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Religious Groups and Climate Change

Drivers, Barriers and Religious Engagement on Climate Change

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Abstract

This thesis looks at the drivers and barriers religious groups within the United States face on the climate change issue as well as the actions religious groups have taken on the issue as a means for encouraging social and individual changes in behavior to address it. It examines the role of religion in shaping values, investigates the drivers and barriers identified through academic literature sources and then compares those drivers and barriers against the statements issued by religious groups and through a survey conducted by the author. Case studies on two religious groups are also presented to offer further detail regarding the types of programs and activities undertaken by religious groups to promote positive change on the climate change issue.

Executive Summary

Introduction

Our awareness of environmental issues and the factors affecting them has evolved rapidly over the past few decades. Initially, much of the focus has centered on the relationship between industrial production and environmental impact. Yet, even as the focus on industrial production continues to dominate, the evolution in our environmental awareness now also recognizes consumer consumption and the values that inspire it as being crucial components that can greatly affect our ability to achieve an environmentally sustainable future.

Notable scientific reports such as the latest report issued by the Intergovernmental Panel on Climate Change (IPCC) (*The Fourth Assessment Report: Climate Change 2007*), as well as the highly regarded *Stern Review on the Economics of Climate Change* issued by the British government have noted the important need to address values as part of the underlying cause and solution to the climate change problem. Additional studies have further supported these conclusions by stating that our best hope to achieve any kind of measure of long-term environmental sustainability can only occur if a fundamental shift in consumer behavior and values is also able to take place.

Yet, if implementing real solutions to issues like climate change is going to be as dependent on changing values as much as it is on implementing cleaner production practices and technological advances, it would then seem logical that religion and its institutions would have an important opportunity to play a significant role in this regard. In fact, as it is argued within this thesis, for better or worse, religious groups and institutions may be one of the most effective resources available that can help a country like the United States make this environmentally necessary shift in its consumer-oriented values.

Purpose of Study

Given the context of the problem, the purpose of this thesis simply seeks to examine why religious groups aren't being seen or utilized as a valuable resource (by the primary climate change stakeholders--i.e. governments, scientific bodies, NGOs, etc.) to help address the climate change issue given that a fundamental change in consumer behavior and values is needed. While many approaches could be taken to address this question, this thesis will attempt to discover possible explanations by examining the drivers, barriers and work being done by religious groups themselves on the climate change issue.

Research Questions

To address the purpose of this study the following research questions will be examined within this thesis:

- What are the drivers and barriers of religious groups as they address the climate change issue?
- How are these groups addressing and overcoming climate change barriers?
- How can the position of the religious groups be strengthened to help them overcome climate change barriers and how can their engagement on the climate change issue be enhanced?

Role of Religion In Shaping Values

According to dual inheritance theory, humanity's ability to survive on this planet is dependent on two types of co-evolving information: Genetic and cultural information. While sources of cultural information take many forms, one of the most influential forms of cultural information that has developed during our history as a species is what we call religion.

Regardless if one attends religious services as a regular part of their everyday life experience, the cumulative religious information that has developed over the past few thousand years continues to exert some level of influence on our lives. But it's not just our mere exposure to religion that has made it such an influential force. Religion operates as a powerful force in our lives because its "...central characteristic and function...is the construction of worldviews that guide individuals and communities in...decision making and action," [Peterson, 2001: 5]. That is, it is the connection religion has been able to forge between our beliefs, values and actions that has made it (and continues to make it) such an influential, divisive, empowering, controversial, inspiring and useful source of cultural information to the vast majority of people that have lived on this planet.

The Role of Religion in U. S. Social Movements

While it is true that government policy and religious matters are not the same thing, it is also true that they are not isolated from one another either, [Helco, 2001: 8]. Some researchers have even described the relationship between religion and public policy as an "inescapable coupling." Certainly the close nature of the relationship has revealed itself numerous times throughout American history and perhaps most vividly during its various social movements in which religious groups have often played a leading or significant role in creating social change. As noted by many authors, the existence of this "inescapable coupling" should come as no surprise given that both groups "claim to give authoritative answers to important questions about how people should live...(and)...both are concerned with the pursuits of values in an obligational way," [Helco, 2001: 8].

Whatever social movement theory or framework one subscribes to, it is hard to overlook the fact that the vast majority of movements for social change have been heavily fueled by religious beliefs and values, [Wallis, 2005: 19]. Even when a relatively broad look is taken at some of the more significant social movements that have unfolded over the last two centuries within the United States, one can see the instrumental role religion has played within many of them, (i.e. Abolitionist, Women's rights, Civil Rights, Worker's Rights, etc.). Religious groups have often been at the forefront of many social movements for centuries and their participation in those movements has often been viewed as a critical component to a movement's success, [Giggie, 2001].

Religion and Climate Change: A Theoretical Perspective

Religious Environmental Drivers Identified through Literature

While much has been written about the relationship between religion and the environment, very little theoretical research has actually gone into the specific examination of drivers. And, consequently, absolutely no academic research to date (as far as this author can tell) has delved specifically into the examination between religious groups and climate change drivers. Suffice it to say, significant gaps continue to exist within this area.

