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Presentation by Phil Leigh, Diocesan Environmental Officer



It's great to be able to speak with you today about our work on net zero carbon.

So as you might know, in February 2022, the General Synod voted for the whole of the Church of England to achieve the goal of reaching Net Zero Carbon by 2030. In response to this, Bishop Paul tasked a group with putting together a program to move the Diocese towards this target. The subsequent planning took place largely over zoom meetings over lookdowns and resulted in the writing of a Programme Delivery Plan which we can circulate following this meeting if you'd like a copy. And this plan has since been adopted by the Diocesan Oversight Team.

So what do we mean when we talk about Carbon and Carbon Net Zero?

The term Carbon, often shortened to CO2, is generally used in this context as short-hand for the emissions of carbon dioxide and a bundle of other greenhouse gases, generated through Human activity.

To be Carbon Net Zero requires that Greenhouse gas emissions have been radically reduced, by cutting waste and reducing the energy use. And that the remaining emissions have been offset (for example by purchasing green energy, or through 'carbon offsetting' schemes such as tree planting or other carbon capture schemes).

So, why should we do this? Why should we care?

I'm not going to go through the science of it all. It's all out there for people to see. However, here are some persuasive voices:



Pope Francis said "Human-induced climate change is a scientific reality, and its decisive mitigation is a moral and religious imperative for humanity. In this core moral space, the world's religions play a very vital role."

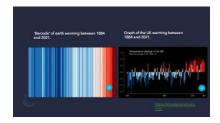
The World Health Organization has said "Climate change is the greatest threat to global health in the 21st century."

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Barack Obama said "We are the first generation to feel the effect of climate change and the last generation who can do something about it."

And Greta Thunberg said "The climate crisis has already been solved. We already have all the facts and solutions. All we have to do is to wake up and change."



And just quickly, this graphic shows global climate change as bar code showing how the world has warmed over time between 1884 and 2021.

And next to that is a graph showing temperature change in the UK over the same period.



Now, our planet is home to an incredible diversity of life, which many of us feel we have a duty to protect and preserve. And Climate change threatens the delicate balance of earth's ecosystems, causing devastating wildfires, more intense hurricanes, and rising sea levels that can displace entire communities.

Moreover, climate change worsens existing inequalities, hitting the most vulnerable communities the hardest. The poor and marginalized are often the first to feel the effects of droughts, floods, and food shortages. Climate change can also lead to conflicts over resources, heightening tensions leading to further instability in the world.

But hopefully it's not all doom and gloom. We're told there's still time for us to mitigate the effects of climate change at least and that there are many things that we can do to make a difference. By reducing our carbon footprint, investing in renewable energy, and encouraging and supporting policies that protect our planet, we can hopefully create a more sustainable future for ourselves and for generations to come.

In the words of the Jane Goodall, "The greatest danger to our future is apathy."

We're all starting from different places. Some people might have been thinking about this for years and others might be new to it – **but we can all help and doing something is better than to do nothing.**

So, what is the challenge ahead for the diocese of Liverpool?

The scope of the national Net Zero programme is quite narrow and focuses on energy use in our buildings and also on work related travel. We intend our programme to go further than this but whilst developing it we did our best to measure the energy footprint of the

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diocese with the information we had available. We needed to know where we were before we could plan a route to where we needed to be.

I should note that the national church has chosen 2019 as its base year to measure progress against as this was the last pre-pandemic year. So we calculated that our footprint for 2019 and found it was around 9,900 tonnes of CO2 and that it was split between the various estate as follows:



- Around 3,900 tonnes came from church buildings (around 1/3).
- 3,800 tonnes came from schools.
- 1,300 tonnes came from vicarages and the rest came from the cathedral, St James' House and Bishop's Lodge.

The national church has since developed an energy toolkit which attempts to measure this more accurately.

Unfortunately, the results from this toolkit from 2021 show an increase of around 2000 tonnes in our 2019 footprint to a total of 11,500 tonnes of CO2 per year for the diocese.

It tells us that of this:

- Schools had a footprint of 6,700 tonnes.
- Church Buildings had a footprint of 2,800 tonnes.
- And housing had a footprint of 1,700 tonnes.

Some of this increase is due to having more and better data, though it's sobering that the footprint has increased since 2019. Especially as our buildings weren't being used to their full capacity during 2021.

This shows the importance of accurate data which all churches and departments need to supply through the Energy Footprint Tool each year.

The Energy Footprint Tool is a part of the Parish Returns System and the deadline for completion is July 31st. Last year we only managed a completion rate of 26% for churches so we're working to improve on that by providing more help and information and running on-line drop-in sessions for anyone stuck on filling it in. I'm also always here to help.



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So now down to the detail of the plan:

Once we had an idea of the challenge ahead we looked at how we might meet it. This included looking at Governance and reporting.

So on this we envisaged:

- A Programme Board to oversee the work which meets quarterly and is chaired by Ellen who reports to DOT quarterly.
- A Programme Lead to coordinate the work of a delivery team and to share information and support with other departments (which is me).
- A Prophetic Lead which is Annie Merry from Faiths4Change and she coordinates the work of her team whilst helping connect us strategically within the region. Faiths4Change are our partners in this.
- And a Technical Lead (who is also me) though I rely heavily on Rob Wallace, our Project Manager to guide us on this.

