

Horfield Methodist Church

The Story of our Eco Church Journey

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1. Eco Church Explained

Eco Church;A Rocha is an award scheme for churches throughout England and Wales who want to demonstrate that the gospel is good news for God's Earth.

This is a free online resource. We can use the online survey and resources to find out how we are doing and measure the progress we make. We can see how we are expressing our care for God's world through worship, teaching, and in how we look after our building and land. Also in how we engage with the local community and in global campaigns, and in the personal lifestyles of our congregation.

The things we do and the changes we make count towards a prestigious Eco Award. There are three awards, Bronze, Silver and Gold.

We are already the proud recipients of the Bronze and Silver Awards, having reached Silver in February 2022.

2. What have we been doing?

We set up our Eco Group, volunteers who have joined together to steer the church on its Eco journey. The group have looked at how we are impacting on the environment and what we can do better. The group is meeting regularly and our focus is on improving and reducing our impact on the community around us. We are working on five key areas;

Worship and Teaching - making sure we have Special Sundays which relate to caring for God's earth. Our hymns and songs enable us to celebrate God's creation regularly. We pray for the environment and issues that the world is facing.

Buildings - we have calculated our carbon footprint and are setting targets to reduce and improve our footprint and ensure our energy use is efficient.

We are looking at all the aspects of our building eg, insulation, lighting, window glazing, paper and plastic usage, recycling, cleaning products used

Land - Our garden club is working to ensure that the small outside space we have, supports the local wildlife. We think carefully about what is planted and how we maintain the land.

Community and Global Engagement - some members of our church are involved with local conservation work eg, with A Rocha UK Partner in Action, RSPB/Wildlife Trusts nature reserve. Some are involved in or have participated in a community clean up project. Our church financially supports an environmental charity - Grow Wilder.

Lifestyle - we encourage members to limit their waste by adhering to the principles of reduce, re-use, recycle. We operate a communal Christmas card scheme. Our church funds are ethically invested. Our notices give practical tips and advice on caring for God's earth.

3. Carbon Footprint Guide

Global Warming and your Carbon Footprint explained

Global Warming is changing the environment and impacting on people's ways of living. The situation is getting worse and it is vital we do something about it. This document will try to give simple explanations for the situation and its solutions.

What are greenhouse gases?

The earth is warm enough to sustain life thanks to the gases in the planet's atmosphere that hold heat - these are the greenhouse gases (basically they act just like a greenhouse in trapping the heat inside our atmosphere). We are often described as the goldilocks of planets, the greenhouse gases that naturally occur ensure the temperature is just right to sustain and nurture life.

The earth's temperature

The average temperature of the earth is 15 degrees Celsius. The more greenhouse gases held in our atmosphere the hotter the temperature gets. The 2 main greenhouse gases both occur naturally, but are increased by human activity;

Carbon dioxide (CO₂) - occurs naturally as it flows in a cycle between oceans, soil, plants and animals, humans produce more from burning fossil fuels, such as coal and oil.

Methane (CH₄) - occurs naturally in swamps and in anything that decomposes naturally without air, humans produce it by rotting garbage, wastewater, gas from livestock and rice crops.

How are we increasing the earth's temperature?

Our energy use - we get our energy from burning fossil fuels and this releases almost three quarters of all the human produced greenhouse gases in the atmosphere. We burn fossil fuels to provide electricity and heat, also in manufacturing (factories) and transportation.

Our land use - how we remove forests and use land has a big impact on human produced greenhouse gases. Trees naturally absorb carbon dioxide from the atmosphere. Logging and clearing land for agriculture and development means the carbon dioxide stays in the air.

Your Carbon Footprint (the amount of greenhouse gases you produce)

Your carbon footprint is how much carbon dioxide is released into the atmosphere as a result of your activities/energy use.

Simple Ways You Can Reduce Your Carbon Footprint (the amount of greenhouse gases you produce)

Reduce, Reuse, Recycle

Eat less (or no) meat. - going vegetarian has the same impact on reducing greenhouse gas emissions as if you trade in a regular car for a hybrid. To produce 1 pound of meat uses ten times more energy than making 1 pound of beans or grains.

Use Green Energy - don't worry if you can't afford solar panels or a wind turbine, just ensure your home energy supplier is supplying renewable energy and you're on their green tariff. If you can't switch to a green tariff, make a contribution to an offsetting charity – check out A Rocha

Travel Smart - fly less or not at all, use public transport if you can, cycle or walk if you're able, minimise your driving

Only use the energy you need - switch off lights when you leave the room, turn down the thermostat, don't leave things on standby. Switch to low energy, LED light bulbs.

We are each responsible for our actions and decisions and **we can make a difference.**

3.1 Our own carbon footprint

Managing our own carbon footprint means we can become part of the solution and help in our own small

way to contribute to stabilising the issues that God's earth is facing.

We have calculated our carbon footprint. By knowing our footprint we can start to address our issues, see any inefficiencies/waste and even reduce costs.

This means we are looking at our emissions. These are generally things we have control over in some way, eg turning off the lights when they're not needed, or deciding who to buy our energy from.

The areas we have looked at are covered by the following categories; **People, Energy, Travel, Food/Drinks, Expenditure, Waste & Water**

People

How often is the church occupied?

The number of services in a year

The use of the church by other groups, how often, how many etc

We are looking at the total occupied time of the church in any year and how many people have use of our building

Energy

What is our energy consumption in a year?

Travel

How do our congregation and staff travel to and from church?

Food/Drink

How many hot drinks/hot meals are we serving in a year?

What food and drinks are we preparing?

Expenditure

What is our spend in a number of areas, such as IT, building and grounds, postage, printing etc?

Waste & Water

How is our waste dealt with and how do we dispose of water?

