Christian Social Movements for Action on Climate Change

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Executive Summary

Climate change poses an existential threat to humanity. To combat climate change, ambitious policy change is urgently needed. To move policy makers to act, social movements organize united constituencies to lift up shared demands. While a social movement for action on climate change has been developed, it has largely overlooked a critical source of social power: American Christians. Christianity has a unique role in the United States, being deeply rooted in the national culture and reaching across conventional demographic and political divides. While there are tensions both among Christians and between Christians and secular environmental organizations, a Christian social movement for action on climate change is well underway. Faith-based organizations are equipping leaders to develop members' spirituality, implement sustainability upgrades, and advocate for change. Despite the tremendous effectiveness of these organizations, they are dramatically under-resourced in comparison with their secular counterparts. With greater resources, faith-based environmental organizations could activate a crucial audience of politically centrist voters, galvanizing new momentum at a critical time for our planet. Better engaging U.S. Christians is essential to protecting humanity from the worst consequences of the climate crisis.

keywords: climate change, social movement, faith, Christian, policy, advocacy

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Introduction

In 2015, Pope Francis sent a pair of his shoes to Paris. Negotiators of the Paris Climate Agreement were hammering out the details of their global accord on climate change, and with police cancelling a planned street march due to security concerns, grassroots leaders came up with a last-minute solution: shoes instead of feet. Laid out in an orderly grid on the streets of Paris, thousands of pairs of empty shoes provided a haunting (and media-friendly) reminder of the real people UN negotiators serve. UN chief Ban Ki-moon sent a pair. So did Hollywood actors. More than 10,000 ordinary people from around the world joined them (Rowling and Mackinnon, 2015).

Pope Francis' well-worn black shoes appeared in many newspapers that covered the story and were shared on social media. The pope's symbolic presence in Paris, along with his publication of *Laudato Si'*, a landmark document on climate change and ecology published just before the conference, captured the public imagination (Shaw, 2015; McCallum, 2019; Pou-Amérigo, 2018; Van Brempt, 2015). This serves as just one example how people of faith, with their millennia-old traditions and often conservative mindsets, are able to galvanize attention as unexpected allies in the fight for climate solutions.

This sense of widespread public pressure was key to the victory in Paris. In order to achieve the milestone of the Paris Climate Agreement, negotiators had to feel the pressure of public accountability. And not just pressure from climate activists, but from everyone. Along with a global climate march in cities around the world and thousands of media stories covering these events, Pope Francis' shoes helped exert the necessary public pressure on UN negotiators that pushed the Paris Climate Agreement across the finish line.

Leadership from high-profile figures like Pope Francis continues to be relevant today. But it is not only the figureheads who matter. A highly distributed movement of grassroots faith leaders across the world is taking action. This paper explores the Christian movement on climate change.

The Climate Context

Climate change poses existential risks to human civilization. Because everything from agriculture to fishing to home construction depends on a stable climate, the "safe operating space for humanity" goes no higher than an average global temperature that is 1.5 degrees Celsius above the pre-industrial average (Rockström et al., 2009, p. 472). The first recorded year of 1.5

degrees of warming occurred in 2024 (Copernicus Climate Change Service, 2025). The world is well on its way to climate catastrophe.

We already experience the uncertainty associated with climate change. A warming planet has brought us greater risks of hunger and conflict, along with the migration that comes with them (World Food Program USA, 2024; CNA Military Advisory Board, 2014; Balsari et al., 2020). Beyond the trends are heart-rending stories. Newly strong hurricanes destroy homes and businesses (NASA Science Editorial Team, 2022). Heat-related illnesses cause pain, worry, and expense (Centers for Disease Control and Prevention, 2025).

In order to stave off the worst consequences of the climate crisis, we need to reduce greenhouse gas pollution by 45% by 2030, and 60% of all known fossil fuel reserves need to stay in the ground while renewable energy infrastructure is rapidly scaled up (United Nations, 2025; Trout, 2023). Ideally, this energy transition would be achieved in a way that supports the hard-working men and women in the fossil fuel industry who have supported our economy over the last century, while also delivering benefits to the communities that provide the minerals necessary for renewable energy infrastructure.

The challenge is immense. However, we know that the choice is not between the energy transition and business as usual. The choice is between the energy transition and catastrophe. Policy changes are needed to deliver the transition in time and at scale.

Social Movements as a Force for Policy Change

In order to achieve the energy transition, changes in policy are needed. Policy change often requires the support of elected officials. The support of elected officials, in turn, depends on their perception that voters care about policies. This is where social movements come in. Social movements build popular support for policy change, either by directly engaging policy makers or by shifting "social values" (Rochan and Mazmanian, 1993, p. 75).

Movements define new constituencies and they create and promote new narratives, both of which influence elected officials (Gamson, 1975). As an example from recent history, a social movement defined a new constituency of firearm owners that "framed gun ownership as an identity″ (Lacombe, 2021, p. 4). This movement created and very successfully promoted a narrative that any limitation on the use of firearms is a threat to American liberties. With a well defined constituency and a powerful message, this social movement has "influenced the outcome of state, local, and national elections" (Musa, 2016, p. 1).

A social movement has been built around climate change and it has delivered significant gains, such as increasing the percentage of American adults who understand the risk of climate change, signing the Paris climate agreement, and passing the Bipartisan Infrastructure Law and the Inflation Reduction Act (Tyson, Funk, and Kennedy, 2023). These successes are notable because climate change is not the type of problem that most people easily understand. Instead, it is an abstract problem, one dealing in complex systems of cause and effect, individual and communal responsibility, and degrees of risk, all of which are hard for most of us to grasp (Marshall, 2015). Delivering any gains at all is a significant achievement for the movement, and the passage of meaningful policies is cause for celebration.

At the same time, this movement has had limited reach to ordinary people. Espeically its early years, its constituency was relatively female, liberal, wealthy, and older, and it focused its messaging on hard science and an "ominous" sense of the future (Fang, 2023; Moser, 2010, p. 32). This is limited constituency and alienating message ran up against sophisticated efforts to discredit climate science that were largely funded by the fossil fuel industry (McCright and Dunlap, 2003; Brulle, 2020). The results are evident in the strong backlash against climate action, which has been the most polarized issue in the United States (Pew, 2020).

In recent years, the climate movement has sought to improve its approach by representing a broader constituency and embracing more effective messaging (Hadden, 2017). Better engaging Christian communities is an important way to strengthen the social movement for action on climate change.

The Role of Christians in Social Movements

About two-thirds of American adults identify themselves as Christian (Smith et al, 2025). Scholars generally agree that “Christianity influences America’s political climate” and that even those Americans who are not Christian “are likely to have been impacted and encountered it in some way” (Smith et al. 2025; Burnidge, 2022). Building on this significant cultural presence, organized communities of Christians have successfully driven major shifts in American culture. The focus, depth, and organizing power of Christian communities have been remarkably effective at moving policy.

Popular opinion may hold that Christians are fully aligned with conservative politics, but historically the faith has supported issues across the political spectrum.

On opposition to abortion access, an issue that is mostly supported by political conservatives, anti-abortion activists engaged American Christians in a half-century-long campaign to reduce or eliminate abortion access (Holland, 2020). While "genuine religious beliefs" do underlie much

religious opposition to abortion, anti-abortion activists capitalized on these beliefs to unite and mobilize what became a significant bloc of voters (Deckman et al., 2022, p. 140). By marrying the American narrative of individual rights with the Christian narrative of an individual's life beginning at the moment of conception, anti-abortion activists convinced wide swaths of American Christians that all abortions are sinful (Lewis, 2017). With a set of Christians becoming singularly focused on abortion as a faith issue, a powerful constituency was mobilized. (Holland, 2020). The strategy was wildly successful. The policies that set the conditions for American women's pregnancies over the course of half a century have been upended.

On civil rights for African Americans, an issue conventionally seen as liberal, Christianity itself provided a consistent and coherent set of messages and Christian communities provided social legitimacy and organizing power (Houck and Dixon, 2006; Fairclough, 1977). Despite the significant challenges that remain, the Christian activists who led the civil rights movement of the 1950s and 1960s successfully delivered the Voting Rights Act and eliminated legal segregation (Richardson, Schulz and Crawford, 2019; Combs, 2016; Shearer, 2015).

