will encourage all schools to implement similar low-cost measures alongside working on large-scale decarbonisation plans.

## Churches and church halls

There are 317 churches (and related halls) in scope.

All churches will continue to be encouraged to sign up for the Eco Church scheme and to progress through the award stages.

A Parish Energy Advisory Team will be established to provide project and funding support that parishes will need to decarbonise. In the first instance, this team will collate a comprehensive database of the buildings. The Routemap asks all churches to move to LED lighting and the top 20% of carbon emitters (typically the busy churches that are used during the week as well as Sundays) to develop and implement net zero plans which will include replacing oil or gas heating wherever feasible. All churches will be encouraged to change to green energy tariffs when feasible.

Projects will be prioritised on 'readiness to go' and the top 20% of emitters. Funding opportunities (including local fundraising) will be identified. The Parish Energy Advisory Team will guide the parishes through the project process in data collation, development of audits/proposals, project management, tendering, funding and contracting a supplier to deliver works. Training and behavioural change initiatives complement the projects.

## Clergy housing

Within scope are 167 clergy houses which includes the Bishop's house. The Archbishop's residence is out of scope. **Important note: The national scope for net zero is based on EPC grades and average reasonable use, not actual usage.**

The plan is to improve the energy efficiency of all stock to EPC level C. As a first step we are renewing all our EPC assessments to ensure that we have an accurate baseline. There are pilot projects to fit air source heat pumps and for a new build vicarage that will be as close as feasible to net zero. We will draw on learning from these and other national pilot projects to enhance our future programme of works.

Any significant works will be carried out during vacancies as far as possible where these would represent significant disruption.

## Diocesan office

We would like Diocesan House to be a demonstrator project to inspire, educate and encourage others to undertake similar initiatives. There are however constraints that arise from being located in a conservation area. We will initially engage a low carbon practice to undertake a feasibility study on what might be possible. We will then develop designs in conjunction with the local authority planners and seek funding for agreed works.

## Cathedral estate

A report and action plan are being presented to Chapter during the autumn. This overall plan will be updated to reflect these in due course.

## Work-related travel

Work-related travel makes up only a very small percentage of our total emissions. This applies to diocesan staff, schools and PCCs. Travel to and from work is not in scope at present.

- We will promote the Energy Saving Trust Sustainable Travel Hierarchy and encourage its use for making travel decisions.
- Our expenses policy will be updated to encourage sustainable transport.
- We will review options to offer EV leasing or EV pool cars to staff and install EV charging and consider secure bike and changing facilities/lockers.
- We will develop a recommended school coach hire policy.

## Glebe land

There is only a small amount of glebe land owned by our diocese. There are no large fields that could be used for renewable installations such as a solar farm. The holdings are small parcels of land. A land management plan is complete. No further action is required.

## Carbon offsetting

No action on carbon offsetting will be done until the 2029 Carbon Footprint Report is issued. This is in line with the Routemap and the CofE recognises that an early move towards offsetting could divert funds from initiatives to reduce carbon emissions. The goal is to ensure that the offsetting should not be for more than 10% of the baseline.

## Investment summary

Based on the indicative estimates and a potential schedule for works, the following summarises the investment that could be needed. Where the number of assets is high, there is a high degree of sensitivity to the individual estimate. Cost estimates will be refined as local and national demonstrator projects progress. Cathedral estimates will be incorporated when available. Inflation has been excluded.

Area	Estimate	Number	Total	2023	2024	2025	2026	2027	2028	2029	2030
Schools	£850,000	52	£44,200,000			£7,366,667	£7,366,667	£7,366,667	£7,366,667	£7,366,667	£7,366,667
Churches & Halls	£50,000	317	£15,850,000				£3,170,000	£3,170,000	£3,170,000	£3,170,000	£3,170,000
Clergy Housing	£50,000	167	£8,350,000	£100,000	£100,000	£100,000	£1,610,000	£1,610,000	£1,610,000	£1,610,000	£1,610,000
Diocesan Office	£500,000	1	£500,000		£10,000	£30,000	£460,000				
<b>TOTAL</b>			<b>£68,900,000</b>	<b>£100,000</b>	<b>£110,000</b>	<b>£7,496,667</b>	<b>£12,606,667</b>	<b>£12,146,667</b>	<b>£12,146,667</b>	<b>£12,146,667</b>	<b>£12,146,667</b>

## Funding sources

The order of magnitude of investment required is significant!

Investment for schools is primarily the responsibility of the government who are working towards a 2050 net zero target. Current funding programmes are heavily oversubscribed.

The Canterbury Diocesan Board of Finance has a weak financial position with very limited assets - second to bottom of the national diocesan league table. Whilst it is appropriate that some diocesan investment be made into this important programme this can only represent a very small part of the total investment required.

