



Scottish Episcopal Church Net Zero Action Plan (2023-2030)

Empowering implementation - for a flourishing future

DRAFT ONLY
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Prepared on behalf of the Provincial Environment Group

Foreword

Thank you for all that you, your Charge and your Diocese are doing to engage with the urgent challenge of climate change, for your response to the Energy Footprint Calculator last year, and for the many other actions you are taking.

The size of the challenge is complex and overwhelming. But we can make a difference if we act together. In this document the Provincial Environment Group (PEG) is offering a Net Zero Action Plan for the Scottish Episcopal Church, to provide a practical pathway for the whole church to follow as we move towards General Synod's target of Net Zero by 2030. We are offering it for consultation with as many people as possible in the church, between now and the early summer of 2023. Discussions and decisions about the Net Zero Action Plan at Diocesan Synods and General Synod will be informed by this consultation.

PEG presented the first steps at General Synod in 2022, and now in this Net Zero Action Plan we develop proposals that will support and empower the actions that will be necessary. As a church we have set ourselves the aim of achieving Net Zero by 2030. I hope that you will find that it will enable you to consider how we can turn our ambition into action.

We have developed this plan to prioritise the areas that would be addressed by Provincial, Diocesan, Charge, and individual action. As you will see, it proposes significant support in terms of both finance and expertise at Provincial and Diocesan levels. The appointment of a full time Director of Net Zero for the Province has already been agreed, but there is also the need for each Diocese to have a Manager of Net Zero. Their role would encapsulate many responsibilities including helping Charges and Dioceses to apply for the significant grant funding that is available.

Please check the Scottish Episcopal Church website for news of the webinars, presentations and articles that will support the consultation – and please take part and have your say! Your views on the Net Zero Action Plan are important, as is our hearing where you may have expertise, experience, or talent that you can share.

The Scottish Episcopal Church is a diverse church, with a wide range of different circumstances in different places. No one set of actions would suit every charge, but the Anglican Communion's *Five Marks of Mission* are a common set of principles for the whole church. These principles will help to shape the vision of *discipleship, hope and justice* which is offered as the basis of this Net Zero Action Plan. We hope that this will inform you and enable you to embed the principles in your own reflections in this period of consultation, and the steps you and your Diocese and Charge will be taking between now and 2030.



The Right Revd Ian Paton
Bishop of St Andrews, Dunkeld and Dunblane
Convener of the Provincial Environment Group

The Five Marks of Mission

- ◆ *To proclaim the Good News of the Kingdom;*
- ◆ *to teach, baptise and nurture new believers;*
- ◆ *to respond to human need by loving service;*
- ◆ *to transform unjust structures of society, challenge violence of every kind and pursue peace and reconciliation;*
- ◆ *to strive to safeguard the integrity of creation, and sustain and renew the life of the earth.*

Lord of life and giver of hope.

*We pledge ourselves to care for your people and world
to strive to safeguard the integrity of creation
and sustain and renew the life of the earth.*

*May your wisdom guide us
so that all creation may flourish and sing your praise.
May the commitment we've made this day
be matched by our faithful living.¹*

¹ Prayer from the Lambeth Conference 2022, <https://www.lambethconference.org>

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1. Executive Summary

This draft version of the Scottish Episcopal Church Net Zero Action Plan (2023-2030) responds to the call of the General Synod 2020 motion for 'urgent action in relation to the global climate emergency'. It provides the guiding values, strategic principles, core objectives, desired outcomes as well as the required resourcing and enabling interventions to give confidence, support and empowerment to dioceses and charges to take the required steps to reach net zero by 2030. It is a plan that answers the call of the motion to "bring forward a programme of actions ... to resource the Scottish Episcopal Church in working towards achieving net zero carbon emissions by 2030." In doing so, it provides a framework to align the whole church towards our transition to net zero, translating what can feel overwhelming into a coherent structure that breaks down the net zero goal into manageable pieces.

This action plan is not a document that gives charges an easy step-by-step guide on how to reach net zero. Those wishing to take the first steps on the net zero journey are recommended to download the Net Zero Toolkit which is available on the Scottish Episcopal Church website. This document has been created primarily to help bring the church together - to help chart a new course towards a flourishing future. It is thus primarily an internal strategy document. Its purpose is to enable all the various provincial boards and committees, as well as diocesan standing committees, to come together to agree upon a strategy that enables the church to hold itself to account. As part of this, we welcome all charges to provide input to help shape the plan, for it is in service to empower you that our work is directed.

Overview of the sections

Section 2 gives an overview of why the Provincial Environment Group is carrying out this Net Zero Action Plan consultation, who it is aimed at, the overall objectives, our engagement strategy and, most importantly, how you can get involved to help shape it. [The deadline for formal feedback via the online survey is Tuesday March 28th.](#)

The next section then reviews the three guiding values that we have used to underpin the strategy - discipleship, justice and hope. These are the lens through which we take on the task of a net zero future ensuring that these fundamental values guide and inform everything we do.

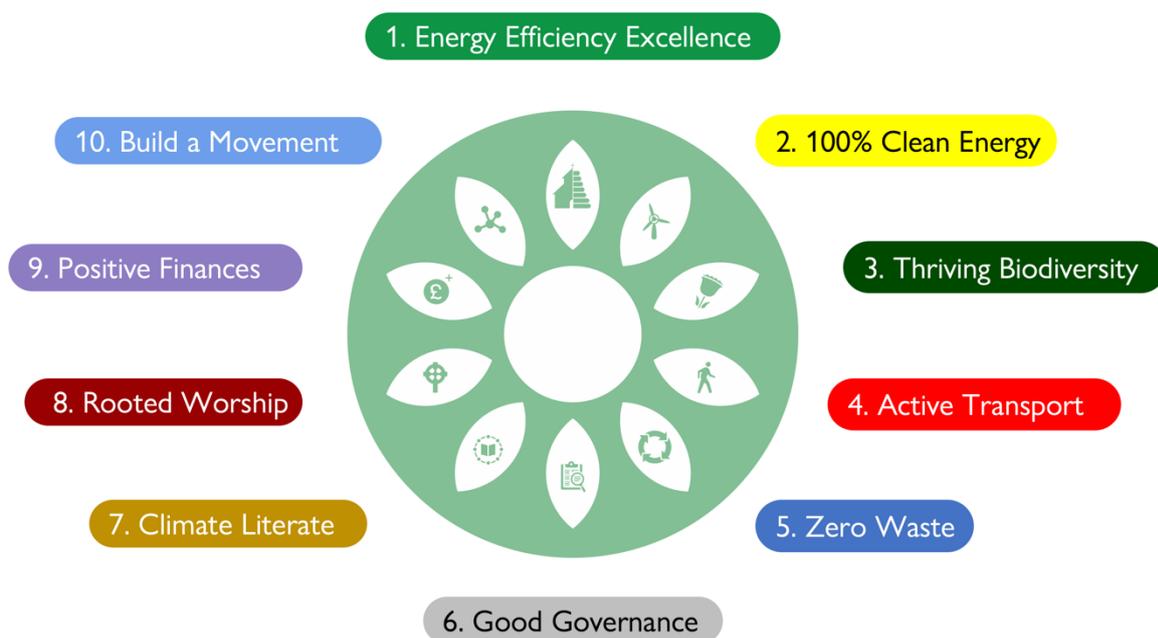
Section 4 outlines our vision of a flourishing future - how the Scottish Episcopal Church can both look inward to transform its operations as well as look outward in calling for system change both nationally and internationally. We outline what we could achieve collectively if we all pulled together and aligned our resources towards a hope-filled future.

Section 5 outlines the high-level objectives of this plan; to 1) reduce our collective carbon emissions by 90% by 2030; 2) invest in clergy well-being and congregational comfort 3) unlock up to £27m in Scottish Government funding; and 4) reduce our operational costs by £3m over the 2023-2030 period. Our results-drive approach is informed by a number of strategic principles including a prudent approach to finances, a reliance on mature, readily available technological solutions and a working style that seeks synergistic collaboration with internal boards/committees whilst partnering with an ecosystem of changemakers across Scotland. This section concludes by providing Standing Committee

with three Key Performance Indicators that can hold this plan to account, helping direct resources and investment towards empowering charges to take effective action on their journey to net zero.

We are cognisant that our approach must be carbon credible. Section 6 therefore outlines how we define the net zero 2030 target, what is included in the scope of activities as well as where we place the organisational boundary. We provide reference to the standards-based approach we are taking to our methodology, as well as the UN principles that guide it. A summary is therefore provided of the monitoring and reporting framework we are putting in place as well as how we calculate our net zero equation.

The bulk of this document is in section 7, which provides a detailed overview of the ten core objectives of the Net Zero Action Plan, each of which has a corresponding set of key results which need to be tracked to ensure effective governance and oversight. As a result, this plan provides a results-driven pathway which enables the church to hold itself accountable, laying out the clear priorities for the journey ahead. The ten core objectives are summarised below.



The final section of the plan outlines how our guiding values, strategic principles and the ten core objectives come together via 50 enabling interventions. These are the activities that the General Synod Office, provincial boards/committees and diocese standing committees need to undertake to empower all charges with the resources they need to reach net zero by 2030. By design, there is no conclusion – that will be written after this consultation period ends.

Implementing the full set of recommendations outlined in this Net Zero Action Plan (2023-2030) will affirm the objectives of the motions passed at General Synod 2021 which called “on the Standing Committee of the General Synod to put in place appropriate structures to enable action at provincial level” as well as “on Dioceses to put in place appropriate structures to enable action at diocesan level.”² It is a plan that requires the whole body of the church to come together, realising discipleship, justice and hope in practice.

² Motion 16 & 17, GS 2021. See Appendix Two for previous synod motion analysis

2. Consultation overview

This consultation phase for the Scottish Episcopal Church's net zero strategy is an opportunity for stakeholders from across the province to help shape the future of our church. We want to ensure that everyone gets a say in how the church implements its net zero strategy.

Who is this consultation aimed at?

Stakeholders across the Scottish Episcopal Church including charges and dioceses, as well as provincial boards and committees.

Consultation objectives - why are we doing this?

- To engage in a participatory process with stakeholders across the Scottish Episcopal Church, enabling all parties to express their views and provide input into the proposed Net Zero Action Plan (2023-2030).
- We are seeking feedback on the overall Net Zero Action Plan, as it relates to the 2023-2030 period. As part of this, we want agreement on the Net Zero 2030 target definition including the proposed organisational boundary and the scopes of activities that will be included in our target. We also want feedback on the specific 'Key Results' that are associated with each of the ten core objectives found in section 7. Where we are seeking specific feedback, you will find guidance via a box like this: 📌



This is the way we indicate we want your specific feedback ...

- We welcome any comment into the overall strategy, including the proposed resources and enabling interventions that are being recommended to support this ambitious goal.
- We want to raise awareness of the net zero journey ahead, build momentum and align the community on the shared objectives and tasks ahead ready for motion approval at General Synod 2023.
- We want to embrace the collective intelligence of the SEC community to collect a broad set of valuable feedback including additional ideas, opinions and insights and make adaptations based on this.

How can we get involved?

1. Register for one of the online webinars on either *Tuesday 21st February (16.30-18.00)* or *Thursday 9th March (11.30-13.00)* – bringing any questions you have about this document or our strategy.
2. Complete the formal online consultation survey. You will find a copy of the questions included in the survey at the end of this document.

Deadline and next stages:

- We expect it will take two hours to read this document. We would like you to submit your formal feedback on this draft Net Zero Action Plan (2023-2030) by **12 noon on Tuesday March 28th**, when the online survey will close.
- Data submitted as part of this process will then be reviewed and aggregated, with a presentation of the results and recommended changes presented for review by Provincial Environment Group on April 18th, 2023.
- The final version of the PEG approved Net Zero Action Plan (2023-2030) will be offered for presentation to Standing Committee in April and subsequently included in the papers for General Synod 2023.
- The Provincial Environment Group will seek approval of the Net Zero Action Plan (2023-2030) via a motion at General Synod 2023 (June 8-10th).
- If you have any questions about the consultation, please email: peg-feedback@scotland.anglican.org

Engagement Strategy

- Prior to the publishing of this draft plan, representatives of the Provincial Environment Group have already had engagement regarding the high-level strategy with Bishops, Deans, the Provincial Buildings Committee, Church in Society Committee, Scottish Episcopal Institute, as well as guidance from the Provincial Standing Committee.
- PEG will also have representation at each 2023 Diocesan Synod - this being a good platform from which to interact with members of the church as well as receive valuable informal feedback to guide the strategy.
- Letters about the consultation have been sent to all provincial committees and boards, as well as diocese administrators and secretaries.
- Information about the consultation has been included in the February 2023 edition of the SEC Inspires Online newsletter which reaches over 2000 people (you can sign-up via the website!) and will be highlighted in the March newsletter too.
- Information about this consultation is showcased on the front of the SEC website during the course of the consultation with promotion also via SEC social media channels.
- The consultation was launched on Wednesday 15th February via a live stream introduced by Bishop Ian Paton, accompanied by consultant Robert Woodford. You can review the launch video from the PEG area of the SEC website, under 'Tackling climate change'.
- Individual emails from the General Synod Office have been sent to all charge vestries to ensure broad consultation, requesting at least one vestry member attend the launch or webinar.
- We are reaching out to stakeholders using a variety of formats. However, the formal feedback process is managed via the online survey (see above). In general, formal feedback should be provided via this method. If this is not convenient, you are also welcome to provide feedback via an email using the address above and putting 'consultation feedback' in the title.

This draft Net Zero Action Plan is not a finished product, and the Provincial Environment Group don't have all the answers - we want to co-create this together. Thank you for your contribution and input to help make this Net Zero Action Plan (2023-2030) a success. Your feedback is greatly appreciated.

3. Our guiding values

To guide this work together as a church, we embrace three fundamental Christian values: discipleship, justice and hope. These values underpin all that we do and as we join together in this journey they will sustain the work required. They are the lens through which we see the Net Zero 2030 target and our guiding force for action.

Discipleship

- As disciples we are all called to live out the teachings of Jesus in our day-to-day lives, following Christ's advocacy for love, justice and compassion in the world and responding in ways that imitate the life of Christ in our thoughts, words and deeds. Discipleship is, in the words of Rowan Williams, about "going on asking whether what we do, how we think and speak and act, is open to Christ and Christ's Spirit; developing the skills of asking ourselves the difficult questions about our consistency and honesty, about how seriously we take what we say."³
- We acknowledge that this calling is not about one off 'net zero fixes' but about the active and continuous participation in the transformation of the world. It is about fusing our lives into alignment with Christ to help bring about the kingdom of Heaven on earth.
- As disciples, we are called to protect and care for God's creation and to hold steadfastly the Anglican Communion's fifth mark of mission - 'to strive to safeguard the integrity of creation and sustain and renew the life of the earth' - transforming this mission into action in all that we do.

Justice

- We embrace the command to "love your neighbour as yourself", acknowledging that powering our churches with fossil-fuels and continuing church-as-usual is causing devastating impacts on our fellow brothers and sisters across the world. We will ensure that those on the receiving end of climate change have a voice, recognising that those most affected by the climate emergency - those that have done least to cause it - do not have the luxury of the choice. In doing so, we acknowledge the "radical discrepancy between those who have a say and those who feel the pain."⁴
- Climate justice "recognises humanity's responsibility for the impacts of greenhouse gas emissions on the poorest and most vulnerable people in society by critically addressing inequality and promoting transformative approaches to address the root causes of climate change."⁵ We will therefore, at all times, hear the cry of those most impacted by the climate crisis, standing in solidarity to ensure that justice is advocated in every decision we take as we transition to net zero.⁶

³ Williams, Rowan (2016-07-20T23:58:59.000). *Being Disciples*. SPCK. Kindle Edition.

⁴ Cripps, Elizabeth (2022-02-02T22:58:59.000). *What Climate Justice Means And Why We Should Care*. Bloomsbury Publishing. Kindle Edition.)

⁵ p.497, Meikle, Mandy, Jake Wilson, and Tahseen Jafry. "Climate justice: Between mammon and mother earth." *International Journal of Climate Change Strategies and Management*(2016).

⁶ We accept that 'those' people are not a single homogenous group of people in the 'global south', but are individuals from "local communities, Indigenous groups, peasants, and territorial organisations that are victims of the impacts of capitalism, patriarchy, colonialism, structural violence, and extractivist development policy" as well people that are from "vulnerable populations displaced, sacrificed, polluted, politically persecuted, intimidated, and threatened by corporations, the financial system, and States." See *Climate Justice Glossary*, issued by the Latin American and Caribbean Platform for Climate.

- We also support the people in Scotland whose livelihoods are impacted by the transition to net zero. In this regard, we support a fair and just transition for the people of Scotland, ensuring that as we navigate towards a regenerative future this is done in an equitable way, materially enhancing the livelihoods and well-being of all people.