The reasons why Christian social movements can be so successful have first to do with the overlap between the qualities needed for any social movement to succeed and the qualities of any organized faith. Faiths offer the "shared culture, shared issue interests, and resources" that social movements need to succeed (Ellingson, Woodley, and Paik 2012, p. 269). Faith groups promote clear messages (“love thy neighbor,” for instance), maintain durable organizing structures (such as weekly meetings), and count on a network of established, trusted leaders. Faith-based gatherings like worship services can be meaningful and even joyful, providing a reason for participants to keep returning. In addition, social norms–such as those provided by constant feedback from a religious cohort–are highly effective at driving behavior change (Cialdini and Jacobson, 2021)

Beyond the strengths that all faith groups share, U.S. Christian communities in particular offer a special strength that the U.S. climate movement needs: they reach diverse audiences. Christianity has adherents on the left, right, and middle of American politics, in both rural and urban settings, and across racial lines (Pew Research Center, 2024a; Pew Research Center, 2025). This diversity is essential to broadening and strengthening the social movement for climate action.

Christian Perspectives on Climate Change

A network of theologians and scholars has provided an intellectual framework that supports environmental protection. These thinkers work through dedicated networks such as the Yale Forum on Religion and Ecology, religious-founded universities such as Georgetown University and Baylor University, divinity schools such as those at Duke University, and other centers of

learning. Thousands of pages have been written on why Christians should engage in environmental protection. Excellent introductions are available in *The Christian Future and the Fate of Earth* (Berry, 2011), *Earthspirit: A Handbook for Nurturing an Ecological Christianity* (Dowd, 1991), *Laudato Si'* (Franciscus, 2017), *Stewards of the Earth: Christianity and Creation Care* (Christianity Today, 2022), and *Stewards of Eden: What Scripture Says About the Environment and Why It Matters* (Richter, 2020).

For ease of reference, we might summarize three common approaches supporting Christian activism on climate change as "stewardship," "honour," and "justice." These are not mutually exclusive ideological territories, but rather three strands of thought that are often woven together in the worldviews of Christians who support action on climate change.

The *stewardship* approach promotes an understanding of humanity as the appointed caretakers of the natural world, which ultimately belongs to God. "Being created in God's image endows people with the authority to act in behalf of the true owner of the world," who is God (Reichenbach and Anderson, 2022, pp. 48–49). A concern for the viability and usefulness of natural resources across the generations infuses this perspective. "Stewards are servants who, in being commanded to serve (*abad*), benefit that over which they rule," and Christians who hold this worldview see humanity as the long-term custodian of the Earth (Reichenbach and Anderson, 2022, p. 54).

Relatedly, an *honor* approach promotes caring for nature because nature is created by God and is an expression of God's creativity. It is related to but distinct from a *stewardship* approach because it sees caring for God's creation as being good in itself, beyond any utility that the natural world provides. This perspective is rooted in the many scriptures that communicate God's connection to nature, such as the moment in Genesis when "God looked at all of this creation, and proclaimed that this was good – very good" (The Holy Bible: Genesis, p. 1). Christians who embrace this worldview believe that the Earth is "the material-vital aspect of God's creation," and humanity therefore cares for creation as an act of honoring the creator (Santmire, 2021, p. 11).

Finally, a *justice* approach highlights the many scriptures in which God instructs humanity to care for the most vulnerable members of society. This approach connects those scriptures with science on climate change's disproportionate harms to the poorest. Christians who embrace this worldview hold that "as followers of Jesus, we need to respond to the suffering of those most directly affected by the degradation of God's creation" (Borse, 2022, p. 19).

While there is certainly a wealth of intellectual justification supporting Christian action on climate change, there is also substantial opposition. Many Christians reject the premise that their

faith permits, let alone encourages, action on climate change. Again for ease of reference, we might summarize these branches of thought as “mastery,” “promise,” and “end times.”

The *mastery* approach to nature is founded on scriptures that support humanity’s mandate to “subdue” and “have dominion” over nature, as the book of Genesis phrases it (The Holy Bible: Genesis, p. 1). Christians who embrace this view believe that God planned creation “explicitly for [humanity’s] benefit and rule,” and that God provides an inexhaustible bounty of natural resources, which humanity can use however it sees fit (White, 1967, p. 1205).

Similarly, the *promise* approach highlights scriptures that relate God’s promises to protect and care for humanity. One example of this promise comes from the book of Genesis, chapter 9, which reads “When I bring clouds over the earth, my bow will appear in the clouds. Then I will remember the covenant that is between you and me and every living creature, and never again will the waters become a flood to destroy all living flesh" (The Holy Bible: Genesis, p. 9). The application of this promise to the contemporary climate crisis may be most succinctly expressed by a comment made by Pastor Robert Jeffress, a member of then-President Trump’s Evangelical Advisory Board, following a speech by Greta Thunberg. Pastor Jeffres said, “Somebody needs to read poor Greta Genesis, Chapter 9, and tell her the next time she worries about global warming, just look at a rainbow” (Jenson, 2017).

Finally, the *end times* approach is relevant for the portion of Christians, typically Evangelicals, who believe that Christ’s return as predicted in the book of Revelations is imminent. For these people, there is little value in committing to actions that are difficult in the short term and pay off only in the long term. This approach is exemplified by a 2013 comment attributed to Pastor Mark Driscoll, then-leader of two mega-churches, who said, "I know who made the environment. He's coming back and he's going to burn it all up. So yes, I drive an SUV" (Pierson and Roe, 2013).

By taking these perspectives to their natural conclusion, action on climate change can come to seem like an act of hubris: a disregard of God’s instructions, a denial of God's promise, and a distraction from the central Christian project of following God’s will. The Convention of Southern Baptists, for example, considers proposing limits on greenhouse gasses to be “very dangerous.” (Southern Baptist Convention, 2007).

Tensions between Christians and Secular Activist Organizations

Environmental organizations have grappled with the breadth of Christian opinions on climate change in diverse and often contradictory ways. Some secular environmentalists have believed negative viewpoints to be representative of all Christians. In 1970, “the most famous essay ever

written about religion and the environment," *The Historical Roots of Our Ecologic Crisis*, laid the blame for environmental degradation at the feet of Christianity (Zaleha and Szasz, 2015, p. 19). Emphatically declaring that Christianity "insisted that it is God's will that man exploit nature," the paper was widely distributed in teaching materials for the first Earth Day (White, 1967, p. 1205).

Early actions by the secular climate movement were not helpful in reaching the mainstream Christians who have very much wanted action on climate change. In the early 2000s, many of the leading environmental organizations communicated messages that were unlikely to resonate within Christian culture. Messages from these groups often implied that morality is defined by a commitment to environmentalism as the secular environmentalists see it. They also often framed the environmentalists themselves as moral heroes. These messages seldom appealed to Christian values such as stewardship, honor, or justice.

A 2009 video from Greenpeace International typifies this approach (Greenpeace: Inspiring Action, 2009). The video opens with deeply troubling images of animals being slaughtered. It then transitions to a montage of heroic Greenpeace staffers working to stop these atrocities (including by hanging a banner from the outstretched arm of the Christ the Redeemer statue, literally imposing an environmentalist message on a sacred piece of art). Thinking from the perspective of Christians who believe that their role is to steward the miracle of God's creation and to humbly serve the most vulnerable, these messages not only miss the mark, but may even seem offensive.

Similarly, in a 2007 interview, Carl Pope, then-executive director of the Sierra Club, referred to research on the target audience for Sierra Club membership. Mr. Pope extolled his organization's ability to reach people who "loved nature as much as we [Sierra Club members] do," people who "felt responsible for it," and people who "felt they could make a difference" (Big Think 2007a). A message that centers on the moral superiority of being a Sierra Club member may alienate people who spend a lot of time thinking about what they see as a broader and deeper definition of morality.

While the mainstream environmental movement was well intentioned and people such as Sierra Club director Carl Pope even recognized the need to engage people of faith, their outreach efforts did not resonate with the mainstream, middle-of-the-road Christians who make up a vast and diverse swath of the U.S. population (Big Think, 2007b). Instead, these approaches left many Christians cold. They led some to perceive taking action on climate change as "save-the-earth propaganda," "so many things that seem like extremes," and "worshiping the creation instead of trusting the Creator" (Piper, 2020).

Secular environmental organizations' efforts also failed to adequately respond to the shifts among the majority Christian population in the U.S.

First, there was a well-funded effort to ally Evangelicals, a highly organized and influential denomination, with conservative policies and policy-makers. While Evangelicals embraced politically diverse opinions in the mid-20th century, more liberal perspectives were “overtaken by the better organized and more deeply resourced conservative wing of evangelicalism that quickly gained substantial public influence" (Steensland and Wright, 2014, p. 706). Second, there was a well-funded effort to turn conservatives away from accepting the science on climate change. Conservative think tanks, often funded by fossil fuel interests, were “able to define . . . global warming as non-problematic” (McCright and Dunlap, 2003, p. 349). The Evangelical shift towards conservative politics and the shift of conservative politics away from climate science meant that climate organizations needed a sophisticated strategy to engage Christians. Unfortunately, they largely missed this opportunity.

