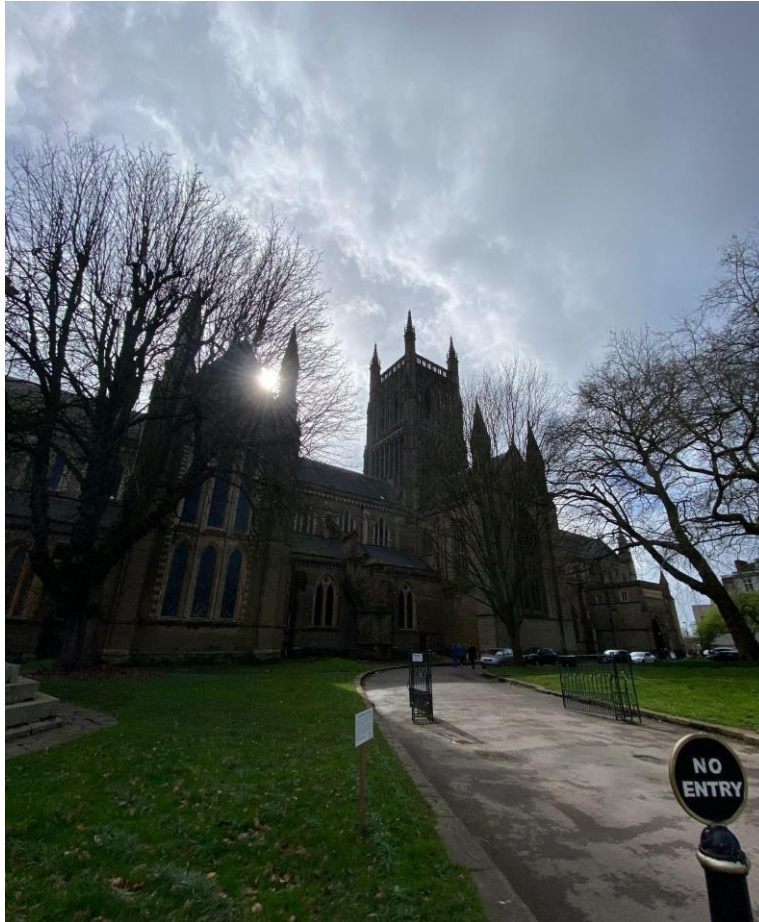


Engaging Worcester Cathedral Visitors on Practical Steps for Green Living



Picture of Worcester Cathedral

2 May 2023

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Degree of Bachelor of Science

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Abstract

We worked with Worcester Cathedral to develop and recommend messages and strategies to engage visitors in practical steps for green living and the environment. We segmented visitors through semi-structured surveys to help identify their attitudes toward the climate crisis. We conducted semi-structured interviews with Cathedral staff members to understand how to use the Cathedral's history, heritage, and architecture to engage the visitors in the environment. We found that the majority of the Cathedral's visitors were aware of climate change. We recommend that Worcester Cathedral implement more eco-related signage, highlight eco-locations in their brochures, and train their tour guides on the new eco-locations to help encourage green living for their visitors.

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Executive Summary

Introduction: Goal and Objectives

Green living encompasses carbon literacy and acting in ways to reduce one's emissions by changing lifestyle and habits. Worcester Cathedral aims to engage visitors in practical steps for green living and the environment. To do so we researched Worcester Cathedral and developed the following objectives:

- Understand visitor attitudes towards climate-friendly objectives.
- Understand how the Cathedral's history and architecture can be used to engage visitors on climate issues.
- Develop messages and strategies for Worcester Cathedral to engage visitors in practical steps for green living and the environment.

The project used a variety of methods to achieve these objectives, including semi-structured interviews with key staff members, semi-structured surveys with visitors, and analysis of other religious institutions. These methods offered insight into visitor attitudes and an understanding of how the Cathedral's history, heritage, and architecture can be leveraged to engage them effectively. Combining all of this information, we recommended strategies and messages to constructively engage visitors on practical steps for green living.

Characterising Visitors' Perspectives on Climate Issues

We used Britain Talks Climate 2020 (BTC), a resource that can be used to categorise British Citizens into one of seven segments. These segments are then used to understand the mentalities of the individual to design climate-related messaging that is effective at targeting what motivates and speaks to them. We found through our surveys that 78% of the visitors fell under one of three segments: Backbone Conservatives, Civic Pragmatists, and Established Liberals. These three groups recognize climate change as an issue and do some things about it, such as reducing, reusing, and recycling. They also have knowledge of carbon emissions (carbon literacy), and some even report sourcing local foods to reduce that footprint. Comparatively, less than 10% of visitors fell among Disengaged Traditionalists and Loyal Nationalists, people who actively deny

climate change. We sought to understand the three segments in order to tailor messages to make them most effective. We analysed the toolkit Britain Talks Climate from Climate Outreach, a charity organisation with the goal of communicating climate change to the British public.

All the main segments share common values. In the areas of overlap, we are able to use the values in creating targeted messages. By utilising this diagram, we were able to design messages that engage multiple segments by using shared values. For example, both Civic Pragmatists and Established Liberals are compromising, and we can use that value in creating targeted messaging.

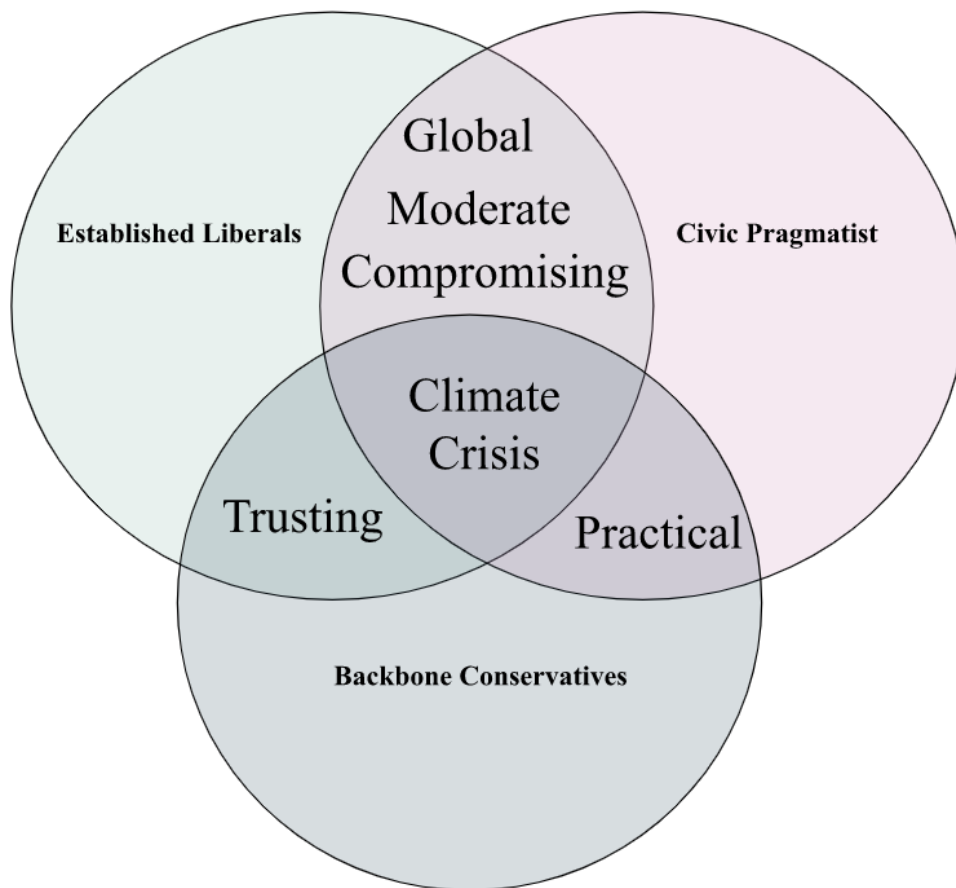


Figure 1: Venn Diagram showing the values from Britain Talks Climate that overlap between the three main segments (Climate Outreach, n.d.).

Some segments share strategies that effectively engage them in the climate crisis. For example, Established Liberals and Backbone Conservatives both need proof that climate action makes an impact on emissions. They also need to be shown that climate issues need to be more of a priority because of the negative impacts climate change has on the country.

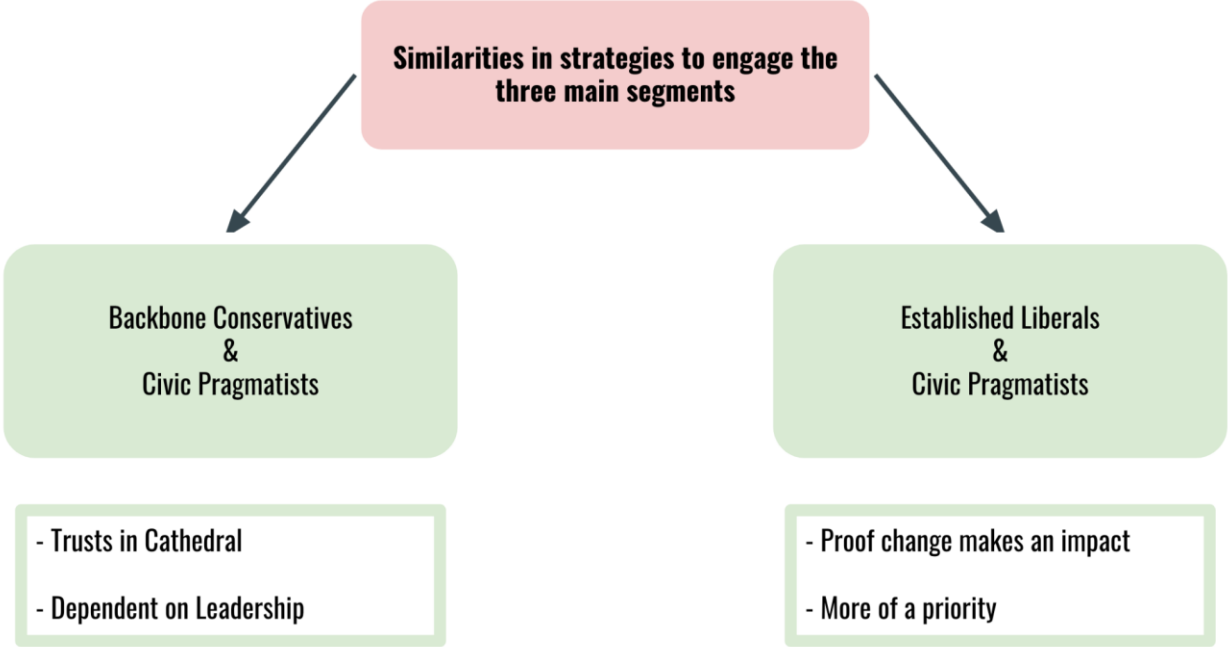


Figure 2: Diagram showing the similarities in engaging the segments (Climate Outreach, n.d.).