Some Parochial Church Councils (PCCs) have funds that could be invested although this is likely to be limited, especially after the impact of Covid.

The national programme has £180m to invest over the period to support dioceses with their programmes. Divided amongst 42 dioceses, this will represent a small part of the total investment. This funding will be used to build capacity and to lever in additional investment.

It is clear from the above that a significant amount of additional fundraising will be required. This will include local and national grant funders and appeals to those in the church and beyond.

This plan assumes that all responsible bodies will choose to migrate to green energy tariffs as soon as feasible. The recent disruptions in the energy market may make this change difficult within tight budgets.

## Capacity

Preparing and delivering a programme of this magnitude will require significant additional staff capacity beyond that which can be accommodated as part of normal day to day activities. This has been recognised by the national programme and capacity funding has been made available. The weak financial position of our diocese will significantly limit the additional capacity that can be made available, and the national funding request will therefore likely be relatively higher than other dioceses. A discussion is in progress with the national team to discuss the level of funding that might be available, and a joint request is being explored with another diocese.

**Note: If national funding is less than the amounts requested, this is likely to have a significant impact on what the programme can deliver.**

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**End of Plan Summary**



# Schools

## Scope

The energy used by schools where the Diocesan Board of Education (DBE) has a significant degree of influence, including halls and other buildings. Work-related travel including school trips are also within scope.

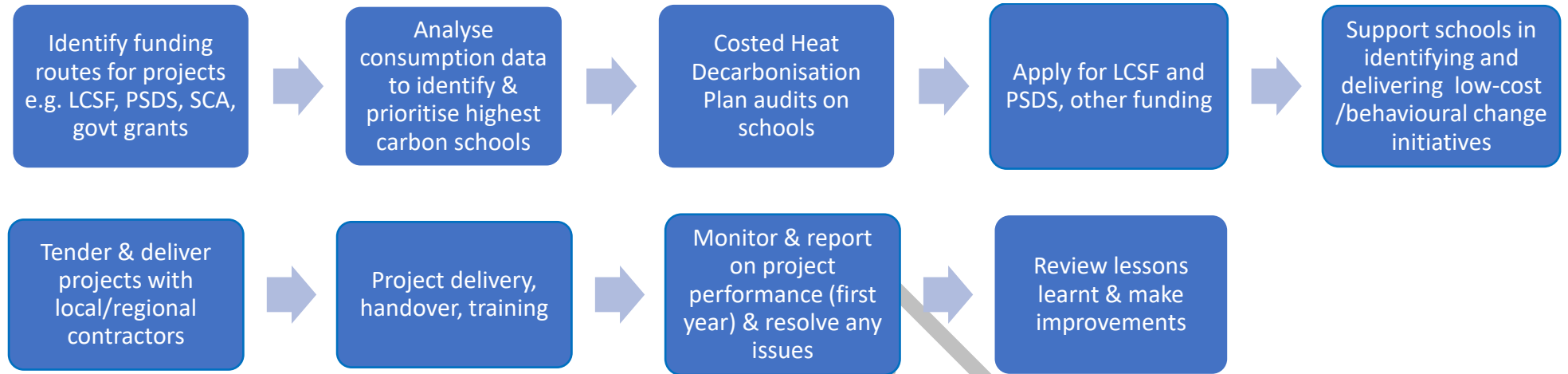
There are a total of 52 schools in scope of which 16 are Voluntary Aided (VA) and 36 are academies. The academies are spread between three multi-academy trusts and six single academy trusts. Other Church of England schools are out of scope such as Voluntary Controlled Schools and Academy Trusts where the Church of England is in a minority at member level. However, we will seek to influence these where possible.

As of May 2023, a consultancy (Inspired Efficiency Ltd) has completed Heat Decarbonisation audits on all VA schools focusing on the plant in the schools, not the building fabric. These have been sent to the schools.

## National carbon net zero routemap actions

Ref	National Carbon Net Zero Routemap Actions	By
4.3.3b	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 BEIS to deliver	2023
4.3.3c	Revise to include Execution Plans (funding, delivery method, programme etc)	2024
4.3.3d	Revise to include Heat Decarbonisation Plan	2026
4.3.3e	Deliver the actions in these plans (subject to funding)	2030
4.3.4	DBE to take the lead in the promotion of the Energy Toolkit in their schools to commence data collection from utility bills	2022
4.3.6	DBE to take the lead in the promotion of smart meter installations in schools and be undertaking data analysis from the information provided	2023
4.3.7	All schools to work with their procurement provider to switch to green energy tariffs at point of contract renewal	2025