One of the few credible pieces to touch upon the issue of drivers among religious groups was developed by Laurel Kearns (1996) in her paper on Christian environmentalism within the

United States. In her paper, Kearns broadly categorized the drivers motivating religious groups to address environmental issues into three groups: Christian Stewardship, Eco-Justice and Creation Spirituality. While the focus of her research centered exclusively on Christian groups, the framework developed by Kearns could also be applied to other religious traditions as well given that the three models tended to reflect differences that could be essentially divided into conservative/fundamentalist, mainline, and liberal theologies or philosophical identities.

While the three models developed by Kearns do not pretend to fully encompass all the drivers motivating religious groups to engage on environmental issues, Kearns was able to provide a foundational theoretical framework that we could use to help us understand their basic drivers. Based on the information presented by Kearns, we can say that religious groups are essentially motivated to engage on environmental issues from the following three primary drivers: Biblical mandate, Social Justice and Cosmological Physics.

Climate Change Barriers Identified through Literature

While the amount of literature resources available to identify climate change barriers is also equally limited at this time, four categories of climate change barriers were identified/developed: Individual, social, political and religious. According to the very limited amount of literary sources, climate change barriers within each of the four categories were identified as follows:

Individual Climate Change Barriers:

- *Lack of Knowledge*
- *Uncertainty/Skepticism about Climate Change*
- *Distrust in Information Sources*
- *Externalizing Responsibility and Blame*
- *Belief that the Problem Will Be Solved Through Technology*
- *Climate Change is a Distant Threat*
- *Other Problems More Important*
- *Reluctance to Change Personal Lifestyles*
- *Fatalism*
- *Helplessness*

Social Climate Change Barriers:

- *Lack of Political Action*
- *Lack of Action by Businesses/Industry*
- *Worry about Free-Rider Effect*
- *Social Norms and Expectations*
- *Lack of Enabling Initiatives*

Political Climate Change Barriers:

- *Hostile Political Environment*
- *Numerous Competing Interests*
- *Previous Ineffectiveness of Environmental Groups*

Religious Climate Change Barrier:

- *Dominion versus Stewardship Ideology*

Religion and Climate Change: An Empirical Analysis

What Religious Groups are Doing to Address the Climate Change Issue

A review of the information compiled within Appendix 1 of this thesis offers some interesting insights regarding the type of events, activities, campaigns and declarations religious groups have conducted on the climate change issue. While the list of groups and activities compiled within this thesis is far from exhaustive, it does provide a general overview of religious activity on the climate change issue, which can be further grouped into the following categories:

- Climate change statements and declarations
- Educational outreach and awareness on the climate change issue (including workshops and forums)
- Religious publications on climate change

- Public awareness campaigns on climate change
- Support, promotion or advocacy of climate change legislative activities/efforts
- Climate change congregational support/leadership activities

Based on the material compiled within Appendix 1, we can say that religious engagement on the climate change issue is not a new phenomena. For example, religious groups like the Orthodox Church have been involved on the climate change issue since the early 1990s, well before climate change became the hot-topic issue it has become today. In fact, we can easily conclude that in many seen and unseen ways, religious groups, leaders and followers have made the issue of climate change their own for well over a decade and will continue to do so for years to come.

Climate Change Drivers Identified by Religious Groups

To help us understand more specifically why religious groups are driven to engage on the climate change issue, various “climate change statements” released by the religious groups within the last decade were examined within this thesis. To date, nearly every major religious and denominational group (i.e. Catholic Church, Orthodox Church, Methodist Church, etc.) appears to have issued some form of a declaration or statement on climate change. The list of drivers inspiring religious groups to engage on climate change have been summarized following a review of the climate change statements collected for the Interfaith Center on Corporate Responsibility, [Heim, 2007]. Based on a review of the 16 climate change statements issued by religious groups, a number of primary drivers for religious engagement on the climate change issue have been identified and are summarized as follows:

- Scientific consensus that climate change is real and human-induced.
- The poor most likely to suffer from climate change.
- There is a moral obligation to respond to climate change.
- A response to the crisis is urgently needed.
- The climate crisis is a reflection of humanity’s sin.
- The climate crisis offers an opportunity to re-evaluate consumer-focused lifestyles.

Climate Change Barriers Confirmed by Religious Groups

A written survey conducted by this author and sent to a number of religious groups was used to help support or invalidate a number of climate change barriers identified and gathered through literature analysis. The survey questionnaire developed for this purpose and sent to religious groups received a 26.7% response rate (8 out of 30 religious groups participated in the survey). In order for a climate change barrier to be considered “relevant or valid” for purposes of this thesis, at least 75% of the respondents (6 out of 8) needed to rate a particular barrier as being either as a 1 or 2 (strongly agree or agree). Based on the survey responses among religious groups in the United States, the following climate change barriers were validated and rated highest:

Individual Barriers:

- Lack of knowledge about climate change
- Believe problem will be solved through technology
- Other problems more important
- Reluctance to change behavior/personal lifestyles
- Sense of fatalism