We interviewed key staff and volunteer members of Worcester Cathedral with the goal of understanding the history, architecture, and traditions of Worcester Cathedral. The results identified the data we found consistent throughout the 10 interviews we conducted:

- Key members are actively trying to reduce their carbon footprint.
- The West Window of Creation can engage visitors using animals and plants and the story of creation.
- The Cathedral was a Benedictine Monastery and continues to use three Benedictine values creating a “new us” mentality.
- The Eco-Church Silver status shows active engagement in climate issues.
- As demonstrated by its longevity, the building was built to last, allowing it to adapt and change as needs arose, continuing to serve the community.

- The grounds plan shows active efforts to revive the space by adding native species resulting in a better environment for wildlife.

Using these Messages to Engage the Visitors

We determined specific messages to engage the main groups, Backbone Conservatives, Civic Pragmatists, and Loyal Nationalists. Below is an explanation, including how each message applies to some specific segments' values:

Window of Creation: This distinguished feature of Worcester Cathedral shows that the planet is a gift housing many plants and animals. We are not to exploit the Earth, but we are to be a steward of the Earth, as reflected in the Book of Genesis. This message can speak to Civic Pragmatists and Backbone Conservatives because of their trust in Worcester Cathedral as an institution and the respected figure of God. It also speaks to Established Liberals by reducing their climate anxiety by showing the earth is a blessing. For Civic Pragmatists, the idea of stewardship can be used to persuade them to change their mindset.

Eco-Church Silver: The Eco-Church Silver Status proves Worcester Cathedral has shown effort and initiative in the climate crisis. Cathedrals, because of their scale, larger churches face more challenges than smaller churches to achieve these eco-status medals. Ranging from copper to gold, Worcester Cathedral Eco-Church Silver Status conveys the determination of the staff and their commitment to the environment. This message speaks to Civic Pragmatists and Established Liberals by showing proof that climate action is effective in building infrastructure and reducing carbon emissions produced by buildings. It also shows that the cathedral prioritises the issue of climate change. It targets Backbone Conservatives and Civic Pragmatists because of their trust in the Cathedral. By using Worcester Cathedral as a symbol of leadership, Backbone Conservatives and Civic Pragmatists can look to them for guidance, following the idea of reducing carbon emissions in buildings. Backbone Conservatives are able to take pride in this achievement being completed by a British cathedral that has existed for more than 700 years.

Worcester Cathedral was built to last: The Cathedral that still stands today began construction in 1084. The greatest amount of carbon emission was during the building's construction phase.

With the use of manual tools and animals, the carbon footprint of the church is minimal. Instead of building a new Cathedral, Worcester Cathedral is constantly being restored and expanded by stonemasons and woodworkers using traditional techniques. Today, buildings are constructed with large machines and materials, creating large carbon footprints. These buildings are sometimes torn down to make space, unlike Worcester Cathedral, which stressed the importance of creating a building that will last. Worcester Cathedral continues to serve as a place of worship to this day, with 700 years of service to its community highlighting the importance of ‘building to last’. This message speaks to Established Liberals showing there are ways to be carbon conscious in construction and other aspects helping to relieve climate anxiety. For Civic Pragmatists and Established Liberals, it is proof that buildings can be constructed in ways that support green living and reduce carbon footprint. Backbone Conservatives can take pride in the traditional methods, old buildings, and overall in what British people were able to create and sustain.

Benedictine Principles: The Cathedral started as a Benedictine Monastery, where they practised Saint Benedict’s principles: Prayer, work, study, hospitality, and renewal. They emphasised a “new us” mentality compared to overconsumption: We should spend energy on changing our habits and mentalities rather than wanting to buy more to fulfil ourselves. By changing our habits and mentalities we can reduce carbon emissions on food and travel. Today the Cathedral staff does their best to live by the Benedictine principles and to reduce, reuse, and recycle. The Benedictine principles speak to Backbone Conservatives because of their value of tradition. Showing these traditional values can reduce one's carbon footprint would prove a useful message for Backbone Conservatives. This message also speaks to Established Liberals and Civic Pragmatists, because they apply to real-life situations and, when implemented, result in lower carbon emissions and conscious decisions about the environment.

Strategies Worcester Cathedral can use to Engage Visitors

The messages will be implemented into the following strategies:

New signage: Because there is limited and outdated signage in the Cathedral, we recommend creating new signage related to the new eco-locations. This signage could advertise the grounds

plan with pictures at the entrance. Retractable banner stands could be put alongside the risers (choir stand). This new signage would be paired with the additions to the current brochure or a new eco-brochure. We recommend adding signage at the Window of Creation, the Eco-Church Silver Status plaque, and the locations found in [Appendix G](#).

Brochure updates: The current brochure has a map of the Cathedral with various locations labelled. We identified two ways to incorporate eco-related information into brochures and the existing map. The first way is by modifying the current brochure. The eco-locations would be added to the brochure, with the locations shown in [Appendix G](#) added to the map. With the new eco-locations in the brochure map, the visitors can go on a self guided eco-tour. Eco-locations can have signage to help describe their relationship to the Cathedral, as well as the environment.

The second way is to create a new eco-brochure. This brochure would also show key eco-related hotspots in the Cathedral. This allows for the ability for a visitor to go on a self guided eco tour with the information about each location found in their pamphlet.

We recommend adding the location of the Window of Creation and its message from [Section 5.2](#). We also suggest adding the location of the Eco-Church Silver Status plaque and its message ([Section 5.2](#)). We then recommend adding the message about how Worcester Cathedral was built to last, and continues to serve its purpose as a place of worship ([Section 5.2](#)). The message that Benedictine Principles can encourage people to have a greener lifestyle ([Section 5.2](#)) should also be added to the brochure. Finally, add the various stone and wood carving locations to the brochure. This can be paired with the message that people are naturally drawn to the beauty of nature, this is reflected in the stone and wood carvings seen throughout Worcester Cathedral. These locations and messages have the most potential for engaging visitors on green living. Other locations that can be added to the brochure can be found in [Appendix G](#).

Additions to tour guide training: Our final suggestion is to add these same locations shown above, their messages, and the locations found in [Appendix G](#) to the Cathedral's tour guide training. Many tour guides have their own version of the tours given at the Cathedral. However,

they will need to be taught about the new eco-locations throughout the Cathedral, as well as their messages, so they can provide sufficient information to the visitors as they please.

With these recommended messages and strategies, Worcester Cathedral will be able to better engage with its visitors on practical steps for green living.

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1. Introduction

Climate change is a global issue resulting in an increase in global temperatures, melting ice caps, rise in sea level, forest fires, heat waves, floods, droughts, hurricanes, a decrease in biodiversity, impacts to human health, and threats to food production (Singh, 2021, Chapter 1). According to the United Nations, “climate refugee” numbers will increase within the next ten years due to droughts, famine, and health risks (United Nations, n.d.). Even though these challenges are detrimental to the environment and human life, people can implement some plans and actions that help prevent more damage. For example, the United Nations has produced the Sustainability Development Goals, UN Framework Convention on Climate Change, and the Paris Agreement to reduce carbon emissions, make financial adjustments, and record data on climate change (United Nations, n.d.).

Many countries like the United Kingdom are taking the UN plans as an initiative to reduce carbon emissions in their country. If the UK does not reduce its carbon emissions, the country will face devastating impacts, such as a drastic increase in skin cancer, heat strokes, coastal floods, water pressure, and cost of living by the end of the century (Bradford Council, n.d.). The United Kingdom developed a new governmental section called the Climate Change Committee to prevent these irreversible changes. According to the CCC’s official website, the goal is to “advise the UK and devolved governments on emissions targets and to report to Parliament on progress made in reducing greenhouse gas emissions and preparing for and adapting to the impacts of climate change” (CCC, n.d.). The UK hopes that with the UN and CCC's help, the UK will achieve its goal of carbon neutrality by 2050.

Establishing community engagement is crucial to reducing climate change. It allows collaboration for small climate-friendly objectives that will benefit the entire community and ensure all perspectives are considered (Klain, n.d.). Collaboration “between communities, government agencies and project developers” produces more positive results (Klain, n.d.). There will likely still be conflict and disagreement; however, when there is more collaboration between all parties together they can address climate issues effectively (Klain, n.d.). Case studies have

shown that working with the community and understanding their perception of low-carbon energy sources changes can impact the switch to renewable energy sources (Klain, n.d.).

Worcester Cathedral plays an important role in Worcester's community, and its construction began in 1084 by Saint Wulfstan (Worcester Cathedral, n.d.). Since then, the Cathedral has been reformed and is now a part of the Church of England. Worcester Cathedral is a popular tourist attraction, as it brings in around 150 thousand visitors a year (D. Parnell, personal communication, 19 April 2023). The Cathedral has its environmental group called Worcester Cathedral Eco-Group. The Cathedral and the Eco-Group share the same mission to “be a catalyst” for environmental and social justice awareness by 2025 (Worcester Cathedral, n.d.). The Eco-Group hosts events, workshops, and climate-issue talks through their program “Living Gently on the Earth” (Worcester Cathedral, n.d.).

The project aims to develop and recommend the necessary messages and strategies for the Worcester Cathedral community to help relate and take practical steps for green living and preserving the environment. To accomplish this goal, we wanted to understand the attitudes of the Cathedral visitors through surveys and interviews. We then wanted to explore the local area and see what other communities are doing regarding climate change. We finally determined how to use the Cathedral’s history, heritage, and architecture to engage the community on climate issues, which we accomplished through structured interviews with key staff members and the congregation. We presented our findings to the Worcester Cathedral at an event, providing them with messages and strategies enabling them to engage their community on sustainable habits.

2. Background

In this chapter, we discuss the current situation, goals, and strategies the United Kingdom has to reduce its impact on the climate. We then move on to the role of community engagement in addressing climate change. Lastly, we end with Worcester Cathedral's history, the Cathedral's current communities, and the Cathedral's Eco-group.

2.1. Climate Change in the UK

Climate change in the United Kingdom is causing environmental challenges. According to the National Oceanic and Atmospheric Administration (NOAA), the global temperature has risen by one degree Celsius in the past 130 years. If the temperature rises further, human health, water supply, and food supply could be at risk. The increase in temperature has also resulted in acidic ocean water. Since 1993, ocean levels are rising by 3.2 mm per year, and icebergs and glaciers have decreased in volume by over 60 feet (National Oceanic And Atmospheric Administration, 2021). By 2100, coastal infrastructures would be drowning below sea level, extreme weather fluctuations would occur such as “heavy rains, floods, wind, snow”, hurricanes and tornadoes, and “83 million excess temperature-related deaths” would occur (Fletcher, 2021). As a response, in 2008, the United Kingdom created the Climate Change Act as an acknowledgement of the climate crisis. According to the UK government, net zero is “any emissions [that] would be balanced by schemes to offset an equivalent amount of greenhouse gases from the atmosphere, such as planting trees or using technology like carbon capture and storage” (Dray, 2021).