An Overview of Faith-Based Climate Organizations

Standing in the gap left by secular organizations, a network of faith-based non-governmental organisations (NGOs) successfully developed a grassroots Christian climate movement. They based their early efforts on statements made by institutional authorities, such as a 1971 statement on environmental protection by the National Association of Evangelicals, a 1983 mention of “global environmental dangers” by the United States Conference of Catholic Bishops, and the 1993 founding of the National Religious Partnership for the Environment (Borse, 2022; National Conference of Catholic Bishops, 1983).

Faith-based NGOs have achieved two things that are crucial for successful movements (McAdam, 2017). First, they have developed frameworks for community organising by collaborating with authorities within the existing structures of faith communities (Sauer et al., 2021; Webster, 2020). Second, they have drawn on ancient teachings of the faiths to develop the shared stories that help people find meaning in their relationship to big challenges like climate change (McAdam, 2017).

There are likely hundreds of small, local faith and environment NGOs. These organizations do critical work by building relationships and taking action with relatively small but deeply committed groups that are leading change on the local level.

A few organisations have successfully galvanized nationwide movements. Some of these organisations reach Christian communities as part of a wider interfaith effort. These interfaith NGOs include GreenFaith, the National Religious Partnership for the Environment, Blessed

Tomorrow, the National Religious Coalition on Creation Care, and the Center for Earth Ethics. Other organisations are ecumenical, meaning that they engage multiple Christian denominations under the broad umbrella of Christianity. These include A Rocha, Por la Creación, and, to some extent, Creation Justice Ministries, which is Christian in focus but which counts other faith traditions among its partners. Finally, another group of organisations engages single faith traditions within Christianity. This group includes Laudato Si' Movement and Catholic Climate Covenant (which work with Catholic communities), the Evangelical Environmental Network (which works with Evangelical communities), and Green the Church (which works within Black church traditions).

Across the board, all faith-based NGOs engage a variety of leaders. This includes grassroots actors, denominational heads, and institutional partners, affiliates, or members, with an important nuance around hierarchy in Black churches, within which leadership can sometimes be more distributed. The NGOs often promote action under the banner of a faith-relevant term, such as "creation care" or "justice and peace." These NGOs sometimes offer training that gives volunteers more credibility, equipping them to become "champions," "animators," "leaders," "ambassadors," or other signifiers of authority.

Taking Action

Through years of trial and error, faith-based NGOs have identified the methods, networks, and messages that are crucial to engaging communities in climate action. They maintain frequent contact with the people who are on their "lists," typically via email but also via phone calls, texting tools, and social media. Anecdotally, the organisations that engage people of faith often have higher levels of engagement through their communications efforts than the nonprofit industry average. The communications that these NGOs send offer both encouragement and practical resources for volunteers to address climate change within their congregations, schools, or other communities.

Congregations and other communities typically become aware of volunteers' activities when the volunteers organize one-time events such as a prayer service or film screening or when they undertake ongoing work such as developing an environmental education program for young people. The approval of the church's leading pastor(s) for these activities is an important signal to all members that the norms of the community include caring for the environment (Sparkman, 2021).

The volunteers who are active in Christian communities often express significant passion and a sense of personal calling towards their activism, saying things like "I felt compelled to contribute" (Jose, 2023) and "faith has been my compass on this incredible journey towards

environmental stewardship and sustainable living" (Henkel, 2023). In addition to a sense of calling, a sense of unity also pervades much of the Christian work on climate change. These leaders speak about "collective responsibility" (George, 2023) and about building community support to "move us all forward to greater stewardship of our natural world" (Mountain Sky Conference, 2023).

With a strong sense of personal commitment and community support, it is not surprising that Christians' engagement on climate change tends to be durable, with many active in local volunteering over the course of many years, according to anecdotal conversations. Grassroots actors typically engage in sustainability, spirituality, or policy. All three of these avenues can have widespread repercussions for the community as a whole.

Spirituality

A common theme across all environmental activities undertaken by Christian communities is an interest in spirituality. As Paul Gorman, the founder of the National Religious Partnership on the Environment put it, "religious environmentalism is not just a movement with environmental goals, but also a means for helping religious individuals and communities become more authentically religious." (Ellingson, Woodley, and Paik, 2012, p. 269).

Many Christian climate actors speak of having an ecological conversion, one in which the person begins to perceive that acting on climate change is an essential way to demonstrate his or her faith in the world today. For these Christians, an ecological conversion "is less about the turn to nature and more about a responsible and loving attitude towards it, inspired by an appropriate appreciation of the particular role of human beings" (Deane-Drummond, 2012, p. 88). This deep and lasting change in perspective influences many decisions, from daily sustainability habits to policy and voting preferences.

All of the faith and environment NGOs address spirituality. One area of work for these organisations is equipping local community volunteers to organize shared acts of prayer in their communities. Engaging in shared acts of prayer has two outcomes. First, it can be a deeply moving experience, one that transforms the person and inspires or renews a commitment to care for the Earth. Participants often believe that their prayer is efficacious and good in itself and hope that it will lead to real change in climate policies and carbon-intensive lifestyles. Second, prayer bonds actors together. The experience of sharing one's hopes and fears and of committing to something bigger together is a powerful way to create the sense of unity that is important for activist groups to exist (Blee, 2012). From a pragmatic standpoint, this sense of unity is essential to creating strong, durable networks of actors.

Organising prayer services is a relatively low-bar entry point for many volunteers, one that allows them to engage their communities in action on climate change in a way that is familiar to the community and that has no more logistical hurdles than finding a time, place, and group of people to participate. While many local volunteers are willing to undertake this work, they need resources and training. As examples of the type of support provided to volunteers, Laudato Si' Movement provides a monthly prayer guide for volunteers to use in their churches, training for volunteers to facilitate ecological prayer retreats, and a "community contemplation" program that connects volunteers to each other to pray together online (Laudato Si' Movement, 2023). Like many others, this NGO also provides special materials that equip volunteers to connect ecological themes to annual Christian celebrations such as Lent and Advent (Laudato Si' Movement, 2023).

A prayer celebration that deserves special mention is the Feast of St. Francis, a figure from the twelfth century who remains beloved across Christian traditions. St. Francis was known for his care for the natural world and is frequently cited by Christians who are active on climate change as a figure of inspiration. As a saint, he has a dedicated day (October 4) to reflect on his work and life story. As an example of how NGOs build on this day to promote wider community reflection, Catholic Climate Covenant provides materials that equip volunteers to engage their communities in St. Francis events (Catholic Climate Covenant, 2023).

Another area of spiritual work for these organisations is equipping pastors to speak about climate change in their sermons. While activism within congregations often begins with community volunteers, pastors also independently arrive at the conclusion that the climate crisis should be a focal point for their teaching. Given the complexity of climate science, the sensitive nature of this issue in public discourse, and the depth of thinking on how climate change relates to Christianity, many pastors seek guidance from faith-based NGOs. The resources provided to pastors range from multi-week education courses to written materials such as bulletin inserts and sermon outlines to media materials such as videos and posters.

As examples of how organisations fulfil this need, Creation Justice Ministries runs a regular pastor training course (Creation Justice Ministries, 2023), and Green the Church offers summits that bring pastors and other church leaders together and organizes ongoing training seminars on everything from green theology to sustainable practices to building power for political change (Green the Church, 2023).

Many Christian communities take action on spirituality first and then progress to other actions in sustainability and advocacy.

Sustainability

Christian actors' work in sustainability can encompass a wide range of activities, many of which are focused on improving facilities. Facilities improved typically include churches, educational institutions, and communities of religious women and men. The activities range from low-bar, less impactful projects (such as installing recycling bins) to high-bar, more impactful projects (such as installing solar panels). Highly impactful projects such as installing solar panels and increasing energy efficiency can make a real difference in emissions. There are approximately 350,000 church facilities in the U.S., according to the US Religion Census (Association of Statisticians of American Religious Bodies, 2020), and decreasing emissions across this massive portfolio would be significant. As an example of how NGOs are encouraging emissions reductions in these facilities, Catholic Climate Covenant offers a "Catholic Energies" program that has installed solar panels on Catholic institutional buildings, realising "40 projects in 14 states" (Heatherington, 2023).