## Key activities



Key Activities	Owner	'23	'24	'25	'26	'27	'28	'29	'30
Identify funding routes for projects e.g. LCSF, PSDS, SCA, govt grants	DBE	*	*	*	*	*	*	*	*
Analyse consumption data to identify & prioritise highest carbon schools	DBE	*	*						
Costed Heat Decarbonisation Plans on schools	DBE	*	*	*	*				
Apply for LCSF and PSDS, other funding	DBE	*	*	*	*	*	*	*	*
Support schools to identify & deliver low-cost/behavioural change initiatives	DBE		*	*	*	*	*	*	*
Tender & deliver projects with local/regional contractors	DBE			*	*	*	*	*	*
Project Delivery, Handover, Training	DBE			*	*	*	*	*	*
Monitor & report on project performance (first year) & resolve any issues	DBE			*	*	*	*	*	*
Review Lessons Learnt & make improvements	DBE				*	*	*	*	*

## Estimated costs and funding opportunities

Estimate costs will be built up with the Heat Decarbonisation Plans as they are completed for each set of schools. In the meantime, this plan assumes an average cost of £850,000 per school.

Funding opportunities may come from the following areas:

- School Condition Allocations grants – for insulation/keeping heat in
- Devolved Formula Capital
- Public Sector Low Carbon Skills Fund (LCSF), from the UK Government – for Heat Decarbonisation Plans
- Public Sector Decarbonisation Fund, from the UK Government
- Engaging with Kent County Council and district/borough Councils regarding potential collaboration on funding and delivery of school decarbonisation projects

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# Churches and Church Halls

## Scope

This energy used by our 317 churches, many with church halls. These are the responsibility of 204 parishes.

There is a wide variety in building size, type, age, fuels, building fabric, building services and usage patterns. A large proportion of churches in our diocese are listed buildings and many are in rural locations.

The Routemap focuses efforts on the highest 20% of carbon emitters and also identifies that all buildings should move to LED lighting and green energy tariffs as soon as practical. Every Parochial Church Council (PCC) will need to develop plans to achieve this, with support and advice from the Diocesan Advisory Committee (DAC).

Quinquennial reports should identify how churches can meet the 2030 plan. Each PCC should be ready to apply for appropriate funding opportunities where the plan cannot be met within the parish's own resources plus any funding available through our diocese.

There is some dependency on the government for rolling out national grid infrastructure to rural locations.

Note: Some churches and church halls where there is low energy use may still be using oil or gas heating beyond 2030 until it is feasible to transfer over to electric heating.

## National carbon net zero routemap actions

Ref	National Carbon Net Zero Routemap Actions	By
4.2.4	The top 20% of energy-consuming churches to develop net zero carbon action plans. These should include, as a minimum, low-carbon heating options to replace fossil-fuel heating at end-of-life, such as heat pumps or far infra-red heating panels. 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.	2027
4.2.5	90%+ completion rate for the Energy Footprint Tool.	2023
4.2.9	Eco Church registration <ul style="list-style-type: none"> <li>• 10% of local churches registered; 5% of local churches awarded at least at bronze (= Bronze Eco Dioceses standard).</li> <li>• 40% of local churches registered; 30% of local churches awarded, of which at least a third of these awards should be Silver or higher (= Silver Eco Dioceses standard).</li> <li>• All dioceses reach Gold Eco Dioceses standard – targets are currently being amended by A Rocha</li> </ul>	2023 2026 2029
4.2.10	At the point of contract renewal, switch to 100% green electricity tariff, encouraged through a major national switching campaign. <i>*Timing to be kept under review, depending on stabilisation of the energy markets.</i>	2024*
4.2.11	Having reviewed options to replace fossil fuels, all churches 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. <i>*Timing to be kept under review, depending on stabilisation of the energy markets.</i>	2024*
4.2.12	No new oil boilers installed in churches after this date. <i>* contingent on government action to connect rural communities to the grid.</i>	2025*
4.2.13	All churches to have energy efficient lighting installed throughout, with timers and light and motion sensors where appropriate.	2025
4.2.14	At least the top 20% of energy-consuming churches, to deliver the actions in their Net Zero Carbon Action Plans.	2030

## Key activities





Key Activities	Owner	'23	'24	'25	'26	'27	'28	'29	'30
Set up Energy Advisory Team (EAT) to create & support project delivery process	DAC	*	*						
Collate information on entire estate, including church halls	EAT / DAC	*	*						
Continue Heat Decarbonisation plans & low-cost measures recommendations	EAT / DAC	*	*	*	*	^			
Build clear picture of assets using different fuels for heat: electricity, 3-Phase electricity supply, oil and gas	EAT / DAC	*	*						
Identity funding sources for multiple or single parishes	EAT		*	*	*	*	*	*	*
Prioritise parishes by 'ready to go' and 'highest emitters'	EAT	*	*						
Plan batches of parishes for funding, procurement and delivery	EAT		*	*	*	*	*	*	*
Tender, deliver and handover projects	EAT		*	*	*	*	*	*	*
Post-projects checks on performance & satisfaction	EAT		*	*	*	*	*	*	*
Report on lessons learned & continuous improvement	EAT		*	*	*	*	*	*	*

## Estimated costs and funding opportunities

An indicative estimate of £50,000 per church on average has been used for broad planning purposes.

