

Saving Creation Church Case Studies



Case Study for the Parish Church of All Hallows, Bardsey, Leeds



All Hallows Key Points

- That there is something in the case study that each church can do in the quest to become a Carbon Net Zero church.
- That although there are lots of different steps that can be taken, it's just a question of taking that first step.
- That there is lots of help available. It's just a question of looking for it!

Links

- www.bardseyeparish.com
- Church Heritage Record number 646044
- <https://facultyonline.churchofengland.org/CHR/ChurchDetails.aspx?id=10795>

The context

- Grade I listed church built in the ninth century with significant changes in the twelfth and nineteenth century.
- Situated centrally in the village of Bardsey and within a three-acre churchyard that remains open for burials.
- Our church footprint is 390 sq. metres
- The area is white, middle class and relatively affluent.

Our Journey on the Six Steps to Carbon Net Zero

Step 1: Measure and Monitor

- We have measured our carbon emissions via the Church of England Energy Footprinting Tool.
Gross CO2 emissions (Tonnes): 15.5
Net CO2 emissions (Tonnes): 15.0
- We have measured our carbon emissions via 360 Carbon Stewards.
Total Annual Emissions: 21.82 tCO2

Step 2: Plan and Prepare

- We have appointed a Parish Environment Officer
- In July 2020 our PCC agreed our parish environment policy – we used the Diocesan template as current at that time. We will review/renew our policy at our July PCC meeting in line with the new template now available.
- We are aware of the Practical Path to Net Zero and are working through Section A, though with an eye on the subsequent sections!
- The environment, the actions we are taking and future plans are discussed at every PCC meeting

Step 3: Essential Energy Actions

- We purchase 100% renewal electricity from Parish Buying
- In October 2021 we will move to purchasing carbon neutral gas from Ecotricity.
- In 2014 our church lighting was upgraded and LED bulbs fitted. Subsequent electricity bills show a significant decrease in usage. We have also put all our outside lighting on timers.
- In 2016 we changed parts of our old cast iron heating pipe work with gilled tubing, which helps the circulation of heat – cost £9,000. This has made the church significantly warmer and quicker to heat without any marked increase in gas kWh usage.

- In 2019 we repointed all external walls, repaired areas of the roof and repaired/replaced all rainwater goods. Total cost £68,000 (excluding VAT which was recovered). This will ensure that the church is kept dry, and therefore hopefully easier to heat, for many years to come.
- We have fitted sensor lighting in our church toilet to stop the light being left on when people leave.
- In 2021 we are planning to fit cushions to our pews. Pews are cold to sit on – hoping to make them warmer. We plan to use any spare material to make draught excluders for some of our doors and windows.
- Longer-term plans will include a new heating system. Our boiler is old but working well at the moment. We have no current plans to replace with another gas boiler, indeed as climate laws change we may not be able to do in future. Heating systems are rapidly changing and improving, so waiting for a year or so to see how things develop.

Step 4: Essential Travel Actions

- Travel in our rural community is very much dependent on the car. Buses are infrequent and much shopping is done on line, by supermarket delivery and Amazon. People do walk when they can, though mostly for leisure.
- Our clergy and volunteers do not claim travel expenses, other than for journeys to the crematorium, so church mileage difficult to calculate.

- Church meetings during lockdown have been on Zoom so have reduced car usage.
- A number of parishioners are moving to hybrid or fully electric cars but price is an obstacle at the moment.

Step 5: Carbon Offsetting

- We have not yet participated in any carbon offsetting schemes but will be looking to do so at the end of 2021. Offsetting based on Climate Stewards calculations for 2019 would cost £436.32 for the year.

Step 6: Stepping Out and Up

- At All Hallows we very much see moving to carbon net zero as just one part of our commitment to taking a wide range of actions on the climate emergency.
- We are an A Rocha Eco bronze award church and hopefully will be moving to silver at the end of 2021.
- We have an Eco item in every edition of our village newsletter that is on our website and hand delivered free to every house in the parish. See page 15 of our June/July 2021 edition on www.bardseyekparish.com
- We have recently become an affiliated church with [Creation Care](#) and plan to now promote their Eco home scheme throughout our parish.

“Reducing our carbon emissions is not just for Church on Sunday – it’s for everyone and it’s for life!”



St Mary's Embsay with Eastby, near Skipton, North Yorkshire



St Mary's Key Points

- We started from a position of knowing nothing
- We built a team
- You can do this too

Links

- www.stmaryembsay.org.uk/
- TCNCC project: www.stmaryembsay.org.uk/churches-in-craven-carbon-neutral/

The context

- A Grade 2 listed Victorian church in a village just inside the Yorkshire Dales National Park, but only 2 miles from the busy market town of Skipton.
- Any changes will need to be approved by the Yorkshire Dales National Park, the DAC and Craven District Council.