Social Barriers:

- Lack of political action
- Lack of action by businesses/industry

- Worry about free-rider effect
- Social norms and expectations
- Lack of enabling initiative

Political Barriers:

- Hostile political environment
- Numerous competing interest groups

Case Studies

Two case studies are presented in the thesis to help gain additional insight as to how religious groups are addressing and overcoming climate change barriers. Even though the two groups selected as case studies for this thesis can be similarly identified as regional/local independently-unaffiliated religious groups, the differences in terms of geographic scope, operational efforts and group size were still able to yield some interesting results. The selection of the two groups as case studies for this thesis was not only based on the differences noted above, but more importantly, on their consent and willingness to participate within this research. Efforts were made to recruit a larger/national religious group as a case study for this thesis to help provide a more balanced and broader perspective on the activities of religious groups. However, due to a variety of conflicts, the author was unable to secure a large national religious group to participate as a case study. While this narrowly focused examination on local/regional religious groups certainly serves as a limitation within this thesis, the author is very grateful for the participation and contribution of the two groups highlighted within it.

As mentioned above, despite the similarity in drivers, theological orientation and identified barriers, significant differences in outcomes exist between the two case study groups. Given the extensive amount of work accomplished by the first case study group, we can readily assume that it is doing an effective job addressing the climate change issue and a majority of its barrier. The same, however, cannot necessarily be said for the second case study group. The second case study group appears to fall drastically short in being able to address the barriers that exist on the climate change issue given its limited resources and outcomes. A comparative table is presented in the thesis between the two case study groups at the end of chapter five.

Analysis

Within the Analysis section of the thesis, three suggestions are offered as a means of helping religious groups reduce and overcome climate change barriers. The first suggestion recommends that religious groups consider addressing the climate change issue through specialization. The recommendation is based on the recognition that not all religious groups are alike or can be evaluated as such. Instead, it is recommended that religious groups see themselves (and be evaluated as such) based on the primary function or role the group plays on the climate change issue, (i.e. Inspiration and Action).

The next suggestion is less theoretical and abstract in nature than the one mentioned above and is being directly relayed from religious groups themselves. According to a number of religious representatives interviewed for this thesis, the key to successfully developing climate change into a united social movement hinges on its proponent's ability to transform it from an environmental issue to a human issue.

The final suggestion also comes from information gathered during interviews with representatives from religious groups and speaks more directly to the role of religion in-general. The recommendation was articulated by one interviewee as the most important challenge before religious groups today, which is the need for religious groups to reclaim their prophetic voice within the American community, [Street, 2008]. Another interviewee stated the problem in another way by saying that contemporary religious groups have lost their prophetic voice because they have become far more interested in creating a sense of community among their followers instead of instilling a sense of change within them, [Sawtell, 2008].

Conclusion

Through its investigation, this thesis has been able to touch upon many different aspects of religious engagement on the climate change issue. The information presented thus far within this thesis led this author to the few following conclusions:

- We can say with a high degree of confidence that religious groups of various types and sizes, and from nearly every faith and denomination, are and have been actively engaged on the climate change issue for many years.
- We know, based on the two case studies presented in this thesis, that there may be significant differences in actions and outcomes among religious groups who are addressing the climate change issue.
- We also know, based on the release of various climate change statements issued by religious groups, that there is a general consensus among religious groups regarding the drivers/reasons for engagement on the climate change issue.
- And finally, we know, based on a survey conducted by this author and confirmed by a number of participating religious groups, that religious groups continue to face a number of challenging barriers on the climate change issue.

The initial problem statement stated at the very beginning of this thesis asked if the investigation of drivers and barriers would help us understand why religious groups and institutions appear to be largely marginalized or excluded from the climate change conversation. It is apparent that religious groups operating out of a national/international level have thus far been unable to reproduce the same type of achievements obtained by their local/regional counterparts given that the U. S. federal government has thus far failed to pass key pieces of climate change legislation, implement tougher fuel efficiency standards, ratify international climate treaties like Kyoto, or to develop an ambitious energy plan that moves the country further toward energy independence and renewable energies.

However, there are many reasons that can explain this discrepancy in achievement beyond the influence and activities of religious groups. First, we are making an assumption that a key component regarding the passage of these key pieces of climate legislation on the state level is due, in some measure, to the activities of religious groups. This may or may not be the case and further research is needed before that conclusion can be determined. Second, religious activity on the national level may not reflect any less of a commitment or effectiveness on the part of large/national religious groups engaged on the issue compared to religious groups engaged on the issue at the state level. The discrepancy in legislative outcomes may more simply reflect a lack of willingness on the part of the U.S. federal government in-general to address the climate change with any seriousness. Yet, again, a great deal of research is needed before any kind of conclusion can be made in this regard.