Funding opportunities may come from the following areas:

- PCC funds
- Grant applications made through the diocese for national or other funding
- Local donations, friends of...
- Other fundraising and local grant applications

# Clergy housing

## Scope

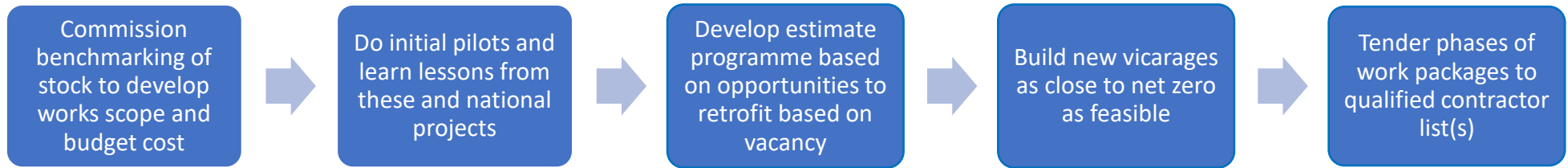
The energy use of our 167 properties used for clergy housing, including the bishop’s house, and for rental when not otherwise in use. **Note: Energy usage is based only on EPC grades and average reasonable use, not actual usage.**

The current target is to get housing to EPC C rating, which is the Government’s proposed legislation by 2025. We are initially targeting boilers for renewal that are 20 years old and improvements to insulation.

## National carbon net zero routemap actions

Ref	National Carbon Net Zero Routemap Actions	By
4.1.5a	Audit clergy property (where possible)	2023
4.4.2	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.	2023
4.4.3	To have commissioned stock surveys such as EPC+ reports for at least a representative sample of clergy housing.	2023
4.4.4	To have run switching campaigns to encourage occupiers to switch to ‘green’ electricity and green gas tariffs if necessary at the point of contract renewal. <i>*Timing to be kept under review, depending on stabilisation of the energy markets.</i>	2024*
4.4.5	To have stock improvement plans in place, having regard to the timing of when properties become vacant. The plan should make reference to the <i>Practical Path to Net Zero for Clergy Housing</i> (Milestone 4.4.1) and actively consider implementation of ‘quick wins’, how to decarbonise heat and how to reduce energy consumption.	2024
4.4.8	At change of tenancy, install smart meters to assist with monitoring and management of energy consumption.	2030

## Key activities



Key Activities	Owner	'23	'24	'25	'26	'27	'28	'29	'30
Commission benchmarking of stock to develop works scope and budget cost	Property	*							
Do initial pilots and learn lessons from these and national projects	Property	*	*						
Develop estimate programme based on opportunities to retrofit based on vacancy	Property	*	*	*	*	*	*	*	*
Build new vicarages as close to net zero carbon as feasible	Property	*	*	*	*	*	*	*	*
Tender phases of work packages to qualified contractor list(s)	Property	*	*	*	*	*	*	*	*

## Estimated costs and funding opportunities

An estimate of £50,000 per property on average has been assumed (excluding new builds).

Funding opportunities may come from the following areas:

- £200k allocated in 2022/3 for EPC improvement.
- Other diocesan funds – although these are extremely limited
- Church of England Triennium funding
- The Marshall's Charity
- [UK government grants for domestic properties](#)



# Diocesan office

## Scope

The energy used in Diocesan House. The bishop’s office is part of Old Palace which is the archbishop’s residence. This will be covered by national church.