Hope:

- In the face of the climate crisis and intense sufferings of our world, it is easy to become overwhelmed with despair. Our work as disciples is to find the hope that pulls us ever forward whilst contending with the grief of the world. As we undertake this work, we trust in God's love, trusting in our role as agents of change, and recognising the gifts and resources that have been entrusted to us.
- We recognise that hope is not a state of mind passively accepted, but a radical act of faith which comes through the active choices and decisions that we make and in the actions that we undertake in practice to transform our church.
- We will work to support and inspire one another, to remember that we are not alone in this struggle, and that together we can make a difference. We will always hold onto the belief that through focused effort, we will make a positive impact in the world, and that a flourishing future is possible. Through grace, hope will pull us forward.

These values underpin how this net zero action plan has been constructed. Discipleship calls us to be steadfast advocates for justice and compassion, and to take urgent action to protect the planet and its inhabitants. Justice requires that those most affected by the climate crisis are considered in every decision we take. Hope encourages us to find strength in the midst of uncertainty, to trust in God's universal love, and to keep working for a flourishing future.

With these Christian values rooting our work, we can together transform our church and make a lasting and positive impact on the climate crisis. Together we can bequeath to future generations a church that is fit for purpose.

4. Our collective vision – a flourishing future

This Net Zero Action Plan lays out a positive future for the church, tackling head on the triple crises of climate change, biodiversity loss and the cost of living. With unerring focus and dedicated resource, we can address these challenges, transforming the operations of the Scottish Episcopal Church to act in harmony with the living ecosystems in which it resides. Guided by the principles of discipleship, justice and hope, step-by-step we can together bring about a more beautiful world our hearts know is possible.⁷

Our 2030 vision is of a flourishing future for the whole church. One in which:

- ⇒ We are realising the 5th mark of mission ‘to strive to safeguard the integrity of creation and sustain and renew the life of the earth’ – embedding the principles of discipleship, justice and hope in all we do – giving voice to those on the receiving end of climate change and supporting a just transition for the people of Scotland.
- ⇒ Our churches & ancillary halls are resilient places of warm welcome at the heart of the communities they serve, with significantly lower operational costs and powered by 100% clean energy. Our rectories are warmer, lowering costs for clergy & contributing to their wellbeing.
- ⇒ The land we care for is rich in biodiversity, providing places of refuge and calm for nature to thrive.
- ⇒ Our clergy embrace ‘active travel’, moving around their 20-minute local area using their own physical energy (whether walking, wheeling or cycling), and travelling across the broader Scottish regions using public transport or electric vehicles.
- ⇒ The products and services that we use are carefully considered, based on the principles of refuse, reduce, reuse, recycle and restore. We are a zero waste church, contributing to the circular economy.
- ⇒ We have the necessary governance structures in place to give appropriate oversight, holding each other to account with love and kindness, recognising that we are all on a larger journey working towards a mutually-enhancing human-earth relationship.
- ⇒ We are a climate literate church, fully understanding the systemic link between climate change and biodiversity loss, acknowledging that these two aspects are part of a wider set of planetary boundaries which we must not transgress.
- ⇒ Our worship is rooted, rejoicing in our interdependence within the ecosystems of creation.
- ⇒ We have a prudent but holistic approach to financial management, embedding climate justice in all the decisions we take.
- ⇒ We are part of a broader movement of change both nationally and internationally, resolute in our call for system change within the current cultural milieu in which we live and move and have our being.
- ⇒ We are a church that maintains a credible voice for justice in the world, being an active part of the solution in Scotland’s journey to net zero and taking a leadership role in the process.
- ⇒ We are beacons of hope in action, actively participating in the process of healing creation.

⁷ <https://charleisenstein.org/books/the-more-beautiful-world-our-hearts-know-is-possible/>

Our intent is that with this hope-filled provincial future, each diocese and charge will adapt it and make it their own, contextualising it for your mission whilst transforming it into living practice. This is, of course, just a vision, but what if we really strive to make this a reality? What if together we transformed apathy into action, despair into hope, doubt into faith?

As Rob Hopkins, the founder of the Transition Town movement and author of *What if?* states: “maybe it’s time to recognise that at the heart of our work is the need for those around us to be able to imagine a better world, to tell stories about it, to long for its realisation. If we can imagine it, desire it, dream about it, it is so much more likely that we will put our energy and determination into making it reality.”⁸ This plan is a call for the whole church to draw together in hope-filled passion, using its collective energy and determination to make a flourishing future a reality.

⁸ Hopkins, Rob; Hopkins, Rob (2019-10-14T23:58:59.000). From *What Is to What If* . Chelsea Green Publishing. Kindle Edition.

5. Our net zero strategy - empowering implementation

The Provincial Environment Group's strategic approach to implementing the Net Zero 2030 target takes a coherent and unified approach.

Our strategic objectives are to:

1. reduce our collective carbon emissions by 90% by 2030
2. invest in clergy well-being and congregational comfort
3. unlock up to £27m in Scottish Government funding
4. reduce our operational costs by £3m over the 2023-2030 period and
5. ensure discipleship, justice and hope are embedded at the heart of everything we do

In practical terms this translates into many things. It means reducing the energy lost through poor thermal efficiency and stopping the combustion of fossil fuels to heat our churches and halls. It means switching to 100% clean energy and moving towards zero direct emissions heating solutions. It means maximising government grants and having the right contextualised action plans in place.

With all this - and so much else - our strategy is to empower every cathedral and church to take the necessary steps to reach net zero, whether this be through financial support, the selection of appropriate solutions, the provision of resources, the availability of tools, interactive workshops, short webinars, easy-to-use templates, or technical expertise. Our approach will continue to learn from the existing expertise from across the province, bringing together the great work that is already happening, learning tactics and ensuring we refine our strategy in an iterative manner.

It is a strategy that reviews the church holistically, revealing over 50 enabling interventions (laid out in section 8) with a commitment to implement these in collaboration with provincial boards/committees and ecosystem partners across the nation. It is an approach to tackling our net zero 2030 target which ensures transparency, integrity, and credibility.

Our Ten Strategic Principles

Morally imperative

We embrace climate justice in both heart and mind bringing the voice of those on the receiving end of climate change into the room. We hear the call to act urgently, acknowledging the 'slow violence'⁹ that our actions are having on our brothers and sisters across the world which are resulting in cascading impacts, moving the earth towards irreversible planetary tipping points.¹⁰

Ecologically sound

Our approach is focused on absolute emissions reductions halting the release of carbon emissions from church operations. We acknowledge that science tells us every fraction of a degree of global warming matters, every tonne of carbon dioxide released matters.¹¹ In doing so, we recognise that climate change and

⁹ Nixon, Rob. *Slow Violence and the Environmentalism of the Poor*. Harvard University Press, 2011. For a good overview of Rob Nixon's concept of 'slow violence' see: <https://www.bbc.com/future/article/20210127-the-invisible-impact-of-slow-violence>.

¹⁰ To understanding the implications of irreversible planetary tipping points see: <https://www.carbonbrief.org/explainer-nine-tipping-points-that-could-be-triggered-by-climate-change/>

¹¹ <https://www.ipcc.ch/sr15/about/foreword/>

biodiversity loss are intertwined, so our strategy embraces the protection of earth's global ecosystems by addressing these issues together whilst recognising the root causes that underpin them.

Financially prudent

We take a prudent approach to finances. Undertaking the energy efficiency measures outlined in this action plan will lower operational costs for charges by an estimated £2.7m as well as reduce clergy energy bills by £300k over eight years. Our strategy unlocks up to £27m in government funding and will significantly reduce future carbon offset charges - saving ~£400k by 2030 (low end – high uncertainty).

Technically realistic

Our strategy is based on the availability of mature resilient technology. Existing technology, such as heat pumps, have been tested at scale and are readily available with the engineering know-how and necessary funding streams to get there. We want to provide clarity that we do not believe that hydrogen or biomass boilers are suitable solutions for the replacement of gas heating for the timescales under consideration (see 100% Clean Energy – core objective 2).

Protect heritage

Maintaining the heritage of our buildings is of paramount importance, and good maintenance and upkeep is a pre-requisite for enhancing energy efficiency. Our strategy will, in conjunction with the Provincial Buildings Committee, build a partnership with Historic Environment Scotland, with a recommendation for funding the necessary expertise and making this available to charges with listed buildings.

Results driven

Our strategy outlines a set of specific targets for each of the ten core objectives, giving clarity to the key results desired.¹² This helps focus energy and bring alignment to activities across the province based on our net zero 2030 definition. This is important as “net zero pledges alone are not a sign of climate leadership - they must be accompanied by a deep emission reductions commitment to be meaningful.”¹³ It is therefore imperative that the church hold itself to account with the appropriate oversight of these objectives via standing committee governance.

With a large proportion of carbon emissions coming from cathedrals and the top 25% of energy consuming churches in each diocese, our strategic priority in the immediate term is to work with high-energy consuming charges that have active congregations in order to achieve the most significant near-term emissions reductions and ensure investments are sound over the long term.

Systems perspective

This strategy has 50 enabling interventions to support the transition, focusing resources towards those interventions that empower charges and shift the province towards the net zero target. These interventions, coordinated in partnership with various committees, are points of leverage within the Scottish Episcopal Church ‘system’. By pinpointing and adjusting these levers of change, our strategy embraces a holistic picture of the whole church working as one body. This ‘systems-thinking’ approach acknowledges that “net-zero targets cannot be achieved through marginal improvements. Rather, they entail fundamental

¹² The methodology for this is based on the Objectives & Key Results (OKR) framework used by numerous organisations.

¹³ <https://zerotracker.net/analysis/recommendations-and-current-realities>

transformations ... at the systems level”.¹⁴ Such an approach aligns the whole church to participate in the transition to net zero. To manage these interventions, Standing Committee have already approved the appointment of a Net Zero Delivery Director to reside within General Synod Office - for which recruitment is imminent. It is also highly recommended that a dedicated Diocesan Net Zero Delivery Manager is appointed to empower charges every step of the way, ensuring government funding is maximised and the enabling interventions are fully employed. More detail on this new role and our recommendations on co-funding can be found in the ‘enabling interventions’ section (Section 8 – specifically T8).

Committee collaboration The Provincial Environment Group seeks synergistic relationships with the church’s committees and boards to effect change at scale and speed. This recognises that to be successful we need to embrace expertise across the church, allowing the ownership of the many streams of work to be actively shared in a collaborative manner. Whilst this action plan can provide an overarching plan to drive forward execution, we strive for productive synergistic partnerships.

Ecosystem partnerships Whilst internal collaboration is critical to achieve our objectives, we also want the church to be an important node in the wider Scottish climate change ecosystem. As a small organisation, we will rely upon building action-orientated partnerships with Church of Scotland, Historic Environment Scotland, Eco Congregation Scotland, Climate Literacy Trust, Keep Scotland Beautiful, Stop Climate Chaos Scotland, amongst others. This will help us be nimble in the provision of enabling services for charges in the transition, whilst contributing our voice for climate justice nationally and internationally.

Carbon credible To ensure the road we take is credible, our strategy has a clearly articulated net zero definition (see Our Net Zero Definition in the section following), a specific 2030 target (set by Synod 2020) and a transparent monitoring and reporting framework. This ‘carbon credible’ strategy aligns with UN High-Level Expert Group on the Net Zero Emissions Commitments of Non-State Entities.¹⁵ These five principles are: i) ambition which delivers significant emissions reductions; ii) demonstrated integrity by aligning commitments with actions/investments; iii) radical transparency in sharing relevant data on plans and progress; iv) established credibility through plans based in science & 3rd party accountability; v) demonstrable commitment to both equity and justice in all actions. It is, in the words of António Guterres (UN Secretary General), imperative that every organisation “walk the talk on their net zero promises. We cannot afford slow movers, fake movers or any form of greenwashing.”

¹⁴ Business & Society Volume 62, Issue 1, January 2023, Pages 9-13 <https://doi-org.ezproxy.is.ed.ac.uk/10.1177/00076503211053816> Optimism Amid Despair: How to Avoid a Net-Zero Debacle (Jan 2023) Rajat Panwar

¹⁵ The ten recommendations from the ‘Integrity Matters’ report are: 1) announcing a Net Zero Pledge, 2) setting Net Zero Targets, 3) using Voluntary Credits, 4) creating a Transition Plan, 5) phasing Out of Fossil Fuels and Scaling Up Renewable Energy, 6) aligning Lobbying and Advocacy, 7) People and Nature in the Just Transition, 8) increasing Transparency and Accountability, 9) Investing in Just Transitions and 10) accelerating the Road to Regulation. For more information see: <https://www.un.org/en/climatechange/high-level-expert-group>

Key Performance Indicators

To ensure executive oversight of this action plan by Standing Committee, three Key Performance Indicators have been identified to enable the church to track and review progress as we progress towards our Net Zero 2030 target ensuring the desired outcomes are achieved.

These metrics are intended to help focus the executive committee towards decisions that result in tangible, specific interventions that can achieve the scale of impact required. These indicators therefore act as the core barometer by which the collective success of this plan is effectively measured and managed.

We are setting three overarching indicators for the province:-

- **KPI – 1:** Absolute reduction in carbon emissions based on the 2018 province baseline. This focus on absolute emissions reduction is imperative to be a credible approach. It is also financially prudent significantly lowering charge operational costs, unlocking government funding, reducing the financial risk from future carbon offsets from 2030 as well as preparing the church for future Scottish Government legislation.
- **KPI – 2:** Increase percentage of charges that use 100% renewable electricity tariffs. This enables the province to reduce some emissions relatively easily in the near term, helping to flatten the curve of emission trajectories.
- **KPI – 3:** Increase total heating systems powered by electricity with either heat pumps or radiant heating solutions. This is the most challenging aspect of the plan but it is ultimately required to reach net zero effectively by 2030.

Proposed Key Performance Indicators targets for Net Zero 2030 (subject to change):

#	Targets
KPI:1	90% reduction in absolute CO2e emissions across province (from 2018 baseline) by 2030, with interim target for 2026 pending modelling (updated at GS 2023) ¹⁶
KPI:2	95% of charges have switched to 100% renewable electricity renewable by 2026
KPI:3	33% of all heating systems in charges are electric by 2026, 85% by 2030

In the next update of this plan due in 2026, we intend to include an additional indicator which helps track carbon emissions per person hour. In effect, this will help monitor building utilisation, and help the executive understand how our buildings are supporting the broader mission of the church. At this stage, we are not setting any specific KPI that tracks this, but we are interested in feedback in the consultation regarding this area and will seek guidance to ensure that this approach empowers rather than restricts any charges' core mission.

It is clear to achieve the above goals requires a response that is nothing less than the rapid, radical transformation of the way church operates. We must end the dependence on fossil fuels which is driving climate change ever forward. This is the decisive decade for climate action. We recognise this

¹⁶ This ultimately needs more data from diocese to be robust. See enabling interventions – T27

can feel overwhelming and that the task is hard. But we also are cognisant that what is hard for us as a church is a death sentence for those on the receiving end of climate change – for those of the human family that are bearing witness to its devastating consequences that do not have the luxury of the choice.

Before reviewing the ten core objectives of the Net Zero Action Plan, the next section gives a brief overview of how we intend to define our net zero 2030 target. Doing so will help focus our resources, investments and objectives in the right direction, ensuring we address the emissions within the net zero definition.

6. Our net zero target – a credible approach

Net zero in simple terms is where the greenhouse gases released into the atmosphere are balanced by their removal out of the atmosphere.¹⁷ To be useful in creating a credible pathway that leads the Scottish Episcopal Church towards a reduction in absolute carbon emissions, our approach is aligned with the principles of the UN High-Level Expert Group on the Net Zero Emissions Commitments of Non-State Entities, as outlined in the strategy section.¹⁸

Carbon emissions reporting methodology

The Scottish Episcopal Church intends to disclose the gross carbon emissions included in our Net Zero 2030 target based on the categorisation of emissions outlined by the Greenhouse Gas Protocol.¹⁹ Namely:

- *Scope 1 emissions*: direct emissions arising from on-site generation of energy in our buildings, vehicles, or land. This includes all hydrocarbon combustion engines (gas or oil boilers).
- *Scope 2 emissions*: indirect emissions associated with the use of electricity, heat, steam, and/or cooling. In most cases this will mainly be from the electricity supplied by the national grid.
- *Scope 3 emissions*: all other indirect emissions that occur in the church's 'supply chain' – in other words the purchased goods and services the church uses, its waste, water use as well as work-related travel.