3.2 Carbon Footprint pre covid

The carbon footprint of our church in a year, pre covid, was 28.43 tCO₂ (tonnes of carbon dioxide). This was at a time when we were not on a 100% renewable energy supply.

To put this in perspective the average carbon footprint of a UK household is 2.7 tCO₂ in energy use alone. The average carbon emissions of each individual in the UK is 12.7 tCO₂.

3.3 Carbon Footprint 2021

We have now been able to put all the figures for 2021 into the footprint calculator toolkit and this has shown our carbon footprint for last year was 25.01 tCO₂.

This is over 3 tCO₂ less than our baseline figure pre covid and this is due to the following factors;

People

we were still in lockdown at the start of the year and our in person worship didn't start until May. user groups didn't return until April and some of our other groups started later than this or have not returned yet.

Energy

we now get credit for the electric energy supplied on our contract by Eon as this is 100% renewable

Food/Drink

No hot food/cooking has taken place this year

3.4 Offsetting Our Emissions

We will be offsetting the emissions we can't reduce by making a contribution to A Rocha. We can effectively become carbon neutral for emissions by supporting projects that help communities in the developing world. Information on these projects is listed below;

Biosand Water Filters (Uganda) - the supply of biosand water filters to poor communities in Kampala - these provide clean water for families and save 0.9 tCO₂ per year

Fireless Cookers (Uganda) - a fireless cooker (families are taught how to make their own fireless cooker - it's a heavily insulated basket made from local materials. It allows them to prepare a meal in the morning on a conventional fire, bring it to boil, douse the fire immediately to save fuel then place the stew in the fireless cooker which then acts as a slow cooker and cooks the meal during the day using 0 energy - this saves about .74 tCO₂ per year, cuts fuel costs and reduces lung and eye disease from smoke.

Smokeless Metal Stoves (Nepal) - installing fuel-efficient cookstoves in the Humla District of north-western Nepal. Each stove will avoid the emission of 6.5 tonnes of carbon dioxide per year.

4. Garden Group

Within the ECO group a sub Garden Group was set up to specifically look at the land. What we have done so far and what the plans are for the future;

What we have already done -

A full plant survey of our land has been carried out and we already have wildlife friendly plants on site. There are berried shrubs and pollinator plants already.

We have;

wild areas at the back and side of our church which are intentionally left wild, with little disturbance by people.

cleared and cut back areas at the front of church and this work is ongoing. We will be planting suitable plants when the time is right.

created a pile of all the vegetation removed and this will rot down and is a good habitat for insects, slow worms, mice etc

We will be;

putting stick piles and stone piles in the areas being developed to encourage native wildlife

looking at placing bird boxes on site after consultation with experts e.g. Avon Wildlife Trust

in the Spring we will spend time recording the types of birds/wildlife seen on site

Some of the plans for specific areas;

Area under the toilet windows - cover with gravel or bark over a weedproof membrane

Area of grass outside room 1 - a useful area as its the only flat grassy space, keep grass short to allow use by Messy Church and other groups.

Grass surrounding church hall and church - mow every month if possible, whilst leaving small areas longer

Borders surrounding lawn outside church hall door next to path - maintain

Corner behind sign displaying HMC details - dig over soil, dig in soil improver, plant up with easy care pollinator friendly plants (could be an area for the Scouts/cubs to maintain)

Area next to Gloucester Road in front of right church steps - cut back, clear grass, dig over soil, replanting with shrubs at the right time 2022

5. The future as we continue on this journey

Things we will be looking at in the coming year

- 1) offset our emissions now and agree to always offset our emissions at the end of the year
- 2) fundraising for ECO projects
- 3) carry out a draught audit of each room in our building
- 4) a DIY project to put insulation above the office upstairs
- 5) when serving food/drinks at any time have a vegan/veggie option, a non cows milk option
- 6) use organic products when we can
- 7) buy local when we can
- 8) use some fair trade produce - plan a **Fairtrade coffee morning in June** and an **Eco fayre later in the year**. We can use only Fairtrade ingredients for the cakes/drinks and have literature on display that explains what Fairtrade is all about and gives information regarding us becoming a fairtrade church. More details to follow on both these proposals.
- 9) Set up a drop off zone for printer cartridges at church. We collect these and when we have enough we can send to Recycle4charity. They will pay for certain cartridges on their wanted list and this money can be given directly to a nominated charity or we can nominate our own charity - this could be climate stewards who run the carbon footprint toolkit we use and the money earned can be linked to our offsetting target. They will take all cartridges, so we will save them from landfill even if they are not all ones that they will pay for.
- 10) Restrictions allowing, set up a communal card scheme, like we had a few years back - try to reduce the number of Christmas/Easter cards sent.
- 11) Continue to push the message to the congregation and user groups eg, - car share if they can, walk if they can, switch off lights that are not being used, recycle all they can, reuse, reduce....

Our energy contracts tie us in until 2024, but we commit to reviewing these to make sure they are the best ECO option when the time comes.

6. If you want more info who to contact

If you want to hear more or are interested in getting involved then just ask one of the Eco Group. They are;

Eurfron Parry
John Parry
Helen Wallbridge
Monique Brocklesby
Lou Carias
Asmin Taylor
Audrey Bainbridge
David Bainbridge
Janet Browning
Margaret Postlethwaite
Bob Walters
Lorraine Richardson

7. Useful contacts and resources

www.ecochurch.arochoa.org.uk

www.arochoa.org.uk

www.climatestewards.org

www.growwilder.co.uk

www.rewildingbritain.org.uk

www.climatehero.me

www.footprint.wwf.org.uk

The book How to Save The World For Free, by Natalie Fee - available to borrow from Lou or Eurfron.