By 2050, the UK government must reduce 100% of net carbon emissions according to the Climate Change Act. To do so, the UK plans to reduce 75% of carbon emissions by 2030, 90% by 2040, and 100% by 2050. The Committee on Climate Change (CCC) has determined that 20% of the country's carbon emissions result from Northern Ireland, Scotland, and Wales. Therefore, those sovereign states need to reduce 80% of carbon emissions by 2050. As of 2030, the UK wants 30% of agriculture-related emissions to be reduced, 52% of electric car sales, and for hydrogen production to have a capacity of five gigawatts (BBC, 2021).

According to the Natural History Museum, the UK is on course to cut only 40% of its emissions by 2050 due to unclear agricultural plans (Ashworth, 2022). Less than a third of its agriculture-related carbon emissions were cut in the last decade. According to the UK government, the country's agricultural plans were “highly optimistic and not yet backed by credible policies” (Ashworth, 2022). Another major setback was the government's plan to make homes more energy efficient. In 2020, the UK created a Great Homes Grant for home renovations, but it was proven ineffective after six months as the Environmental Audit Committee said the plan was “poorly implemented” (UK Parliament, 2021). As a result, the current Prime Minister Rishi Sunak joined the COP26 meeting to strategize better plans to help achieve their goals (Ashworth, 2022).

The UK has eight major strategies to reach carbon neutrality. The first strategy is to have 600,000 heat pumps installed in buildings by 2028 which will replace the current heating method through boilers. The UK also plans to not sell petrol and diesel vehicles after 2030. Petrol and diesel account for around 32% of the country’s carbon emissions, and the switch to electric vehicles can decrease carbon emissions. In 2021, Prime Minister Rishi Sunak also increased flight taxes to help reduce flight-related carbon emissions.

The CCC also plans to cut meat and dairy production by 20% and decrease food waste. The land that is not being used to farm meat and dairy products would instead have trees planted on it to help reduce atmospheric carbon emissions. Besides the heat pumps for heating buildings, the government also wants to use low-carbon fuels for power, heating, and energy storage. By 2026, the government wants to test using hydrogen as a fuel to reduce carbon emissions.

Lastly, industries are required to report their carbon use and should decrease emissions by two-thirds of their regular use. This can be achieved if the carbon that is being released is captured and stored for industrial purposes. Some of the logistics are still being investigated and planned. However, if the country can follow these eight strategies, the goal of achieving carbon neutrality is highly possible (BBC, 2021).

2.2. Community Engagement in Climate Change

Meaningful community engagement around climate change is extremely important, as it can spur behavioural changes related to climate-friendly recommendations, potentially leading to action on a wider scale through policies and programs. A major way that communities of all different statuses and cultures can make their perspectives heard and incorporated in some way is through these policies. This engagement will also make climate policies, programs, and action plans more effective to implement throughout the community and be more sustainable over a long-term period.

2.2.1. Common Practices to Reduce Climate Change

According to a study done by the organisation Our World In Data, as of 2021, the average carbon footprint per year was 5.15 tons of CO₂ per person in the United Kingdom (Friedlingstein et al., 2022). In order to sustain a climate on Earth that is liveable for mankind, the average emission of CO₂ produced by each person per year will need to lower by 2 to 2.5 tons by the start of 2030 (United Nations, n.d.). There are many ways people can help make a difference. Writer Melissa Denchak from the National Resources Defense Council (NRDC) references many different ways people can reduce climate change by making adjustments to their lifestyles.

Many ways to reduce carbon emissions could be made in the home. One of the larger factors of energy use in every home is appliances, including heating and cooling. Ofgem estimates that the typical household in Britain uses 2900kWh of electricity and 12000kWh of gas yearly (Ofgem, n.d.). Energy-efficient appliances have reduced almost 2.3 billion tons of carbon dioxide from Earth's atmosphere since being implemented in 1987, which is the same as the annual carbon emission of almost 440 million cars (Denchak, 2022). By lowering the amount of energy used in homes, homeowners reduce monthly energy bills and make energy costs more affordable for businesses and lower-income families. Recycling household items can also help reduce carbon emissions by lowering the energy consumption in the home. This is because recycling lowers the amount of waste going to landfills, as well as removes the need to make the same product entirely new, which requires a large amount of energy to harvest the raw materials and assemble them together. Household items such as paper and cardboard boxes, when recycled, can make a

significant difference, with the UK saving 18 million tonnes of CO₂ per year by recycling (DAERA, 2022).

When shopping for appliances such as refrigerators, washing/drying machines, water heaters, and others, models that are energy efficient will have an energy grade level on them. Heating and cooling are also very energy-consuming in homes, with Denchak stating that it accounts for almost half of home energy use (Denchak, 2022). With the average temperature inside a home between 21 to 18 degrees Celsius, a small adjustment anyone can make is by setting the thermostat a couple of degrees down during the winter months, or a couple of degrees up during the summer months. By doing this, homeowners can save around £130 per degree Celsius in thermostat temperature, according to a study done by University College London (Few & Oreszczyn, 2022). Also, ensuring that windows and doors are properly insulated can lower the amount of time that heating and cooling is needed.

Finally, significant reductions in carbon emissions can occur with transportation. A study in 2020 showed that transportation makes up 24% of the total green gas emissions in the UK, with cars and taxis alone making up 52% of the transportation emissions (Department for Transport, 2022). With every vehicle on the road releasing an average of one pound of CO₂ per mile driven, by taking public transportation such as buses or trains, CO₂ emissions lower by 45% (Pei, 2021). Other alternatives to public transportation that are environmentally friendly include bicycles, scooters, and walking.

2.2.2. Tools for Community Engagement

Climate Outreach is a global organisation founded in 2004 as the first British charity to focus entirely on public engagement in relation to climate change (Climate Outreach, n.d.). They have created multiple toolkits that are available on their website with the purpose of supplying individuals and other organisations with the resources to inform others about the environment and why action needs to be taken about climate change. A specific toolkit available on their website is Britain Talks Climate, which is “an evidence-based, shared and strategic understanding of the British public” (Climate Outreach, n.d.). The toolkit begins by providing the individual with a set of 16 questions called “The Sixteen Golden Questions,” and uses the

responses to organise them into seven different groups called “The Seven Segments,” which are based upon people’s core, political, and environmental beliefs. The characteristics of each of these seven segments are:

- **Disengaged Traditionalist (18%):** They recognise certain environmental problems, such as air pollution, but do not believe that there needs to be focused action for climate change. They feel as though it will be a problem for foreign governments to deal with.
- **Loyal Nationals (17%):** They are traditional, proud to be British, and have high participation in politics. They feel threatened by issues such as crime, immigration, and terrorism. They believe climate change is an issue, but due to local inequality and environmental degradation, rather than it being a global problem.
- **Backbone Conservative (15%):** They take immense pride in their country based upon the environmental achievements, and care about food, farming and the rural economy. However, they are sceptical about global leadership or symbolic lifestyle changes.
- **Progressive Activists (13%):** They are vocal and passionate, as well as politically active. Climate change is an important part of their identity with politics. They believe the government is not doing enough about the issue, and that their lack of work towards it is making all other challenges and inequalities worse.
- **Civic Pragmatist (13%):** They are moderate, but are anxious about the future due to climate change. They try to follow a low-carbon lifestyle, but are not as motivated on the climate crisis because of a lack of government emphasis on climate change. Civic Pragmatists will support most progressive climate policies.
- **Established Liberals (12%):** They are confident and financially comfortable, and have a global outlook driven by professional networks rather than a sense of solidarity with communities around the world. They do not emphasise climate change, but want to take low-carbon solutions into consideration because of the potential drive of economic resilience and growth.

- **Disengaged Battlers (12%):** Having to survive day to day, they feel as though they are underrepresented and unheard. They feel as though they need to take action on climate change but do not believe that it will directly benefit them.

Based upon which segment an individual falls under, Britain Talks Climate has a set of recommendations for ways to communicate regarding the dangers of climate change and why action needs to be taken.

2.3. Worcester Cathedral

In this section, we start with information about the history of Worcester Cathedral. The next and final part of the chapter has information about what Worcester Cathedral’s Eco-group has done and is doing in relation to the environment.

2.3.1. Worcester Cathedral History

The Benedictine house built in Worcestershire was initiated by Saint Oswald in the late 900s (Melissa, n.d.). Saint Oswald was a “leading figure of monastic and feudalistic reforms” and assisted in the creation of Ramsey Abbey and Huntingdonshire monasteries. He slowly replaced the secular clerks at Worcester Cathedral with monks from Ramsey (Melissa, n.d.). The main difference between the secular clergy and monks is that the clergy does not follow the monastic lifestyle, such as following Saint Benedict’s principles and teachings. Monastic refers to anyone under religious vows, and in the Cathedral’s case, this refers to the monks that ran the Cathedral.

St. Benedict was the founder of the Monte Cassino and “father of Western monasticism” (Knowles, 2023) Ultimately, his contribution to the monastic way of life was in providing a “complete directory for the government... spiritual... and material well-being of a monastery” (Knowles, 2023). This came in the form of specific rules he laid out and would preach. The basics of his principles can be broken down as such:

- Moderation in all aspects; ownership is not allowed
- All guests receive attention
- The day is broken down into almost equal sections:
 - Sleep
 - Prayer/practice
 - Manual work

- Reading scripture
- Monasteries should strive that they are self-sufficient
- Flexibility regarding age, illness or disability, overall necessities, and spirituality
- Punishment is clear and succinct

(Knowles, 2023)

Overall, humanity and humility are woven throughout St. Benedict's principles. There is a constant reminder that they are there to follow the law of God.

Reformation around the use of religious structures would continue through the late 10th century into the eleventh. Edward the Confessor brought ideas from Normandy at the time, re-organizing Westminster Abbey in 1044 (Stollard, 1993). These changes in thinking would spread through England and result in a change in attitude towards the use of cathedrals and abbeys. Mainly, these religious structures were seen as influential locations to support civil partnerships and military forces (Stollard, 1993). Saxon religious leaders were phased out and asked to leave, slowly replaced with Benedictine monks who sought to reform the administration and clergy (Stollard, 1993).

The present Cathedral's construction began in 1084 by Saint Wulfstan (Worcester Cathedral, n.d.). The Cathedral quickly gained importance in education for subjects such as medicine, law, history, mathematics, physics, astronomy, and theology. The Cathedral remained a centre for learning throughout the late middle ages. Along with being sources of education, culture, and medicine, many cathedrals at the time would have been self-sufficient community centres able to provide food and medicine for themselves (Stollard, 1993).