However, the greatest impact of sustainability efforts may lie beyond the reduction of emissions. Activities to make any facilities upgrades typically require the approval of religious authorities such as the church pastor or school principal. To secure this approval, community volunteers often deliver sustained internal activism, bringing together a committee, holding meetings with members, exploring the budgetary implications of facility improvements, and finally successfully making the case for change. Because the decision to upgrade facilities involves so many stakeholders, it has long-term consequences across programming in many institutions. The curriculum of religious education classes, the prayer and song selections that raise community awareness of the ecological crisis, and even the policy focus of the church might change as a result of this internal activism.

Certifying sustainability improvements allows actors to continue making the case for change beyond the initial decision-making period. Certification regimes, which are optional, typically involve both a long-term commitment from the participating institution and a public statement of its accomplishments, often made by posting a banner or plaque on the grounds of the facility or by publishing statements via the institution's communications channels. Certification provides a way for the church or religious school to communicate that climate action is an ongoing priority for the community. This has ripple effects. Many churches and schools are highly aware of what others in their area are doing, and certification programs can inspire greater ambition across a local area.

There are several options for certification programs offered by faith-based NGOs. The Environmental Protection Agency offers a free program, "ENERGY STAR for Congregations," which is not a certification program per se but does offer many of the benefits of certification (United States Environmental Protection Agency, 2023). These include tools, training, and

support for places of worship, including a benchmarking tool, "Portfolio Manager," that allows places of worship to track improvements over time.

Among the most ambitious of the certification programs may be the Laudato Si' Action Platform (Dicastery for Promoting Integral Human Development, 2023). This platform is a project of the Vatican's environmental and social office–its Dicastery for Promoting Integral Human Development–and has operational support from Laudato Si' Movement. The platform offers advice about the most impactful ways to take action across seven strategic areas, with the advice adjusted to the needs of the user, a tool to track progress across a multi-year period, and a certification regime, helping promote greater ambition in the community as a whole.

Advocacy

Christian communities advocate on a wide range of policy issues, from local to national to global questions. Across the board, Christians' ability to turn out voters and to craft public discourse has been seen as bringing substantial power to the issues they embrace, with past examples including civil rights for African Americans (Marsh, 2008) and opposition to access to abortion (Lewis, 2017; Peters, 2022), as discussed above.

The potential of faith communities to promote pro-climate policies is enormous, and faith NGOs play a crucial role in elevating awareness of climate policies and in equipping actors to address them. In general, faith-based NGOs are 501(c)3 organisations. This means that they must strictly limit their work on lobbying. Rather than promoting or opposing specific candidates for office, these organisations typically support general policy perspectives or specific policy proposals and ensure that policymakers are aware of faith-based demands for action.

In the area of supporting policy, these NGOs work in a wide variety of ways. Most faith-based NGOs organize frequent educational efforts, such as webinars and conference calls, to inform members about policy issues. As one example, the National Religious Partnership for the Environment regularly promotes statements or webinars on national policy issues from partner groups and other allied faith-based organisations (National Religious Partnership for the Environment, 2023).

In the area of connecting with policymakers, many of the faith-based NGOs support both online and in-person efforts. As examples, Catholic Climate Covenant coordinates joint statements from Catholic organisations urging policymakers to support key policy decisions (Catholic Climate Covenant, 2023) and a decades-long program of the National Religious Coalition on Creation Care, the annual National Prayer Breakfast for Creation Care, brings religious leaders together for a day of meetings with members of Congress (National Religious Coalition on Creation Care, 2023a).

While national organisations often encourage the US Congress to develop stronger policies, smaller faith organisations are often deeply effective on more local policy issues. Work on climate justice, for example, can be powerfully addressed at the local level. State and local organisations are able to sustain a focus on particular power plants, coal ash ponds, highways, and other infrastructure assets and are able to pressure elected officials through direct relationships with communities that are aware of the issues and likely to vote. The state affiliates of Interfaith Power and Light, including in Alabama, Illinois, and Georgia, are among the leaders of this work (Alabama Interfaith Power and Light, 2023; Faith in Place, 2023; Georgia Interfaith Power and Light, 2023).

A handful of U.S. faith-based NGOs work on the global level, including GreenFaith and Laudato Si' Movement. GreenFaith organizes mobilisations in Europe, Africa, and Asia, collaborates with UN bodies, and promotes the Fossil Fuel Nonproliferation Treaty. Laudato Si' Movement supports policy change in Hispano-America, Brazil, Western Europe, Eastern Europe, Eastern Africa, South Africa, and the Asia-Pacific region. Examples of its national policy work include supporting the creation of a Polish environmental ministry, protecting Indigenous land stewardship in Ecuador, and organising events with political candidates to discuss coal-based electricity in the Philippines (Laudato Si' Movement, 2023). Laudato Si' Movement also organizes high-level summits in Rome and at various climate and biodiversity COPs and coordinates a body of work on the Fossil Fuel Nonproliferation Treaty (Laudato Si' Movement, 2023). This work by Laudato Si' Movement and GreenFaith demonstrates the extent to which action on climate change is supported by people of faith around the world.

Across the board, Christians' awareness of policy issues–and policymakers' awareness of their interest–pressures officials to commit to support a just energy transition. But direct advocacy is not the only way that faith actors encourage policy shifts. Story-telling on social media and in the press can be as effective as or even more effective than direct engagement.

When policy makers maintain the perception that action on climate is a priority primarily for a niche audience of left-leaning voters, it can be all too easy for decision makers to dismiss demands for ambitious climate policies. Action by people of faith communicates a very different story. It suggests that a tremendous swath of the American public is following this issue and expecting accountability from its elected officials. This provides a framework for centrist policymakers who would like to act on climate change but who are reluctant to align themselves with the approach of "leftist" activists. Contributions by Christian actors bring unique and urgently needed strengths to the larger movement of climate advocates.

These news stories are not reaching faith actors alone. Instead, they are reaching the broad spectrum of people who are curious about why unexpected leaders like Pope Francis are

speaking publicly about the climate crisis. This sense of a massive movement among unexpected allies constitutes a powerful argument for elected officials who are keen to both act on climate change and keep their jobs.

Faith-Based Climate Organizations' Unmet Potential

The successes of faith-based environmental NGOs represent a proof of concept. However, the total reach of these organizations, when compared with the more than 200 million Christians in the U.S., is tiny. In fact, less than 10% of Christians often hear about climate change in sermons or speak about climate change with someone in their congregation (Alper, 2022). A possible explanation is the lack of financial resources.

Faith-based NGOs are dramatically under-resourced. Based on budgets shared internally, many of the faith-based NGOs see annual revenues of between $1 million and $4 million each. In contrast, annual reports indicate that the annual revenue of secular climate NGOs (such as the Climate Reality Project and 350.org) is approximately $20 million each, while the total annual revenue of a few larger environmental organizations that devote a significant portion of their work to climate change (Environmental Defense Fund, National Resources Defense Council, and the Union of Concerned Scientists) amounts to nearly $400 million combined.

The reasons why faith-based climate NGOs are dramatically under-resourced in comparison to their secular counterparts are unclear. This may stem in part from the early divisions between the environmental movement and people of faith that are explored above. In addition, the relative lack of funding for faith-based NGOs, all of which ultimately target grassroots communities and several of which engage communities of color, is indicative of a broader trend within environmental philanthropy. Various studies of environmental philanthropy indicate that funding for grassroots organizations is lower than funding for “insider” organizations, and that funding for BIPOC-led and -focused organizations is lower than funding for white-focused organizations (Ramirez et al. 2022; Kunreuther and Thomas-Breitfeld, 2020; Bailey, Levoit, and Perch, 2022).

The result is that despite their proven methods, faith-based NGOs lack the capacity to scale up. Additional funding would provide staff hours to explore the demographic and regional data that would point the way to strategic expansion of their work, specialized staff expertise to develop robust analysis and evaluation programs, and breathing room in staff time to apply learnings in an iterative way for continuous improvement.

An additional consequence of funding constraints is a limited ability to cooperate. Faith-based NGOs do often work together in a relatively limited way on specific programs. As examples, Catholic Climate Covenant and Laudato Si' Movement collaborate in the training of grassroots

volunteers and a board member of the Evangelical Environmental Network also serves on the board of Creation Justice Ministries. However, most faith-based NGOs do not have sufficient staff time to explore and implement more comprehensive and sustained coalition-building.

Healthy coalitions are a critical way for social movements to drive change. They enable individual organizations to work together in "mobilizing large numbers of people and demonstrating widespread support for an issue" (Van Dyke and Amos, 2017, p. 2). Faith communities offer a good foundation on which to build inter-organizational collaboration, as they have the strong social ties, organizational structures, and cohesive identity that are needed to work in coalition (Van Dyke and Amos, 2017). The resource scarcity that prevents faith-based NGOs from fully engaging in coalition-building holds back the effectiveness of the movement as a whole.