Finally, through this thesis' investigation of drivers, barriers and actions on the climate change issue, we can conclude that it is not possible to easily determine any clear explanations as to why religious groups may not be seen as a valuable resource by the primary climate change stakeholders to help address the issue. It is possible that strong biases continue to divide religious and scientific communities which are further preventing the two groups from coming together to address the issue in a unified fashion. But again, this assumption cannot be made without additional research. What we can conclude based on the work conducted within this thesis is that, whether or not religious groups are being seen as a valuable resource to address the climate change issue, they are making their presence and impact known at least on the state-political level throughout the country. We can also conclude that they will likely continue to do so as long as the drivers inspiring them to action remain.

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1 Introduction

Our awareness of environmental issues and the factors affecting them has evolved rapidly over the past few decades. Initially, much of the focus concerning environmental protection centered on the relationship between industrial production and environmental impact. This focus on production as a means of curtailing harmful environmental impact helped to guide the development of many of the environmental laws within the United States. The underlying philosophy behind the bulk of these laws was to help ensure that the negative external effects resulting from production practices were regulated to levels that still provided a reasonable degree of safety and protection to both human and natural environments.

Nearly all production-related companies operating within the United States and other industrialized societies, (i.e. cement, steel, automotive, computer, medical, chemical, agriculture, pulp and paper industries, etc.), have regulations in place that limit the amount of toxins and pollutants these companies are legally allowed to release into the surrounding air, water and soil environments. The response to these early breed of environmental laws and regulations has spurred the development and technical innovation of a myriad of competing “end-of-pipe” treatments and solutions within nearly every industry.

Yet, many forwarding thinking companies have started to break away from the “end-of-pipe” mentality and have instead started employing a number of “cleaner production” or “pollution prevention” production practices and strategies as a means of minimizing their environmental impact. While the move from “end-of-pipe” to “pollution prevention” production practices is more prevalent within Europe and Japan due to more restrictive environmental regulations, among other factors, the adoption of these practices is gradually increasing within the United States as awareness of them continues to expand around the globe. Beyond the considerable environmental benefits that these new practices have produced (i.e. lower emission levels, less use of natural resources, waste minimization, etc.), companies are also realizing increased benefits and positive gains in operational productivity and efficiency, reduced operating and procurement costs, reduced liability and compliance costs, worker health and safety improvements, and corporate/community relations, [U.S. EPA, 2001].¹

While the adoption of cleaner production practices remains in its relatively early stages and holds great promise for future environmental protection and conservation, there is the recognition by many prominent researchers, institutions and governmental bodies that the focus on production practices alone will not cure our environmental problems. Despite the promise, intense focus and investment increasingly being paid to newer technologies and cleaner production practices, both are insufficient as a means to achieving environmental sustainability with our planet. However one looks at the situation, humanity cannot “better produce” its way out of many of the global environmental problems it has created and is currently trying to solve—especially when it comes to addressing problems as large, complex and globally interconnected as climate change.

The limitations of newer technological innovations and cleaner production practices have been highlighted through a number of studies. For example, no amount of cleaner production practices can fully address the problem of insatiable demand for natural resources within our global economy. It has been argued by some prominent researchers that our current rate of consumption of natural resources would only be sustainable if we had four earth planets at

¹ Good resources on cleaner production/pollution prevention practices can be found within the U.S. EPA’s publication, *An Organizational Guide to Pollution Prevention* as well as the United Nations Environmental Programme’s publication *Governmental Strategies and Policies for Cleaner Production Practices*. Both publications are available online.

our disposal, [Weizsacker, Lovins, 1997]. While some researchers have argued that the actual rate of resources being consumed could be as low as 2 planets or as high as 10 to 15 planets, whatever the actual number there is no denying the finite amount of natural resources available within our one and only planet.

While we have thus far failed to conduct our global economic affairs to reflect the reality of this finite situation, there is no denying that our planet is limited in its ability to meet the infinite global demand for a whole host of consumer and business goods. What is also known is that consumption rates for these resources are only increasing as large developing countries like China, India and Russia are now actively competing for their share of these resources against the traditionally intense resource consuming Western powers in the world, (whose consumption rates also continue to steadily increase).

Yet, even as the focus on production practices continues to dominate, a paradigm shift in the evolution of our environmental awareness is believed to have formally taken place with start of the Agenda 21 document adopted at the 1992 Earth Summit in Rio de Janeiro. Among the many key principles, ideas and objectives contained within the document, there are two important points within it worth mentioning here. First, there was acknowledgment that while the goal to achieve global environmental sustainability may be the primary responsibility of governments, the “broadest public participation, and the active involvement of the non-governmental organizations and other groups”² was also critically needed. In other words, there was the recognition that governments alone could not solve the massive global environmental problems facing humanity. The active involvement of other groups was absolutely needed. The second important point made within the Agenda 21 document was the broad agreement that a fundamental change in consumption patterns was absolutely critical, (particularly by industrialized societies), to achieve environmental, social and economic sustainability, [Keating, 1993]³. Which is again to say in other words that the concept of sustainable consumption was formally recognized as a necessary component to help achieve environmental sustainability.