SCOPE 1 (DIRECT)



Gas, oil, biomass on-site
Work-related travel in transport
owned/controlled by SEC

SCOPE 2 (INDIRECT)



Purchased electricity or heat & steam
Incoming power to buildings

SCOPE 3 (INDIRECT)



All other indirect emissions
Purchased goods & services
Disposal of water and waste
Clergy/staff ecclesiastical travel

Defining our Net Zero 2030 target

To focus our 2023-2030 strategy, we need to be clear on which of these scopes of activities will be included within our Net Zero 2030 target as well as what entities we include within the 'Scottish Episcopal Church' organisational boundary. The following section gives an outline of how we define both our scopes and boundary of inclusion.

¹⁷ A good way to understand Net Zero is to compare it with 'carbon neutral' - another term that is often used to frame a (rather inadequate) strategy to address climate change. See webinar on this topic on the PEG area of the SEC website.

¹⁸ <https://www.un.org/en/climatechange/high-level-expert-group>

¹⁹ This method enables the church to align with international standards ensuring our reporting can be independently scrutinised. See: <https://ghgprotocol.org>

Boundary: For the purposes of our Net Zero 2030 target, the Provincial Environment Group place within the boundary *all those entities that are within the sphere of the Scottish Episcopal Church that are under our control or significantly under our influence*. This includes all cathedrals, churches, church halls and ancillary buildings, owned clergy/staff/bishop housing, all provincial/diocese offices, the Scottish Episcopal Institute as well as those properties under the control of the Retirement Housing Committee.

Scopes: Within the scopes of inclusion for 2030, we intend to include all scope 1 and scope 2 emissions, as well as any reimbursable work-related travel which is a scope 3 emission. We believe this reflects the *material* emissions of The General Synod of the Scottish Episcopal Church and is thus where we will focus our emission reduction strategies.

Therefore, summarising the boundary and scopes of inclusion outlined above, the entities and activities included within our Net Zero 2030 target are as follows:

 We are seeking specific feedback on whether you agree with this net zero target.

Scottish Episcopal Church Net Zero 2030 target	Boundary/Activity
<p>Net Zero 2030 inclusion</p> 	<p>Energy usage for our buildings and land:</p> <ul style="list-style-type: none"> • Gas, oil, or other GHG related fuel use (biomass, etc) • Electricity purchased <p>Where we define our buildings as:</p> <ul style="list-style-type: none"> • All churches, church halls and ancillary buildings • All cathedrals and the buildings for which they control • Clergy/staff/bishop housing • All provincial/diocese offices • Scottish Episcopal Institute (included in GSO) • Properties under Retirement Housing Committee control • Any other property, including common parts of tenanted properties <p>All ecclesiastical or work-related travel:</p> <ul style="list-style-type: none"> • All petrol/diesel used by clergy/staff, reimbursable clergy/ordinand travel, reimbursable staff/volunteer travel, reimbursable train journeys, staff/clergy flights for work/ministry <p>From these emissions, we will subtract the following in our net reduction calculations:</p> <ul style="list-style-type: none"> • 100% renewable energy tariffs that meet criteria outlined above, referenced in the Net Zero Toolkit • Excess energy exported to the grid from on-site solar generation • Verified carbon offsets (only after absolute emission reductions of c.90% see Positive Finances section below)
<p>Net Zero Post 2030 inclusion</p> 	<p>All other Scope 3 emissions within the sphere of SEC that are under our control or significantly under our influence including:-</p> <ul style="list-style-type: none"> • Product and services that we buy, air-conditioning gases, building projects, investments, waste disposal & • water/drainage.

<p>Not included, but within our sphere of influence.</p>	<p>Whilst the following activities are within the church's influence; they are not under its control and are therefore not included:-</p> <ul style="list-style-type: none"> • Staff/clergy travel to/from work • Congregational personal GHG emissions (travel (incl. to church), purchases, holidays, etc) • Clergy family's & residents' GHG emissions (consumer goods, travel, holidays)
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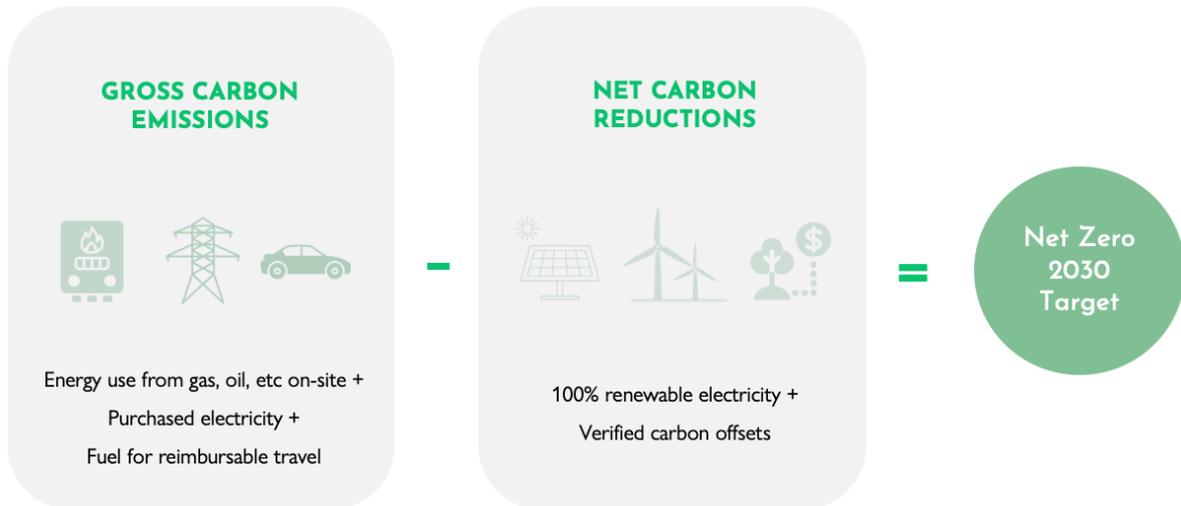
In deciding what to include and where to place the operational boundary we balance the prophetic with the practical. Our aim here is a focus on the material emissions of the church and we believe that this approach reflects this in a way that fuses aspirational realism with integrity. This approach aligns with others in the Anglican Communion, including the Church of England. In future years, we intend to expand the scope of inclusion to encompass a broader set of scope 3 emissions but at this stage, given where our material emissions emanate, our clear focus and priority for the church from 2023-2030 is on reducing absolute emissions from the activities outlined within the target.

To have a credible approach requires a standardised monitoring and calculation framework ensuring there is a consistent approach to carbon emissions calculations across the province. For church and halls this will be based on the Energy Footprint Tool (which we hope to make available in 2023) and will be complemented by procedures to ensure the emissions associated with clergy and staff reimbursable travel are embedded within SEC travel policy and reported accordingly. As transparency is a core principle underpinning a credible approach, it is important that all charges, dioceses, and the province publicly share emissions data. The Provincial Environment Group therefore intends to report provincial carbon emissions annually at General Synod from 2024. Likewise, dioceses should report their emissions at their respective synods in early 2024. Each church should also post their emissions publicly inside their church.

Net Zero 2030 target equation

With the Scottish Episcopal Church Net Zero 2030 target now defined, to assess the net zero carbon emissions associated with this, we first work out our gross carbon emissions. This is calculated by combining 1) the emissions related to all energy use of oil, gas (scope 1) and electricity (scope 2) in our buildings along with 2) any travel related fuel from work-related reimbursable travel (scope 3). From this gross carbon emissions sum, we then subtract 1) any 100% renewable electricity, along with 2) any 2030 purchased carbon offsets.

When gross emissions minus (renewable energy + carbon offsets) equal zero we can be said to have achieved our goal of 'net zero' carbon emissions.

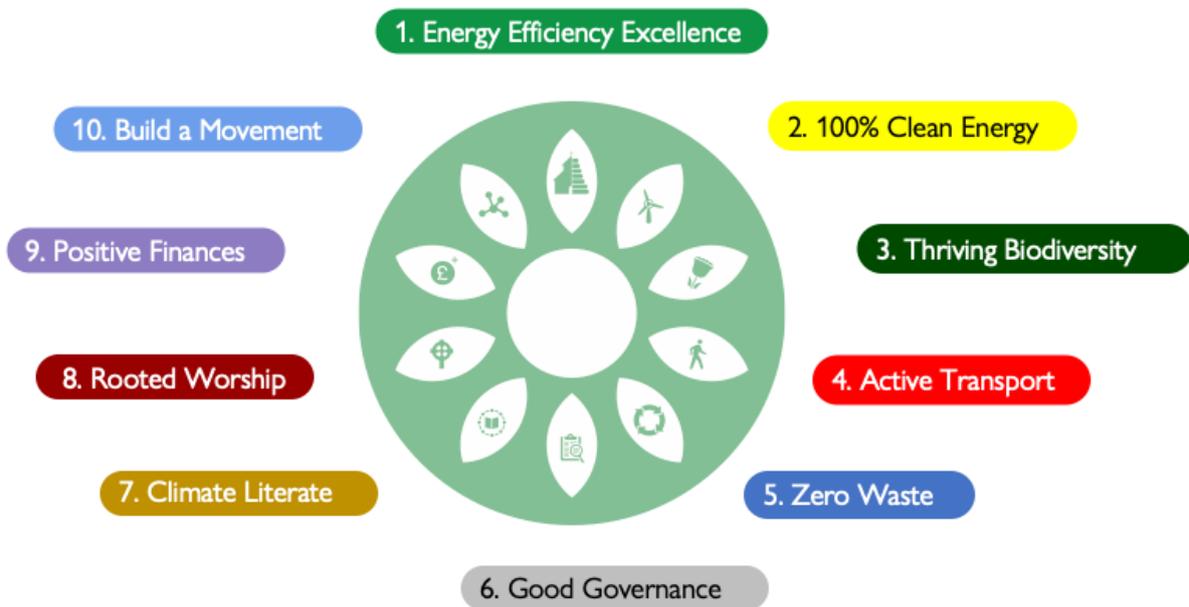


Given our strategic principle to ensure carbon credibility and an unerring focus on absolute carbon emissions reductions, we aim to achieve a 90% reduction in absolute emissions by 2030 from our 2018 baseline, with a limit of 10% for offsetting residual carbon emissions. This ratio of emissions:offsets adhere the recommendations outlined by the Science Based Targets Initiative (SBTi). Recognising the contested nature of carbon offsets, the Provincial Environment Group intend to release a carbon offset strategy for review by General Synod in 2025. We will also review the new standards being created by the International Sustainability Standards Board (ISSB) and report back on this to General Synod in 2026.

7. Net Zero Action Plan: our ten core objectives

This Net Zero Action Plan (2023-2030) has ten fundamental objectives, each of which has a set of enabling interventions along with a corresponding set of key results - outcomes that we aim to collectively achieve. In highlighting the desired outcomes in a transparent way, they help align all parts of the church towards our shared goal and enable everyone to understand how their actions contribute to our shared endeavour.

In isolation, each of the ten objectives that follow are an important element for how change can happen. Together they reinforce each other and are a recipe for transformative which can empower the church to reach net zero in a way that brings about a flourishing future.



This ten-part framework has been adopted because it a) enables our approach to connect seamlessly with the ten-point structure of the Net Zero Toolkit, b) prepares the church for additional scopes of emissions inclusion post 2030 (i.e. the rest of scope 3 emissions incl. products and services, as well as waste and water) and c) is a holistic approach to change, recognising that all the objectives intertwine with positive reinforcing elements of feedback.



Please note your feedback on each of the ten objectives, particularly the Key Results identified.



1. Energy Efficiency Excellence

Our objective is to create a competence across the church that achieves energy efficiency excellence ensuring that charges are empowered to be able to install effective and appropriate insulation which increases the energy efficiency of buildings, reduces heat loss whilst protecting heritage. We estimate such measures will lower operational costs across the province by an estimated £2.7m over the next eight years, increasing comfort levels and significantly reducing carbon emissions.

In addition, this objective sets out a pragmatic, resourced approach to address the poor energy efficiency of our rectories, getting these homes to a minimum EPC rating of C, increasing clergy well-being and reducing the financial burden this carries.

We will achieve these objectives by utilising the following interventions:

Net Zero Toolkit: The first version of the Net Zero Toolkit, made available in 2022, leveraged the great work of the Church in Society committee and is the most appropriate place to start reviewing the various 'quick wins' in the area of energy efficiency. It outlines strategies that address both the reduction in energy demand as well as measures to increase energy efficiency (draught-proofing, replacement of lighting with LED's, etc.). Together, these approaches can help shave off significant annual operating costs as well as lower carbon emissions.

The Provincial Environment Group is committed to updating this Net Zero Toolkit on an annual basis, with the next version providing greater clarity on the process that needs to be undertaken by each charge as they move forward on their journey to net zero. This forthcoming

update will also connect the ten sections of the toolkit with the ten objectives laid out here, creating a seamless link between the two.

There will also be a new 'sources of insulation guidance' document created by the Provincial Buildings Group which will be reviewed by the Provincial Environment Group shortly. This should be available by General Synod 2023.

Energy Assessments: After the quick wins have been identified, the next important step in achieving higher energy efficiency is to have an energy audit/assessment carried out by a third-party organisation. At present, Business Energy Scotland offer a free energy assessment audit for which most charges will qualify, subject to certain criteria. Depending on the specific audit undertaken, it is likely the results of this will present charges with: a) specific recommendations on further energy saving measures suitable for your building; b) estimates for the annual financial savings; c) financial costs for each recommended implementations; d) pay-back period – i.e. the return on investment; e) what permissions may be needed and; f) the net effect of these measures on overall CO₂ carbon emissions reductions. Such an audit should also estimate the heat loss calculations for the building – an important factor when considering the replacement of the heating system (see 100% Clean Energy). Because this is such an important part of the process to get to net zero, we are recommending that as part of a quinquennial, every church couples this with an energy audit – ensuring that all energy assessments are complete within at least the next five years.

Interest free loans and cashback: We recognise that financing energy efficiency

measures may be challenging. Business Energy Scotland currently offer eight-year interest free loans of up to £100k (per charge) for eligible energy efficiency measures, with a 75% cashback grant available of up to £20k per charge. We recommend charges move quickly to maximise this financial opportunity whilst it is available. (See Positive Finances – Objective 9)

New Rectory Insulation Fund: Many of our rectories are below the minimum standard of EPC C rating, losing significant amounts of heat through walls, windows and roofs, causing significant challenges for clergy well-being as well as the financial burden that this places on their families.

This Net Zero Action Plan therefore takes up the Provincial Buildings Committee recommendations (from April 2022) that every rectory “should have an Energy Performance Certificate (EPC) rating of at least C” and that all housing “should comply with the Province’s environmental and climate change policies.”²⁰ To do so we are recommending that Standing Committee commit to funding a new Rectory Insulation Fund that provides 50% of the costs for efficiency measures (up to a total value of £10,000) for rectories that are presently being used to accommodate stipendiary clergy.

Given current energy bills, we estimate that this will save each rectory about £500-600 per year, giving an estimated total saving across the province of £300k in energy bills over the next eight years. More critically, this will increase residents’ wellbeing through reduction in damp, condensation, and mould lowering the risk of cardiovascular and respiratory illnesses.²¹ The

²⁰ “Minimum Standards For Clergy Housing” (April 2022) <https://www.scotland.anglican.org/vestry-resources/appointments-and-employment/minimum-standards-for-clergy-housing/>

²¹ Note the relationship between housing energy efficiency and health is complex. When carrying out energy efficiency measures, it is important to ensure ‘compensatory’ ventilation to ensure positive health outcomes at all income levels. For a broad overview of recent literature see: Symonds, P., Verschoor, N., Chalabi, Z. et al. Home Energy Efficiency and Subjective Health in

Provincial Environment Group is committed to help ensure that the right resources are available to enable all rectories to reach this as soon as possible, ensuring the minimum acceptable standard of living for clergy is in place. As part of this, we are also recommending to Standing Committee that a new Rectory Audit Fund is established, enabling all rectories to have EPC reports complete by 2024, with a central database tracking progress.

This significant investment in rectories (which is expected to be match-funded 50% with dioceses) will increase the overall property value of rectories as assets held by each diocese, with research by BEIS and the University of Cambridge calculating an increased sale value of 6% by just moving an EPC rating from D to C.²²

Government Legislation: Our focus on energy efficiency excellence prepares the church for forthcoming legislation which requires “all private rented sector properties to reach a minimum standard equivalent to EPC C by 2025 where technically feasible and cost-effective, at change of tenancy, with a backstop of 2028 for all remaining existing properties” – although it is unclear whether this would apply to tied-accommodation.²³ Longer term, for domestic properties, the government will also “introduce regulations requiring that all residential properties in Scotland achieve an Energy Performance Certificate rating of at least equivalent to EPC C by 2033, where technically and legally feasible and cost-effective.”²⁴ Even where not feasible or cost-effective, it is proposed that “a minimum level of fabric energy performance through improvement to walls, roof, floor and windows, as recommended in the EPC, would apply”.²⁵ There

Greater London. *J Urban Health* 98, 362–374 (2021). <https://doi.org/10.1007/s11524-021-00513-6>

²² <https://www.gov.uk/government/publications/house-prices-private-sector-rents-and-energy-efficiency-levels>

²³ <https://www.gov.scot/policies/energy-efficiency/energy-efficiency-in-homes/>

²⁴ <https://www.gov.scot/policies/energy-efficiency/energy-efficiency-in-homes/>

²⁵ <https://www.gov.scot/publications/heat-buildings-strategy-achieving-net-zero-emissions-scotlands-buildings/pages/9/>

are also indications that the Scottish Government will introduce minimum efficiency standards in non-domestic buildings too.