Directions Forward

Faith-based NGOs are bootstrapping a social movement that is active across spirituality, sustainability, and advocacy. The failure to effectively support them is a tragically missed opportunity. While a social movement on climate has delivered notable successes, it has also been constrained by its lack of political, racial, and geographic diversity. Meanwhile, most people in the United States are Christian, Christianity reaches across conventional divides, and Christians have delivered success on policy issues across the political spectrum. This section of this paper suggests lines of inquiry for funders and faith-based NGOs to build a movement that more effectively brings Christians' strengths to bear on the existential challenge of climate change.

Movement-building organizations typically identify an audience, craft messages that are likely to engage the audience, activate messengers to share those messages, and find the right medium to deliver them (Schmidt, 2023). For example, a social movement to limit the regulation of firearms might define gun owners as a target audience, shape a message around firearm ownership as freedom, identify messengers among action movie stars and former soldiers, and deliver the message via social media platforms that are used by the target audience. How might a greater Christian movement for climate action be built?

Audiences

To identify an audience for building a social movement of Christians who support action on climate change, the first consideration is narrowing down the more than 200 million Christians who live in the United States. Only some Christians support action on climate change. To identify likely supporters, political party affiliation is a useful proxy. Party affiliation supersedes religious identity in influencing individuals' opinion on climate change (Alper, 2022).

Hard-right Republicans generally oppose action on climate, and attempts to engage this constituency are unlikely to be productive (Kennedy and Tyson, 2024). While some evidence suggests that people across the political spectrum support policies that are meant to address the climate crisis, other evidence points to the difficulty of shifting engrained opposition (Marlon et al., 2025; Palm, Lewis and Fang, 2017). Anecdotally, experience has taught the leaders of faith-based NGOs that deeply conservative Christians are reluctant to take part in conversations about climate change.

Engaging hard-left Democrats is more feasible, as they generally support action on climate change (Kennedy and Tyson, 2024). One challenge inherent in this strategy is that many U.S. voting districts are gerrymandered, and activating more left-leaning voters will primarily build a constituency for the Democratic elected officials who already support the energy transition.

Instead of reaching people on the far right or the far left, a more successful approach may be engaging center-left, centrist, or center-right Christians. While partisanship is increasing in the U.S., more centrist constituencies do remain (Harrison, 2020). The Pew Research Center estimates that 35% of American voters are either truly politically neutral or only "lean" in one direction or another, rather than being deeply partisan (Pew Research Center, 2024b). Christians within this group are potentially open to conversations on climate change and would build a base of support in the political middle. Given that many political bodies are bifurcated along party lines and that they tend to pass and repeal climate policies with the changing of power from one party to the other, a small cadre of centrist policy makers can play an outsized role. Reaching these policy makers through unexpected allies among centrist Christians could be deeply impactful.

Beyond political orientation, additional factors such as age, race, gender, urban/suburban/rural location, and denominational affiliation are important in identifying an audience to build a Christian social movement for climate action. In general, younger people, people of color, women, and urban or suburban people are more likely to support action on climate change (Funk, 2021; Lazri and Koniski, 2019; Marlon et al. 2024; Pechar Diamond, Bonnie and Rowe, 2020). Among the largest U.S. Christian denominations, Black Protestants, Catholics, and mainline Protestants are likely supporters (Alper, 2022).

To build the social movement, faith-based NGOs and their funders may be well served by conducting data analysis to identify specific Christian audiences that align with these demographic factors and that are politically centrist.

Messages

Messages work well when they are tailored to the audience, and the audiences mentioned here are too broad to be sufficiently addressed within the scope of this paper. However, a few general rules apply. Messages that simply supply information about the science of climate change are not likely to succeed (Suldovsky, 2017). At the same time, there is mixed research on the efficacy of messages that focus on morality or faith values; it is not clear that these are any more likely to succeed than science-based messages (Goldberg, Gustafson and van der Linden, 2020).

One signal remains clear: messages on social norms tend to be effective (Constantino et al., 2022). Framing climate change as a religious issue *while* communicating that other Christians support environmental protection is likely to succeed (Goldberg et al., 2019). Delivering these messages over a long period of time can increase their effectiveness (Goldberg, Gustafson and van der Linden, 2020).

Messengers

Identifying messengers is likewise beyond the scope of this paper, given the complexity of the potential audience. However, a good messenger is typically someone who is "credible and who speaks to [the audiences'] world views, or who even belongs to their community" (Sippel, Shaw, and Marshall, 2022). Christian churches have long-standing training and support programs that cultivate leaders who meet these criteria. People in many positions within Christian communities, including both clergy (such as bishops, pastors, and women and men religious) and lay leaders (such as religious educators, deacons and elders, and choir leaders) would be well suited. In addition, online influencers such as Gavin Ortlund and Esau McCaulley are followed by many Christians.

While many of the faith-based NGOs do manage programs to engage and train these messengers, more analysis is needed to determine which messengers most effectively reach the centrist Christians in the outreach audience. For example, in more conservative churches, the authority of the head pastor can be an important signal of approval for messages, while in more liberal churches the authority of a lay committee leader may be sufficient. Exploring whether there are meaningful trends for trusted authorities within churches that are primarily made up of politically centrist congregants could improve the effectiveness of the movement as a whole.

Media

Different audiences use different media channels and in different ways, and the breadth of media used by the potential audience is beyond the scope of the paper. One important note is that Christian communities have channels of communication beyond those that are available to secular audiences. Bulletin inserts and listserve newsletters are deeply personal and encourage openness to messages from leadership. Sermons and study groups promote the sustained, deep

consideration "that is likely to lead to enduring attitude change" (Goldberg, Gustafson and van der Linden, 2020, p. 315).

Conclusion

The climate crisis is an existential risk to humanity, and ambitious policy change is urgently needed to address it. A social movement to encourage policy makers to act achieved remarkable successes. Working with the kind of abstract, risk-based, future-affecting problem that our brains famously resist, the movement has managed to raise awareness of the climate crisis and to drive real change in policy.

However, much remains to be done. Christian communities, which offer a long history of delivering social change and unique strengths that the larger climate movement needs, offer a valuable way forward.

The history of engagement between Christian communities and the mainstream climate movement is fraught. Long-standing divisions are rooted in both the lack of common cultural signifiers and the broad social shifts that shaped American culture over the past few decades.

Despite these challenges, a diverse and robust network of faith-enviroment NGOs has developed structures, methods, and messages/messengers to galvanize action among Christian communities. These successes represent a proof of concept. Much more intentional and fully developed collaboration from funders is needed to bring them up to scale.

It is clear that *not* engaging Christian communities is not an option. With a highly organized and well funded opposition doing everything it can to extend the fossil fuel-economy past the point of no return, the climate movement should take advantage of a big, organized, motivated community that has proven its ability to deliver change.

References

A Rocha (2023). *A Rocha*. https://arocha.org/en/ [Accessed 1 December 2023].

Alabama Interfaith Power & Light (2023). *Alabama Interfaith Power & Light.* https://www.alabamaipl.org/ [Accessed 1 December 2023].

Alper, B. (2022). *How Religion Intersects With Americans' Views on the Environment.* Pew Research Center, 17 November. https://www.pewresearch.org/religion/2022/11/17/how-religion-intersects-with-americans-views-on-the-environment/ [Accessed 1 August 2025].

Association of Statisticians of American Religious Bodies (2020). *US Religion Census*. https://www.usreligioncensus.org/ [Accessed 1 December 2023].

Baily, K., Levoit, D., and Perch, M. (2022). *To increase support for BIPOC-led climate work, foundations must get creative. Here's how.* Philanthropy News Digest, 6 July. https://philanthropynewsdigest.org/features/commentary-and-opinion/to-increase-support-for-bipoc-led-climate-work-foundations-must-get-creative.-here-s-how [Accessed 1 August 2023].

Balsari, S. et al. (2020). Climate Change, Migration, and Civil Strife. *Current Environmental Health Report* 7, 404-414. https://link.springer.com/content/pdf/10.1007/s40572-020-00291-4.pdf [Accessed 1 March 2025].

Berry, T. (2011). *The Christian Future and the Fate of the Earth*. Maryknoll: Orbis Books.

Big Think (2007a). *Religion and the Environmental Movement* https://bigthink.com/videos/religion-and-the-environmental-movement/ [Accessed 1 September 2023].

Big Think (2007b). *What is the Sierra Club?*. https://bigthink.com/videos/what-is-the-sierra-club/ [Accessed 1 September 2023].