In the 13th century, there was a shift in thinking. Gothic styles marked a change in thinking towards Biblical stories. The shift resulted in architecture, sculptures, and stained-glass features strongly reinforcing the biblical stories' connection to natural events. King Henry VIII ended the monastery in 1540 during the Reformation era (Worcester Cathedral, n.d.). The English Civil War took place from 1642-1652 (Ohlmeyer, n.d.). Because of the Civil War, the Cathedral was badly damaged, and rebuilding was in place during the Restoration of Charles II. Most of the Cathedral's restorations were carried out by Victorians, in 1864 - 1875 (Worcester Cathedral, n.d.).

Worcester Cathedral has various styles of architecture. The English styles included Norman, Transitional Norman, Early English, and Decorated through to Perpendicular (Worcester Cathedral, n.d.). The monastic past can be revealed through the mediaeval cloisters and the Early English Quire (Worcester Cathedral, n.d.). The Cathedral's library has been maintained since its mediaeval Anglo-Saxon time. It holds manuscripts, pictures, artefacts, and books collected from the 16th century (Worcester Cathedral, n.d.). These items are accessible today via appointment.

Today, Worcester Cathedral has a large community and influence. The Cathedral is a popular tourist attraction, as it brings in around 150 thousand visitors per year (D. Parnell, personal communication, 19 April 2023). Visitors come for reasons such as visiting the tomb of King John II and to admire the Cathedral's architecture (Worcester Cathedral, n.d.).

2.3.2. Worcester Cathedral Eco-Group

Worcester Cathedral's environmental group is called Worcester Cathedral Eco-Group, and they work with the Cathedral to work towards becoming an Eco-Cathedral. The Cathedral and the Eco-Group share the mission to "be a catalyst" for environmental and social justice awareness by 2025 (Worcester Cathedral, n.d.).

Additionally, the Cathedral intends to partner with local and regional groups to help work towards the Eco-Church Gold Standard and reach net zero carbon emissions by 2030. The Cathedral is already at Eco-Church Silver Standard (Worcester Cathedral, n.d.). A church in the Diocese of Europe can achieve this award by completing a survey and applying for the award through A Rocha UK, and the church's leader must approve the survey results to achieve the bronze level (A Rocha, n.d.).

The Worcester Cathedral Eco-Group has declared a climate and environmental emergency (Worcester Cathedral, n.d.). The Dean and the Chapter of Worcester Cathedral have recognized that there is a climate crisis. They recognize the crisis is due to the "failure of human beings to fulfil God's call to love our neighbours, live justly and steward God's creation" (Worcester

Cathedral, n.d.). Therefore, the Dean and the Chapter have pledged to commit to the following goals:

- “They will examine their lives individually and corporately in relation to this crisis, seeking to live faithfully to God’s call.
- In 2022 they created the following action plan:
 - To minimise their negative corporate impact on the environment, and help restoration where possible
 - Achieve net zero emissions by 2030
 - Care for the natural environment and biodiversity in the grounds of our Cathedral.
- They will encourage the Cathedral’s community to make relevant lifestyle changes appropriate to their circumstances.
- Using the Cathedral’s influence they want to encourage local and national governments, businesses, and other groups to take action on the climate crisis.”

(Worcester Cathedral, n.d.)

The Cathedral has taken many steps to work towards these goals, such as the Eco-Group hosting various events, workshops, and talks on climate issues through “Living Gently on the Earth”. These events reach out to the Worcester community, and they are free. The Eco-Group first started these events on December 6th, 2021 and since then has hosted over 10 events. The Eco-Group has more events scheduled (Worcester Cathedral, n.d). In order for the Cathedral to effectively engage with their visitors they need to know more about the visitors’ views and attitudes in an inclusive and welcoming way that helps bring all people together.

3. Methodology

The goal of this project is to develop and recommend messages and strategies for Worcester Cathedral to engage visitors in practical steps for green living and the environment. To achieve that goal, we pursued the following objectives:

1. Understand the visitor's attitudes toward climate-friendly objectives.
2. Understand how the Cathedral's history and architecture can be used to engage the visitors on climate issues.
3. Explore other institutions with similar religious perspectives that prioritise community engagement and green living.
4. Develop messages and strategies for Worcester Cathedral to engage visitors in practical steps for green living and the environment.

In this chapter, we outline the methods that were used to achieve these objectives.

3.1. Understand Visitor Attitudes Toward Climate-Friendly Objectives

We first sought to understand the visitors' attitudes towards climate-friendly objectives. To do this, we sought to answer the following questions:

- Is the visitor aware of the effect of climate change, and to what extent are they aware?
- What are some current actions the visitor is taking to live a greener life?
- Where does the visitor fall under one of the Britain Talks Climate seven segments?

We sought to understand the Cathedral's visitors to be able to engage with them in an effective manner, as Britain Talks Climate provides effective ways to engage with each segment. We did not use Britain Talks Climate's 16 Golden Questions because Worcester Cathedral felt they were too divisive and did not follow their ethics policy. Therefore we designed a set of semi-structured interview questions found in [Appendix B](#). These semi-structured interview questions were designed to learn a visitor's passions and values in a nondividing way so that we could follow the Cathedral's ethics policy and place the visitor into one of the Britain Talks Climate seven segments. We conducted the semi-structured interviews in Worcester Cathedral, and team members carried out the interviews orally. The interviews were designed to be quick to increase

participation, for the semi-structured interview would take about five to ten minutes. Responses to questions were recorded with the visitors' permission. The information collected from these semi-structured interviews provided us with quantitative data. The visitors were categorised into one of the seven segments through a flowchart we designed, which can be found in [Appendix D](#). The flowchart shows common keywords and themes related to the six Personal Questions shown in [Appendix B](#). The visitor's segment would be chosen based on whatever keywords and themes best matched a given segment. The team members that interviewed the visitors were free to make judgements on the visitor to help them categorise the visitor. The team member would often judge the visitor's enthusiasm and body language when asked climate-related questions.

Although these questions did successfully help us segment the visitors, we did face a setback. We had to create semi-structured interview questions that would help us understand where the visitor would fall under one of the seven segments without asking political, polarising, and divisive questions. The seven segments weigh heavily on dividing the segments through an individual's political views. However, we had to follow Worcester Cathedral's inclusivity rules and ethics policy, so we did not ask political questions. Instead of asking a political question that would help segment the visitor, as stated before, judgements had to be made based on the conversation between a team member and the visitor.

3.2. Understand how Religious Institutions' Practices, History, and Architecture can be used to Engage Visitors on Climate Issues

We wanted to understand how to engage the visitors using Worcester Cathedral's practices, history and architecture. To do so, we sought to answer the following questions:

- What are elements of the architecture, history, and heritage that directly relate to living gently and climate issues?
- What can be learned about sustainability from other religious communities?
- What similarities are there between other religious communities and the Worcester Cathedral?

- How can the similar practices of these surrounding religious communities be used to help develop messages and strategies for Worcester Cathedral?

We sought to answer these questions through interviews with Worcester Cathedral staff and visits to other nearby religious institutions. We designed a set of interview questions, found in [Appendix C](#), to interview key staff members such as the dean, vice dean, architect, gardener, eco-members, and canons. Each interview was voice recorded with the interviewees' permission. The interviews were conducted with a team member who asked the interview questions and a note taker to write down key information from responses to the questions. The interviews lasted from thirty minutes to an hour, and if more information was needed follow-up questions were asked at the end. The interviews presented us with qualitative data. Once the interviews were done, the responses were transcribed and the recordings were reviewed by all the group members. A limitation that the group faced was that some of the Cathedral members were new to Worcester Cathedral, so they could not answer some of the questions related to the congregation, staff, or visitors. Another limitation to the interview was that many of the staff members did not have the historical background to help us understand how to relate the Cathedrals' history to green living. With the information that was given to us we intended to utilise the key aspects of the Cathedral to engage visitors about climate change.

We visited Mucknell Abbey to analyse what these surrounding communities are doing to engage their respective audiences about the environment, climate change, and green living. To do this, two members of the group visited these various locations to conduct interviews with key members of these communities. The semi-structured interview can be found in [Appendix E](#). In each interview, both members of the group asked the structured interview questions and noted important information. The interviews lasted from thirty minutes to an hour, and follow-up questions were asked throughout if more information was needed. These interviews presented us with qualitative data. Once the interviews were done, the responses were typed and read by all the group members. The group analysed the interviews by looking for similarities and differences regarding community engagement and sustainable living between Mucknell Abbey, and Worcester Cathedral, as the information from these responses could be used to help develop new messages and strategies. The two members of the group who visited Mucknell Abbey would

also note any examples of sustainable living or ways of engagement towards sustainable living that they were able to physically view.

3.3. Develop Messages and Strategies for Worcester Cathedral to Engage Visitors on Practical Steps for Green Living and the Environment

We aim to recommend messages and strategies for Worcester Cathedral to help improve the visitors' engagement on green living. In order to do so, we sought to answer the following research questions:

- Towards which segments of the British population should the Cathedral focus its climate messaging?
- What types of messages are likely to be effective in communicating with these audiences?
- What opportunities are there to connect the history and architecture of the Cathedral to climate-friendly objectives?
- What strategies might the Cathedral use to raise climate awareness?

Once all visitors interviewed were categorised, we determined the segments comprising most visitors with the use of Microsoft Excel and a pie chart. This allowed us to focus our potential messages and strategies towards the majority of the population that visited the Cathedral. Using the resources available from Britain Talks Climate, the team identified overlaps between the main segments in terms of core values and how to engage these segments. The team identified similarities in the staff members' semi-structured interviews ([Appendix C](#)). Using the similarities from the interviews and the overlaps in BTC we identified significant information that would help develop messages for the three groups. We focused on the following two interview questions, *“What aspects of the history, heritage, and architecture of the Cathedral are people most engaged upon?”* and *“Do you think that any of those three categories (history/heritage/architecture) could help engage the community on climate change and the environment?”*. This helped us understand how the Cathedral's history and architecture could be used. We identified specific strategies to engage the main segments through meetings with our sponsors and by reviewing what the Cathedral has been doing to engage their visitors.

4. Findings

In this chapter, we discuss the results of our staff interviews and visitor interviews as well as findings from other cathedrals in the greater Britain area. We will also examine these results with graphical images and state any limitations after analysing the data.

4.1. The Majority of the Cathedral Visitors are Aware of Climate Change

The majority of Worcester Cathedral's Visitors are aware of climate change, but some are not actively taking steps towards green living. There are very few visitors who are disengaged about the climate crisis. Below we present findings about the visitors coming to Worcester Cathedral.

The interviews show that 78% of the visitors fell under one of three segments: **Backbone Conservatives, Civic Pragmatists, and Established Liberals**. This shows the majority of the visitors coming into the Cathedral are worried about the climate crisis in some way. This distribution is different from the general British public and suggests opportunities for climate messaging.