Fabric First Approach: With the resources in place to support the above measures, we believe that all churches can take the necessary steps to increase their energy efficiency of their churches and halls, thereby reducing operational costs across the province by an estimated £2.7m and

helping them to be places of warm welcome at the heart of the communities that they serve. Tackling energy efficiency first (sometimes called a ‘fabric first’ approach) is a pragmatic and important pre-requisite for the replacement of any heating system – ensuring that the overall energy required when considering the design of the new system is as effective and efficient as possible.

Key Results: Energy Efficiency Excellence

KR#	Key Result outcomes
KR1.1	75% of charges complete energy audit/assessments in their churches & halls by 2025, 95% by 2028
KR1.2	100% of churches/halls have energy efficient lighting systems installed by 2025
KR1.3	All dioceses complete EPC audits of clergy property by spring 2024, with a roll-out plan in place for upgrades by end 2024
KR1.4	35% of rectories achieve minimum EPC rating C by 2025, 75% by 2028
KR1.5	25% churches/halls achieve minimum C rating in CO2/m2 (as measured by Energy Footprint tool standardised results) by 2026, 70% by 2028
KR1.6	Net Zero workshops completed by 30 charges by 2024, 120 by 2027



2. 100% Clean Energy

Our objective is to move the energy systems of all church buildings and halls across to 100% clean energy by 2030. We will do this by encouraging charges to switch to 100% renewable electricity tariffs by 2025 and via the installation of new zero direct emissions heating solutions to replace existing heating systems powered by gas or oil boilers. This is, without doubt, the most challenging task that lies before the church, however, it is achievable with the right decisions made in terms of 'space heating' (likely via 'low-regret' highly efficient heat pumps) or a heat-the-people approach (using either radiant or pew-based heating strategies).

In addition to switching to 100% renewable tariffs and transitioning to zero direct emission heating, there is also scope to generate on-site renewable energy on our land in order to reduce grid costs, generate income and reduce future offset charges across the province.

By 'clean energy' we mean that there are no direct carbon emissions as a result of their ongoing use and that any energy supplied via the national grid is via a contract with an approved 100% renewable energy tariff.

100% Renewable Electricity Tariffs: Results from the 2021 Energy Footprint Analyser data suggest that only 18% of charges are currently on a 100% renewable energy tariff. As a result, the Scope 2 related emissions from the grid are responsible for a significant portion of the church's footprint. We strongly recommend that

all charges move across to a verified 100% electricity contract by 2025. To aid in this task, the Provincial Environment Group will create a list of verified tariffs that meet specific criteria and make this available via the Net Zero Toolkit.

Zero Direct Emission Heating Solutions:

To reach Net Zero by 2030, all charges need to carefully plan for the replacement of gas and oil boilers with low-energy, zero direct emissions heating alternatives. A variety of solutions exist.

Heat pumps are a mature, readily available technology which has been demonstrated at scale²⁶, recognised by the Scottish Government as a 'strategic technology' for the Net Zero²⁷ and recommended by the Climate Change Commission as a 'low-regret'²⁸ option. They are broadly accepted to be "a big piece of the low-carbon jigsaw puzzle" to rapidly decarbonisation heating.²⁹ Accepting that energy efficiency measures are a likely pre-requisite for installation of heat pumps, they are a highly efficient way of providing space heating and hot water in many non-domestic buildings. Indeed, even for listed buildings they are becoming more popular with 54 installations in Church of England listed buildings, 21 of which are Grade 1 listed. The benefits and some of the recognised challenges associated with heat pumps will be outlined in an updated version of the 'Sources of Heating Guidance' document, written by the Provincial Buildings Committee and approved by the Provincial Environment Group. It should be

²⁶ Heat pumps have been used for space heating since the early twentieth century, and are a proven, mature technology. Their wide adoption in Scandinavia should give confidence to their ability to operate in Scotland.

²⁷ <https://www.gov.scot/publications/heat-pump-sector-deal-expert-advisory-group-scottish-government-response/pages/14/>

²⁸ <https://www.theccc.org.uk/publication/reducing-emissions-in-scotland-2020-progress-report-to-parliament/>

²⁹ <https://www.economist.com/britain/2023/02/06/the-heat-pump-challenge-in-britain>

noted that significant government grants through CARES are available for heat pumps installations (up to £80k - see Positive Finances – Objective 8).

New Radiant Heating Fund: Other forms of direct heating solutions (such as far infrared “heat the people” approaches) may be more suitable for those buildings that are not in regular use. However, there is less financial support available for these measures from the government. The Provincial Environment Group is therefore recommending to Standing Committee that a new ‘Radiant Heating Fund’ be established to support those charges retiring their combustion boilers and adopting a ‘heat the people’ strategy.

Heating Resilience Plans: To help with the process of planning for the replacement of an existing fossil-fuel combustion system, the Provincial Environment Group will produce a new ‘Heating Resilience Plan’ guide which will empower charges with all the factors that they should consider to ensure the process is financially prudent, ecologically sound and that the principle of climate justice is made prominent in the decision making process. An accompanying Heating Resilience Plan template will complement the guide and PEG hopes to make that available later in 2023.

Heritage Expertise: There is no one decarbonisation heating technology that is suitable for all churches, it depends on the church site, building archetype, the usage pattern. As pointed out by Dan McNaughton, Senior Building Services Engineer, Historic England, “the challenging reality is that it does cost money, but as an engineer, I can say that it is technically possible to heat churches with low and zero carbon heating systems, and from a heritage perspective it is possible to achieve this without adversely affecting the character and significance of these listed churches”.³⁰

We intend to form a strategic partnership with Historic Environment Scotland to help ensure that such an approach is realisable with the provinces’ heritage buildings. As part of this, we are recommending to Standing Committee that along with Church of Scotland, we provide funding for the ready availability of expertise on church archetype insulation, selection/installation of suitable heat pumps, as well as their on-going maintenance / associated training. This will ensure that the decisions taken help maintain and protect the physical heritage of buildings.

Interim Green Gas Tariffs: Whilst our focus is on the absolute carbon emissions, we recognise that in those churches that have recently had gas boilers installed, it may be suitable to move to a ‘green gas’ tariff. Such a move will, in effect, offset the gas use in any particular charge. However, given our strategic focus on absolute carbon emission reductions, to be carbon credible this should only be considered an interim solution, and only as part of a longer-term plan to retire the combustion heating system. However, it may be a useful lever that enables some charges to immediately move towards lowering their overall carbon emissions in the near-term.

On-site Solar Generation: Whilst moving towards 100% clean energy powered by the grid, there is an opportunity to include the generation of renewable energy from on-site solar PV across the province.³¹ To capitalise on this opportunity PEG intends to create a strategy to empower charges to increase the amount of solar energy generated across the province, helping charges lower their electricity bills, increase income from exporting energy to the national grid, contribute to the reduction of future carbon offset charges as well as help the province as a whole reach net zero by 2030. Prices for solar power have dropped dramatically over the past decade and may now be an attractive proposition. Whilst there will be planning obstacles that need to be

³⁰ <https://www.youtube.com/watch?v=wbzLYAxG-bQ&list=PLAfV-ab0mU9neAq3oOX3EnXFHUYrmkeg&index=2>

³¹ subject to certain criteria being met, £80k cares electric heating in place.

overcome, particularly in the case of listed buildings, we are encouraged by the fact that the Church of England currently has 119 installation of PV solar generation in listed buildings, 46 of which are Grade 1 listed.³² We welcome your input as part of this consultation.



Please comment on on-site solar

Prepare for Legislation: Gas boilers are highly inefficient in comparison to modern alternatives (such as heat pumps) – with a far lower coefficient of performance and contribute to the pollution of creation by emitting carbon dioxide, methane and nitrous oxide.³³ Moving away from gas or oil boilers enables charges to overcome their reliance on fossil-fuels with their increasing price volatility. It should be noted that fossil fuel-powered boilers will be banned in all new-build homes from 2024 and the Scottish Government “will legislate to phase out the need to install new or replacement fossil fuel boilers from 2025, subject to technological developments and decisions by the UK Government in reserved areas.”³⁴ The government also aims to phase out “the need to install new or replacement fossil fuel boilers in off gas properties from 2025, and in on-gas areas from 2030” for both domestic and non-domestic buildings.³⁵ Even the International Energy Agency has stated that all new fossil fuel boiler

installations must end by 2025 (IEA) in order to reach global Net Zero trajectories by 2050. It is clear that the future is not in gas boilers.

Minor Works Changes: To ensure that all factors are taken into consideration when replacing a heating system, in coordination with the Provincial Buildings Committee and Deans we are recommending changes to the Minor Works provisions in Canon 35. This will remove the ability for automatic replacement of like-for-like gas boilers without the consent of the Bishop and Diocese Buildings Committee. Our approach here is not to ‘ban’ gas boilers, but to help aid charges in reviewing all the solutions available and to ensure that the full gamut of factors have been taken into consideration. This is a pragmatic step to align gas heating systems with the approval process required for other zero emission forms of heating solutions.

Hydrogen Hype: We want to provide clarity that we do not believe that hydrogen (or biomass) is a suitable technology for the majority of charges. Indeed, the hype around this could cause uncertainty and confusion delaying the urgent action needed. Further information regarding the rationale behind this, can be found in a forthcoming update to the ‘Source of Heating Guidance’ document referenced from the Net Zero Toolkit.^{36,37}

³² <https://facultyonline.churchofengland.org/renewables>

³³ “The emissions from natural gas-fired boilers and furnaces include nitrogen oxides (NO_x), carbon monoxide (CO), and carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), volatile organic compounds (VOCs), trace amounts of sulphur dioxide (SO₂), and particulate matter (PM).” https://www.epa.gov/sites/default/files/2020-09/documents/1.4_natural_gas_combustion.pdf

³⁴ <https://www.gov.scot/publications/heat-pump-sector-deal-expert-advisory-group-scottish-government-response/pages/6/>

³⁵ <https://www.gov.scot/publications/heat-buildings-strategy-achieving-net-zero-emissions-scotlands-buildings/pages/9>

³⁶ For hydrogen there is a) a lack of availability of equipment at scale at a competitive price point b) the high energy-intensity of producing the gas c) scarcity of ‘green hydrogen’ – even by 2040

and d) safety concerns on its operational usage. For a short introduction to the issues see: Ueckerdt, F., Bauer, C., Dirnauchner, A. *et al.* Potential and risks of hydrogen-based e-fuels in climate change mitigation. *Nat. Clim. Chang.* **11**, 384–393 (2021). <https://doi.org/10.1038/s41558-021-01032-7>. See also: Odenweller, A., Ueckerdt, F., Nemet, G.F. *et al.* Probabilistic feasibility space of scaling up green hydrogen supply. *Nat Energy* **7**, 854–865 (2022). <https://doi.org/10.1038/s41560-022-01097-4>

³⁷ Biomass has a detrimental impact on local air quality, global deforestation and biodiversity loss, lack of safeguards with regard to afforestation replacement, and the release of carbon emissions during the burning process which, whilst carbon capture storage may longer term alleviate just the last of these issues, this is not available at scale presently.

Key Results: 100% Clean Energy

KR#	Key Result outcomes
KR2.1	95% of all charges, offices have switched to 100% renewable electricity tariff by 2026 or at point of contract renewal (whichever is sooner - subject to market conditions)
KR2.2	No new oil heating boiler installations in all buildings from 2024
KR2.3	95% of all <i>new</i> heating installations in buildings are zero direct emissions by 2024, 100% by 2028
KR2.4	33% of <i>all</i> heating systems are electric by 2026, 85% by 2029
KR2.5	On-site electricity generation from solar photovoltaics (PV) account for <5% of overall SEC electricity demand by 2028 and <10% by 2030 [TBC]
KR2.6	As interim step towards full decarbonisation, 50% of all churches have signed up to approved 100% green gas tariffs at contract renewal by 2026, 95% by 2029 (subject to market conditions)



3. Thriving Biodiversity

Our objective is to increase the biodiversity of our church land and encourage it to be a place of refuge for nature to thrive. We acknowledge the intertwined nature of climate change and biodiversity loss and seek to take steps to help heal creation.

Biological diversity – or biodiversity – includes both the genetic diversity within species as well as the variation between species and ecosystems. It's an easy way to describe in simple terms the rich variety of life on earth. In Scotland, there are an estimated 90,000 different species of animal, plant and microbes – which collectively form the interconnected feedback loops that create the complex ecosystems which enables all life to be held in balance.³⁸ Biodiversity is, according to the 15th Conference of the Parties to the UN Convention on Biological Diversity (the Kunming-Montreal Global Biodiversity Framework) report, “fundamental to human well-being, a healthy planet, and economic prosperity for all people, including for living well in balance and in harmony with Mother Earth. We depend on it for food, medicine, energy, clean air and water, security from natural disasters as well as recreation and cultural inspiration, and it supports all systems of life on earth.”³⁹

In Scotland, however, we've already lost 25% of our wildlife⁴⁰ and biodiversity is declining faster than at any other time in human history.⁴¹ Species loss and habitat loss are caused by multiple factors, including the unintended consequence of overdevelopment, intensive farming practices as well as the forces of unbridled capitalism.

It is now agreed that the climate crisis is inextricably linked with the biodiversity crisis and that tackling these crises is part and parcel of the same objective. Indeed, we are facing ‘twin reinforcing crises’ with both a decline in biodiversity that “will make the climate crisis worse” as well as a changing climate that “will increase the rate of biodiversity loss.”⁴²

We therefore need to reflect on how we care and nurture the land and ecosystems in which our churches are embedded, helping to heal these ecosystems and provide the conditions in which biodiversity can thrive.

In the small patches of ground which encompass the foundations of our worship, there are opportunities to make a visible difference, creating the enabling conditions for healthy ecosystems – an opportunity to help provide a refuge for God's creatures and critters to rejoice in playing their part in earth's complex living processes. In partnership with an appropriate provincial committee, the Provincial Environment Group aim to release guidance on sustainable management practices for SEC land by 2025. As part of this, we would like to work with all dioceses to have an understanding of their land holdings and management responsibilities, reviewing opportunities for forest planting as well as other carbon sequestration possibilities.

Promote NatureScot Activities: Learning about the joy and wonder that is in creation gives us opportunities to see where we might take imaginative and practical action together to

³⁸ <https://www.nature.scot/scotlands-biodiversity>

³⁹ p.4 Kunming-Montreal Global Biodiversity Framework <https://www.cbd.int/article/cop15-final-text-kunming-montreal-gbf-221222>

⁴⁰ <https://www.nature.scot/scotlands-biodiversity>

⁴¹ <https://www.cbd.int/article/cop15-final-text-kunming-montreal-gbf-221222>

⁴² Scottish Biodiversity Strategy 2022

sustain and renew the life of the earth. We recommend vestries promote the 'Making Space For Nature' campaign from NatureScot to help encourage such practices. Sharing current projects and practices will encourage each other, fire our collective imagination, and help our church have a flourishing future. Links to this will be provided in the Net Zero Toolkit Update (2023).

Our actions can be small but together they can, step-by-step, help halt biodiversity loss and in turn, help move towards the restoration and healing of creation. Just leaving small spaces of land to be rewilded can help increase the biodiversity of our land.⁴³ We can start small,

with our own church lands, connecting these places of living heritage with other pathways of regeneration.

Ban Glyphosate and Metaldehyde: To limit the immediate degradation of our church land, we propose to ban the use of any products that include glyphosate and metaldehyde within church lands – as it is clear these harmful chemicals have a significant influence on the decline on avian biodiversity, as well as knock-on impacts to other species.⁴⁴

 Do you agree with this ban?

Key Results: Thriving Biodiversity

KR#	Key Result outcomes
KR3.1	Integrate NatureScot's 'Making Space For Nature' campaign in the Net Zero Toolkit, encouraging charges to adopt the practices therein by 2025
KR3.2	Ban all products that contain glyphosate or metaldehyde within the grounds of all SEC land (curtilage of all churches, halls and rectories) by end of 2023
KR3.3	PEG, in partnership with relevant committees, to develop guidance on sustainable management practices for SEC land by at least 2026 as well as a guide for the caring for church land and graveyards
KR3.4	The Provincial Environment Group also to work with diocese administrators for on land management strategies by 2026, working on co-creating a databased on land holdings across province by 2024

⁴³ <https://www.rewildingbritain.org.uk/explore-rewilding/rewilding-the-land/rewilding-on-a-smaller-scale>

⁴⁴ de Montaignu, Cannelle Tassin, and Dave Goulson. "Habitat quality, urbanisation & pesticides influence bird abundance and

richness in gardens." *Science of The Total Environment*(2023): 161916.