Blee, K. (2012). *Democracy in the Making: How Activist Groups Form*. New York: Oxford University Press.

Blessed Tomorrow (2023). *Blessed Tomorrow.* https://blessedtomorrow.org/ [Accessed 1 December 2023].

Borse, D., et al. (2022). *Loving the Least of These.* Washington, DC: National Association of Evangelicals. https://www.nae.org/loving-the-least-of-these/ [Accessed 1 December 2023].

Brulle, R. (2020). Denialism: organized opposition to climate change action in the United States, in Konisky, D. (ed.) *Handbook of Environmental Policy*. Northampton: Edward Elgar Publishing, pp. 328 - 341.

Burnidge, C. (2022). Religious impressions on American politics. *Northern Iowan*, 7 April, https://www.northerniowan.com/16865/opinion/religious-impressions-on-american-politics/.

Catholic Climate Covenant (2023). *Catholic Climate Covenant*. https://catholicclimatecovenant.org/ [Accessed 1 December 2023].

Center for Earth Ethics (2023). *Center for Earth Ethics*. https://centerforearthethics.org/ [Accessed 1 December 2023].

Centers for Disease Control and Prevention (2025). *Indicator: Emergency Department Visits for Heat Stress*. https://ephtracking.cdc.gov/indicatorPages?selectedContentAreaAbbreviation=35&selectedIndicatorId=89 [Accessed 1 March 2025].

Christianity Today (ed.) (2022). *Stewards of the Earth: Christianity and Creation Care*. Bellingham: Lexham Press.

Cialdini, R. and Jacobson, R. (2021). Influences of social norms on climate change-related behaviors. *Current Opinion in Behavioral Sciences,* 42, 1-8. https://www.sciencedirect.com/science/article/abs/pii/S2352154621000061 [Accessed 1 August 2023].

CNA Military Advisory Board (2014). *National Security and the Accelerating Risks of Climate Change*. Alexandria: CNA Corporation. https://www.cna.org/archive/CNA_Files/pdf/mab_5-8-14.pdf [Accessed 1 March 2025].

Combs, B. (2016). Black (and Brown) Bodies Out of Place: Towards a Theoretical Understanding of Systematic Voter Suppression in the United States. *Critical Sociology,*

42(4-5), 535–549. https://www.researchgate.net/profile/Barbara-Combs-2/publication/272938855_Black_and_Brown_Bodies_Out_of_Place_Towards_a_Theoretical_Understanding_of_Systematic_Voter_Suppression_in_the_United_States/links/582b249908aef19cb806a55e/Black-and-Brown-Bodies-Out-of-Place-Towards-a-Theoretical-Understanding-of-Systematic-Voter-Suppression-in-the-United-States.pdf [Accessed 1 August 2023].

Constantino, S. et al. (2022). Scaling Up Change: A Critical Review and Practical Guide to Harnessing Social Norms for Climate Action. *Psychological Science in the Public Interest*, 23(2), 50–97. https://journals.sagepub.com/doi/abs/10.1177/15291006221105279 [Accessed 15 March 2025.

Convention of Southern Baptists (2007). Resolution On Global Warming, 1 June. https://www.sbc.net/resource-library/resolutions/on-global-warming/ [Accessed 1 August 2023].

Copernicus Climate Change Service (2025). Copernicus: 2024 is the first year to exceed 1.5°C above pre-industrial level. *European Centre for Medium-Range Weather Forecasts,* 10 January. https://climate.copernicus.eu/copernicus-2024-first-year-exceed-15degc-above-pre-industrial-level [Accessed 1 March 2025].

Creation Justice Ministries (2023). *Creation Justice Ministries*. https://www.creationjustice.org/ [Accessed 1 December 2023].

Deane-Drummond, C. (2012). Ecological conversion in a changing climate: An ecumenical perspective on ecological solidarity. *International Journal of Orthodox Theology*, 3(1), 78–104.

Dicastery for Promoting Integral Human Development (2023). *Laudato Si' Action Platform*. https://laudatosiactionplatform.org/ [Accessed 1 December 2023].

Deckman, M. et al. (2023). Abortion, religion, and racial resentment: Unpacking the underpinnings of contemporary abortion attitudes. *Social Science Quarterly*. 104(2), 140-152. https://www.newswise.com/pdf_docs/167586280482523_Greene%20abortion%20and%20race%202023.pdf [Accessed 1 September 2023].

Dowd, M. (1991). *Earthspirit: A Handbook for Nurturing an Ecological Christianity*. Waterford: Twenty Third Publications.

Ellingson, S., Woodley, V. A., and Paik, A. (2012). The structure of religious environmentalism: Movement organizations, interorganizational networks, and collective action. *Journal for the Scientific Study of Religion*, 51(2), 266–285. https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1468-5906.2012.01639.x [Accessed 1 August 2023].

Evangelical Environmental Network (2023). *Evangelical Environmental Network*. https://creationcare.org/ [Accessed 1 December 2023].

Faith in Place (2023). *Faith in Place*. https://www.faithinplace.org/ [Accessed 1 December 2023].

Fairclough, A. (1977). *A Study of the Southern Christian Leadership Conference and the Rise and Fall of the Nonviolent Civil Rights Movement.* Doctorate. University of Keele. https://keele-repository.worktribe.com/output/413619/ [Accessed 1 September 2023].

Fang, C. (2023). *To Change Everything, We Need Everyone: Belonging, Equity, and Diversity in the U.S. Climate Movement.* Doctorate. Antioch University New England. https://www.proquest.com/openview/4cb309f9762def4692ab71b42e5c521e/1?pq-origsite=gscholar&cbl=18750&diss=y [Accessed 1 March 2025].

Franciscus (2017). *Laudato Si': On Care for Our Common Home*. Rome: Libreria Editrice Vaticana.

Funk, C. (2021). *Key findings: How Americans' attitudes about climate change differ by generation, party and other factors*. Pew Research Center, 26 May. https://www.pewresearch.org/short-reads/2021/05/26/key-findings-how-americans-attitudes-about-climate-change-differ-by-generation-party-and-other-factors/ [Accessed 15 March 2025].

Gamson, W. (1975) *The Strategy of Social Protest.* Belmont: Dorsey Press.

Gelb, J., & Shogan, C. J. (2005). Community activism in the USA: Catholic hospital mergers and reproductive access. S*ocial Movement Studies*, 4(3), 209–229.

George, Z. (2023). Catholic groups join sea of protesters in New York march against fossil fuels. *National Catholic Reporter*, 19 September.

https://www.ncronline.org/earthbeat/justice/catholic-groups-join-sea-protesters-new-york-march-against-fossil-fuels. [Accessed 1 September 2023].

Georgia Interfaith Power and Light (2023). *Georgia Interfaith Power and Light*. https://gipl.org/ [Accessed 1 December 2023].

Goldberg, M. Gustafson, A. and van der Linden, S. (2020) Leveraging Social Science to Generate Lasting Engagement with Climate Change Solutions. *One Earth* 3(3), 314-324. https://www.sciencedirect.com/science/article/pii/S2590332220304206 [Accessed 15 March 2025].

Goldberg, M. et al. (2019). A Social Identity Approach to Engaging Christians in the Issue of Climate Change. *Science Communication* 41(4), 442-463. https://www.researchgate.net/profile/Matthew-Goldberg-2/publication/334298965_A_Social_Identity_Approach_to_Engaging_Christians_in_the_Issue_of_Climate_Change/links/5d28a17f92851cf4407e67fa/A-Social-Identity-Approach-to-Engaging-Christians-in-the-Issue-of-Climate-Change.pdf [Accessed 15 March 2025].

Green the Church (2023). *Green the Church*. https://www.greenthechurch.org/ [Accessed 1 December 2023].

GreenFaith (2023). *GreenFaith*. https://greenfaith.org/ [Accessed 1 December 2023].

Greenpeace: Inspiring Action (2009). YouTube video, added by Greenpeace International [Online]. Available at https://www.youtube.com/watch?v=zVu9eawb1QY [Accessed 1 August 2023].

Hadden, J. (2017). 'Learning from defeat: The strategic reorientation of the U.S. climate movement', in Cassegard, C. et al. *Climate Action in a Globalizing World: Comparative Perspectives on Environmental Movements in the Global North*. New York: Routledge, pp. 127-148. https://d1wqtxts1xzle7.cloudfront.net/115662418/Climate_Action_proof-libre.pdf?1717546186=&response-content-disposition=inline%3B+filename%3DClimate_Action_in_a_Globalizing_World.pdf [Accessed 1 March 2025].