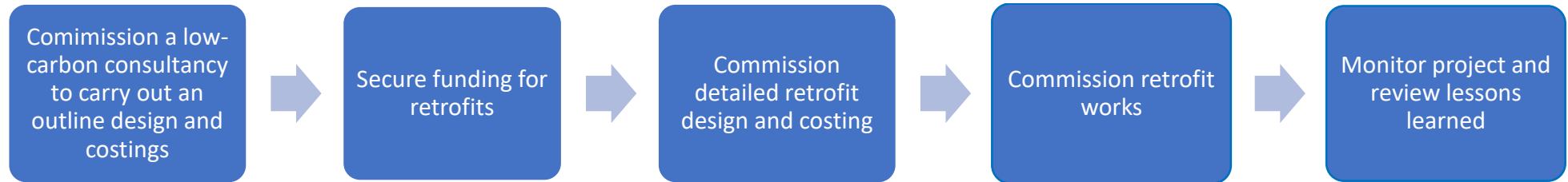
As a minimum, Diocesan House will need to achieve an EPC C rating by 2025 and a B rating by 2030 to meet government regulations for office buildings. The 1953 built main building, and 1961 built attic, use a 1997 installed gas boiler which is reliable. The cottage extension was built in 1993 and has a new gas boiler which was installed in 2022. The lighting is under an LED replacement programme. EV charging has been considered but not installed yet.

There are restrictions on what measures can be adopted for this building as it is part of planning conservation area.

## National carbon net zero routemap actions

Ref	National carbon net zero routemap actions	By
4.6.1	Diocesan House Eco Church Award Status – achieve Silver (currently Bronze)	2026
4.6.2	Diocesan House to measure and report on carbon emissions	2023
4.6.3	Diocesan House to have at least a high level Net Zero Carbon Plan	2023
4.6.4	Diocesan House electric vehicle charging points and dedicated parking spaces	2024
4.6.5	Diocesan House to switch to a green electricity tariff at the point of contract renewal. <i>*Timing to be kept under review, depending on stabilisation of the energy markets.</i>	2024*
4.6.6	Diocesan House: having reviewed options to replace fossil fuels, if remaining on gas heating switch to a ‘green’ gas tariff at the point of contract renewal. <i>*Timing to be kept under review, depending on stabilisation of the energy markets.</i>	2024*
4.6.7	No new or replacement oil boilers to be installed	2025
4.6.8	Diocesan House to deliver the actions in the net zero carbon action plan	2030

## Key activities



Key activities	Owner	'23	'24	'25	'26	'27	'28	'29	'30
Commission a low-carbon consultancy to carry out an outline design and costings	Property	*	*						
Secure funding for retrofits	Property		*	*					
Commission detailed retrofit design and costing	Property			*	*				
Commission retrofit works	Property				*	*			
Monitor project and review lessons learned	Property					*	*		

A standard that could be considered is the highly recognised [Passivhaus EnerPHit standard](#). However, its feasibility in a conservation area is not yet known.

## Estimated costs and funding opportunities

An indicative estimate for the works is £500,000.

Funding might come from the following sources:

- The existing annual renewals and repairs budget – currently £32,000 p.a.
- The arrangements with the car park management provider
- Diocesan funding – although this is limited
- National Carbon Net Zero funding

# Cathedral estate

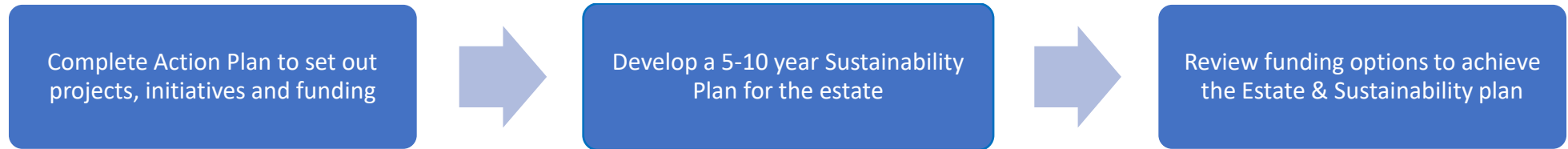
## Scope

The energy used by all buildings within the green line forming part of the precinct. The Cathedral estate consists around 120 buildings including the Cathedral, the Precincts, ancillary buildings and a large number of properties to which the organisation is landlord. Buildings across the estate run on kerosene as the main heating fuel.

## National carbon net zero routemap actions

Ref	National carbon net zero routemap actions	By
4.2.4	Develop a net zero carbon action plan. This should include, as a minimum, low-carbon heating options to replace fossil-fuel heating at end-of-life, such as heat pumps or far infra-red heating panels. 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.	2027
4.2.6	Complete a review. The review should refer to the Practical Path to Net Zero and actively consider implementation of 'quick wins', how to decarbonise heat and how to reduce energy consumption.	2023
4.2.10	At the point of contract renewal, switch to 100% green electricity tariff, encouraged through a major national switching campaign. <i>*Timing to be kept under review, depending on stabilisation of the energy markets.</i>	2024*
4.2.11	Having reviewed options to replace fossil fuels, if the cathedral remains with gas heating, switch to a 'green' gas tariff at the point of contract renewal, based on national advice about the criteria to apply. <i>*Timing to be kept under review, depending on stabilisation of the energy markets.</i>	2024*
4.2.12	No new oil boilers installed after this date.	2025
4.2.14	Deliver the actions in their Net Zero Carbon Action Plans.	2030