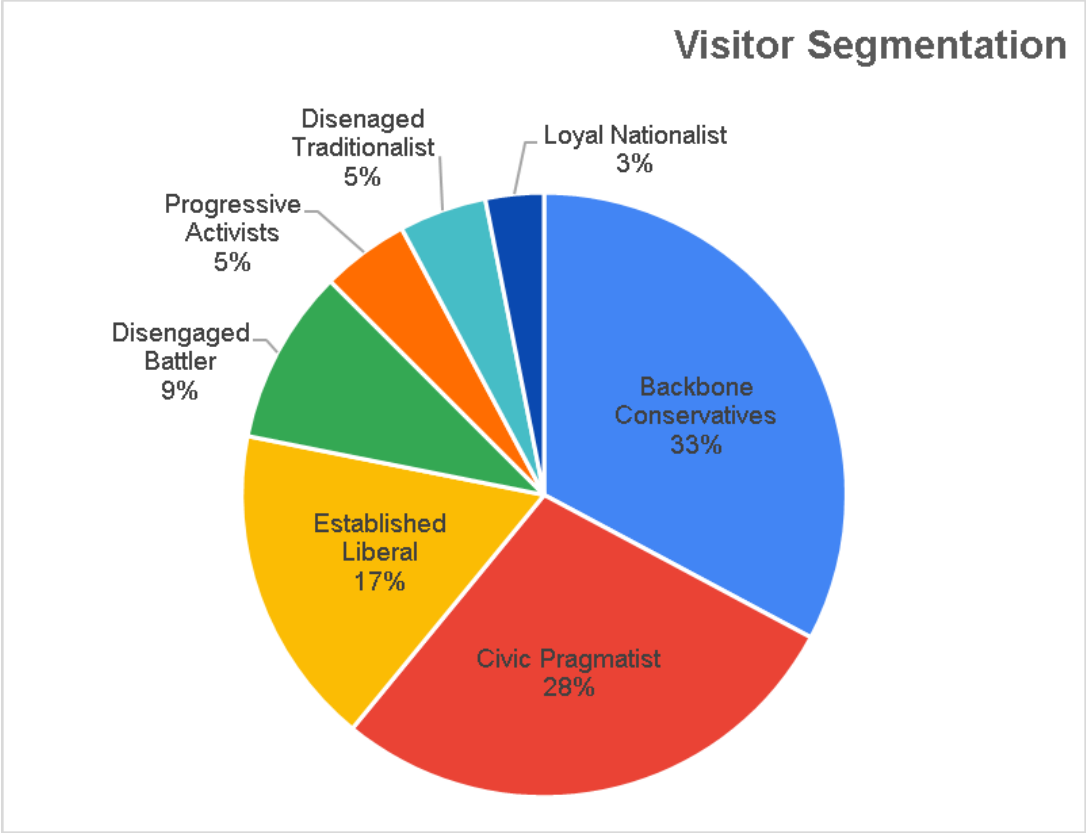


Figure 3: Pie chart showing the percentages of each segment from the 64 visitor interviews.

Less than 10% of visitors fell under Disengaged Traditionalists and Loyal Nationalists. These groups encompass people that actively deny climate change. This shows that very few of the visitors that come to the Cathedral are not engaged in the climate crisis.

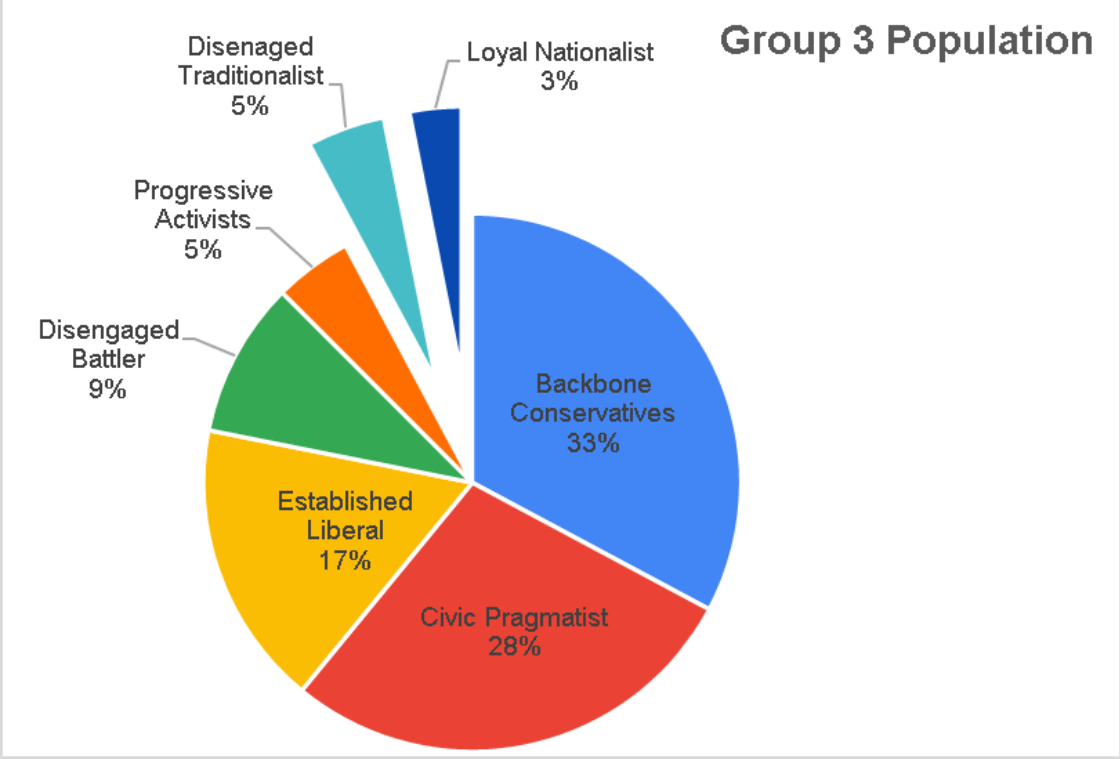


Figure 4: Pie chart highlighting the segments that are disengaged about the climate crisis (n = 64).

Of the three main segments, every segment shares similar values. The shared values help develop effective messages to engage the three main groups by looking at their shared values. Especially since all three segments already value the climate crisis in some way.

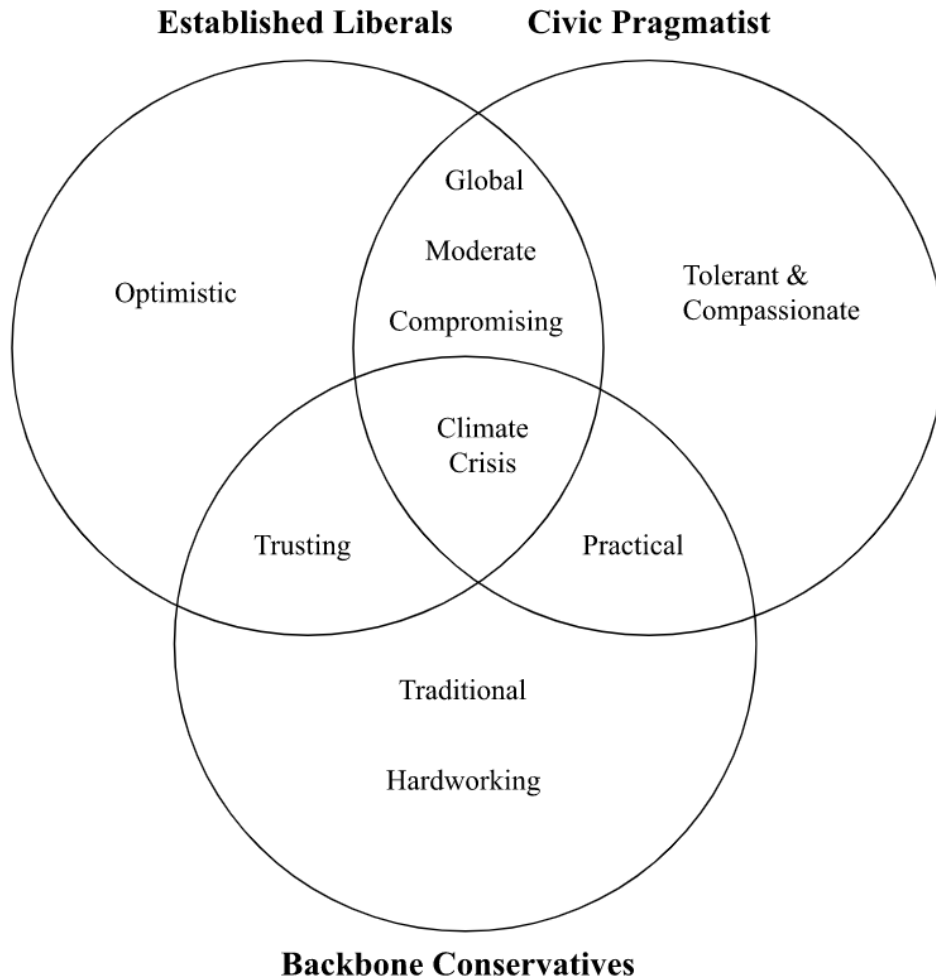


Figure 5: Venn Diagram showing the values from Britain Talks Climate that overlap between the three main segments (Climate Outreach, n.d.).

Of the three main segments, there are a few strategies to better engage them on climate issues. Even though Established Liberals and Backbone conservatives do not share any similar strategies, by looking at the similarities in effective strategies they help develop effective messages to engage the three main groups.