Harrison, K. (2020). *The Forgotten Center: An Analysis into the Disappearing Moderate in a Climate of Increasing Political Polarization*. Inquiries Journal 12. http://www.inquiriesjournal.com/a?id=1796 [Accessed 15 March 2025].

Heatherington, K. (2023). US Catholic dioceses are leading the ‘green revolution’ championed by popes. *The Boston Pilot*, 1 September. https://www.thebostonpilot.com/article.php?ID=195476 [Accessed 1 December 2023].

Henkel, L. (2023). Cycling into season of creation. *Interviewed by Laudato Si’ Movement, Laudato Si’ Movement*, 12 September. https://laudatosimovement.org/news/cycling-into-season-of-creation/. [Accessed 1 September 2023].

Holland, J. (2020) *Tiny You: A Western History of the Anti-Abortion Movement.* Oakland: University of California Press.

Houck, D. and Dixon, D. (2006). *Rhetoric, Religion and the Civil Rights Movement, 1954-1965*. Waco: Baylor University Press.

The Holy Bible (2007). *Genesis. 1:31; Genesis 9:14-15. The Inclusive Bible: The First Egalitarian Translation*. Lanham: Rowman and Littlefield Publishers, Inc.

Jenson, K. (2017). Evangelical Pastor to Greta Thunberg: Don't Worry, God Promised Not to Flood Earth Again. *Newsweek*, 25 September. https://www.newsweek.com/robert-jeffress-greta-thunberg-rainbow-flood-climate-1461326 [Accessed 1 August 2023].

Jose, J. (2023). Community Resilience and Empowerment: Lessons from a Divine Encounter in the Philippines. *Laudato Si’ Action Platform*, 13 June. https://laudatosiactionplatform.org/community-resilience-and-empowerment-lessons-from-a-divine-encounter-in-the-philippines/ [Accessed 1 September 2023].

Kunreuther, F. and Thomas-Breitfeld, S. (2020). *Race to Lead Revisited: Obstacles and Opportunities in Addressing the Nonprofit Racial Leadership Gap*. Building Movement Project. https://9ca930.p3cdn2.secureserver.net/wp-content/uploads/2020/07/RTL_Revisited_National-Report_Final.pdf [Accessed 1 March 2023].

Lacombe, M. (2021). *Firepower*: *How the NRA Turned Gun Owners into a Political Force*. Princeton: Princeton University Press.

Laudato Si’ Movement (2023a). *Divestment*. https://laudatosimovement.org/divestment/ [Accessed 1 December 2023].

Laudato Si' Movement (2023b). *Laudato Si' Movement*. https://laudatosimovement.org/ [Accessed 1 December 2023].

Lazri, A. and Konisky. D. (2019). Environmental Attitudes Across Race and Ethnicity. *Social Science Quarterly* 100(4), 1039-1055. https://papers.ssrn.com/sol3/Delivery.cfm?abstractid=3380764 [Accessed 15 March 2025].

Lewis, A. (2017). *The Rights Turn in Conservative Christian Politics: How Abortion Transformed the Culture Wars*. New York: Cambridge University Press.

Marlon, J. et al. (2024). *Explore Climate Change in the American Mind.* Yale Program on Climate Change Communication, 20 May. https://climatecommunication.yale.edu/visualizations-data/americans-climate-views/ [Accessed 15 March 2025]

Marlon, J. et al. (2025). *Yale Climate Opinion Maps 2024*. Yale Program on Climate Change Communication, 13 March. https://climatecommunication.yale.edu/visualizations-data/ycom-us-2024/ [Accessed 15 March]

Marsh, C. (2008). *The Beloved Community: How Faith Shapes Social Justice from the Civil Rights Movement to Today*. New York: Basic Books.

Marshall, G. (2015). *Don't Even Think About It: Why Our Brains Are Wired to Ignore Climate Change.* New York: Bloomsbury USA.

McAdam, D. (2017). Social movement theory and the prospects for climate change activism in the United States. *Annual Review of Political Science*, 20, 189–207. https://www.annualreviews.org/doi/full/10.1146/annurev-polisci-052615-025801 [Accessed 1 December 2023].

McCallum, M. (2019). Perspective: Global country-by-country response of public interest in the environment to the papal encyclical, Laudato Si'. *Biological Conservation*, 235, 209–225.

McCright, A. and Dunlap, R. (2003). Defeating Kyoto: The Conservative Movement's Impact on U.S. Climate Change Policy. *Social Problems*, 50(3), 348-373. https://www.researchgate.net/profile/Riley-Dunlap/publication/228594257_Defeating_Kyoto_The_Conservative_Movement%27s_Impact_on_US_Climate_Change_Policy/links/0

deec52741384ef5d7000000/Defeating-Kyoto-The-Conservative-Movements-Impact-on-US-Climate-Change-Policy.pdf [Accessed 1 August 2023].

Moser, S. (2010). Communicating climate change: history, challenges, process and future directions. *WIREs Climate Change* 1(1), 31-53. http://danida.vnu.edu.vn/cpis/files/References/Climate%20Change/Communicating%20climate%20change%20history,%20challenges,%20process%20and%20future%20directions.pdf [Accessed 1 March 2025].

Mountain Sky Conference (2023). *Creation Justice*. https://www.mtnskyumc.org/creation-justice [Accessed 1 December 2023].

Musa, S. (2016). The Impact of NRA on the American Policy. *Journal of Political Sciences & Public Affairs* 4(4), p. 1-6. https://www.researchgate.net/publication/312518552_The_Impact_of_NRA_on_the_American_Policy [Accessed 1 March 2025].

NASA Science Editorial Team (2022). *A Force of Nature: Hurricanes in a Changing Climate.* https://science.nasa.gov/earth/climate-change/a-force-of-nature-hurricanes-in-a-changing-climate/ [Accessed 1 March 2025].

National Conference of Catholic Bishops (1983). *The Challenge of Peace: God's Promise and Our Response*: *A Pastoral Letter on War and Peace by the National Conference of Catholic Bishops.* https://www.usccb.org/upload/challenge-peace-gods-promise-our-response-1983.pdf [Accessed 1 March 2023].

National Religious Coalition on Creation Care (2023a). *Annual Washington Week Events and Prayer Breakfast 2023*. https://nrccc.org/events/ [Accessed 1 December 2023].

National Religious Coalition on Creation Care (2023b). *National Religious Coalition on Creation Care*. https://nrccc.org/ [Accessed 1 December 2023].

National Religious Partnership for the Environment (2023). *National Religious Partnership for the Environment*. http://www.nrpe.org/ [Accessed 1 December 2023].

Palm, R., Lewis, G. and Fang, B. (2017). What Causes People to Change Their Opinion about Climate Change? *Annals of the American Association of Geographers*, 107(4), 883–896. https://provost.gsu.edu/files/2019/02/What-Causes-People-to-Change-their-Opinion-about-Climate-Change.pdf [Accessed 15 March 2025].

Pechar Diamond, E., Bonnie, R. and Rowe, E. (2020). *Rural Attitudes on Climate Change: Lessons from National and Midwest Polling and Focus Groups.* NI Report 20-06. Durham: Duke University.

Pew Research Center (2020). *As Economic Concerns Recede, Environmental Protection Rises on the Public's Policy Agenda.* Pew Research Center, 13 February. https://www.pewresearch.org/politics/2020/02/13/as-economic-concerns-recede-environmental-protection-rises-on-the-publics-policy-agenda/ [Accessed 1 March 2025].

Pew Research Center (2024a). *Party identification among religious groups and religiously unaffiliated voters.* Pew Research Center, 9 April. https://www.pewresearch.org/politics/2024/04/09/party-identification-among-religious-groups-and-religiously-unaffiliated-voters/ [Accessed 1 March 2025].

Pew Research Center (2024b). *The partisanship and ideology of American voters.* Pew Research Center, 9 April. https://www.pewresearch.org/politics/2024/04/09/the-partisanship-and-ideology-of-american-voters/ [Accessed 15 March 2025].

Pew Research Center (2025). *Age, race, education and other demographic traits of U.S. religious groups.* Pew Research Center, 26 February. https://www.pewresearch.org/religion/2025/02/26/age-race-education-and-other-demographic-traits-of-us-religious-groups/ [Accessed 1 March 2025].

Pierson, R. and Roe, G. (2013). Mark Driscoll: Gas-Guzzlers a Mark of Masculinity. *Sojourners*, 9 May 2013. https://sojo.net/articles/mark-driscoll-gas-guzzlers-mark-masculinity [Accessed 1 August 2023].

