‘Apocalypse Now’?

Report on the Environment and Climate Change to Diocesan
Synod, 14th July 2022

Summary

- **General report and update**
  Dangerous climate change is upon us, action increasingly necessary and urgent – hence our over-arching target of net zero by 2030, established in 2020. We need a credible theological basis for our present responses and future hope.

- **National and international background**
  Environmental challenges especially climate change are set in an increasingly threatening matrix of global challenges to security and human welfare. We need to speak the truth and be honest about our own failures, while relying on the promises of God in Christ.

- **Eco Church, Areas and Parishes**
  These are the key settings for our environmental action. Progress is being made, especially on Eco Church and reduction in CO₂ emissions from energy use in churches and other buildings.

- **2030 Vision, 2025 interim prospectus.**
  Our actions to Care for God’s Creation form part of the Compassionate Communities strand of our 2030 Vision. We face a range of barriers and dilemmas. We need to exert leadership, aided by creative partnerships and excellent communications.

‘Apocalypse Now’

I have approached this report with a sense of writer’s block. How to add to the volume of writing and comment on the apocalyptic times we seem to be living in? However, I got my cue from a LinkedIn post about the young protestor at the French Open tennis competition, with her t-shirt bearing the slogan "We have 1028 days left". That takes us to 27th March 2025. The protest was evidently about the climate crisis. I hesitate to make any specific predictions for that exact date – I haven’t discovered anyone else who has, and I don’t know where she got it from. But if she meant that we have until then to take decisive action, in order to avoid catastrophic climate change, then I believe she was mistaken. We do not have nearly that long.

I have re-read some of my earlier synod reports on the environment and climate change. Ten years ago, on 17th July 2012, I wrote "Make no mistake, the challenges to the environment and sustainability worldwide remain (sic) acute. Probably the most severe, climate change – which may soon begin a frightening acceleration – places us all in grave peril.” On 19th July 2016, I wrote "Members may have read of the extraordinary global temperature records being set on a monthly basis. At some point this may slacken for a while". The acceleration I predicted began during 2014, and the 7 calendar years since have been the 7 hottest ever recorded globally.
There is little sign of any slackening – 2020 equalled 2016 as joint hottest year on record – while new heatwave records and accompanying wildfires and floods (and droughts) have become daily news, along with melting ice and rising sea levels – stealthy but nonetheless deeply threatening. Temperatures in the upper 40s Celsius in western Canada in 2021 are among several that smashed earlier highs out of sight. Record records if you like. That is the shape of things to come – and it isn’t pretty.

But it would be idle to continue in this vein: dangerous climate change is upon us, along with biodiversity loss and the flood tide of rubbish in the oceans. Many organisations have declared a climate emergency, some a biodiversity emergency as well. Nevertheless we can and must try to help make these human-inflicted enormities less bad than they would have been. General Synod and Diocesan Synod were and remain right, I believe, to set our target of net zero CO$_2$ emissions – these emissions being the principal cause of global heating and climate change – by 2030. That has to be the first and most essential ingredient in our strategy.

**Scripture and theology**

Our reasons to act are profoundly moral, theological, and rooted in Scripture. A huge amount of work has been done over the years, by Dave Bookless, Ruth Valerio and many others, teaching us why as Christians we should care for God’s world. That includes reducing our climate impacts, cherishing the biodiversity in our churchyards, diligently sorting and recycling our waste, and much else.

I have been struck by how we cannot separate environmental challenges from the many other afflictions which torment our world, including the cost of living, hunger, migration, disease, tyranny and war. As Giles Goddard, Vicar of St John Waterloo and Chair of Faith for the Climate has recently written, “It is clear that social justice, economic justice and climate justice are inter-connected”. Short-term self-interest everywhere prevails over the long-term common good. Acts of wickedness are inter-linked with mere negligence and expediency. They are bound up with each other and they amplify each other – even though we know from Christ’s words in Matthew 24 not to be prematurely alarmed, as such things will take place but the end is not yet.