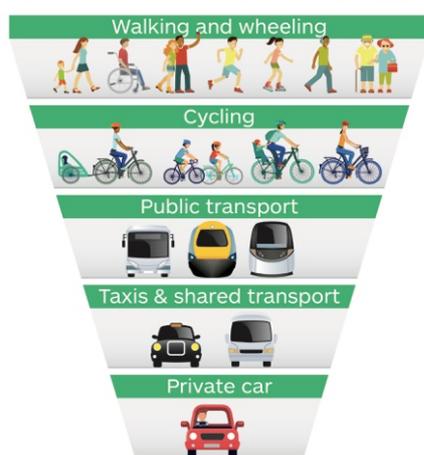


4. Active Travel

Our objective is to reduce work-related travel by clergy in fossil-fuelled transport to address the emissions included within the Net Zero 2030 target. To do so, we have aligned our approach with the Scottish Government's 'active travel' framework which supports our goals in a holistic and comprehensive manner.

By Active Travel we mean, where possible and feasible, clergy are encouraged to make short, local journeys in physically active ways like walking, wheeling (using a wheelchair or mobility aid), cycling, or scootering.⁴⁵

Prioritising Sustainable Transport



In doing so, we hope not only to reduce our environmental impacts but also contribute to the Scottish Government's objectives to reduce air pollution, improve the health of communities (and clergy), reduce congestion, have safer community streets and take steps towards a higher quality public realm.

It is recognised that in many rural areas, however, where distances of travel will be far greater, active travel is not feasible. For these longer journeys we want to encourage clergy to use public transport, taxis or shared transport where possible and, if a private car is the only viable solution, then they strive to move away from the use of fossil-fuelled vehicles by 2030.

New Active Travel Fund: To support this transition, the Provincial Environment Group is recommending to Standing Committee that a new 'Active Travel Fund' be made available to stipendiary clergy who retire their petrol or diesel car and replace this with a bike, e-bike or electric vehicle (or associated charging point) as their primary form of travel. This proposed £1500 grant, which is recommended to run on an annual basis from 2023-2028, will lower up-front costs for these modes of transport whilst driving down carbon emissions. Clergy that are living in city centres may also wish to review the Low Emission Zone Support Fund, offering up to £3000 for the disposal of non-compliant vehicles subject to eligibility. Note the Scottish Government intends to ban the sale of all new petrol or diesel cars from 2030.⁴⁶

It is clear the direction of travel is away from combustion engines. Indeed, we believe electric vehicles are now a viable option for many clergy across Scotland, especially given the distances now available (an average of 202 miles) as well as the increasing availability of rapid charge

⁴⁵According to Scottish Government figures, 17% of journeys in Scotland were under 1 km, and more than half (54%) were under 5 km. It is these shorter trips that offer potential for a significant shift to active travel.⁴⁵ We hope that through this approach, we can contribute to an overall reduction of 20% in car use by clergy by 2030, contributing to the wider Scottish

Government target <https://www.transport.gov.scot/our-approach/environment/20-reduction-in-car-km-by-2030/> & <https://www.transport.gov.scot/publication/a-route-map-to-achieve-a-20-per-cent-reduction-in-car-kilometres-by-2030/>
⁴⁶ <https://www.gov.scot/publications/draft-energy-strategy-transition-plan/documents/>

points.⁴⁷⁴⁸ It is also welcome news that when electric vehicles are charged at home they have lower overall running costs than petrol or diesel cars. Servicing and maintenance are also lower due to the reduction in mechanical components.⁴⁹ Indeed, overall, even taking into consideration the upfront cost of a new EV, the lifetime running costs of an electric car are now lower than that for petrol. A full review of the benefits of electric car use in Scotland can be found on the Net Zero Nation website.⁵⁰

EV Charge Point Strategy: Whilst the specific targets associated with our net zero 2030 target are in relation to work-related clergy travel, we hope that congregations will also adopt this approach in travelling to and from their community church where feasible. With this in mind, to support EV use in some charges, the

Provincial Environment Group intends with cross-committee collaboration to release a strategy for EV charge points across the province by end of 2024, reviewing revenue generating opportunities and the planning requirements related to curtilage.

All this being said we are cognisant of the ecological impacts from the purchase of electric vehicles and in particular the high resource extraction in terms of nickel and lithium. Electric cars are no silver bullet which is why we passionately embrace the active travel hierarchy, which tacitly embeds climate justice into the approach. For some, a used EV car purchase may help reduce these impacts. The Energy Saving Trust has a Used Electric Vehicle Loan fund which some clergy may wish to consider to help support such a purchase.⁵¹

Key Results: Active Travel

KR#	Key Result outcomes
KR4.1	30% of all clergy/staff work-related travel via active travel, public transport or Electric Vehicle by 2026, 75% by 2030
KR4.2	Provincial Environment Group release strategy for EV charge points by 2025
KR4.3	100% charges promote active transport hierarchy to congregations – via recommendations in forthcoming update to Net Zero Toolkit

⁴⁷ <https://www.which.co.uk/news/article/why-electric-car-owners-are-the-happiest-aS3Aw8V5wBto>

⁴⁸ <https://chargeplacescotland.org>

⁴⁹ <https://www.netzeronation.scot/take-action/electric-vehicles/benefits-electric-vehicles>

⁵⁰ <https://www.netzeronation.scot/take-action/electric-vehicles/benefits-electric-vehicles>

⁵¹ <https://energysavingtrust.org.uk/grants-and-loans/used-electric-vehicle-loan/>



5. Zero waste

Our objective is to prepare the ground for Scope 3 emission inclusion post 2030 and empower charges to take steps in preparation for this. We believe the principles outlined here of Refuse, Reduce, Reuse, Recycle, Restore, provide a useful framework for churches to adopt. We believe wholeheartedly that we need to move away from a linear model of production to a circular one.

Every year, over 92% of the 100 billion tonnes of materials that get used in the economy gets thrown away.⁵² This mass consumption of materials in the goods and services we use causes around half of global greenhouse gas emissions and contributes to over 90% of biodiversity loss.⁵³ In Scotland, around 80% of the nation's carbon footprint comes from the all the goods, materials, and services that we produce, use and throw away. Everything we buy as a church – be it the paper for service sheets, the cleaning products in our toilets or the computer screen for emails – they all have a carbon cost and a biodiversity cost.

We need to take steps to reduce the impact from these products and services, moving away from a linear production model (where products are designed with planned obsolescence and produced via a 'make, use, dispose' production line) to a circular one (where the products are designed to be modular and repairable ensuring materials get recirculated).

To help make this transition the following five principles (adapted from the work of the Well-Being Economy Alliance) will help guide and empower charges.

- **REFUSE:** Question the status quo in your church, whether that be the products that are used, or the behaviours or norms that surround them. Understand some of the root causes of the climate and biodiversity crises and what impacts the products being used have on this. Refuse any single-use plastics and question any products that do not provide clarity on their consideration of the extractive excesses involved in production and distribution. Refuse items that have excess plastic packaging and waste.
- **REDUCE:** When you must purchase products take steps towards reducing their use through efficiency or alternative approaches. Shift your purchasing towards products that are specifically designed within the mould of circular and regenerative processes.
- **REUSE:** Make use of products over and over (e.g., by refilling, repairing, repurposing, and returning); this may mean shifting towards the purchase of goods that have a longer lifespan considering durability, high energy-efficiency, quality and repairability. This will require moving beyond the initial purchase 'price' and instead making-decisions that review of the total life-cycle costs and ensuring climate justice is brought into the decision-making process. Where possible, you may wish to consider leasing products or purchasing second-hand goods that increase the economic value of these items by keeping them in use.⁵⁴
- **RECYCLE:** Whatever is left after it has been used, reused and repaired, should be returned to ensure that the materials and modules within the product can be recycled back into biological

⁵² Circle Economy, The Circularity Gap Report 2021 (Amsterdam: Circle Economy, 2022) [ebook], <https://www.circularity-gap.world/2021>.

⁵³ UN, "Facts and figures", 2022, [online] <https://www.un.org/en/actnow/facts-and-figures>.

⁵⁴ <https://www.circularcommunities.scot/map/>

compost or technical reuse. All churches are recommended to have access to a local comprehensive recycling system and make full use of its facilities.

- **RESTORE:** Help protect the planet from the harm that has been caused to enable all ecosystems and communities to thrive. Take steps to ensure your church is part of the process of healing creation, enabling ecosystems to thrive. This means, taking a proactive nature positive approach (see Thriving Biodiversity section), acknowledging past harms and working towards the healing and restoration of creation.

Ban Single-use Plastics: Government legislation means it is now against the law to commercially supply any of the following single-use plastics: cutlery (forks, knives, spoons, chopsticks and other similar utensils), plates, beverage stirrers, food containers made of expanded polystyrene, cups and lids made of expanded polystyrene as well as plastic straws and plastic balloon sticks. This also includes all

single-use items made from plastic which is labelled as 'biodegradable' or 'compostable' that are discarded after one use. When considering alternatives, it is recommended that you move away from other single-use items due to the knock-on environmental impacts such as their associated carbon emissions, the damage to ecosystems as well as the additional pressures this places on water resources.

Monitor Water Usage: We need to carefully monitor the water usage and take steps to minimise wastage. We should treat water as a sacred gift.

Prepare for Scope 3 Emissions: The majority of emissions associated with this 'supply chain' area are not included in the Net Zero 2030 definition. However, they are an important part of our longer journey towards net zero and taking these steps now can help prepare for broader inclusion of Scope 3 emissions post 2030.

Key Results: Zero Waste

KR#	Key Result outcomes
KR5.1	100% of charges enforce government ban on single-use plastic use across churches & halls
KR5.2	100% of charges maximise effective recycling of all materials and have a formal policy adopted by vestry by 2024
KR5.3	100% of charges actively monitor their water usage/bills on an annual basis by 2024, reviewing strategies to significantly reduce water wastage by 2028



6. Good Governance

We want to provide guidance on the enabling conditions that allow this Net Zero Action Plan to flourish in a way that is credible and robust. This means having the necessary oversight in place to ensure the appropriate resources and support are provided across the province to make it happen. Without oversight and active management of the agreed objectives by both the Provincial and Diocesan Standing Committees this Net Zero Action Plan will not be effective.

Diocesan Net Zero Working Groups:

Getting the right governance structures in place is critical to ensure the transition is managed with formal oversight and the commitment to the net zero goal is embedded in the formal decision-making process of the church. As such, Standing Committees at both diocese and provincial levels need to ensure that the targets included in this plan are tracked. With this in mind, it is recommended that all dioceses have an active Net Zero Working Group by end 2023, made up of senior representatives from across the diocese (incl. buildings, finance, Deans and a Net Zero Delivery Manager position), reporting directly to diocesan standing committee.

Net Zero Action Plans: Whilst this plan provides a provincial strategy of what is required to reach net zero by 2030, each diocese will need to create their own action plans which contextualise the approach based on the mission and circumstances of their diocese. It is hoped that this document will provide a good foundation for this work. It is recommended that each Diocesan Net Zero Delivery Manager work with senior diocesan representatives to create

their plan, which should be approved at Diocesan Synods. It is also recommended that with the help of the Net Zero Delivery Manager, every Cathedral and the top 25% energy-consuming charge in each diocese create their own Net Zero Action Plan. Templates for this Net Zero Action Plan will be made available later in 2023, pending recruitment of the Diocesan Net Zero Delivery Managers.

Energy Footprint Tool: Having a credible approach to net zero requires a transparent methodology. As outlined above, we intend to use the Energy Footprint Tool (EFT) from the Church of England as the standardised process by which charges, dioceses and the province monitor and report carbon emissions for Scope 1 & 2 emissions. Using the EFT will also enable a charge to see how its energy consumption compares to other similarly sized peers, as well as the carbon emissions per person served.⁵⁵ This tool will be complemented by new measures to track reimbursable travel at diocese level, so all the emissions associated with our Net Zero 2030 target are included

Publish Carbon Emissions: The Provincial Environment Group will aggregate the data submitted by charges and publish this at General Synod tracking progress annually and comparing this to our 2018 baseline. We will also outline at what stage individual dioceses are at with regards to their respective Net Zero Action Plans. Dioceses should likewise report their annual carbon emissions at each diocesan synod, and it is recommended that every charge also post their annual carbon emissions publicly inside their

⁵⁵ <https://businessenergyscotland.org/use-kpis-assess-your-energy-use-correctly/>

church. All these measures increase the transparency and integrity of the church's net zero strategy.

Lobbying Alignment: As part of the church's credible approach, any lobbying or advocacy work that the church engages in with the Scottish Government must align with the principles and objectives of our goal Net Zero 2030 goal, thereby adhering to the recommendations as set out in the UN Integrity Matters 2022 report.

By acting with good governance, the church can hold itself accountable and be carbon credible. With clearly laid out objectives and corresponding key results, we can align our efforts collectively towards this shared goal. With robust transparent monitoring and reporting in place we will be carbon credible, ensuring the Scottish Episcopal Church continues to be a trusted voice for justice and hope in the world.

Key Results: Good Governance

KR#	Key Result outcomes
KR6.1	All cathedrals and 85% of charges complete Energy Footprint Tool returns on an annual basis by 2024, 100% by 2025 - posting annual updates inside church buildings
KR6.2	Contextualised diocesan-level Net Zero Action Plans in place and approved at Diocesan Synod by 2024
KR6.3	All Cathedrals and top 25% of energy-consuming charges have a Net Zero Action Plan in place by 2025, with a working group active, completing measures by 2030
KR6.4	PEG to publicly report aggregate province carbon emissions to General Synod annually by 2023
KR6.5	All dioceses to publicly report aggregate diocese-level carbon emissions to Diocesan Synod annually by 2024
KR6.6	All dioceses have multi-disciplinary Net Zero Working Groups in place by end 2023, with Net Zero objectives tracked by Diocesan Standing Committee quarterly from 2024
KR6.7	PEG to review and update this Net Zero Action Plan (2023-2030) at least every 3 years (2026, 2029, 2032) presenting changes to General Synod



7. Carbon Literate

Our objective is to become a climate literate organisation, fully understanding the systemic nature of climate change and its link to biodiversity loss. We intend to partner with Keep Scotland Beautiful on the roll-out of the carbon literacy programme from the Carbon Literacy Trust and will roll out a new Net Zero workshop programme in collaboration with Heathack. We will also co-create with the Scottish Episcopal Institute updates to the IME programme. We will roll out a new workshop programme for charges, update the Net Zero Toolkit on an annual basis, provide new training webinars and resources as well as create a new area of the SEC website to be a one-stop shop for all net zero resources.

Climate Literacy Training: To address the urgent challenge to address the climate emergency and to understand the systemic nature of the climate system and its impacts, we need to get climate literate. Being climate literate means having the knowledge and capacity required to create a positive shift in how live, work and behave in response to climate change. It a term used to describe an awareness of climate change mitigation and adaptation, and the climate impacts of the everyday actions that we all participate in. We intend to partner with the Climate Literacy Trust, and their lead partner in Scotland – Keep Scotland Beautiful – to ensure that the training undertaken is given in the Scottish context. We strongly recommend that all senior leadership of the church complete this training by the end of 2023, and that representatives from all vestries are invited to attend the training. Our goal is to achieve ‘Climate Literate Organisation’ status by 2026.

SEI Initial Ministerial Education: We will work with the Scottish Episcopal Institute to embed the fundamentals of climate literacy into the core of ministry training. The initial stage of

this will be the inclusion of an ‘Introduction to Net Zero’ training within IME1 (Initial Ministerial Education 1) during Orientation Week 2023 with the longer term ‘Greening the curriculum’ via IME1 starting from 2024. We will also explore the inclusion of ‘climate anxiety’ training in this programme in order to help sustain clergy well-being as well support them as they engage in pastoral care related to the climate emergency.

Net Zero Workshops: Taking the required steps, in the right order and prioritising all the various actions is complex. With this in mind, we intend to pilot a new interactive workshop programme that can be organised with charges to help them make change happen in a manageable way. The goal of the workshops is to help vestries and property convenors understand how heating and heat loss is occurring and what strategies could be employed to stem the loss. Some of the topics in the workshop therefore include consideration of choices regarding energy efficiency (including diagnosing heating system faults and demand reduction strategies), thermal comfort in difficult buildings, zero emissions heating technology options and how buildings can be best utilised in the local context. Our intention is to pilot this workshop programme in 2023 and roll out this out to 30 charges by end of 2024.