Piper, J. (2020). 'How Should Christians Respond to Climate Change?', *Ask Pastor John*, Desiring God [Podcast]. June 12, 2020. Available at https://www.desiringgod.org/interviews/how-should-christians-respond-to-climate-change [Accessed 1 September 2023].

Por la Creación (2023). *Por la Creación*. https://porlacreacion.org/ [Accessed 1 December 2023].

Pou-Amérigo, M.-J. (2018). Framing 'Green Pope' Francis: Newspaper coverage of encyclical *Laudato Si*' in the United States and the United Kingdom. *Church, Communication, and Culture*, 3(2), 136–151.

https://www.tandfonline.com/doi/pdf/10.1080/23753234.2018.1478229 [Accessed 1 August 2023].

Ramirez, J. et al. (2022). Grassroots Enviroots Environmental Justice Work and Philanthropy: Challenges and Opportunities. *The Foundation Review* 14(1), 33-46.

Ray, J. (2020). *How Black Americans saved Biden and American democracy*. Brookings, 24 November. https://www.brookings.edu/articles/how-black-americans-saved-biden-and-american-democracy/ [Accessed 1 March 2023].

Reichenbach, B. and Anderson, V. (2002). *On Behalf of God: A Christian Ethic for Biology*. Eugene: Wipf & Stock Publishers.

Richardson, R., Schulz, J., and Crawford, K. (2019). Dirty Data, Bad Predictions: How Civil Rights Violations Impact Police Data, Predictive Policing Systems, and Justice. *N.Y.U. Law Review Online.* 94(192), 192-233. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3333423 [Accessed 1 September 2023].

Richter, S. (2020). *Stewards of Eden: What Scripture Says about the Environment and Why It Matters*. Westmont: InterVarsity Press.

Rochan, D. and Mazmanian, T. (1993) Social Movements and the Policy Process. *The Annals of the American Academy of Political and Social Science, 528, 75-87.* https://journals.sagepub.com/doi/pdf/10.1177/0002716293528001006 [Accessed 1 March 2025].

Rockström, J. et al. (2009) A safe operating space for humanity. *Nature* 461, 472-475. https://www.nature.com/articles/461472a [Accessed 1 March 2025].

Rockström, J. (2023) *A safe and just future for humanity on Earth.* 9 February, Uppsala University, Uppsala. https://earth4all.life/events/rockstrom-safe-just-future-talk-uppsala/ [Accessed 1 March 2025].

Rowling, M. and Mackinnon, M. (2015). Pope Francis puts his shoes in the centre of Paris to protest against climate change. *Independent*, 30 November. https://www.independent.co.uk/news/people/pope-francis-puts-his-shoes-in-the-centre-of-paris-to-protest-against-climate-change-a6754151.html [Accessed 1 December 2023].

Santmire, H. (1985). *The Travail of Nature: The Ambiguous Ecological Promise of Christian Theology*. Philadelphia: Fortress Press.

Sauer, K., et al. (2021). Six minutes to promote change: People, not facts, alter students' perceptions on climate change. *Academic Practice in Ecology and Evolution*, 11, 5790–5802. https://onlinelibrary.wiley.com/doi/pdf/10.1002/ece3.7553 [Accessed 1 September 2023].

Schmidt, V. (2023). Populist agenda-setting. *Journal of European Public Policy*, 1–24. https://www.iee-ulb.eu/content/uploads/2024/04/Schmidt-2023-Populist-agenda-setting-online.pdf [Accessed 15 March 2025].

Shaw, M. (2015). *Paris Earth Summit: Visual Activism Rises to the Climate*. https://www.readingthepictures.org/2015/12/the-paris-earth-summit-visual-activism-rises-to-the-climate/ [Accessed 1 December 2023].

Shearer, T. (2015). Invoking Crisis: Performative Christian Prayer and the Civil Rights Movement. *Journal of the American Academy of Religion*, 83(2), 490–512. https://academic.oup.com/jaar/article-abstract/83/2/490/713404 [Accessed 1 September 2023].

Sippel, M., Shaw, C. & Marshall, G. (2022). *Ten key principles: How to communicate climate change for effective public engagement.* Climate Outreach Working Paper. Climate Outreach. https://www.researchgate.net/profile/Chris-Shaw-10/publication/362189002_Ten_Key_Principles_How_to_Communicate_Climate_Change_for_Effective_Public_Engagement/links/66a6cccdc6e41359a8469367/Ten-Key-Principles-How-to-Communicate-Climate-Change-for-Effective-Public-Engagement.pdf [Accessed 15 March 2025].

Smith, G. et al. (2025). *Decline of Christianity in the U.S. Has Slowed, May Have Leveled Off.* Pew Research Center, 26 February. https://www.pewresearch.org/religion/2025/02/26/decline-of-christianity-in-the-us-has-slowed-may-have-leveled-off/ [Accessed 1 March 2025].

Sparkman, G., Howe, L. and Walton, G. (2021). How social norms are often a barrier to addressing climate change but can be part of the solution. *Behavioural Public Policy*, 5(4), 528–555. https://www.cambridge.org/core/journals/behavioural-public-policy/article/abs/how-social-norms-are-often-a-barrier-to-addressing-climate-change-but-can-be-part-of-the-solution/90BCDC030D23B9CE5078FB025EEBECCB [Accessed 1 December 2023].

Steensland, B. and Wright, E. (2014) American Evangelicals and Conservative Politics: Past, Present, and Future. *Sociology Compass* 8(6), 705-717. https://compass.onlinelibrary.wiley.com/doi/abs/10.1111/soc4.12175 [Accessed 1 September 2023].

Suldovsky, B. (2017). The Information Deficit Model and Climate Change Communication. *Oxford Research Encyclopedia of Climate Science.* https://oxfordre.com/climatescience/view/10.1093/acrefore/9780190228620.001.0001/acrefore-9780190228620-e-301 [Accessed 15 March 2025].

Trout, K. (2023). *New Data: Shut Down 60% of Existing Fossil Fuel Extraction to Keep 1.5°C in Reach.* Oil Change International. https://oilchange.org/blogs/shut-down-60-percent-existing-fossil-fuel-extraction-1-5c/ [Accessed 1 March 2025].

Tyson, A., Funk, C., and Kennedy, B. (2023). *What the data says about Americans' views of climate change*. Pew Research Center. https://www.pewresearch.org/short-reads/2023/08/09/what-the-data-says-about-americans-views-of-climate-change/ [Accessed 1 March 2025].

Tyson, A. and Kennedy, B. (2024). *How Republicans view climate change and energy issues.* Pew Research Center. https://www.pewresearch.org/short-reads/2024/03/01/how-republicans-view-climate-change-and-energy-issues/ [Accessed 1 March 2025].

United Nations (2025). *For a livable climate: Net-zero commitments must be backed by credible action.* https://www.un.org/en/climatechange/net-zero-coalition [Accessed 1 March 2025].

United States Environmental Protection Agency (2023). *ENERGY STAR for Congregations*. https://www.energystar.gov/buildings/resources_audience/congregations [Accessed 1 December 2023].

Van Brempt, K. (2015). *What We Can't Do, Francis Can*. https://www.euractiv.com/section/climate-environment/opinion/what-we-can-t-do-francis-can/ [Accessed 1 December 2023].

Van Dyke, N. and Amos. B. (2017). Social movement coalitions: Formation, longevity, and success. *Sociology Compass* 11(7), 1-17.

https://sites.ucmerced.edu/files/nvandyke/files/van_dyke_and_amos_-_social_movement_coalitions.pdf [Accessed 1 March 2025].

Webster, R., et al. (2020). *Communicating Climate Change During the COVID-19 Crisis: What the Evidence Says*. Oxford: Climate Outreach. https://orca.cardiff.ac.uk/id/eprint/135308/1/Climate-Outreach-Communicating-climate-change-during-Covid-19-crisis%20(3).pdf [Accessed 1 December 2023].

White, L. (1967). The Historic Roots of Our Ecologic Crisis, *Science, New Series*, 155(3767) 1203-1207. https://archive.org/details/HistoricalRootsOfEcologicalCrisisV [Accessed 1 August 2023].

World Food Program USA (2024). *How Climate Change Is Causing World Hunger.* https://www.wfpusa.org/articles/how-climate-change-is-causing-world-hunger/ [Accessed 1 March 2025].

Zaleha, B. and Szasza, A. (2015). Why conservative Christians don't believe in climate change, *Bulletin of the Atomic Scientists.* 2015, 71(5), 19–30. https://journals.sagepub.com/doi/pdf/10.1177/0096340215599789 [Accessed 1 September 2023].