That does not mean we should detach ourselves and become passive hermits. Quite the contrary. We are all implicated and must all engage in ministering to the world’s agonies with the love of Christ. It has often been remarked that the 5th Mark of Mission, about Care for Creation, involves aspects of all the other four marks. We also cannot separate the local from the global. That insight has become a commonplace one, since someone coined the slogan “Think Global, Act Local”. Everyone has heard of globalism, even though that is under such severe strain.

But above all, we cannot separate past, present and future – not only in terms of the impacts of our forebears’ actions being felt today, and our own which will bear on our successors, but also in terms of God’s economy. God is outside time, and sees all in a single landscape. We are living in a single dispensation, stretching from the Crucifixion, Resurrection, Ascension and Pentecost, through to the Parousia. We are often rightly encouraged to place our hope for the future in God, and we have a firm foundation on which to rest that hope: the death and resurrection of Christ, by which He liberated Creation from its bondage to decay, and guaranteed ultimately to unite all things in Christ (Romans 8:21, Ephesians 1:10).

Foreseeing what that future will look like, when it becomes reality, is another matter - much less when that will be (which we are forbidden to attempt). On the theology of hope for the future of Creation, and the new redeemed Creation, I recommend "Hope in an Age of Despair”, Jonathan Moo & Robert White (IVP, 2013).
The promise that Creation will be renewed is not of course any reason to abandon caring for Creation as it is now, and living out our love for each other, especially the poor and vulnerable, in accordance with clear scriptural commissions to humankind. We need all the more to hold onto our biblical hope, while redoubling our efforts in the present. There may be less time than we think.

Here are some of my own thoughts on these questions over the last couple of years, from the diocesan website:

https://www.london.anglican.org/articles/what-do-we-know/
https://www.london.anglican.org/articles/faith-and-faithfulness/.

Human failure, the truth, promises

Before going on to summarise ongoing work in this Diocese, and to pose some of the challenges and barriers to be aware of, and to discuss and share experience, I would like to pose two other moral and theological questions for reflection:

- What if we fail?
- How may we speak the truth, in love – to ourselves, to people especially young people, to the world, to those in power, to God?

I am tempted to ask, rather, what when we fail? For we all fail, at least in some ways, some of the time. In one of C S Lewis’s Narnia tales, The Silver Chair, the children are tasked with finding and liberating a kidnapped and enchanted prince. They are given several signs to help them on their quest. Depressingly they miss almost all these signs, even when presented right under their noses (albeit in concealed or confusing form). But in spite of all, in the end, the divine figure of Aslan brings about the desired outcome, still through his chosen but flawed human agents and their (relentlessly pessimistic!) Narnian guide.

We all partake in the common frailty of humanity. So far, humanity as a whole has failed calamitously on the climate crisis. The evidence was provisional and confusing for a long period, perhaps until the 1980s. Now it is unequivocal and irresistible. Yet some have persisted in evading or obfuscating the truth, tilting its demands towards their own interests, wrenching concessions and promises from others while failing to deliver on their own.

So we have to speak, and confess, the unvarnished truth. The times demand no less. Plato propounded a patronising doctrine of the ‘noble lie’, whereby inconvenient truths were best withheld by the ‘guardians’ from the common people. But who guards the guardians? The common people would (mostly) far rather they were told the truth ‘like it is’ – yet too often are unwilling to accept the consequences for the behaviours and lifestyles of us all. We must swim against this depressing and dangerous tide.

Christ’s promises to all ‘who overcome’ are to be read in the Spirit’s letters to the seven churches, in Revelation 2 – 3. They are heady stuff. What we are not worthy to receive, Christ is nevertheless worthy to bestow.

What ‘overcoming’ means is set out in Ephesians 6. Through that whole epistle, Paul’s vision makes little distinction between the personal and familial on one hand, and the global and cosmic scales on the other – he segués naturally between them. Whatever we do or say, however we rise to the challenge or fall short of it, God will do what He will do, including the liberation of His entire Creation!