## Key steps



Key Activities	Owner	'23	'24	'25	'26	'27	'28	'29	'30
Complete Action Plan to set out projects, initiatives and funding	Cathedral	*	*	*					
Develop a 5-10 year Sustainability Plan for the estate	Cathedral		*	*	*				
Review funding options to achieve the Estate & Sustainability plan	Cathedral			*	*	*	*	*	*

## Estimated costs & funding opportunities

No estimate is available at present.

Funding opportunities may come from the following areas:

- National Triennium funding
- Sale of assets not required by the Cathedral
- Campaigns for private contributions from members of Cathedral communities

# Work related travel

## Scope

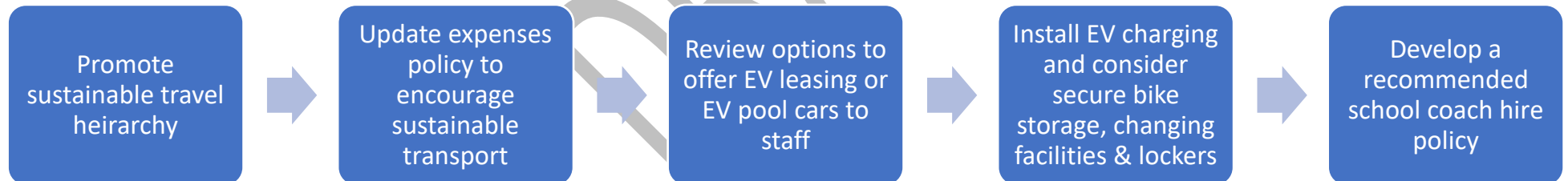
All work-related travel for diocesan staff (and expenses claimed on diocesan business), school staff and parish staff. This section of the plan focusses only on diocesan staff and Diocesan House.

The 2030 target does not include staff commuting, parishioner or school travel. However, these are areas in which our diocese can try to influence. As they are outside of scope, they are not covered in this plan.

## National carbon net zero routemap actions

Ref	National carbon net zero routemap actions	By
5.3.3	All dioceses, schools, offices to develop or update a Travel Plan that includes 'no travel' options.	2023
5.3.4	All dioceses, schools and offices to review and update travel and expenses policies to encourage sustainable transport.	2024
5.3.6	Diocese to review opportunities to install electric charging for coaches for churches that are tourist destinations.	2025

## Key activities



Key activities	Owner	'23	'24	'25	'26	'27	'28	'29	'30
Promote the Energy Saving Trust Sustainable Travel Hierarchy and encourage its use for making travel decisions while considering the greenest mile is the mile not travelled.	People Services	*	*	*	*	*	*	*	*
Update expenses policy to encourage sustainable transport. Consider offering UK Government mileage rates for cycling, motorbikes and carrying passengers on business. Review opportunities to offer the Government Cycle to Work Scheme to employees.	People Services		*						
Review options to offer EV leasing or EV pool cars to staff.	People Services		*	*	*	*			
Install EV charging and consider secure bike and changing facilities/lockers	Operations		*	*	*	*			
Develop and share a recommended school coach hire policy which suggests the use of low carbon transport wherever possible and contains a sustainable coach hire hierarchy.	DBE		*	*					

## Estimated costs & funding opportunities

No costs have been included for these activities. It is assumed that they can be funded through existing budgets.

# Glebe land

## Scope

Our diocese only has a small amount of glebe land which is in small parcels of land. There are no large fields that could be used for renewable installations such as a solar farm.

A land management plan is complete.

## National carbon net zero routemap actions

Ref	National carbon net zero routemap actions	By
6.2.1	Contribute to a baseline survey of the current situation of these holdings run by the national Church	2022
6.2.2	Dioceses to review with their land agents the terms of tenancy agreements to include net zero and biodiversity ambitions	2022
6.2.6	All dioceses to align land management agreements going forward with the diocesan environmental policy objectives	2025

## Key activities

Given the nature of the limited glebe land, there are no activities that will help contribute to net zero.