With consumption now being recognized as a critical component that had to be factored into the sustainability equation, our awareness of environmental issues had taken an important step forward and evolved beyond the narrow scope of industrial production. Yet, the issue of sustainable consumption is both multifaceted and complex and remains one of the most underappreciated issues facing us today. This may, in part, be due to the fact that consumption itself remains an extremely sensitive issue, [Mont, O., Plepys, A., 2007]. Even after the historic recognition of the issue on the world stage in Rio, there appears to be a great deal of reluctance on the part of nearly every major stakeholder to fully address it. While its direct and indirect relationship to so many social, environmental and even interpersonal problems we are currently trying to address is no longer debatable. The amount of attention we give to the issue remains startlingly disproportionate to the degree to which we are affected by it.

With justifiable concern much of our attention (both within the mainstream media and scientific community) has increasingly been drawn to the external environmental and social effects that our unsustainable consumptive lifestyles have produced. Issues like climate change, the exploitation of natural resources, deforestation, water and soil pollution, increasing global poverty, the growing risks to human health, the loss of biodiversity,

² Agenda 21, Chapter 1. Text available at: <http://www.iisd.org/rio+5/agenda/chp01.htm>

³ See Chapter 4, “Changing Consumption Patterns,” within the Agenda 21 document for more information. The complete text of the chapter is available at: <http://www.iisd.org/rio+5/agenda/chp04.htm>

genetically modified organisms, chemical use, and the accelerating disparities of wealth between the rich and poor are just some of the issues that have consumed much of our attention recently⁴. Obviously, these are all serious issues. And they rightly demand our attention, resources and actions to mitigate or rectify them.

However, our approach to these issues is perhaps questionable given that the topic of sustainable or reduced consumption is often excluded from the conversation when searching for viable solutions. While technological and/or cleaner production practices, on the other hand, continue to be promoted as ‘silver bullet’ solutions, they will not in themselves solve many of these pressing social and environmental problems. Serious changes in our consumptive behaviors and values must also be addressed and integrated as a fundamental part of the solution process if we are to have any realistic hope of achieving a sustainable relationship with our natural environment.

From a sustainable consumption point of view, the approach of solely relying upon cleaner production and technological solutions as a means to achieve environmental sustainability is faulty in the sense that it still seeks to apply a prescriptive instead of preventative approach to our larger global social and environmental problems. As mentioned earlier, this is not to say that significant gains can not be made to lessen the degree of environmental impact through newer technological and cleaner production solutions. They can. And, much work remains to be done within the field. However, our decision to focus so much of our attention on the issue of production instead of directly addressing the issue of consumption is akin to addressing the symptoms of what ails us instead of the cause.

While we may eventually one day arrive at seriously addressing the issue of sustainable consumption by dealing with the negative external effects it produces, continuing to do so in an indirect fashion can hardly be described as being the most effective and efficient approach. Those who have studied the issue or who have looked deeply into many of the environmental and social issues mentioned earlier understand that unsustainable consumption is one of, if not the, primary engine inflaming and further exacerbating many of the problems we are now facing on a global scale.

This is not to say that the issue of sustainable consumption is being ignored altogether. As much work is being done by a relatively small number of researchers, our awareness of the issue continues to evolve. A new phase within this evolution of our environmental awareness is starting to call into question the numerous factors driving unsustainable consumption patterns around the world, (particularly among individual/household consumers). One of these driving factors drawing growing attention as of late is that of values. The United Nations Educational, Scientific and Cultural Organization (UNESCO), identifies values--which often include religious beliefs--as a key factor playing a significant role in our lives by the way in which they influence and shape the way in which we view, live and act in the world, [Fien, 2008].⁵

Notable reports such as the latest report issued by the Intergovernmental Panel on Climate Change (IPCC) (*The Fourth Assessment Report: Climate Change 2007*), as well as the highly regarded *Stern Review on the Economics of Climate Change* issued by the British government, also speak of the important need to address values as part of the underlying cause and solution to

⁴ A summary of the World Watch Institutes Vital Signs Statistics in Appendix 7 offers an overview of global environmental problems currently facing humanity.

⁵ More information available at: http://www.unesco.org/education/tlsf/TLSF/theme_c/mod10/uncom10.htm

the climate change crisis.⁶ Numerous studies have further supported the conclusion that our best hope to achieve any kind of measure of long-term environmental sustainability can only occur if a fundamental shift in consumer behavior and values is also able to take place.

Another group of researchers recently developed a number of different modeling scenarios to try to understand how developed nations could transition to environmentally sustainable economies. The results of their efforts led to them to a surprising conclusion. The researchers found that while government-led market and policy initiatives and adjustments are certainly going to be needed along with advances in technology and production practices, reaching environmental sustainability appears unlikely without a significant a shift in values also taking place, [Raskin, Banuri, Gallopin, Gutman, Hammond, Kates, Swart, 2002: 47].⁷

Yet, while values are being recognized as highly influential forces operating in our lives and there is a recognized need to address them, it is striking that the potential role religion and its accompanying groups could play to help create this necessary change is being entirely ignored or overlooked. If the world community agrees with one of the fundamental points made in the Agenda 21 document—which is that the “broadest public participation, and the active involvement of the non-governmental organizations and other groups” is absolutely needed—it is curious then why religious groups aren’t being included in this process to help create this fundamental change in values? What should also be further taken into serious consideration is that if religious groups can’t be expected to help create this change—who then could help do it? This is a question that none of the reports and studies mentioned above have attempted to address.