Let us pray to be included in that redemptive work, and to channel it through our actions in the present, however feeble and insignificant these may seem.
Perseverance and action

So what are those actions – with which we must persevere? Our 2025 mid-term prospectus for Caring for God’s Creation, in its present iteration, accompanies this report. It forms part of the Compassionate Communities theme of the 2030 Vision. Here are headlines on progress, using the same numbering as our targets:

1. As of end of March 2022, 142 churches so far in the London Diocese have signed up with Eco Church. These include 50 award winners – two Gold Awards (the latest being St Paul’s in North Marylebone), 10 Silvers and 38 Bronze award winners. By the time Synod meets we may be able to report further increases in these encouraging figures.

2. Work on developing an underlying theology is progressing, along the lines sketched out above, in this report.

3. 59% of churches in this Diocese entered their 2020 data in the national Energy Footprint Tool in 2021. Savings of 21.7% in annual energy use and 31.3% in net CO₂ emissions were calculated from these reports, the average across churches in the Diocese, since 2005.

We now have at least 42 solar panels installations on churches and halls and houses, and a growing number of electrical heating systems including heat pumps.

A programme of Energy Performance Certificates for the diocese’s operational housing is progressing, part of the process of compiling a complete estate terrier, with a view to CO₂ reduction towards net zero; this will build on energy saving improvements already implemented over the last several years.

Proposals for flood risk mitigation in operational housing are under consideration.

4. Progress reported in the 2022 LDF Trustees’ Annual Report (later item in this Synod meeting’s agenda, lower half of page 8) includes Diocesan House returning to net zero status on fuel and power.

The LDF’s investment policy on exclusions is under review.

5. The Diocese now has a Steering Group on Caring for God’s Creation, and teams of champions in each episcopal area.

Willesden Area is taking a lead in running online events, such as on Electric Vehicles and Green Energy in a Time of Crisis. We have also supported Stepney Area training on How to get going with Eco Church. Other areas are encouraged to run seminars, which we can support.

Area leads have been given professional development through Carbon Literacy Training. A pilot is planned to run this training (in August) at diocesan level: we are seeing significant interest from lay and clergy.

6. Work with the LDBS is progressing, including measurement of church schools’ energy and CO₂, in 2019 from Display Energy Certificates, and in 2020 utilising the CoE Energy Footprint Tool for schools (part of a national toolkit which now also includes houses and cathedrals). Emissions are shown as steady or reducing slightly, but it is too soon to discern a reliable trend in relation to schools.

At the same time, two of our schools, as well as one church, participated in the national CoE Wayfinders programme, examining in generic terms the feasibility of reaching net zero.

7. We are working with the Children and Youth Team to help churches ensure their young people are engaged on environmental issues, and have leadership opportunities.

Mutual exchange and encouragement between our young people in communities in Angola and Mozambique is being facilitated.

The prospectus suggests who should be leading and supporting on its 7 objectives. In reality, this is a collaboration between all involved!
Progress, dilemmas, barriers

While we have seen significant progress, dilemmas and barriers are inherent in several of the above areas, in particular:

- **31.3% annual net CO$_2$ savings from 2005 to 2020 does not equate to 100% savings by 2030.** If progress continues at the same rate, that would move us half way to net zero by 2030. However there are grounds for believing that the rate of progress is accelerating. It will therefore be seen in the accompanying Prospectus (item 3, referred to above) that we are now proposing an interim target of 50% by 2025. Nevertheless, assuming that is achieved, the remaining 50% improvements will remain to be achieved in the 5 years from 2025 to 2030 – still a very daunting challenge, for which we should be using the coming three years and more to find ways to facilitate and resource.

- **As the transition to LED lighting is progressing, low carbon heating is becoming the dominant challenge for most churches, even more than it was already.** More than 80% of energy use in churches is for heat. The national electricity grid has been ‘decarbonising’, meaning that switching heating from gas to electricity is encouraged – though this may be compromised by current world events.

- **A range of all electric heating systems are available, although electric boilers to drive traditional hot water radiator systems in larger buildings remain lacking – and would be very expensive to run if available.** They are however available at domestic scale.