# Communications plan

## National carbon net zero routemap actions

Ref	National carbon net zero routemap actions	By
4.1.3	Develop a communication strategy to churches and schools	2022
5.1.3	Create a Routemap to Net Zero Carbon by 2030 Communications Strategy	2022

## Key activities

Key Activities	Owner	'23	'24	'25	'26	'27	'28	'29	'30
Encourage churches to register for Eco Church and progress through award levels	Media & Eng.	*	*	*	*				
Encourage churches to complete the Energy Footprint Tool each year	Media & Eng.	*	*	*	*	*	*	*	*
Encourage churches to switch to 100% renewable electricity and “green” gas	Media & Eng.		*	*	*	*	*	*	*
Encourage churches to switch to LED lighting	Media & Eng.	*	*	*	*	*	*	*	*
Encourage the top 20% of churches, in terms of energy use, to work towards being carbon net zero by 2030.	Media & Eng.	*	*	*	*	*	*	*	*
<b>Tell stories of carbon reduction initiatives (e.g. PV panels, heat pumps etc.) and any benefits such as cost reductions that churches might have achieved.</b>	Media & Eng.	*	*	*	*	*	*	*	*
Campaigns over the year to raise awareness of our environmental responsibility	Media & Eng.	*	*	*	*	*	*	*	*

The Diocese of Canterbury has committed to achieving net zero carbon emissions across the organisation by 2030. This commitment was made in the conviction that care for the whole of God’s creation is an essential part of our Christian duty and is the fifth mark of mission:

*To strive to safeguard the integrity of creation, and sustain and renew the life of the earth*

To achieve this aim, we need to ensure that our worshipping communities across our diocese recognise:

- a) the importance of care for creation as a part of their faith
- b) how climate care integrates with wider parish and missional vision



- c) that they feel it is something they can make a difference to personally
- d) hope for the future through an achievable, if ambitious, pathway towards real change.

Challenges we will face include:

- lack of financial and human resource to complete the tasks needed.
- climate apathy.
- climate despair.
- no sense of urgency.

To get to net zero we are asking all churches to focus on four environmental priorities. There are more areas that can be done, but we want to create traction and get people feeling that they are able to make a difference:

1. Be a part of Eco Church
2. Complete the Energy Footprint Tool (EFT) each year as part of your parish return.
3. Switch to 100% renewable electricity and 'green' gas as soon as feasible.
4. Switch to LED for lighting.

In addition, the top 20% of churches in terms of carbon emissions, are being asked to work towards being net zero carbon buildings by 2030. These are generally busy churches with lots of weekday daytime use.

Campaigns over the year to raise awareness of our environmental responsibility could include:

- No Mow May, caring for churchyards and encouraging cultural change in how our public spaces should look.
- Churches Count on Nature/Love your burial ground, encouraging an increasing knowledge of the natural world and promoting biodiversity.
- Creationtide, to increase theological understanding of our stewardship responsibilities.
- COP to encourage partnership across communities and throughout the world as we seek to care for the planet.

# Carbon offsetting 2030

## Scope

Reductions in energy consumption will be prioritised first and after this, the installation of on-site renewable energy generation on suitable buildings, whilst all sites should switch to renewable energy tariffs. This will leave a net carbon footprint.

In line with the Routemap, no action on carbon offsetting will be taken until the 2029 Carbon Footprint Report is issued. An early move to offsetting could divert attention and funds from reducing emissions.

## National carbon net zero routemap actions

Ref	National carbon net zero routemap actions	By
6.1.4	Implement carbon offsetting with an approved supplier to offset those emissions that have been impossible to eliminate	2023

## Key activities

In 2029, research and preparation should be made by the Diocesan Board of Finance, for purchasing offsets in the following year, 2030. From 2025, the CofE will be providing a Parish Buying approved supplier list for carbon offsets.

As time progresses towards 2030, the costs, opportunities and certification structure in the carbon offset market will change, therefore, what is relevant in the market now, may not be towards the end of the decade.

The Routemap states that by 2030, a diocese should offset less than 10% of the baseline carbon emissions, annually.

## Estimated costs

At current prices, carbon offsetting is estimated to cost £22/tonne in 2030. Based on a reduction of 90% emissions by 2030, the residual carbon (excluding our cathedral) is estimated to be c1000 tonnes. Carbon offsets would therefore cost an estimated £22,000 assuming the required reductions in emissions are achieved.

# Capacity

## Scope

This section looks at the additional capacity that will be needed to support the programme over and above the day-to-day workload of the respective teams. The national funding is broken down into triennia. Bids will therefore need to be prepared for each triennia. This section does not include estimates of resources that will be needed to manage the potential large number of retrofit projects that will arise if significant funding is obtained. It is assumed that such project management provision will be incorporated in any funding bids for works. This section does not include our cathedral who will be part of separate funding arrangements. We are working with the Diocese of Rochester to consider how best to resource the programme across the two dioceses.