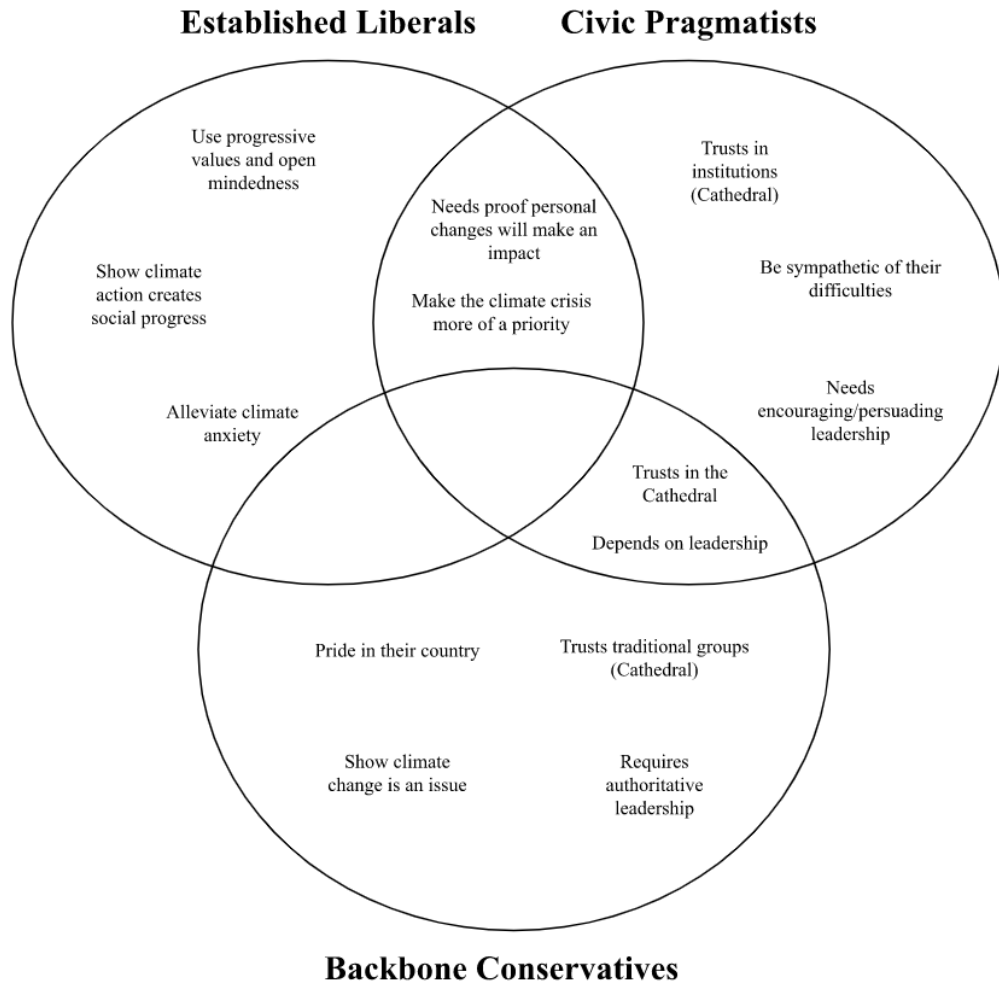


Figure 6: Venn diagram showing what engages the three main segments (Climate Outreach, n.d.).

4.2. There are Multiple Ways to use the History and Architecture of Worcester Cathedral to Engage Visitors Regarding Green Living

Through staff interviews ([Appendix C](#)), we determined key aspects of the Cathedral's history and architecture that can be used to engage visitors. Below we highlight key common ideas brought up in staff interviews.

The West Window of Creation can motivate visitors to engage in climate issues.

This important architectural feature of the Cathedral is one of the first things noticed when you enter. Depending on the time of day, it can be strikingly illuminated by the sun radiating colours through the space. It is historically significant as the original mediaeval stained glass was destroyed during the civil war by Cromwell. What stands today was built during the Victorian era restorations.

Based on the staff interviews, the West Window of Creation can be an effective tool to engage visitors and convey messages related to green living and stewardship of the earth. The window's depiction of the Story of Creation, with its abundance of plants and animals, provides an excellent opportunity to develop educational resources that can inspire visitors to protect and connect with nature.

Staff identified a major architectural feature as a possible way to convey these messages to the visitors. Robin Parry elaborated on it, mentioning it has “got tons of potential cause that's the creation story... [it can be used to] develop educational resources based on the window because it's packed full of animals and plants and all sorts of [things like] that”. The residentiary Canon and Precentor, Reverend Canon John Paul Hoskins, notes that we “can make connections” with the creation window. These connections include tying together the Story of Creation with green living and stewardship of the earth, protecting its beauty.

The West Window of Creation can engage Civic Pragmatists and Backbone Conservatives. It speaks to both segments' trust in the Cathedral as an authority on the topic, as well as the need for a respected figure such as God. The window also speaks to the Established Liberals. It alleviates climate anxiety by promoting stewardship and taking practical steps to reduce carbon emissions. These actions will have a direct impact on the Earth, and showing how the staff reduce their footprint could speak to Established Liberals.

Overall, the message of the West Window of Creation can be a powerful tool for engaging visitors from all backgrounds on the importance of environmental stewardship. By tailoring the message to the specific concerns and values of each group and highlighting the practical steps that visitors can take, Worcester Cathedral can inspire them to make changes in their own lives and become more environmentally conscious. Many staff notice their efforts to reduce transportation emissions and waste by recycling and using objects until they are irreparable. By showcasing these efforts of the Cathedral staff and connecting them to the message of the West Window of Creation, we can inspire visitors to follow their lead and take meaningful action to protect the environment.

The Cathedral was a Benedictine Monastery and continues to use Benedictine values, encouraging practical steps for green living.

Based on the staff interviews, the Cathedral's Benedictine history and principles provide a powerful framework for encouraging practical steps for green living. As Robin Parry noted, there is a lot that can be drawn out from the monks' lifestyle with great contemporary relevance, particularly around the idea of simplistic living. By emphasising the importance of simplicity, the Cathedral can inspire visitors to take practical steps to reduce their carbon footprint and live a more sustainable lifestyle.

To engage the visitors around the idea of Benedictine principles and green living, the history of Worcester Cathedral, starting as a monastery, should be highlighted. As the Dean, The Very Reverend Dr Peter Atkinson noted, three of the Benedictine principles that are particularly relevant to today's issues include:

- The idea that "nothing is to be preferred to what he called the work of God." This can be interpreted as a call to prioritise the protection of the environment and the natural world, which can be seen as a reflection of God's creation.
- The principle that "every guest should be received as if he was Jesus Christ himself." This can be interpreted as a call to treat all people and living beings with respect and hospitality, which can extend to the way we interact with the environment and the natural world.
- The idea that "every community of monks is a place of learning, and we take learning seriously." This can be interpreted as a call to engage in lifelong learning about sustainability and the environment, and to continue to seek out new ways to reduce our impact on the planet.

In following this mindset Worcester Cathedral can stay true to the Benedictine heritage and offer educational resources on climate action. This will engage visitors if they stress tradition.

Backbone Conservatives can take pride in the history and longevity of Benedictine principles. Established Liberals and Civic Pragmatists will be persuaded with concrete examples, such as Mucknell Abbey, which showed that following these principles directly had immediate results for climate action. Altogether these ideas can inspire visitors to adopt a “new us” mentality: Implementing new habits and values into their daily life that can reduce carbon emissions.

The Eco-Church Silver Status shows active engagement in climate issues.

The Cathedral's achievement of Eco-Church Silver status is a testament to its active engagement in climate issues and commitment to environmental sustainability. Visitors should be made aware of this accomplishment, as it shows that the Cathedral takes the climate crisis seriously and is actively taking steps to address it. The Vice Dean, The Very Reverend Dr Stephen Edwards says that “Having achieved silver and being rightly proud of it, we can use that to encourage others to just take the first step...we encourage others to start”. Dave Whelan's suggestion of creating partnerships with other local groups can also be a powerful way to engage visitors and encourage them to get involved in sustainability efforts. By using the Eco-Church Silver award as evidence of the Cathedral's commitment to environmental sustainability, the Cathedral can establish itself as a leader in the community and inspire others to follow their example.

To engage Civic Pragmatists and Established Liberals, Worcester Cathedral can emphasise the Eco-Church Silver status as proof that climate action is effective on building infrastructure. By highlighting the practical steps that the Cathedral has taken to reduce its carbon footprint and earn the Silver status, they can inspire Civic Pragmatists and Established Liberals to take action in their own lives and make a positive impact on the environment. The Cathedral's prioritisation of the issue of climate change can also be a powerful way to engage Civic Pragmatists and Established Liberals who may be concerned about the environment and looking for ways to make a difference.

To engage Backbone Conservatives and Civic Pragmatists, Worcester Cathedral could emphasise the Cathedral's credibility and authority as a trusted institution that has earned the Eco-Church Silver status. By showcasing the practical steps that the Cathedral staff have taken and highlighting their commitment to environmental sustainability, you can inspire Backbone Conservatives and Civic Pragmatists to take the issue of climate change seriously and recognize it as an important issue to address.

To engage Backbone Conservatives, highlight the achievement of Eco-Church Silver status as a milestone compared to other buildings. By showcasing the Cathedral's leadership and commitment to environmental sustainability, Backbone Conservatives can be inspired to take pride in the Cathedral and recognize it as a role model for other buildings and institutions to follow.

Despite its age, the building was constructed to withstand the test of time, allowing it to continue fulfilling its intended purpose as a place of worship.

Stonemasons and woodworkers are the foundational caretakers of Worcester Cathedral, ensuring that it continues to function for generations to come. Rather than resorting to extensive renovations, they work diligently to maintain the building's integrity. As Camilla Finlay, architect for Worcester Cathedral, rightly pointed out, Worcester Cathedral is an important symbol of Worcestershire and its history: It has a 700-year legacy and stands out as a testament to the perseverance of those who built it.

Over the centuries, Worcester Cathedral has adapted to meet changing needs. It started as a small Anglican cathedral but has since grown to include the chapter house, crypt, and numerous architectural renovations. It remains a place of worship and reverence, and it would be unrealistic to expect it to perform like a modern building.

Another staff member mentioned that Worcester Cathedral is an important old beautiful building that needs to be preserved. The cost and time associated with renovating such a historically significant structure would be substantial, and the time required to go through the process of paperwork for historic buildings is substantial. Staff members agree that preserving it in its current form is best.

Despite not having modern amenities such as heating and ventilation, Worcester Cathedral is still a comfortable space. The building's stone construction keeps it cool in the summer, while large windows allow for plenty of natural light. The staff suggest a change in culture, such as asking visitors to wear extra layers in the winter, as a solution to the energy consumption issue. Adapting to a different way of life as the Benedictine monks have done.

In conclusion, Worcester Cathedral stands as a symbol of building things to last, with a rich history and a dedicated team of craftsmen committed to its preservation. While it may not function like a modern building, its unique features and cultural significance make it a valuable and irreplaceable part of the community.

The ground plan shows active efforts to revive the space by adding native species resulting in a better environment for wildlife.

Worcester Cathedral has a ground plan in action to revive the space and bring new native plant life. Dave Whelan explained that after it's done, it can be used to introduce “the history of the grounds and plants and trees to the members of ... the public to the cathedral via the grounds”. Robin Parry hopes that Worcester Cathedral can offer the community space to “plant a monastic garden to help connect to heritage: it could also be an eco-garden... and an educational place”.

The monks used to grow their herbs and food on the cathedral grounds. We can use this history to engage the public with a more hands-on method.

5. Conclusions & Recommendations

In this chapter we present recommendations for Worcester Cathedral to engage their visitors on practical steps for green living. The messages and strategies we recommended are to engage the main segments: Backbone Conservatives, Civic Pragmatists, and Established Liberals.

5.1. Messages

Our findings reveal four key messages that will engage with the Backbone Conservatives, Civic Pragmatists, and Established Liberals:

The Window of Creation is a reminder that our planet is a gift to be stewarded. The Window of Creation reminds us that our planet is a gift housing many plants and animals. As stated in the Book of Genesis, we are not to exploit the Earth, but we are to be a steward of the Earth. This message appeals to Civic Pragmatists since they can trust an institution like Worcester Cathedral. Backbone Conservatives can trust the Cathedral to deliver this message, as the Cathedral can be considered a respected figure. This message also alleviates Established Liberals' climate anxiety.