Diocesan Net Zero Delivery Managers: To assist charges in the complex journey to net zero, we are recommending to standing committee that it co-fund a dedicated Net Zero Delivery Manager in each diocese. Such a person will enable charges to maximise available funding streams, help them create Net Zero Action Plans, build the case for funding (realising good

building utilisation rates are key for grants), facilitate Net Zero workshops, support completion of EFT, interpret energy assessments and liaise with heritage expertise. They will, in short, propel the day-to-day action that is required across each diocese.

New Website, Webinars &

Templates/resources: The Provincial Environment Group, in conjunction with the Net Zero Delivery Director, will provide the province with a set of training webinars around the core areas of focus for the Net Zero 2030 objectives, helping educate and inform charges of the steps required. We will also provide a range of templates to help support the process, including Net Zero Action Plan templates, Heating Resilience Plans and a project management

template, all of which should help vestries prioritise and structure the task ahead. We will also work with the Director of Communications in the General Synod Office on a new website area dedicated to this Net Zero Action Plan, communicating its central tenets, useful training materials, case studies and resources.

Annual Net Zero Toolkit Updates: The Net Zero Toolkit will be updated on an annual basis, with fresh case studies, updated funding advice and new resources that help charges learn and prioritise the tasks ahead. The forthcoming update (expected Summer 2023) will also provide a clear step-by-step guide for charges to manage the process in order to make manageable progress towards Net Zero 2030.

Key Results: Carbon Literate

KR#	Key Result outcomes	
KR7.1	Carbon Literacy training	All Bishops, Deans, core SEI Staff and Standing Committees (Provincial and Diocese) complete Carbon Literacy training by end of 2023, with all diocesan staff and at least 1 charge vestry representatives completing training by 2025
KR7.2	Carbon Literate Organisation	Scottish Episcopal Church becomes a certified 'Carbon Literate Organisation' (CLO) by 2026
KR7.3	New training and resource updates	Net Zero Toolkit to be updated by PEG in conjunction with the Net Zero Delivery Director every year at General Synod, with new templates produced by end 2023 and with continuous updates of Net Zero dedicated website
KR7.4	SEI 'Greening the curriculum'	SEI to include 'Introduction to Net Zero' training within IME1 (Initial Ministerial Education 1) Orientation Week 2023, with rolling out of the 'Greening the curriculum' outcomes via IME1 from January 2024



8. Rooted Worship

This objective aims to ensure that our liturgy, rituals and forms of worship amplify the 5th Mark of Mission - to strive to safeguard the integrity of creation and sustain and renew the life of the earth. This mission is integral to all our preaching, liturgy, worship, and prayer for it recognises the importance of creation as a sacred living gift.

“The climate emergency is not just a physical crisis – it is also a spiritual one.” As the Call for the Environment at Lambeth Conference in 2022 outlined: “We must see the world differently: repenting of and rejecting an extractive world view, which regards the earth and all nature as something to be exploited, and embracing a relational worldview, espoused especially by indigenous peoples, which sees the profound interdependence of all creation.”

As a diverse province, there are many opportunities for creative and imaginative ways of praying and bringing attention to this aspect of our communal mission. There is a great opportunity to engage all ages, and to celebrate creation in new ways, whether that be at harvest-time, in the waxing and waning of the seasons or worshiping in places outside of our physical buildings.

Creationtide: The ‘Season of Creation’ has been introduced into our liturgical calendar to reflect the commitment of our church to respond appropriately to the global climate crisis. Liturgy for experimental use has been introduced to support this season. However, whilst this

provides a month’s focus on creation and climate issues, the fifth mark of mission requires discipleship in action every day. Care for creation must surely break-out of this monthly straitjacket to transmute into a multitude of forms.

Some charges may wish to place a particular emphasis on healing what has been damaged, others on providing a space to process climate grief, others to transform climate anxiety, whilst all will likely rejoice in celebrating creation, directing worship towards stimulating its protection.

All these approaches help the church to translate the fifth mark of mission into everyday practice. The Provincial Environment Group would like to liaise with the Liturgy Committee and Faith and Order Board to work towards a stream of work that embeds the fifth mark of mission more fully in liturgy, rituals, and all forms of worship.

SEI Initial Ministerial Education: Many educational and theological materials around climate change and Christian ecological responses exist, and study groups (around Advent and Lent) can allow congregations to engage in deepening their understanding. We are currently exploring with the Scottish Episcopal Institute ways to develop the curriculum to address some of the above approaches within the Initial Ministerial Education 1 & 2 programmes. We are not alone in concentrating our worship in this way, so this is also fertile ground for ecumenical work.

Key Results: Rooted Worship

KR#	Key Result outcomes	
KR8.1	Season of Creation Liturgy	100% of charges make use of the 'Season of Creation' liturgy material by 2030, and consider extending these themes to other times of the year
KR8.2	Addressing climate anxiety and climate grief	SEI and PEG to partner on the inclusion of 'climate anxiety' and 'climate grief' within IME2 (Initial Ministerial Education 2) by 2025/2026 (see work with SEI in Climate Literate objective above)
KR8.3	Worship spaces to reconnect	PEG, in partnership with relevant SEC committees, to create a directory of outside worship spaces in Scotland (e.g. labyrinths, pilgrim ways) for promotion and use by charges in 2027



9. Positive Finances

Our objective is support charges with all the financial resources that are needed to make the transition to net zero. This will come through maximising the significant funding that is available from the Scottish Government, expanding the Provincial Building Grants Fund and Building Loans Fund, setting up a new Radiant Heating Fund (see 100% Clean Energy), providing up-to-date listing of other grants available and having the Diocesan Net Zero Delivery Manager assist charges with navigating this challenging process. We also want to ensure that when large financial decisions are taken that these decisions are holistic in nature and consider the full gamut of factors including climate justice. We intend to explore the provision of a pooled purchasing programme with partners and will create a credible carbon offset strategy by 2025.

Maximise Grants: There are currently two significant funding streams that are available from the Scottish Government which provide financial help to implement some of the measures outlined in this Net Zero Action Plan. These are the Community And Renewable Energy Scheme (CARES) (which covers up to 80% of total cost for heat pumps up to a maximum £80K via the Let's Do Net Zero: Community Buildings Fund)⁵⁶ and Business Energy Scotland (with a £100k 8-year interest free loan with up to 75% of total costs up to a maximum of £30k available via cashback)⁵⁷. Collectively, this potentially releases up to £27m in Scottish Government funding for charges across the province. We intend to continue to lobby government to keep these funding streams in place via the Scottish Churches Parliamentary Office, the Net Zero

Subcommittee as well as through our membership of Stop Climate Chaos Scotland.

Expand Provincial Grants and Loans: To further support charges we are also recommending an expansion of the Provincial Building Grant Fund & Building Loan Fund to help charges with these match-funding opportunities for both energy efficiency measures and heat pumps.

It is recognised, however, that for the larger churches and cathedrals, additional funding will be needed to complement this, especially to install an appropriate scale zero-emissions heating solutions. Additional grant funding streams from various foundations and trusts will be identified in the forthcoming Net Zero Toolkit update. It is expected that in some cases, depending on the financial resources of the charge, fundraising campaigns will likely complement this.

Holistic Decision Making: As part of a positive approach to finances, we hope to empower vestries with a new resource which will enable all factors to be considered when they are putting together a plan for the replacement of their heating systems. Such a resource will help charges take a holistic approach, ensuring factors such as upfront capital expenditures (incl. grants available), operational costs over the lifecycle, potential changes to electricity levies, the potential introduction of ETS payments, the social cost of carbon and future carbon offset charges. We also want to help bring the voice of those on the receiving end of climate change into

⁵⁶ <https://localenergy.scot/funding/lets-do-net-zero-community-buildings-fund/>

⁵⁷ <https://businessenergyscotland.org/smeloan/>

the room, ensuring that these large decisions are aligned with a just transition to net zero.

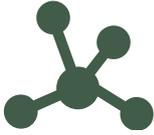
Pooled Purchasing Programme: The Provincial Environment Group will explore the opportunity of a pooled purchasing programme with other faith-based organisations by end of 2024, to review what options there are to join with others to get reductions in unit pricing for renewable based technologies.

Create a Carbon Offset Strategy: In order to create a credible carbon offset strategy, we will need to carefully consider credible, verified

carbon offsets - ones that reduce emissions in a effective and verifiable way based on a science-based approach with clear measurement and verification. Given the contested nature of carbon offsets we need to ensure that we review criteria in areas such as additionality, permanence, independent verification, and leakage. This is a complex area which needs careful consideration. As such, the Provincial Environment Group intends to publish a Carbon Offset Strategy to be incorporated into our net zero planning sequence in 2026.

Key Results: Positive Finances

KR#	Key Result outcomes	
KR9.1	BES Loans and cashback	40% charges applied for Business Energy Scotland SME Loan Scheme (with associated 75% cashback) in churches/halls by 2025, 80% by 2028
KR9.2	CARES grant funding	20% of charges have applied for Scottish Government Community and Renewable Energy Scheme (CARES) grant fund (run by Local Energy Scotland) by 2026, 55% by 2029 for renewable energy installations
KR9.3	Heating Resilience Plan template	PEG to release Heating Resilience Plan template by late 2023
KR9.4	Heating Resilience Plans	All cathedrals, offices and top 25% energy consuming charges in each diocese have completed a (forthcoming) Heating Resilience Plan template by end of 2024
KR9.5	Carbon Offset strategy	PEG to create a Carbon Offset strategy by end of 2026



10. Build a Movement

Whilst the previous nine objectives are focused on the internal actions that the church can take, this objective recognises we are more effective when we join hands in partnership with others. The intent of this objective is therefore to build a movement of change with other organisations, playing our role as an important node in an ecosystem of changemakers across Scotland.

This last objective aligns our work with a broad coalition of actors calling for change in our national and international democratic institutions, to enact the required legislations to address the climate emergency with urgency, credibility and integrity.

The Provincial Environment Group, in collaboration with other committees, intends to join hands with other like-minded organisations to contribute to a groundswell of support, activating our current partnerships with the Scottish Churches Parliamentary Office, the Scottish Churches Net Zero Subcommittee, Eco Congregation Scotland and Stop Climate Chaos Scotland (SCCS) as well as expand our ecosystem by developing new partnerships.

We recommend dioceses and charges likewise engage with their respective Local Authorities and local Climate Action Networks, facilitating conversations in church buildings with local communities and embracing the arts as a method to creatively express the challenges, implications, and urgency of climate change.

Amplify Climate Justice Campaigns: We believe climate justice is central to the mission of

the church. We will maintain our voice as a member of the Anglican Communion Environmental Network, Christian Aid, Stop Climate Chaos Scotland and Tearfund as well as develop new engagements with partnerships such as 350.org, Climate Fringe⁵⁸ Friends of the Earth Scotland and The Climate Coalition.⁵⁹

We also wish to raise the awareness of the important campaigns that these organisations create and want to amplify these delivering them to our congregations via our communications channels (newsletters, church notices). This helps the church positively and strategically contribute to a broader international movement calling for change and justice.

Congregational Engagement: The elephant in the room may well be how the church engages with all communicants in a positive, helpful manner with regards to the lifestyle changes that are needed as a society. Given our net zero definition does not include carbon emissions associated with the personal carbon emissions from members of our congregations, this is not an operational priority. However, we recognise the imperative to live out the principles outlined at the beginning of this report with regards to discipleship, justice and hope in all we do. With this in mind, it would be a lapse not to include a programme of work that enables the church to engage with members of the congregation in a proactive way. The Provincial Environment Group therefore intends to review a number of existing third-party programmes that can help deliver a robust programme of engagement with congregations. As part of this, we will review the

⁵⁸ <https://climatefringe.org>

⁵⁹ <https://www.theclimatecoalition.org>

Climate Conversations (being implemented by the Scottish Communities Climate Action Network), the new 'Living with the Climate Crisis' (being led by the [Climate Psychology Alliance](#)) as well the *Plenty!* Course (developed by Green Christian's Joy in Enough project).

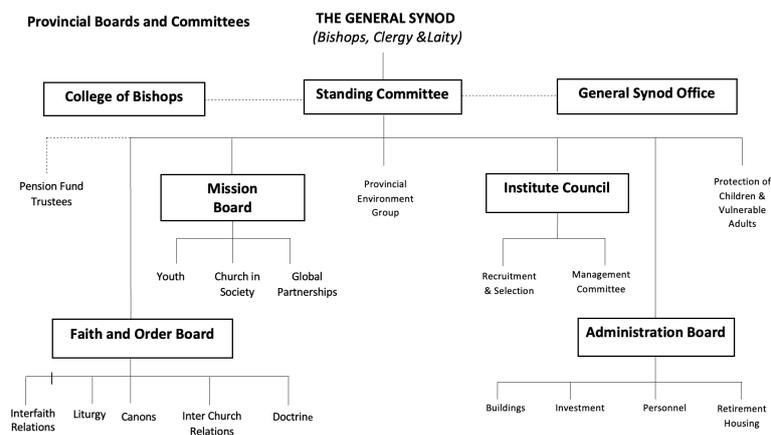
The Provincial Environment Group expects to work on refining this stream of work with the Church in Society committee and are excited by the possibility that this offers.

Key Results: Build a Movement

KR#	Key Result outcomes
KR10.1	GSO, all dioceses and all charges to include climate justice campaigns at least four times a year from select organisations in their online newsletters and social media channels from 2024
KR10.2	PEG & Church in Society to create a congregational engagement strategy via the roll-out of a aligned third-party programme by 2024

8. Our enabling interventions – pulling it all together

When we review the organisational ‘structure’ of the Scottish Episcopal Church, we are often presented with a visual picture of how the various committees of the church report into various higher-level boards, which in turn have the oversight of Standing Committee and The General Synod. This hierarchical perspective, however, does not provide insight into the pattern of relationships between the various committees nor the way that the policies of the church generate multi-directional complex flows of information through the tacit rules and assumptions between the constituent parts.



“The internal structure of the church” – taken from the SEC website.

Whilst such an approach is useful in understanding the structures of decision-making within the church they do not reflect the underlying complex-adaptive system of the church – the ways in which the various parts interact with each other via a set of interconnected feedback loops. Understanding these flows of data, the policies which guide them and the dynamic of relationships between them is critical to changing the course of the church towards a flourishing net zero future.

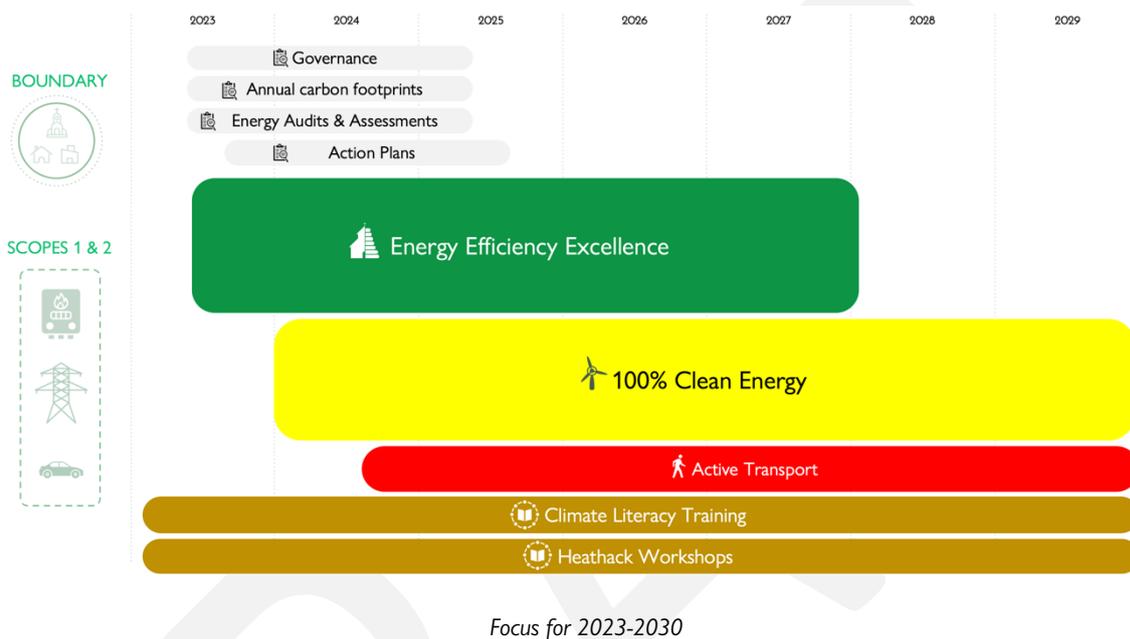
The strategic approach of this action plan therefore takes a ‘systems view’ of the Scottish Episcopal Church, analysing the ways in which the ‘information-feedback’ system occurs across the church, and looking for leverage points “where a small shift in one thing can produce big changes in everything”.⁶⁰ In doing so, it has found a set of ‘enabling interventions’ which will have a disproportionate impact on shifting the overall system towards a net zero future whilst strengthening the church’s commitment to the five marks of mission.