## National carbon net zero routemap actions

Ref	National carbon net zero routemap actions	By
5.2.10	Individually, or in regional groups, all dioceses to review their capacity to respond to the Routemap and identify gaps	2023

## Key activities



Key Activities	Owner	'23	'24	'25	'26	'27	'28	'29	'30
Finalise with departments the required resources & timescales	Net Zero lead	*							
Agree Role descriptions	Net Zero lead	*	*						
Apply for CofE Resources funding	Net Zero lead	*							
Recruit roles (according to timescales)	Net Zero lead		*	*					

# Governance

A Net Zero Programme Board has been formed from the Senior Management Team with additional key members of their teams who are actively working on Net Zero. The role of the Project Board is to oversee the progress of the programme. It will also be responsible for reporting progress and recommending investment decisions to Archbishop’s Council/Diocesan Synod. Progress will also be reported to the Strategic Programme Board.

Once additional capacity has been recruited, a Net Zero Working Group will be established and chaired by the Net Zero Programme Manager.

Our cathedral will also have a Net Zero Project/Programme Team. A representative would be invited to attend the diocesan Net Zero Programme Board.

## National carbon net zero routemap actions

Ref	National carbon net zero routemap actions	By
4.1.2	Provide an annual carbon emissions report to Diocesan Synod	2022+
7.1.3	Prepare a report on progress on the milestones detailing the successes and explaining the reasons for any delays to progress	2025+

## Key Performance Indicators (KPIs)

The headline indicator will be the total carbon footprint of our diocese. This will be broken down into the various contributory elements. This measure is a “lag” indicator i.e. it takes some time for the measure to be produced. The national reporting is available in the autumn for the previous year.

The lag is further exacerbated by the additional delay between completion of carbon reduction projects and the outcomes being reflected in the carbon footprint. A project completed say in year 1 will not show a full year benefit until year 2 and this will not be reported until the autumn of year 3. For this reason, the Programme Manager and Net Zero team will need to develop a set of “lead” indicators.

These additional measures will need to reflect the following:

- the accuracy of data collection e.g. the level of estimation verses actual data
- the progress of project delivery against the total number of projects required within each element of the programme
- the cumulative carbon reduction anticipated from projects.

There will also need to be a set of financial measures for example showing average costs of projects, funding breakdown etc.

At this point (2023) the KPIs only consist at the overall diocese level, rather than department level. The Programme Manager, with the Net Zero Working Group can decide whether department KPIs are useful in years to come.

# Risk management

A programme of work of this complexity would be challenging in its own right. In addition, there is some uncertainty about capacity to plan the activities and considerable uncertainty about where the bulk of the funding will come from.

The Net Zero Programme Manager, once appointed, will be responsible for creating and maintaining a detailed risk register. The key risks as currently identified are included in the table below.

Key Risk	Level	Owner	Mitigation
<b>Insufficient capacity to develop the programme of activity</b>	Medium	Net Zero Lead	Bid for national funding for capacity Working with Diocese of Rochester on a joint bid Alignment of existing capacity were feasible
<b>Insufficient funding to undertake the full programme</b>	High	Net Zero Lead	<ul style="list-style-type: none"> <li>• This plan which identifies likely costs and potential funding sources</li> <li>• Local and national pilot projects to refine costs</li> <li>• Potential work frameworks or shared tendering to minimise costs of works</li> <li>• Bids to national programme and other funders for groups of projects</li> </ul>
<b>Insufficient funding within programme timescales for schools</b>	High	DBE	<ul style="list-style-type: none"> <li>• Lobby national government to prioritise Church of England schools or to increase investment available</li> </ul>
<b>Insufficient contractor capacity to carry out required works</b>	High	Net Zero Lead	<ul style="list-style-type: none"> <li>• Lobby national government through national programme to work on the skills gap</li> </ul>
<b>Insufficient infrastructure especially in rural areas</b>	High	Net Zero Lead	<ul style="list-style-type: none"> <li>• Lobby national government through national programme to work on the skills gap</li> </ul>
<b>Insufficient local knowledge or experience</b>	Amber	Net Zero Lead	<ul style="list-style-type: none"> <li>• Learning from other dioceses especially through pilot projects</li> <li>• Working with Diocese of Rochester</li> </ul>

# Version history

Version	Date	Author
Initial draft	2 July 2023	Tristan Oliver - Craig Partnership Ltd
Working draft	14 August 2023	Colin Evans – Net Zero Diocesan Lead
Version 0.1	18 September 2023	For review by Net Zero Project Board on 21 September 2023
Version 0.2	25 September 2023	For review by Episcopal Staff Team
Version 0.3	29 September 2023	For Archbishop’s Council
Version 0.4	13 <sup>th</sup> October 2023	For Diocesan Synod

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