The Eco-Church Silver Status demonstrates Worcester Cathedral's commitment to the climate crisis. Worcester Cathedral has shown effort and initiative in the climate crisis, has started to reduce its carbon footprint, and developed its strategy to achieve Net Zero by 2030. While this is not an easy goal to accomplish, with the help of the community, this task can be achieved through hard work. Progress can be represented by the Eco-Church Silver Status achievement. The Cathedral has already begun taking steps to reach Eco-Church Gold Status. This message is effective in engaging Civic Pragmatists and Established Liberals since this shows the Cathedral prioritises the issue of climate change, and there is proof that climate action is effective in building infrastructure. Backbone Conservatives can take pride in Worcester Cathedral reaching this achievement. Finally, this message shows Backbone Conservatives and Civic Pragmatists that the climate crisis is a priority, since they trust Worcester Cathedral.

Worcester Cathedral was built to last, and continues to serve its purpose as a place of worship. The greatest amount of carbon emission is during the building's construction phase. The Cathedral that still stands today began construction in 1084, long before any heavy machinery was used. Instead of building a new Cathedral, Worcester Cathedral is constantly being restored by stonemasons and woodworkers. Worcester Cathedral continues to serve as a place of worship to this day, with 700 years of service to its community. This message alleviates climate anxiety for Established Liberals. Backbone Conservatives can take pride in what British people are able to create and sustain. Civic Pragmatists and Established Liberals will recognize this as proof that buildings can be constructed in ways that support green living and reduce carbon footprint.

Benedictine Principles can encourage people to have a more green lifestyle. The Cathedral once was a Benedictine Monastery, where they practised Saint Benedict's principles: Prayer, work, study, hospitality, and renewal. They emphasised a "new us" mentality over consumption. Today the Cathedral community and staff does their best to live by the Benedictine Principles and to reduce, reuse, and recycle. Backbone Conservatives can recognize and appreciate the old principles and traditions that are still in practice. Mucknell Abbey and other people practising these principles are proof for Civic Pragmatists and Established Liberals that they can reduce their carbon emissions and their carbon footprint.

5.2. Strategies

With these four messages, we developed three strategies to help Worcester Cathedral better engage with its visitors on practical steps for green living and the environment:

New signage: Because there is limited and outdated signage in the Cathedral, we recommend creating new signage related to the new eco-locations. This signage could advertise the grounds plan with pictures at the entrance. Retractable banner stands could be put alongside the risers (choir stand). This new signage would be paired with the additions to the current brochure or a new eco-brochure. We recommend adding signage at the Window of Creation, the Eco-Church Silver Status plaque, and the locations found in [Appendix G](#).

Brochure updates: The current brochure has a map of the Cathedral with various locations labelled. We identified two ways to incorporate eco-related information into brochures and the existing map. The first way is by modifying the current brochure. The eco-locations would be added to the brochure, with the locations shown in [Appendix G](#) added to the map. With the new eco-locations in the brochure map, the visitors can go on a self guided eco-tour. Eco-locations can have signage to help describe their relationship to the Cathedral, as well as the environment.

The second way is to create a new eco-brochure. This brochure would also show key eco-related hotspots in the Cathedral. This allows for the ability for a visitor to go on a self guided eco tour with the information about each location found in their pamphlet.

We recommend adding the location of the Window of Creation and its message from [Section 5.2](#). We also suggest adding the location of the Eco-Church Silver Status plaque and its message ([Section 5.2](#)). We then recommend adding the message about how Worcester Cathedral was built to last and continues to serve its purpose as a place of worship ([Section 5.2](#)). The message that Benedictine Principles can encourage people to have a more green lifestyle ([Section 5.2](#)) should also be added to the brochure. Finally, add the various stone and wood carving locations to the brochure. This can be paired with the message that people are naturally drawn to the beauty of nature, this is reflected in the stone and wood carvings seen throughout Worcester Cathedral. These locations and messages have the most potential for engaging visitors on green living. Other locations that can be added to the brochure can be found in [Appendix G](#).

Additions to tour guide training: Our final suggestion is to add these same locations shown above, their messages, and the locations found in [Appendix G](#) to the Cathedral's tour guide training. Many tour guides have their own version of the tours given at the Cathedral. However, they will need to be taught about the new eco-locations throughout the Cathedral, as well as their messages, so they can provide sufficient information to the visitors as they please.

With these recommended messages and strategies, Worcester Cathedral will be able to better engage with its visitors on practical steps for green living.

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Appendix A

Authorship Page:

Section:	Author:	Editor:
Abstract	RU	MPB
Executive Summary	QLP	RU, KMB
1. Introduction	All	All
2. Background	QLP	All
2.1 Climate Change is an Issue in the UK	RU	QLP, KMB
2.2 Community Engagement in Climate Change	KMB	QLP
2.2.1 Common Practices to Reduce Climate Change	KMB	QLP
2.2.2 Tools for Community Engagement	KMB	QLP
2.3 History of Worcester Cathedral	MPB	RU
2.3.1 Worcester Cathedral History	MPB, QLP	QLP, RU

2.3.2 The Worcester Cathedral Eco-Group	MPB	QLP, RU
3. Methodology	MPB	RU
3.1 Understand visitor attitudes toward climate-friendly objectives	KMB, MPB	KMB, MPB
3.2 Understand how religious institutions' practices, history, and architecture can be used to engage the visitors on climate issues	RU, KMB	QLP, MPB
3.3 Develop the messages and strategies for Worcester Cathedral to engage visitors on practical steps for green living and the environment	RU, KMB	MPB
4. Findings	MPB	QLP
4.1 The majority of cathedral visitors are aware of climate change	MPB	
4.2 There are multiple ways to use the history and architecture of Worcester Cathedral to engage visitors on green living.	QLP	RU

5. Conclusion & Recommendations	KMB	RU
5.1 Messages	QLP	MPB
5.2 Strategies	MPB	KMB
Appendix A	All	
Appendix B	RU	
Appendix C	MPB	
Appendix D	MPB	
Appendix E	QLP	
Appendix F	QLP	
Appendix G	RU, KMB	

Appendix B

We interviewed people visiting the Cathedral to understand the groups that use the building. We informed them that the first set of questions were Cathedral based, and the second part of the interview was more personal. We informed them the interview was anonymous and that they did not have to answer questions if they did not wish. We used this information to categorise the visitors into one of the seven segments from Britain Talks Climate.

Interview Questions for People Visiting Worcester Cathedral:

Cathedral Questions:

1. What is your main reason for coming to the Cathedral today? Is there anything in particular you are excited about?
 - a. Where have you come from to visit the Cathedral? How did you travel to the Cathedral?
2. Is there anything about the Cathedral's history and architecture that you find particularly inspiring? If so, what is it?

Personal Questions:

1. Do you volunteer or donate to charity? What?
 - a. Profession?
2. What is your usual means of transportation? (walking, biking, automobile, rail, etc.)
3. What type of produce do you usually purchase when grocery shopping (organic or non-organic)? Why?
4. During your lifetime have you experienced any changes in weather patterns?
5. Do you partake in any type of composting, recycling or any other eco-friendly activities?
6. Do you think people should take pride in their country?

Appendix C

We asked key staff members if they would like to participate in an interview. We informed them that it will be submitted anonymously and none of the information provided can be traced back to their name. We asked if they consented to be audio recorded, and if we wished to quote one of their responses we would reach out for their consent. Their responses were recorded by a note taker.

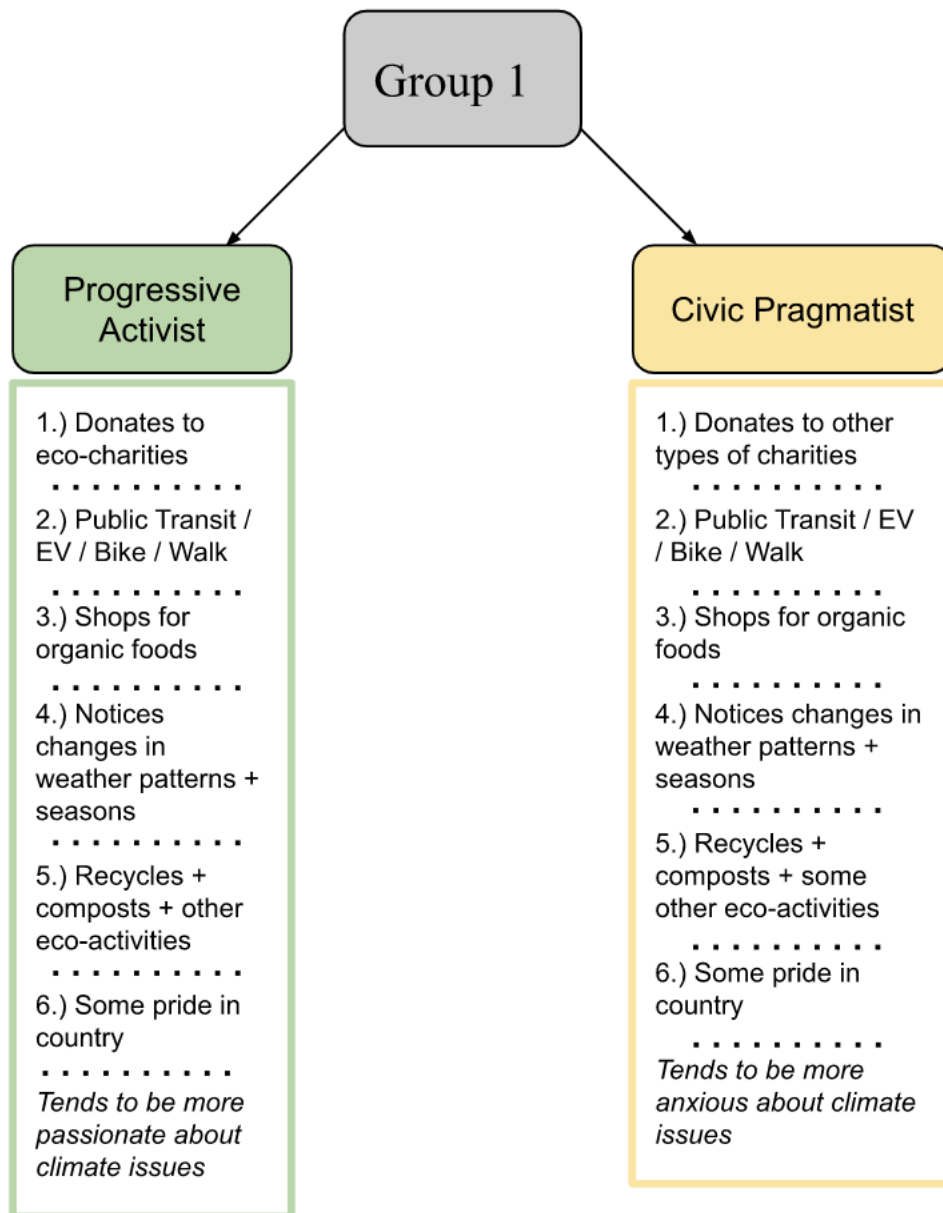
Interview for Cathedral Staff Members:

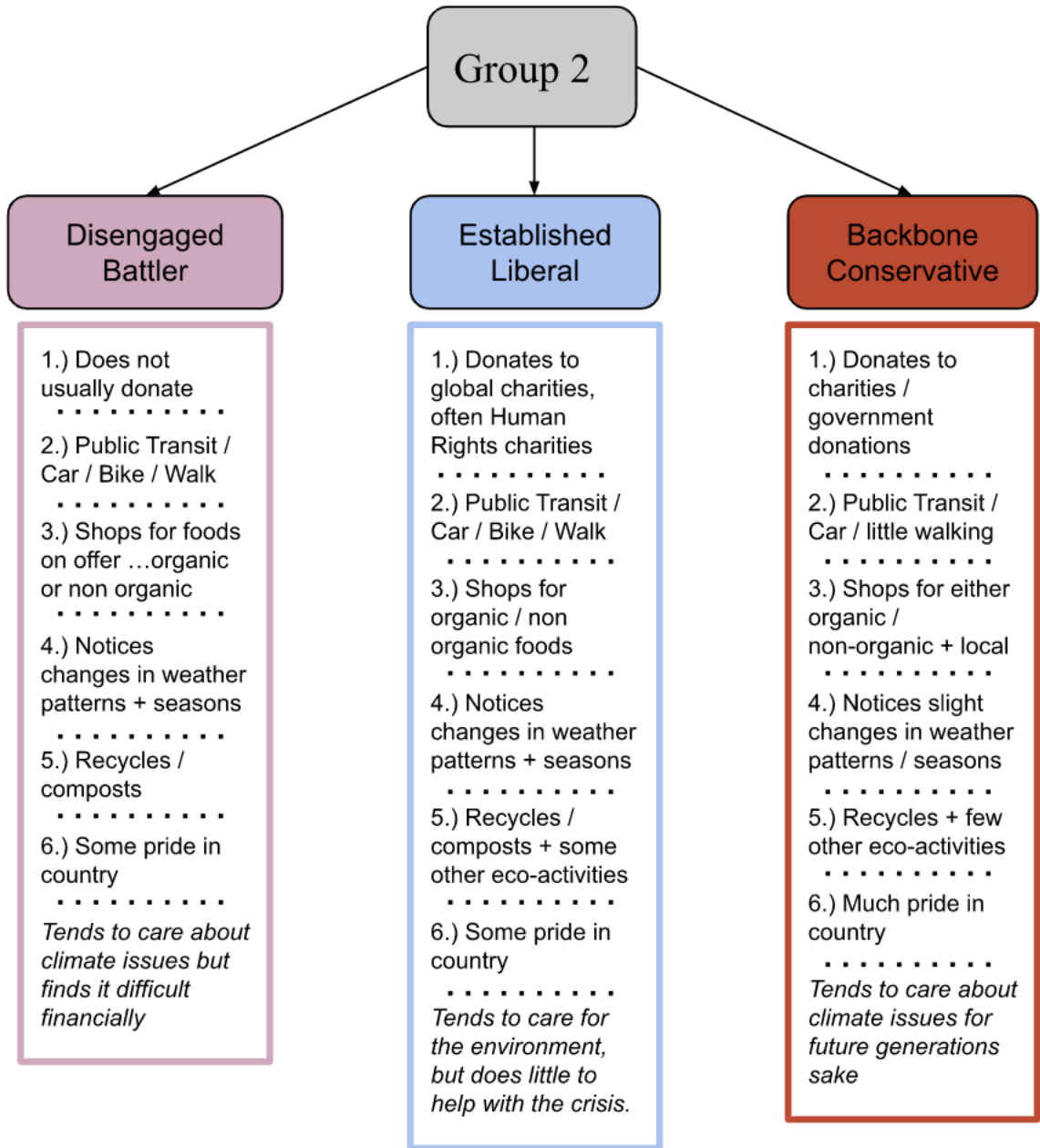
1. How do you practise sustainability in your daily life?
 - a. What is the hardest part of practising sustainable habits?
2. What aspects of the history, heritage, and architecture of the Cathedral are people most engaged upon?
 - a. What is your favourite part of the Cathedral's history/heritage/architecture?
3. Do you think that any of those three categories (history/heritage/architecture) could help engage the community on climate change and the environment?
 - a. (for example: That St. Wulfstan is patron Saint of Vegetarians; The Green men; The West Window of Creation)
4. Overall, what is your view on the congregation's engagement on climate issues?
 - a. What is your view on the staff's engagement on Climate issues?
5. How do you suggest we use the Cathedrals Eco-church silver status to engage the community? How can we use it to our advantage?
6. How do you see the Cathedrals progressing by 2030 in terms of its environmental and net zero goals?
7. Is there anyone else you recommend we talk to?

Appendix D

Flow Chart for Analysis of the Seven Segments:

Each group holds a set of segments. The flowchart highlights keywords and themes related to each of the six “Personal Questions” shown in [Appendix B](#). These keywords and themes helped the interviewer categorise the visitor into one of the seven segments.





Group 3

Disengaged Traditionalist

- 1.) Does not donate often
.....
 - 2.) Public Transport / Car
.....
 - 3.) Shops for any food, often local
.....
 - 4.) No changes in weather patterns / seasons
.....
 - 5.) Recycles what is required
.....
 - 6.) Much pride in country
.....
- Does not notice climate issues.*

Loyal Nationalist

- 1.) Donates, often government donations
.....
 - 2.) Public transport / Car / Walk
.....
 - 3.) Shops for any food
.....
 - 4.) Few changes in weather patterns / seasons... not human caused
.....
 - 5.) Recycles
.....
 - 6.) Much pride in country
.....
- Tends to notice climate issues, but takes little to no steps to act on climate issues*

Appendix E

Questions for other communities

Mucknell Abbey:

- How do you practise sustainability in your daily life?
- Is there any history of the Abbey that you use to engage visitors?
- Do you think the history and culture of the Abbey can be used to teach the community about green living and sustainability?
- Does the Abbey have any goals towards sustainability?
- Is there anyone else we should talk to?

Appendix F

Greater Area Findings and Limitations

By exploring the greater area, we were able to find examples of sustainable communities. Mucknell Abbey is one such example where sustainability is woven throughout their daily life and was a focus during construction.

By touring Mucknell Abbey, we were shown that sustainable practices could be integrated into their lifestyle, creating a carbon-conscious community.

The buildings were built with recycled building materials and using existing buildings. Environmentally friendly practices are built into the structures; Grey water system, solar panels, natural filtering for sewage, and growing food. All of these aspects work to create harmony with nature. The monks are away from the carbon emissions they create and work to reduce them through the ways they construct buildings.

The monks follow the Benedictine principles strictly, resulting in a quieter lifestyle of no personal possessions lowering emissions. Benedictine principles also include staying and focusing on one area. By limiting their travel and personal belongings they are able to reduce emissions otherwise created when taking transportation or producing new goods and consumables. Mucknell Abbey also tries to eat as little meat as possible to minimise their emissions. They also practise crop rotation to keep soil healthy, use natural manure, and choose to not use pesticides.

A “new us” mentality allows for a more adaptable lifestyle resulting in a carbon-conscious mindset. The monks focused on changing and adapting their habits and lifestyle for a greener life. This mentality of personal and spiritual growth is a model we can draw upon for creating effective strategies. Mucknell Abbey also showed active efforts to understand where emissions come from. They submit some questions to websites for answers on climate-related issues. They also research alternate fuel sources and where their energy comes from to be aware of emissions.

Appendix G

Additional Locations to be added to an Eco-Brochure

These are other locations that could be added to an eco-brochure, as they have potential for signage and for engagement on the climate crisis.



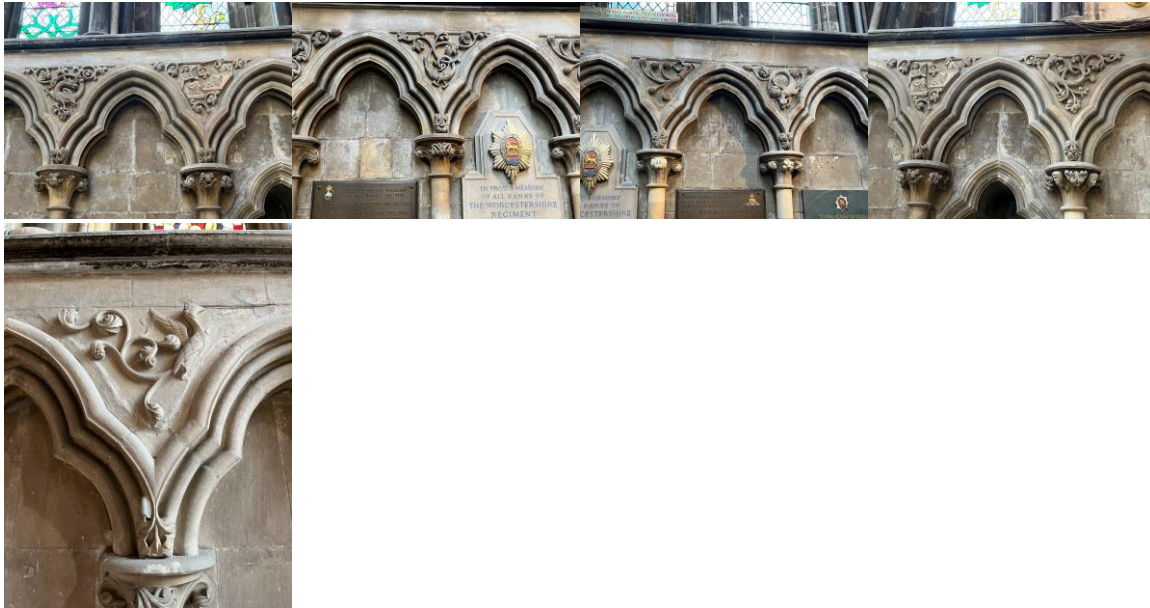
Seats at the quire section to the south of the Bishop's throne with mythological creatures and plants (A)



North end stained glass windows with various sea creatures (B)



Animals and plants on the pulpit (C)



Mythological creatures near St. George's Chapel (D)



Mythological creatures in the ceilings near the Chapter House and around the cloister garden (E)



Pews with nature themed wood carvings (F)



Plants and animals on the east window with the Story of Crucifixion, and mythical creatures around the east window (G)



Mythological creature stone carvings in the Cloister Garden (H)



A stand where scriptures are read during services (I)



Animals and Plants on the floor Outside of Prince Arthur's Chantry (J)



Plants on the sculptures exiting the crypt (K)



Mythological creatures around the Lady Chapel and East Window (L)



Various plants and animals carved in the stone near the Deans Chapel (M)