Our Journey on the Six Steps to Carbon Net Zero

Step 1: Measure and Monitor

- We completed the online Parish Returns Energy Footprinting Tool.
- We do not yet have a reliable measure of our carbon emissions, but part of our renewable energy generation feasibility study report (see below) will be detailed information on the amount and pattern of our carbon emissions.
- As a congregation, we individually measured our carbon footprint in January 2021 using the WWF calculator: <https://footprint.wwf.org.uk>. We then had an after-church zoom discussion and reflected on how we could make improvements as individuals. We plan to return to this in January 2022 to see if we have reduced our personal carbon footprints.

Step 2: Plan and Prepare

- Before we started specifically on the net carbon zero journey, we were already taking part in the Eco Church scheme and achieved the Silver Eco Church Award in autumn 2020.
- Several members of the church attended a webinar hosted by the Diocese of Leeds about net carbon zero and the Rural Communities Energy Fund in October 2020. We formed a team with 4 other churches and submitted a successful application for funding for a Feasibility Study into renewable energy generation (and funding) options.
- We are now taking a leading role in the 'Towards Carbon Neutral Churches in Craven' (TCNCC) project, which comprises 5 rural churches. The Feasibility Study will be written by the end of 2021.
- At Embsay with Eastby, we will need to replace our boiler within the next 10 years, and we intend to use the Feasibility Study to inform our choice of an appropriate renewable energy generation and heating system to replace the existing boiler.
- The TCNCC group is recommending that each individual church draws up an 8-year plan about how to get to net carbon zero by 2030. We are therefore preparing to draw up our own net zero plan for our PCC to discuss. The expectation is that this will be presented at the end of the first quarter of 2022.
- We are also consulting widely with local people and organisations so that we have support for the installation

of appropriate renewable energy generation technology in the churches in the study. We hope that we will be able to show that all churches can install appropriate technology, with planning permission and local support and an affordable funding strategy.

- Part of the project plan is to disseminate widely the findings of the study, and the other Diocesan RCEF-funded projects, so that other churches can learn from the results. This has the support of the Diocesan officers.
- Details of our project are here: www.stmaryembsay.org.uk/churches-in-craven-carbon-neutral/
- We found that the Eco Church Award is helpful in the journey to net carbon zero, with lots of suggestions on the website: <https://ecochurch.arocha.org.uk/>

Step 3: Essential Energy Actions

- We have, as part of the routine maintenance and as part of our work towards gaining the Silver Eco Church Award, carried out a number of the tasks in the 'Practical path to net zero carbon for our churches':
- Maintain roof and gutters – we have a simple maintenance plan which attempts to manage items in a systematic way which assists budgeting. Individuals take responsibility for monitoring different aspects of that.
- Fix broken windows.
- We buy electricity from a renewable energy supplier
- We only run the heating when necessary but are very aware that it is still inefficient and, being gas fired, is our main source of carbon emission.

- LED lightbulbs used throughout the church
- Church grounds include trees
- We have become part of the Towards Carbon Neutral Churches in Craven initiative which will provide us with detailed recommendations on how to minimise our carbon footprint. This approach has the full support of the PCC.
- We believe that getting a feasibility study, from an experienced consultant engineer, is essential to ensure that we select the most appropriate renewable energy generation system for our buildings and contexts.
- All these are early steps in a planned programme which is being implemented and is intended to reach the 2030 target in a measured and secure manner.

Step 4: Essential Travel Actions

- As a result of taking part in the Towards Carbon Neutral Churches in Craven project, and in completing the WWF carbon footprint calculator, some members of the congregation are now walking and cycling to church. This works well and had no cost!
- During the pandemic, all church meetings were held online. We plan to continue to hold some meetings online if this is efficient and carbon-saving.

Step 5: Carbon Offsetting

- At the moment, we are not offsetting any carbon (apart from having trees in the churchyard). We hope that our work on installing a renewable energy generation system,

and using a renewable energy supplier, will go a long way towards getting us to net carbon zero. That development may involve some carbon offsetting, especially until we can replace our gas boiler.

Step 6: Stepping Out and Up

- As part of the publicity for the 'Towards Carbon Neutral Churches in Craven' project, we held Climate Sunday project launch services in each of the churches, with a main launch event in Holy Trinity in Skipton in May 2021 at which the Bishop of Ripon gave the address.
- The TCNCC project will provide a Feasibility Study to advise on appropriate renewable energy generation. We plan to share the results of this, together with details of what we install and how we funded it, widely with other churches and other organisations.

'We are delighted to be taking a lead role in the Towards Carbon Neutral Churches in Craven project. We hope that the Church will be seen as taking a lead role as a catalyst for change in the current climate crisis.'



For more resources ideas and help, please visit
<https://www.leeds.anglican.org/environment/saving-creation>

For support with anything in this document, please email
communications@leeds.anglican.org