Whatever our feelings, thoughts and reservations about it, religion continues to play a major role in our world today, even within highly developed societies (i.e. Europe) where traditional religious beliefs and institutions appear to play a less of a relevant role within people’s everyday lives. During the last few centuries alone numerous authors, scholars, scientists, politicians and researches have observed how religious beliefs and values remain one of the most important factors shaping and guiding our relationships and behavior on the planet, [Fien, 2008]. Yet if we acknowledge that religion continues to play such an influential role in our lives, does it continue to make sense then to avoid their engagement to help address an issue like climate change which again, according to numerous scientific reports, appears to be heavily influenced by our values?

For better or worse, the province of values has largely been the domain of religious institutions for a better part of human history. As alluded to earlier, who is else there that has the ability, resources and authority to address the issue of values in such a way to help create a massive change in our behavior than religious institutions? Businesses and industries certainly

⁶ The latest IPCC report talks about the necessity for policy makers to make decisions based on “value judgments” (IPCC, 2007: 18). While the Stern report has stated that “several ethical perspectives” are relevant due to the “breadth, magnitude and nature of impacts,” (Stern, 2007: 23). In this sense, it becomes easier to see how religious groups can not only play an important role in addressing the moral and ethical aspects of the problem, but become a necessary stakeholder toward its solution. Both reports are available online. The *White Paper on the Ethical Dimensions of Climate Change* has also indicated that there are a myriad of complicated ethical challenges surrounding climate change, (Brown, 2006). Whether one is seeking to address atmospheric targets, the cost to national economies and future generations, procedural fairness or the negative (if not fatal) impact upon those populations least able to adapt to its effects and who have least contributed to the creation of the problem, there appears is no escaping climate change’s moral and ethical dimensions, (Coward & Hurka 1993, Brown et al. 2006, Gardiner 2006, Posas 2008).

⁷ Global Scenario Group, has mirrored previous conclusions through the results of their modeling scenarios. The group concluded that market, technology and government led policy adjustments will not be enough to achieve global sustainability. The group reported in their report (Great Transitions) that the missing or key ingredient that will be needed to realize a sustainable future is a fundamental shift in values, (Raskin, Banuri, Gallopin, Gutman, Hammond, Kates, Swart, 2002: 47).

exert significant influence over our behavior and values but they do so in such a way that the behavior and values they are promoting are largely responsible for having created our current environmental crises. Furthermore, it is also obvious that it is against the obvious self-interest of business and industry to promote a reduction in consumer consumption for simple reasons relating to their bottom-line. As a group, consumers remain too disorganized to act in a unified manner and remain too wedded to the illusion that “greater consumption equals greater happiness” no matter how many studies continue to prove that just the opposite is true after a certain level of material comfort has been obtained. Financial institutions and national governments as well are also obviously very reluctant to promote sustainable consumption principles and given their addictive dependency on economic growth within their societies. And, while consumer protection groups have helped to increase protection and effectiveness of consumer goods, they have never been in the business of promoting a reduction of consumption. Finally, the media, of course, also holds significant power in influencing our behavior, values and actions. But, it too has become a business and industry unto itself which is also largely responsible for at least indirectly promoting greater consumption of material goods through its constant sophisticated forms of advertising running through its various channels (print, TV, radio, electronic).

So, the question remains, who then is left to call into question, re-evaluate, or able to contest and offer a better vision against the current set of unsustainable values directly contributing to our global environmental crisis? Educational institutions could certainly do it but the effects of their efforts could take decades before any noticeable change were to take place and furthermore they have thus far largely failed to even address the issue. So, simply by a process of elimination, religious groups and institutions may be the only viable stakeholder left within our national and global communities who possess the ability, outreach, credibility and authority to bring about this sort of social change that needs to take place in our values and behavior.

There are, of course, a handful of difficult assumptions being made with this argument. First, to bring about this necessary change in values we are assuming that religious groups and authorities still possess at least a moderate degree of influence within our societies to be able to do so. While this may be the case for a country like the United States where religious attendance and affiliation remains strong, it is less so the case for a country like Sweden where the opposite is true. Second, this argument is also being made on the assumption that religious groups have a very real and strong desire to help bring about a change in our values so that we can realistically address an issue like climate change. This may not actually be the case. There is ample evidence to suggest that the world’s religious groups appear to be just as content to carry on with “business as usual” and, in some cases, it may actually be against their own economic interests to “shake things up” in such a manner. Third, we are assuming that religious groups possess a very strong interest and desire to bring about a sustainable, long-lasting relationship with our planet. Which leads us to the fourth assumption being made with this argument which is that we are assuming that religious groups--or religion in general--isn’t part of the problem whose values aren’t in need of correction. Again, this may not be the case as well. Admittedly, all these assumptions are highly problematic and contesting them is not without good cause or reason.