These enabling interventions are achieved with two methods. The first leverages existing structures of influence and momentum within the church and shifts these practices towards a net zero future - much like a judo expert would use the momentum of an opponent to achieve their goals. The second approach pinpoints new points of leverage where small changes stimulate ripple effects throughout the whole system – much like an acupuncturist who works with strategic lines of energy in the body. Taken together, the strategy identifies over 50 enabling interventions which empower the church to take meaningful action in reaching net zero.

⁶⁰ Meadows, Donella. "Leverage points." *Places to Intervene in a System* 19 (1999).

All these interventions are focused on empowering charges to implement the necessary actions to achieve a net zero outcome. With each member of the church playing its part, we can act together in a way that brings a cohesion and unity.

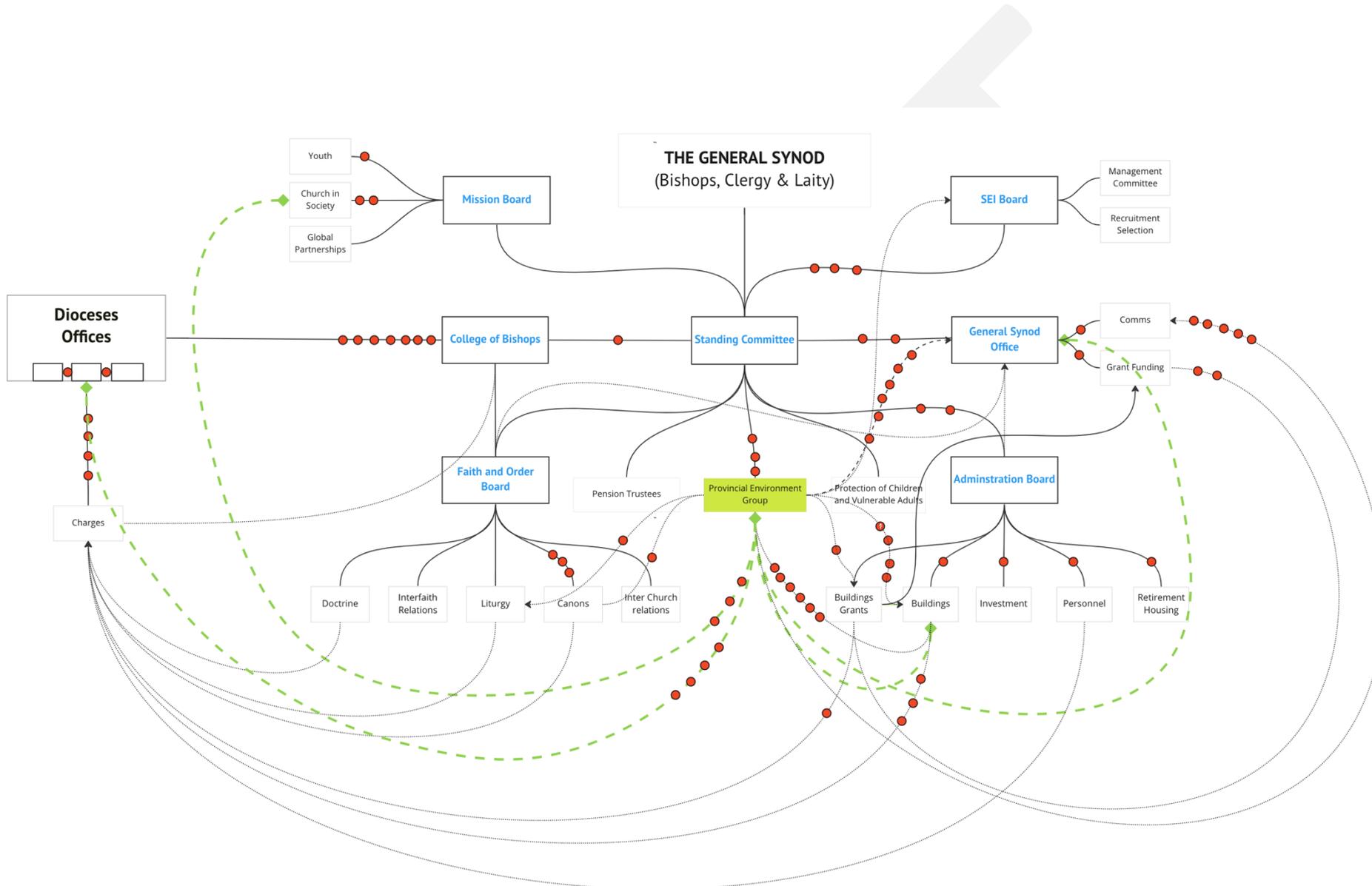
Given the specific scopes of activities within our net zero 2030 target, we have focused these interventions on Energy Efficiency Excellence, 100% Clean Energy, Active Travel, Good Governance, and Climate Literacy. We believe it is a focus in these areas that will have the most impact on absolute emissions reductions and ensure that the church’s approach concords with the ten strategic principles outlined in section 5.



The table on the pages that follow, show the amalgamation of all the enabling interventions, outlining the associated Key Result that it supports, the guiding committee/partner, and the expected outcomes from the intervention.

They are, in short, a summary of the many ways in which this Net Zero Action Plan (2023-2030) gets put into practice – the way the support and resources of the church are aligned to reach our net zero target. They are also a demonstration of the significant step-change in approach from previous General Synod motions, a change which we hope binds the church together in our shared endeavour to reach net zero by 2030.

 We are seeking specific feedback in the table below from the 'guiding partners' that have been identified with the proposed 'enabling interventions'.



Analysis of SEC 'information-feedback' – systems perspective (illustrative only)

T#	Enabling Intervention	Outline of recommendation	Guiding partner(s)	KPI/ KR#	Outcome/Expected Impact	Date
T1	Bishop leadership	Bishops are enthusiastically embracing and promoting the Net Zero 2030 target along with the Key Results sought, providing leadership and championing this programme of operational change across the dioceses and ensuring their respective Diocesan Standing Committee own the targets and track progress.	Bishops	All	Leadership matters to drive broad charge adoption, particularly in the context of constitutional (enshrined in canon law) relationships.	2023
T2	New Rectory Audit Fund	Creation of new 'Rectory Audit Fund' to ensure there are no barriers for energy audits for rectories across the province as the first step towards tackling the leaky housing stock.	GSO, Standing Committee	KR1.3	Dioceses understand the scope of work and insulation measures that can be taken to achieve EPC C across province.	2023
T3	New Active Travel Fund	Creation of new 'Active Travel Fund', which runs on an annual basis from 2023-2028, available to clergy who retire petrol or diesel cars and replace them with a bike, e-bike or electric vehicle as their primary form of travel. This supports a core Net Zero 2030 target inclusion of absolute reductions in carbon emissions from reimbursable travel by clergy.	GSO, Standing Committee	KR4.1	Clergy are supported in moving to their preferred form of active travel.	2023
T4	New Radiant Heating Fund	Creation of a new 'Radiant Heating Fund' to support charges that have made the decision to use localised radiant or pew heating. This is advisable as there is little support from government for this.	GSO, Standing Committee	KR2.3, KR2.4	Charges who decide to move to a radiant 'heat the people' approach have the funding needed for capital expenditure.	
T5	Provincial Building Grant Fund & Building Loan Fund	Increase the funding available in the Provincial Buildings Grant Fund and Loan funds and ring-fence a proportion to support the implementation of energy efficiency measures as well as zero direct emissions heating solutions particularly where grant match-funding has been obtained. We suggest that additionally, where feasible, dioceses make available additional funding for those charges not able to match fund CARES grants or BES SME cashbacks.	GSO, Standing Committee, Administration Board	KR1.2, KR1.5	Where eligible, charges have the financial support needed to be able to take advantage of the significant grants available from Scottish Government.	2023
T6	New Rectory Insulation Fund	Creation of new 'Rectory Insulation Fund' (proposed 50% co-funded with dioceses) to support the roll-out of insulation and energy efficiency measures in rectories (up to max £10k per rectory) to reduce costs, increase clergy wellbeing and reduce carbon emissions.	GSO, Standing Committee, Diocese Standing Committees	KR1.4	Clergy are supported to have their homes upgraded with insulation measures ensuring a minimum EPC C, protecting clergy wellbeing, lowering costs and increasing property value.	2023
T7	New funding application approvals	Note: Our expectation is that applications for the Rectory Audit Fund and Rectory Insulation Fund will be approved at diocesan level by the Diocesan Buildings Committees in conjunction with the Diocesan Net Zero Delivery Manager, with the release of provincial co-funding by General Synod Office. For the Radiant Heating Fund, this may be channelled through the Provincial Grants and Loans Fund.	GSO, Diocese Buildings Committee	ALL	A streamlined process for application approvals within existing structures and payment made via GSO.	2023
T8	Diocesan Net Zero Delivery Managers	In order to implement this complexity of this plan, the Provincial Environment Group recommends to Standing Committee that The General Synod use its financial reserves to help co-fund (on a 50% match fund basis with each diocese) the creation of a new full time Net Zero Delivery Manager in each diocese. This person will assist charges with the hundreds of actions that are required to reach net zero, enabling	GS Standing Committee, Diocese Standing Committees	ALL	Charges are assisted every step of the way with moving towards net zero.	2023

		<p>them to maximise available funding streams, form an matrixed eco-group, create Net Zero Action Plans, build the case for funding (realising good utilisation rates - key for funding and grants), facilitate Net Zero workshops, support completion of EFT, interpret energy assessments, liaise with heritage expertise and propel action day-to-day across the diocese. Based on the total number of buildings that need transformation over the next eight years, for the larger dioceses this role will require a dedicated, full-time paid position to manage the complexity of the role effectively. Our recommendation in that this position reports directly to each Diocese Standing Committee (with a dotted line to the Net Zero Delivery Director within GSO) to ensure the role is fully embedded within each diocese operations. Based on our calculations, in the two smaller dioceses of Argyll and The Isles and Brechin, there may be opportunities to share this dedicated resource with a neighbouring diocese based on the premise that the total number of properties in their respective diocese is proportionally far lower. We would like specific feedback on this proposal from each diocese, noting that our approach is focused on empowering dioceses to put the appropriate level of resources in place to ensure that the heavy workload is achievable, that it is proportionate to the significant challenge that lies ahead and that each diocese is able to fully maximise government funding opportunities as well as operational cost savings.</p>				
T9	Communication s strategy	An overarching Net Zero campaign is created to support the effective roll-out of the Net Zero Action Plan (2023-2030) to charges.	GSO comms	ALL	On-going awareness of Net Zero target and ways to get involved.	2023
T10	Promotion of CARES/BES grants/loans	Ensure that all charges can take advantage of the funding opportunities available from Business Energy Scotland for energy efficiency measures.	GSO Comms	KR1.2, KR1.5, KR2.3, KR2.4, KR2.5	Charges are aware how to maximise government funding streams in order to carry out energy efficiency and zero emissions heat solutions.	2023
T11	Promotion of BES Energy Assessments	All charges can access free Business Energy Scotland Energy Assessments. This is a vital first step to understanding what measures can be undertaken to increase the thermal efficiency of churches and halls. The recommendations outlined therein, provide a good basis for a pathway ahead and are a pre-requisite for most grant funds.	GSO Comms	KR1.1	Every charge knows what measures can increase energy efficiency, options for renewable technologies and viable heating solutions for their building.	2023
T12	Renewable 'switch' campaign	Encourage all charges to switch to 100% renewable electricity. Link to the Net Zero Toolkit which hosts updates to Church of England "Green Energy Companies and the Energy Footprint Tool (2023)" paper which lists companies that match credible criteria.	GSO Comms	KR2.1, KPI2	Vestries are aware of the benefits of renewable energy tariffs and why it is so important to make the switch now.	2023
T13	Heat pump campaign	Scottish Government list heat pumps as 'low-regret' option, but there is mixed messaging and many myths about the lack of effectiveness of heat pumps for 'space heating' Amplify messaging from Scottish Government, steering decisions away from biomass and hydrogen hype.	GSO Comms	KR2.3, KR2.4 KPI1	Vestries know that heat pumps are a mature, viable and sensible solution if they want to go with 'space heating'.	2024
T14	Net Zero website	A central resource holding the Net Zero Toolkit, outlining clearly the steps required to get to Net Zero, listings of webinars and events, up-to-date grant funds available, referencing up-to-date resources and case studies from the Provincial Buildings Group, Historic Environment Scotland, Historic England, Church of England and Eco Congregation Scotland.	GSO Comms	ALL	The one-stop, up-to-date place for all information on Net Zero for charges.	2023

T15	Update Clergy Personnel Handbook	Update Clergy Personnel Handbook – Remuneration, Housing and Expenses book to outline the requirements needed from charges with regards to carbon emission from work-related travel to ensure these are captured within the annual emissions reported.	GSO	KR4.1	Travel carbon emissions reporting is embedded in expenses and travel reimbursement policies.	2024
T16	Canon 35 application form	Make appropriate changes to the Canon 35 application forms referencing importance of considering Net Zero Guidance before submitting to Diocese Buildings Committee and Deans.	GSO	KR1.2, KR1.5, KR2.3, KR2.4, KR2.5	Canon 35 application form encourages support for Net Zero target	2023
T17	Climate Justice Campaigns	GSO to include relevant campaigns from partners such as Christian Aid, Stop Climate Chaos Scotland, 350.org, Friends of the Earth Scotland and Tearfund to amplify the voices of those on the receiving end of climate change, calling on all members to actively advocate for climate justice in our national democratic institutions.	GSO, Diocesan comms teams	KR10.1	Amplify messaging on climate justice from our ecosystem of partners, drive awareness of impacts.	2024
GSO and DIOCESE STANDING COMMITTEES						
T18	Cross Diocese Net Zero Action Working Group	Monthly Cross Diocese Net Zero Action Working Group meetings, to exchange knowledge and experience across dioceses, with senior representative from each diocese (see separate 'Diocesan Net Zero Working Group Operational Terms – Draft').	Diocese NZ Group convenors	KR6.5, KR6.6	A cross diocese group for knowledge sharing, feedback to NZ team, best practice approaches and updates. Started Dec 2022.	2022/3
T19	Diocese Net Zero Action Plans	Each diocese creates their own Net Zero Action Plan based on a template provided by PEG, pending recruitment of the Net Zero Delivery Managers. This will contextualise the plan to the mission and objectives of the diocese. Each Diocesan Net Zero Deliver Manager will work with senior diocesan representatives to create this plan, which should be approved at each Diocesan Synod.	Diocese Standing Committee	KR6.2	Dioceses have their own contextualised version of this plan, which outlines their specific objectives with interim targets and interventions proposed.	2024
PROVINCIAL PARTNERS						
T20	Integrate Climate Literacy and eco-theology into SEI training	Embed climate literacy in SEI training programme	Scottish Episcopal Institute	KR7.2	Net Zero knowledge and basic climate literacy is part of the standard Initial Ministry Education.	2023
T21	Carbon Literacy training	In association with Scottish Episcopal Institute, Carbon Literacy Trust and Keep Scotland Beautiful start roll-out of programme to Bishops, Deans and all Standing Committees. Develop where feasible train the trainer programme (with internal expertise already resident in Scotland) along with Net Zero Delivery Managers leading adoption of this in each diocese.	Scottish Episcopal Institute, Net Zero Delivery Director	KR7.1	SEC becomes a Carbon Literate Organisation, fully understanding the systemic intertwining risks of climate change and biodiversity loss	2023