The focus of the delivery team was to be mainly on church buildings but with help and advice being offered to other departments where relevant.

To achieve the aims of the programme, two key areas were identified in relation to Church buildings these were:

1. The prophetic challenge,

And this uses Eco Church as a delivery model and takes churches through five key areas of church life:

- Worship and teaching
- Management of church buildings
- Management of church land
- Community and global engagement
- Lifestyles

This is delivered and supported by Faiths4Change with workshops, drop-in sessions, individual advice, signposting, and access to resources through an online knowledge platform where we're accumulating resources most relevant the programme.

Eco church dovetails well with the net zero programme as it opens the door to many discussions. It also encourages action outside the scope of the national net zero programme so adding value to it.

The real beauty of Eco Church though is the way it enables and encourages churches to connect with the wider community. This is of huge value in itself.

In addition to the Prophetic challenge we also have:

2. The Technical Challenge

This involves churches benefiting from programme level guidance and assistance to create a Net Zero Plan bespoke to their Church. It draws on information collected from a Practical Pathway checklist which is a national resource that helps identify practical solutions that churches can work on to tackle their footprint.

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It also draws on Heating Feasibility Studies which help develop energy and heating system solutions where more serious measures might be needed.

Cohorts:

The Programme Delivery Team gives support and guidance in each of these key areas, with groups of churches being taken through the process in a series of cohorts.

The first cohort of 20 churches was selected due to them already having achieved an Eco Church award. And this was because we felt these had already shown interest in this work.

Things are progressing well with cohort 1. And lessons are being learned as we go.

When it comes to Eco Church, in the diocese we currently have:

- 105 churches registered
- 29 of these have Bronze awards
- 14 have silver awards
- And 2 have gold awards which is fantastic.

Of course, this isn't all down to the net zero programme which is in its early days.

Many of these churches have been working hard at this for a long time and are now well placed now to support, inspire and encourage other churches. And a key part of this programme will be finding ways to share this wealth of experience.

It's also worth mentioning here that we became a Bronze Eco diocese back in 2019 and part of the programme is to work towards the silver Eco Diocese award.

We are now recruiting Cohort 2, which is a larger group of 35 churches and this is drawn partially from the same deanery groups as the diocesan 'Fit for Mission' programme.

Engaging in this prophetic stream was planned to result in churches moving up one step on the Eco church ladder.

This will hopefully have benefits beyond the church gate as congregations apply learning to other areas of their lives.

The Eco Church pathway **does not** however guarantee a church reaching net zero carbon.

The Technical Challenge:

So, as I've said, to tackle net zero more specifically the plan is that each church will be encouraged to develop a net zero plan.

Heating and Insulation:

The heating and insulation of buildings is key to net zero planning especially in those churches with high energy use.

Heating our buildings is believed to take up to 80% of the overall energy footprint across the country and the diocese.

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So to help us tackle this technical challenge for Church buildings, a number of steps were put in place all focussed on decarbonizing building heating systems

Those steps include:

- Commissioning Heating Feasibility Studies
- Developing Technical Solutions
- Obtaining Project Delivery Funding
- And helping deliver projects

And a consultancy, Crookles Walker, has been identified through a tendering process to help deliver these.

So far, we have 6 Heating Feasibility Studies completed and have permission to share them if you'd like to see one.

It's important to note that some of the solutions identified can be expensive, so help is at hand for fund raising so we can launch projects as money becomes available.

Rationale:

The rationale behind this program parallels that of the national church, and is to tackle as much of the carbon footprint of the diocese as possible up to and beyond 2030 with offsetting being employed beyond 2030 to tackle any remaining footprint. This is all set out in the national church's new 'Routemap to net zero carbon' which is available on their website.

And just to note here, the national Routemap has also encouraged us to look at those 20% of each building type which have the greatest CO2 emissions and we are now starting to look at tackling those footprints.

Funding:

As far as funding goes, we were very fortunate to have secured 3 years' worth of funding from Benefact. This helps pay for the delivery team and to subsidise some of the technical work.

We've also had funding from the national Church's environmental funding pots and the most recent of these is specifically to help us design and cost the full programme required to meet the 2030 target. And we'll need to share this with you if possible later in the year.

We are also just about to enter another bid for national Net Zero Triennium funding which the national church is rolling out between now and 2030. This is specifically for capacity building at the moment, but there will be capital funding to follow

We plan to have some so called 'oven ready' schemes lined up so we can to tap in to this when it's announced.

On other buildings:

Of course, their department heads are best placed to report on this but it's good to be able to note here that all are engaging with the net zero programme despite the many challenges of funding and delivering solutions.

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So, whilst there is still much work to be done, we are moving in the right direction as a diocese.

And with that, thank you for your attention and your support in all this work.



But before we move to questions I'd just like to leave you with three things that you might do:

- 1. Please encourage your church (possibly your Treasurer) to fill in the **Energy Footprint Tool**. This information is vital to us and I'm very happy to help with any problems.
- 2. Please encourage your church also to register for **Eco Church** and begin the journey. Again, we are always here to help.
- 3. On a more personal front, you might like to look at **your own carbon footprint** with an online footprint tool. Climate Stewards have one, as do the WWF which you can easily be googled.

So, many thanks for listening.