

ST ALBANS DIOCESAN SYNOD

14 October 2023

NET ZERO CARBON UPDATE

Introduction

General Synod committed the church to a strategy of achieving Net Zero Carbon by 2030 with significant responsibility lying with dioceses to implement.

Our Diocesan Synod approved its Environment Policy in March 2022 and a Net Zero Carbon Action Plan in October 2022.

Implementation and Developments in 2023

Governance Refresh: In accordance with the Action Plan the Diocesan Environmental Group has been strengthened with a bishop, archdeacon and rural dean. New Terms of Reference are being proposed which will have the DEG report to Bishop's Council. A Net Zero Carbon Implementation Group is being established. A staff group has also been established to champion solutions and opportunities at Holywell Lodge.

Net Zero Carbon Technical Advice and Funding: Tom Abraham has been appointed as NZC Officer and took up his role in May. His input is being well received in parishes. We secured an initial grant from the national church which we have used to fund the first year of this post together with diocesan funding from the 2022 Total Return surplus. Working with the other Eastern Region Dioceses we submitted a funding bid to the national church for further capacity development. We have been awarded £131k which will fund the second and third year of the NZC Officer post and a contribution to a part-time learning post for the region.

Carbon Footprint Baseline: We are encouraging parishes to upload data on energy usage for church buildings and halls via the diocesan online portal, to feed into the national Energy Footprint Tool. The results will give parishes a baseline and will enable us to identify the top 20% high-usage parishes as a priority. Schools are inputting data using the parallel Energy Footprint Toolkit, which is also being used for data from clergy housing and the Diocesan Offices.

234 churches submitted data to the energy footprint tool, up from 145 last year. An initial review has been undertaken of the data, with those churches submitting data having a carbon footprint of 2006 tonnes CO₂e, or 8.5 tonnes CO₂e per church, indicating a total carbon footprint of the churches of around 3,350 tonnes CO₂e per year, equivalent to someone flying around the world 740 times. Churches using gas for heating used 7 times the amount of energy per square metre as those using electricity, and this is reflected in the running costs. There are 21 churches reporting electrical heating, and renewable energy purchased, and whose buildings can be considered Net Zero. We will find a way to acknowledge and celebrate this achievement. From reviewing the quinquennial inspection reports there are at least 90 further churches who use electricity as their heating source, and who could therefore achieve Net Zero for their buildings by purchasing renewable electricity when they renew their supply contract.

We are working to develop parish capacity further, inviting participation in online carbon literacy training hosted by the national church, and we will be delivering an in-person event on 30 November. In addition, this term's churchwarden training is on EcoChurch and Net Zero Carbon.

Energy Audit grants: £50k has been allocated from the 2022 Total Return surplus to support energy audits (grants of £325 at 75% of subsidised cost via Parish Buying). 13 grants have been approved to date, with the fund intended to be disbursed over multiple years to support the transition to net zero.

Diocesan grant scheme for parish net zero carbon projects: £315k has been allocated from the 2022 Total Return surplus. The scheme has been launched and the first grant (£8k) awarded in September. Several other applications are known to be in preparation for projects being supported by Tom Abraham.

It is anticipated that £500k will be added to the designated parish grants fund in 2023, with a further £500k budget for 2024. It is anticipated that the DBF will allocate a significant component of these additional funds for further NZC grants.

Schools: The DBE are working with Local Authorities and using capital funds to ensure schools have a Heat Decarbonisation Plan (HDP). This will enable each school to understand what is required to decarbonise their site and the data to apply for government funds through Salix. Capital allocations will have a greater emphasis on energy efficiency and carbon reduction projects. The DBE is developing and delivering a suite of resources for schools, 'Heart for the Earth', which will enable schools to theologically reflect and frame their commitment to environmental issues and carbon reduction. This project will be delivered over the 2022-2024 academic years.

Sustainable energy sources in clergy housing: The Property Committee continue to focus on conserving energy in parsonage houses through insulation, double glazing etc to reduce heat loss. Without this work, the installation of heat pumps or other technology would have been pointless and serve only to increase the bills clergy paid. The Property Committee is now able to move on to a series of trials of new and emerging technology including air source heat pumps and solar panels. The DBF has allocated £250k over 2023-25 for trials with additional external grants being explored. The DBF funding is coming from additional income from Total Return on the Property Ring Fenced Fund. It is expected that there will be significant learning from these trials and from demonstrator projects in other Eastern Region dioceses.

Of the recommendations contained within the energy performance certificate reports undertaken in the last 10 years, almost half recommend the installation of a condensing gas boiler, which would not meet our net zero commitments. The EPC recommendations are largely based on reducing the energy costs for a household, rather than the total energy consumption or carbon emissions, which means that the current recommendations cannot just be applied to achieve our net zero goal. Anticipated staff training will enable us to develop a more nuanced approach to determine solutions that address both carbon emissions and running costs.

As part of a wider property strategy review it is likely that consideration will be given to replacement of non-optimal parsonage and other houses; with this being based on Missional requirements, functional utility, house condition and potential for improved energy efficiency and carbon emission reduction.

EV Charging points: When requested permission is given for clergy to install EV charging points at their parsonage houses. Given the potential for the installation costs to be recovered within 12 months it is not felt necessary to install charging points at Diocesan cost. The Property Committee is exploring the possibility of offering grants to assist with the up-front cost of installing EV charge points.

The average cost of new electric vehicles in the UK remains in excess of £40k, limiting the current demand from clergy, however used EVs are now a similar price to petrol equivalents which may increase their uptake in the medium term.

Meetings and Travel Policy: Diocesan meetings and training have maintained a significant online component following the pandemic. During 2023 all Boards, Committees etc have been asked to consider their future meeting patterns with a view to reducing carbon footprint. Meetings and Travel Policies are in development for formal approval.

Church Land: The DBF owns 3,262 acres of Glebe land spread across 186 tenants. The Glebe Committee has adopted an environmental policy which commits the Board to undertake activities beneficial to nature and to maximise environmental and sustainable practices.

The Glebe Committee continues to explore the potential for large scale solar farms as a means of producing renewable energy. Developments are unlikely in the next five years. The Glebe Committee is also reviewing the sustainable management of its woodlands and the potential for forestry development.

Future Action and Funding Estimates

NZC Action Plan: A priority task in the next 12 months is to develop the NZC Action Plan into a fully costed programme.

Diocesan Houses: Although costs of new heating technology are expected to fall in real terms, the estimated installation costs are £25-35k per property in today's prices for 300 properties; giving a total cost of £7.5-10.5 million. Where additional work is required to retro-fit properties this can rise by a further £40,000.

Churches and Halls: DAC members and consultants continue to offer general and specific advice on achievable proposals for replacing church heating and other changes or developments which will support a parish's work towards Net Zero Carbon as well as its worship and mission. Churches and halls are the primary focus of the NZC Officer with active involvement with parishes across the diocese, and more than 20 parishes visited to date. In addition to data gathering, attention is being given to promoting messages around understanding the building usage, and exploring electricity as a source of heating the people in the church before looking for electrical options to replace gas or oil-fired space heating which will often cost more both to purchase and to run, with a commensurate increase in comparative carbon emissions. Information gathered to date has primarily been in relation to churches, with much more data needing to be gathered about the halls, their usage, and their heating systems. At this stage it is not possible to develop an evidence-based estimate of the cost of NZC measures in all churches and halls, but this is likely to be more than the costs for parsonage houses, perhaps by a magnitude of 2-3 times.

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