- **Heat pumps are now being considered more often, as well as being key to the Government’s Heat in Buildings Strategy.** There are significant implications of replacing a traditional boiler with a heat pump, such as up-sizing of pipework and radiators, and insuring sufficient insulation. Nevertheless, the Property Department have installed a heat pump in the parsonage at St John at Hoxton as a pilot. St Andrew-by-the-Wardrobe church is completing its new heat-pump based system (featured in the Net Zero Routemap, see below). Experience gained from such pioneers will be very valuable. Larger churches may be less able to benefit from heat pumps, though the technology is developing and improving.

- **Nevertheless, we will still likely need to use some gas to heat our churches.** There are occasions when it can be appropriate to hedge bets, with a hybrid solution using both gas and electricity. We are currently working on a framework to assist parishes in formulating their own strategies for longer term heating provision, to cope with system failures and planned obsolescence.

- **Use of renewable energy from the electricity grid will be essential, probably together with other forms of offsetting (including within energy tariffs, as in the case of Diocesan House).** Genuinely renewable electricity (the CoE has an accredited list) is viable and is strongly advised. Renewable gas (ie biomethane) is now available, at a price. It may not all be ethically sourced. At present it is certainly not vegan. The option of grass fed biomethane is being explored by Ecotricity, but that would capture much-needed arable land. New gas boilers can already be biomethane and hydrogen ready. ‘Green’ hydrogen is becoming a more realistic prospect, but volume constraints may limit its use to transport.

- **Insulating the housing stock, let alone our churches or any listed buildings, is far from being the no-brainer or cure-all that some campaigners would have us believe.** Tough choices will need to be made on our clergy housing stock.

- **In addition to energy in buildings, the next highest order of priority is to measure and reduce emissions from work-related travel.** How to do this is being examined. There are a range of helpful ideas, including facilitating EV use, in the national Routemap (below).

- **Costs are of course a major challenge.** They have yet to be modelled in any detail, though an umbrella figure of £2m per year across the whole diocese and parishes was indicated in March 2020; elements of this are likely to increase, though others may reduce.
Church of England Routemap to Net Zero Carbon by 2030

Regrettably it has not yet been possible at this point to update models and analysis of future progress and cost. The new national Net Zero Routemap, just published, will assist. This strategy is set to go to General Synod on July 8th, ahead of this Synod.

The Routemap is bold, impressive, and generally to be welcomed. At this stage it is appropriate to offer a brief provisional overview. We will need to assess its proposals in detail, although there was a consultation earlier in the year to which we responded. We also need to take account of our latest assessments of our own stock, including outputs from the Energy Footprint Tool, and our ongoing assessment of residential property.

The Net Zero Routemap recaps the definition and scope of net zero previously adopted by General Synod. It goes on to lay down 7 underlying principles:

- Based on theology – treasuring God’s Creation
- Urgent, relevant and widely understood
- Data-driven, focused and transparent
- Embedded in all we do
- Using less energy, and from cleaner sources
- Travelling sustainably
- Offsetting only what we cannot reduce.

The Routemap covers the national Church, dioceses’ offices and operations, residential and commercial property, churches and cathedrals, BMOs, schools and theological education institutes, and proposes milestones for each – some very ambitious (including those imposed on the national Church). This is supported by helpful analysis, such as a hit list of measures common to most churches, drawn from past environmental audits.

Here is a selection of key points:

- The need for planning including estates strategies, maintenance, and reductions in energy use including easy wins, and opportunities for more major interventions, including renewable energy especially solar panels and heat pumps
- Giving priority to high energy use buildings (that includes most churches in this Diocese, where the average is 2½ x the national average due to week-round use)
- Sharing good practice case studies
- Central procurement, training and advice services
- Developing funding streams – a strong lead from the national Church is envisaged
- Green (ie renewable) tariffs
- The need for some offsetting, but only what cannot be reduced or eliminated
- Policies for DACs, Quinquennial Inspections, Archdeacons’ visitations
- Reporting by PCCs to APCMs
- Embedding learning and good practice in staff job descriptions, training and performance reviews.