Nevertheless, if implementing real solutions to issues like climate change is going to be as dependent on changing values as much as implementing cleaner production practices and technological advances, then for better or worse, religious institutions and groups may be one of our best hopes in this regard. This hope, however, is not without merit. Within the United States alone religious groups have amassed a great deal of experience in contesting the status quo to influence people’s behavior and values in order to transform American society in entirely new ways. And, while a country like Sweden may be less in need of religious influence

to help move the country in a more sustainable direction, a country like the United States (which possess a greater need in this regard) could certainly benefit from its assistance and would probably be more receptive to its input.

Just as every crisis brings with it an opportunity, changes in consumer behavior and values as an area where the sustainability community needs the most help and where religious groups can make their biggest contribution, [Gardiner, 2006: 119]. Even before Al Gore, the former Vice President of the United States, famously wrote and commented about it in his book and documentary movie *An Inconvenient Truth*, there have been many who have argued that climate change is more than just an environmental or policy issue but a moral and ethical issue as well. While there may be those who disagree and fail to see any ethical or moral dimensions of the problem, it is hard to overlook the potential impact religious groups could make to help produce this necessary change in values.

1.1 Problem Statement

By focusing on the issue of climate change, the fundamental question this thesis will attempt to address is why--given the apparent need to change consumer values as a primary component toward developing and implementing a sustainable solution toward climate change--aren't religious groups being engaged as part of the solution process? In other words, why does a paradox appear to exist based on the apparent need that changing consumer values is going to be a fundamental component to developing a sustainable solution to climate change?

While there are number of approaches that could be pursued to address this question, the research within this thesis will attempt to approach the question by investigating the drivers, barriers and some of the work currently being done by a number of religious groups engaged on the climate change issue.

1.2 Purpose of Study

Given the context of the problem, the purpose of this thesis is simply to examine why religious groups aren't being seen or utilized as a valuable stakeholder to address the climate change issue given that a fundamental change in behavior and values is needed? The approach is to examine the drivers, barriers and work being done by some religious groups themselves to seek a possible explanation to this problem.

1.3 Research Questions

To address the purpose of this study the following research questions will be examined within this thesis:

- What are the drivers and barriers religious groups have to face as they try to address the climate change issue?
- How are these groups addressing and overcoming these barriers?
- How can the position of the religious organizations be strengthened and their engagement on the climate change issue be enhanced?

1.4 Research Scope

The research scope of this master's thesis is focused primarily on a number of religious groups within the United States that have made and/or stated a commitment to address climate change. Large international religious groups (such as the Catholic Church or Orthodox

Church) are examined as well when appropriate. However, this thesis will primarily focus on the efforts, drivers and barriers of religious groups operating within the United States. While there are numerous religious groups operating within the United States today addressing a wide array of environmental issues, this thesis will further narrowed its scope to focus on those religious groups that are either solely addressing the issue of climate change or address it as a significant component of their overall ministerial, congregational or organizational efforts. Religious groups that have developed along denominational or sectarian lines (such as specifically Catholic or Jewish groups), as well as interfaith groups (groups that are composed of many different denominational faiths) will be examined within this paper.

Finally, given that the relevancy and influence of religious values and institutions within the majority of developed societies may be more easily contested and perhaps considered questionable at best, a conscious decision was made to narrow the scope of this thesis to the United States alone. Given the active role religious groups continue to exercise in contemporary American society and within political arenas, the level of influence religious groups and values play within contemporary American society is less deniable⁸. In many respects, the United States continues to be a religious nation.

1.5 Research Methodology

Three primary methods were used to gather information for this Master's thesis. The first method employed within this thesis was conducted through a literature analysis using a number of books and articles published in a variety of academic journals and other sources that have focused on climate change and religious groups as its main subject matter. However, given that significant gaps in information remain due to the fact that the study of religious groups on the issue of climate change is still a new area and therefore, rather limited in resources, other literature sources were also utilized. Sources from reports from conference proceedings, interviews and reports within conventional magazine and newspaper, as well as articles and online publications and resources from academic, popular, governmental and non-governmental sources have also been used when appropriate.

Second, several interviews with representatives from multiple religious groups within the United States were conducted by this author to help address some of the information gaps that exist on the subject. A total of ten interviews were conducted among representatives from religious groups within the United States to help provide additional insight and information on the nature of the problem. The third and final methodological source used to gather information for this thesis was the development of a written survey conducted by this author and disseminated to all the religious groups listed within Appendix 1 of this thesis.

Additionally, two case studies have been conducted for this research with the expressed purpose to gain additional insight as to how some religious groups are attempting to overcome the barriers they are encountering as they work on the climate change issue. The two case studies chosen for this research were based on their willingness to cooperate with the researcher and availability of information contained through their corresponding online resources, (i.e. group's Web site). An intended choice was made to choose two groups that appeared to possess differences in geographic and operational scope, outreach efforts and organizational structure. While the two groups investigated for this research are "small" in the number of personnel employed, it should be pointed out that even some "large" religious

⁸ The case of the United States is often referred to as the "American exception" given the correlation between a nation's level of economic development and relevancy and influence of traditional religious beliefs and values within its culture. However, the United States is not alone. Other countries like Israel and some wealthy Middle Eastern countries also appear to defy the economic development/influence of religious beliefs and values characterization.

groups operating on the issue today appear to dedicate an equally small number of staff members on the issue. Many of the efforts conducted by both “small” and “large” religious organizations on the climate change issue tend to be limited by the number of paid and volunteer staff members the groups are able to employ and limited amount of financial resources. Therefore, finding an exhaustive list of quantitative and qualitative differences between “national” or “local” organizations is rather limited.