T22	Update 'heating' and 'insulation' guides	Update the following core advisory documents including references the Net Zero Toolkit and Net Zero Workshops: 1) 'Sources of heating guidance' update 2) New 'insulation guidance' for churches document	Provincial Buildings Committee	KR1.5, KR2.3, KR2.4	Charges are empowered with useful documents that clearly lay out the various options with regards to heating solutions, insulation.	2023
T23	Property Convenor updates	Update the "Responsibilities of the Property Convenor" document to include Net Zero goals within these duties. Run a joint webinar with Provincial Buildings Committee targeted to Property Conveners	Provincial Buildings Committee	KR1.5	Property Convenors understand the importance of Net Zero within the role and are helped to take proactive steps forward.	2023
T24	New Case Studies	Provide a range of positive case studies with regards to heating and insulation, clearly laying out different use cases, lessons learnt, providing practical advice and confidence to charges and show them pathways forward.	Provincial Buildings Committee	KR6	Charges have the confidence to move forward, knowing others have done so.	2023/4
T25	Canon 35 minor works changes	Canon 35 Minor Works B.3; update items to enable light fittings to be upgraded without permission (with specific constraints), remove automatic approval of gas boiler like-for-like replacements.	Provincial Buildings Committee, Deans, Net Zero Delivery Director	KR1.5, KR2.2, KR2.3, KR2.4	Canon 35 supports all parties in fully reviewing options before a decision is made.	2023
T26	Quinquennials energy audit coupling	Expand scope of quinquennials for both rectories and cathedrals/churches/halls to include an additional energy audit as requirement - unless a specific energy audit has already been carried out in the past 3 years. Tighten up adherence to existing procedures on reporting and aggregation of data at diocese level.	Provincial Buildings Committee	KR1.1	All charges have carried out energy assessment within the next five years.	2023
T27	Obtain buildings and land data	Work with dioceses to get an accurate picture of all the churches, halls, rectories and land across the province in order to a) get a more accurate insight of the significant task ahead b) increase credibility of the Net Zero by having better data underpinning the modelling, c) understand what scope there is for tree planting, solar energy generation or other carbon positive actions.	Diocese administrators, Net Zero Delivery Director	KPI1	Province and dioceses can accurately report our 2018 baseline, and better model the pathways ahead.	2023
ECOSYSTEM PARTNERS						
T28	Heritage Energy Expert	Co-fund a new position (to be explored with Church of Scotland and Historic Environment Scotland) for specialist heritage building archetype knowledge, especially with regards to typical heat loss mapping and solutions to increase the thermal efficiency, suitability of installation, maintenance regimes, Local Authority planning requirements, listed building consents and overall system design credibility for heat pumps. This is especially important as "heat pump systems are sensitive to design, installation, and user behaviours in ways that gas, oil and electric resistance heating are not." ⁶¹	GSO, Standing Committee, Church of Scotland, Historic Environment Scotland	KR1.5, KR2.3, KR2.4	Charges have the expert advice they need when it comes to implementing energy efficiency measures and zero direct emissions heating technologies in listed buildings.	2024

⁶¹ Heat pump use in Scotland: an evidence review Freya Burns and Stephen Strachan, Changeworks Tessa Clark, Delta-EE, August 2021. DOI: <http://dx.doi.org/10.7488/era/976>

T29	Historic Environment Scotland partnership	Align Net Zero strategies, explore co-funding Heritage Energy Expert and partner to accelerate transition to Net Zero in churches and listed buildings across province.	Historic Environment Scotland, Net Zero Delivery Director	KR1.5, KR2.3, KR2.4	Aligned approaches ease solar PV and heat pump installations.	2024
T30	Scottish Government financial support	Work with the Scottish Government in enabling support for energy efficiency measures in clergy tied accommodation. Combine with other Scottish faith-based partners to lobby to maintain future CARES and associated funding streams.	Scottish Churches Parliamentary Office, SCC NZ, SCCS	KR9	Funding streams continue to be available to charges	2023
T31	ECS Awards level alignment	Work with Eco Congregation Scotland to add Net Zero related requirements to Bronze, Silver and Gold award levels, matching steps with Net Zero Toolkit process.	Eco Congregation Scotland	KR1.5, KR2.3	ECS members are incentivised to take the next step aligning with SEC Net Zero 2030 target.	2023
T32	Verified 100% renewable tariffs	100% renewable energy tariffs verified suppliers listing.	Church of England	KR2.1	Charges know what 100% renewable tariffs are credible.	2023
T33	Energy Footprint Tool	Enable all charges to calculate the carbon emission with their annual energy usage, m2, number of people using building per average week. Metrics from this tool then provide insight into total carbon emissions from buildings, relative energy efficiency in comparison with peers, per person energy usage – the latter two Key Performance Indicators that the church intends to use in future to help manage the transition to net zero. Partnership with Church of England for annual use of the Energy Footprint Tool	Church of England	KR6.1, KR6.4 KPI1	Charges have one place to go to easily calculate their annual carbon emissions from buildings.	2023
T34	Co-fund Heritage Energy Expert	Recommended that Standing Committee co-fund 1 permanent position, for heritage building energy efficiency specialist who has detailed knowledge of Heritage Environment Scotland policy and experience. This seek partnership with Church of Scotland and HES on this.	Church of Scotland, Historic Environment Scotland		The expert heritage and listed building technical solution knowledge is available for those that need it, when they need it.	2023
T35	Net Zero Workshops	As part of the strategy, we intend to run a series of workshops which outlines the key steps and changes that a church can make in relation to achieve net zero, particularly in the area of energy efficiency and the decisions that are needed with regards to 'space heating' vs 'people heating'. This stream of work will create a custom SEC Net Zero workshop, providing a framework to translate the recommendations and targets within this Net Zero Action Plan Toolkit, into specific action in each church, providing a seamless link and synergy between the Net Zero Action Plan (2023-2030) and the Net Zero Toolkit, leveraging guidance from the Provincial Buildings Committee and where appropriate Historic Environment Scotland. Facilitators of this programme will be trained up and the Net Zero Delivery Managers where feasible will lead this process in each diocese based on a programme co-developed by Net Zero Delivery Director and Heathack.	Heathack, Provincial Buildings Committee	KR1, KR2, KR6	Vestries are empowered to make the decisions needed to transition to Net Zero 2030. Increase confidence and knowledge about various zero emissions heating solutions as well as step-by-step approaches to energy efficiency.	2023

CORE NET ZERO DELIVERY TEAM						
T36	Convene diocese-level quarterly gatherings	Net Zero Delivery Manager in each diocese convenes together on a regular basis a gathering of their own charges so that knowledge, experience and best practice can be shared amongst peers. This is part of the strategy to engage each charge and help them get up to speed with some of the useful approaches.	Diocesan Net Zero Delivery Managers	KR6	Charges can swap knowledge, experience and get up to speed in what needs to be done.	2024
T38	Update Net Zero Toolkit	Update the Net Zero Toolkit on an annual basis, matching this with latest guidance and strategy (including that of Buildings Committee) and coupling recommendations with a new workshop program with a third party organisation.	Net Zero Delivery Director	ALL	Charges have the best, up-to-date resources to help them move step-by-step to Net Zero.	2023
T39	Fundraising listings	Up-to-date listing by Net Zero Delivery Director and GSO office on website, monitoring up-to-date changes and liaising with by Net Zero Delivery Managers to ensure charges have the latest information.	Net Zero Delivery Director	KR9	Charges have a list of all the places they can get funding for net zero measures.	2023
T40	Easy-to-understand webinars	Carry out a series of webinars targeted at clergy and vestries to support them in understanding all the steps that are needed to get to net zero, including the stages of the process, the tools available and the various options with regards to energy efficiency and zero direct emissions heating solutions.	Net Zero Delivery Director	KR6	Vestries have easy-to-understand video guides on most of the common questions about the Net Zero process and decision making needed.	2023
T41	Net Zero Action Plan Templates	PEG will create a template for use by cathedrals and charges to assist them in the creation of their own Net Zero Action Plan.	Net Zero Delivery Director	KR6.3	Cathedral and charges have a template to easily create their own Net Zero Action Plan.	2023
T42	Heating Resilience Plans	Creation of a new Heating Resilience Plan template with guidance to ensure that decisions related to replacing the heating system encompass a holistic approach.	Net Zero Delivery Director	KR2.3, KR2.4	Charges have all the information they need to plan for the replacement of their heating system.	2023
T43	Reporting adherence to international standards	Continue work on reviewing international standards with regards to Net Zero and enhance this strategy with reference to forthcoming standards from the International Sustainability Standards Board (ISSB) and exploration of the implications for verification of carbon reporting via the Science Based Targets initiative (SBTi).	Net Zero Delivery Director	KPI1	Ensure our methodology adheres to standardised approaches, using consistent language and principles to ensure our approach to net zero is transparent, credible and focused on absolute emissions reduction and enhancement of biodiversity.	2026
T44	Baseline modelling refinement	Revise modelling of carbon emissions data using more accurate figures provided by diocese. Refine baseline carbon emissions for 2018.	Net Zero Delivery Director	KPI1	Increase credibility and accuracy of net zero emissions reporting	2023
T45	Pooled purchasing	Explore the possibilities of pooled purchasing with other faith-based organisations across the UK by 2024 to achieve cost savings for the purchase of capital equipment related to heat pumps and radiant heating solutions.	Net Zero Delivery Director	KR9	Charges are able to get reduced pricing on products and services.	2024

T46	District heating systems	Explore potential for churches to become a central node in a distributed heating system/network for more densely populated churches and cathedrals and what the solutions are for churches to hook into.	Net Zero Delivery Director	KR2	A review of the suitability for district heating systems and best practice approaches.	2024
T47	Credible carbon Offset strategy	Provincial Environment Group to create a strategy on a credible carbon offset strategy by 2025, reviewing the issues as outlined in Positive Finances objective.	EIAG, Net Zero Delivery Director	KPI1	SEC has a credible, carbon offset programme in place.	2025
T48	EV Charging Strategy	Provincial Environment Group to create a strategy on roll-out of EV charge points across province by 2024.	Net Zero Delivery Director, Provincial Buildings Committee	KR2	Charges know how to install EV's, best practice and clear curtilage guidance.	2024
T49	On-site solar generation	Provincial Environment Group to create a strategy to empower charges to increase the amount of solar energy generated across the province, helping charges lower their electricity bills, increase potential for income from exporting energy to the national grid, contribute to the reduction of future carbon offset charges as well as help the province as a whole reach net zero by 2030.	Net Zero Delivery Director	KR2.5	Charges know the benefits of solar PV, how to navigate planning and consents and incorporate into their financial planning. The province can reduce carbon offset charges from 2030.	2024
T50	Scope 3 inclusion	Review further actions needed to incorporate all Scope 3 emissions within Net Zero target post 2030.	Net Zero Delivery Director	N/A	The church builds its capacity to move towards this post 2030	2026

Appendix One – Questions for the Online Survey Consultation

Welcome to the Net Zero Action Plan (2023-2030) online survey.

Thank you for helping us refine our net zero strategy and providing feedback to the draft of the plan. The Provincial Environment Group certainly don't have all the answers and we want to co-create our approach with stakeholders across the province.

Before completing the survey and answering the questions below, please ensure that you have read the consultation document.

Please note that questions marked with an asterisk (*) require an answer.

Completing the survey

It is important that you provide your name and contact details when submitting your response. Your name will only be published with your permission, and we will never publish your contact details. However, we may use them to contact you if we have a query regarding your response.

Please choose one of the following:

- I am content for this response to be published and attributed to me or my committee/board*
- I would like this response to be published anonymously*
- I would like this response to be considered, but not published ("not for publication")*

Please provide your name in full:

Which of the following best describes your role in completing the consultation?

Congregational member of a church:

- On behalf of a formal provincial or diocesan committee*
- Clergy*
- Staff member*
- Other*

Please provide the name of the church or committee/board you are representing.

In which diocese do you reside?

Please provide your email address so that we can contact you if there are queries regarding your feedback. We will not publish these details.

Your feedback for our overall approach to Net Zero

Overall, do you think that the Net Zero Action Plan outlines what is needed to achieve General Synod's 2020 motion - to work towards reaching net zero carbon by 2030?

Yes, Partially, No, Not Sure. (Please provide any additional comment that supports this view.)

Which of the following best expresses your view of the Net Zero 2030 target definition (the scopes of inclusion and organisational boundary) - taking into consideration a balance between prophetic and practical?

Supportive, Neutral (neither support nor oppose), Opposed, Do not have a view (Please explain the reasons for your response.)

Do you think the net zero 2030 target definition encapsulates the 'material' carbon emissions of the Scottish Episcopal Church?

Yes, No, Not sure

Overall, do you think Net Zero Action Plan is deliverable, assuming the enabling interventions outlined in section 7 are fully resources?

Yes, Partially, No Not Sure (Please explain your response.)

Do you agree that the Net Zero Action Plan (2023-2030) reflects the urgency of the situation?

Yes, Partially, No Not Sure (Please explain your view if your answer was "partially" or "no".)

Do you think the Net Zero Action Plan is a credible approach to net zero action?

Yes, No, Not sure

Do you think the Net Zero Action Plan will result in a reduction in carbon emissions across the province?

Yes, No, Not sure

With regard to the specific Key Results associated with each the ten core objectives (outlined in section 7), are there any that you do not agree with? If there are, how you would change these? Please give the rationale behind your response along with the specific KR# you are referring to.

Do you disagree with any of the enabling interventions proposed? If yes, please state what intervention (using T#) and why is this the case? If you agree with all the interventions, please skip to the next question.

This question is directed towards diocese staff and provincial boards and committees only: Please give your feedback on the 'enabling interventions' in section 8, particularly referencing the T# where your committee or diocese is listed as a 'guiding partner'.

Closing thoughts

If helpful, please briefly explain the experience you have which is relevant to this consultation or elements therein.

Are there any actions that you have been taking that are not included in the plan? Do you have examples of any other net zero work that might be useful to the strategy or to share with others?

Do you have any other additional suggestions or comments on the Net Zero Action Plan (2023-2030) that will help the Provincial Environment Group adapt this strategy further?

DRAFT

Appendix Two – Previous SEC General Synod motions/papers related to climate change

General Synod 2005:

“That this Synod note with concern that time is running out to tackle environmental injustice, in particular the effects of climate change on the development of poorer countries; urge all dioceses to promote the Churches’ Environmental Programme.”

General Synod 2010:

“[Confirms] the necessity for all dioceses and congregations, as an expression of their faith in action, to encourage and protect a sustainable environment and to consider steps to reduce energy consumption”.

General Synod 2011 - Motion 13:

“Encourage each Diocese and Charge to conduct its own environmental sustainability audit ... and to identify opportunities to reduce energy consumption to help the SEC become a more environmentally sustainable Church.” ... “request Diocesan bodies responsible for the care of church property to consider that the recording, monitoring and encouragement of energy use improvement is an integral part of the environmental sustainability audit” (2011)

General Synod 2011 - Motion 14:

“Request Diocesan bodies responsible for the care of church property to consider that the recording, monitoring and encouragement of energy use improvement is an integral part of the environmental sustainability audit.”

General Synod 2015 - Motion 17:

“... the following practical steps being taken by the Scottish Episcopal Church ... [1] Encouraging congregations to join Eco- Congregation Scotland; [2] Working collaboratively with other concerned organisations.”

“If we are to take our responsibility to God’s creation seriously, we should go beyond urging others to take action and undertake actions which lie with us.” (Professor David Atkinson Convener, CiSC Synod Paper)

General Synod 2016 - Motion 17:

“Urge all parts of the Scottish Episcopal Church to play an active part in finding means of reducing the consumption of fossil fuels, including their use in heating and transport.”

“We are calling on Charges to begin to monitor factors linked to climate change impact such as their use of fuels and to report this through dioceses so that we can begin to build up a picture of just what we do use ... we all need to put in practice a progressive programme of changes that work over a period of time, both at personal and at policy levels.” (Church in Society Committee Background Paper)

General Synod 2017: Motion 12:

“Calls on all members, congregations and Dioceses to develop approaches consistent with a low carbon economy” ...

“recognise the urgency of action on climate change at all levels in Society, and reiterate the call made at General Synod in 2016 to everyone in the Scottish Episcopal Church (SEC) - province, dioceses, congregations and members - all to play an active part in moving towards a low carbon economy.”

“On no conceivable ethical grounds can we simply continue ‘business as usual’ and leave it to them [future generations] to clear up, after we have left. It is imperative upon us to do everything we can in our times. God calls humans to be stewards of the creation, which God has entrusted to our care, and no area is more urgently important in this stewardship than to reduce radically our emissions of greenhouse gases.”

General Synod 2020: Motion:

“That this Synod, expressing the need for urgent action in relation to the global climate emergency, call on the Church in Society Committee, working in conjunction with other appropriate bodies, to bring forward a programme of actions to General Synod 2021 to resource the Scottish Episcopal Church in working towards achieving net zero carbon emissions by 2030”.

“For too long, the Anglican Communion's fifth mark of mission “to safeguard the integrity of creation and to renew and sustain life on Earth” had been seen by many as something that one would get around to at some point or that someone else would deal with it. It did not work that way. There was a need for everyone to act now and the Church needed to lead.”

General Synod 2021: Motion 15:

“That this Synod, recognising the urgency of the climate emergency, endorse and commend the Ten Points of Guidance set out in the paper from the Technical Group of the Church in Society Committee”.

General Synod 2021: Motion 16:

“That this Synod call on the Standing Committee of the General Synod to put in place appropriate structures to enable action at provincial level and report back to General Synod 2022.”

General Synod 2021: Motion 17:

“This Synod call on Dioceses to put in place appropriate structures to enable action at diocesan level and to support action at congregational level and report back to General Synod 2022.”