The Routemap asserts that:

“We now know that there are existing technological solutions that could make every one of our buildings net zero carbon. We also know more about the costs and practical challenges that would be involved.”

The first of these statements is based on the sample of 12 high energy use sites in the Wayfinders programme (nationwide total, 3 secondary schools, 3 primary schools, 4 large churches, one Theological Education Institution), and one diocesan office). We shall see how well it ages as projects evolve.
As we have seen, there is much that is already happening, centrally and in many other dioceses as well as this one – though we are much further ahead in some areas than others. One example of significant change at national level is the recent amendment of faculty rules to favour lower carbon projects. The Routemap acknowledges a number of caveats and continuing challenges; some would benefit from statutory reform, for example, constraints on planning permission for solar panels (and heat pumps).

We are pushing against technological limits, as well as practical, regulatory, resources and funding constraints. It is therein that the hard choices may be unavoidable. For example, heat pumps took the great majority of costs in the solutions proposed by Wayfinders.

We do already have a growing body of evidence on which to base choices and trade-offs (including earlier studies in this Diocese such as Generic Building Solutions). The Routemap provides an encouraging map of the 7% of churches across England that have already achieved net zero status.

One issue that is important but currently out of scope is so-called ‘embodied carbon’ in building projects. This is being reviewed, to return to General Synod with proposals to be introduced after 2030.

**Leadership, partners, communications**

Leadership, capacity building, partnerships and excellent communications including progress reports remain vital:

- The Church of England and Diocese of London are seen as leaders in the field, for example by the GLA in the context of their ‘Anchor Institutions’ programme. That leadership needs to be spread more widely and mediated locally as well as organisationally.
- Sources of advice and support in the Diocese include the Compassionate Communities team, the Head of Environment and Sustainability, and the Parish Property Support team – as well as from archdeacons of course; comprehensive information and advice is available at: https://www.london.anglican.org/mission/environment/ and https://www.compassionatecommunitieslondon.org.uk/themes-of-work/caring-for-gods-creation.
- Partnerships with civil society organisations, for example universities and clean tech accelerators may be beneficial. Churches and schools can partner and learn from each other on Caring for God’s Creation, in the context of Eco Church and also Eco Schools.
- Our prospectus sets ambitions for collaboration with ALMA on the impacts of the climate crisis. For the time being we remain relatively fortunate in the UK and London, in this regard. The impacts have been less frequent, and much slighter. Resilience is greater, and properties are routinely insured. We need to be constantly mindful of the experience of our partner dioceses in Mozambique and Angola – which has too often found itself at the opposite end of the scale of hazard and risk.

**Conclusions and next steps**

It is too soon to reach firm conclusions. And not even for us to determine, since we are in the hands of God. This is a work in progress, a journey of faith.

Nevertheless, it is now proposed to review the national Routemap in more detail, including the discussion and outcomes at General Synod – which will be known by the time of this meeting. Then in the light of work in this Diocese as it develops, it is proposed to return to Bishop’s Council with more thorough and detailed analysis, and a worked up diocesan strategy and action plan.
Questions and discussion
Here is a selection of questions to focus on, for discussion:

- *How would we assess the level of awareness in our areas and parishes on the environment, especially climate change – its causes, impacts and urgency, and the action we are taking?*

- *Is Caring for God’s Creation perceived as a ‘nice to have’, an add-on to our many other obligations and preoccupations, or as integral and essential to them all, to Christian Mission & Ministry, and authentic Christian living?*

- *Is this generally accepted as a moral and theological issue? Are clergy receiving sufficient input, direction and resources on the theology? How can this best be delivered?*

- *Is the theology of Creation and Redemption seen as a source of motivation and hope? Is the sense of despair among young people being adequately addressed?*

- *Are we delivering, and receiving, the necessary leadership and support? Are we exploiting potential partnerships in progressing this area of ministry?*

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June 2022