The research methodology has been conducted in the following three phases:

- Phase I: Provides a review of background information and literature material of religious groups within the United States actively working on the climate change issue.
- Phase II: Provides a review of study materials related to the drivers and barriers religious organizations face when addressing the climate change issue as well as any additional material gathered through case studies and supplementary interviews and survey results.
- Phase III: Offers an analysis of data gathered using the methods mentioned above.

In Phase I, literature on the topics of religion and the environment, religious groups and climate change, the drivers and barriers of climate change, the function of religious groups within society, religious groups and their influence on behavior and values, and the role religious groups have historically played in initiating and/or leading societal change within the United States has been analyzed and reviewed.

In Phase II, data from material collected within the scope of the research project was obtained from literature, (including reports issued by governmental, NGO, and religious organizations on the issue of climate change; and summarized proceedings and notes from conferences and workshops) personal interviews and a survey conducted by this author. All three methods were used to help develop a classification of the drivers and barriers faced by religious groups on the climate change issue. Interviews conducted with these representatives were more qualitative than quantitative in nature given that the objective was to try to obtain a large amount of information from a limited number of people. The interviews were also conducted in a semi-structured manner in that a predetermined number of questions were developed to help guide the interview process for each interviewee. However, questions were sometimes adjusted and new questions were asked depending on the interviewee and the progression of the interview. The majority of the interviews were conducted over the phone with follow up questions corresponded through email and/or additional phone conversations. Interviewees within the religious groups were selected based on their role within the organization, availability and ability to provide additional insight and expand upon the material collected for this research. The interviews for this research were conducted over a three month period. A list of interviewees is provided within the references section of thesis. The survey conducted by this author was used to test and reinforce conclusions and data gathered through literature analysis.

In Phase III, a discussion of the collected material and its relevance to the two case studies developed for this thesis, as well as a list of recommendations concerning how these groups can potentially strengthen their position and enhance their engagement on the climate change issue, is examined and presented.

1.6 Limitations

The amount of credible literature sources specifically addressing the issue of climate change and religious groups is extremely limited at this time. Therefore, given that little research has

been conducted in the area significant gaps in information exist. It should be further noted that the specific examinations of drivers and barriers that religious groups are having to face on the climate change issue is virtually nonexistent. Therefore, the classification structure of drivers and barriers developed within this thesis should not be viewed as comprehensive or definitive. Additional interviews among key figures within the religious community could have been further developed but was limited due to constraints in the researcher's time and the availability and willingness on the part of interviewees to participate in the research project. Additional interviews from representatives of these religious groups would have provided further insight and information on the issue, and added further credibility of the findings contained within this thesis.

1.7 Outline

This thesis has been organized into the following chapters:

Chapter 2 examines the role of religion in shaping worldviews and provides a historical overview of various social movements in the United States in which religious groups have played a significant role.

Chapter 3 examines the role of religion in shaping environmental values from a theoretical perspective based on an analysis of literature material. Drivers and barriers based on an analysis of literature is examined and an analytical framework is presented.

Chapter 4 provides an empirical overview of what religious groups within the United States are doing on the climate change issue and lists the drivers and barriers of religious groups based on the release of climate change statements and a survey conducted by this author to religious groups on climate change barriers.

Chapter 5 presents data collected from the two case studies developed for this thesis. A general description of the groups and their activities is presented along with the drivers and barriers identified by each group.

Chapter 6 offers an analysis on the role of religion in the climate change issue and offers suggestions as to how religious groups can increase their level of influence on the issue and overcome climate change barriers.

Chapter 7 offers an argument as to why religious groups should be engaged on the climate change issue and what assets they can use to help promote positive change on the issue.

Finally, Chapter 8 concludes with a summarization of the major findings within this thesis and re-examines the initial problem statement the research questions were seeking to address.

2 Role of Religion in Shaping Values

This chapter will examine the role in which religion shapes worldviews and values. An examination is made within Section 2.1 on this subject through the perspective of dual-inheritance theory. Section 2.2 of this chapter continues with the primary argument by highlighting various examples within American history in which religious groups have played either a leading or significant roles in various social movements that have helped to create social change.

2.1 Role of Religion in Shaping World Views and Values

According to dual inheritance theorists, our ability to survive on this planet is dependent on two types of co-evolving information. In fact, without these two types of information our existence would not be possible. The first type of information is genetic information. This type of information, which is coded into our DNA, is what makes us different from a slug, tree, elephant, sea horse, and each other, [Miller, G., 2005: 42]. Every physical characteristic that we can see clearly with our own eyes or examine under a microscope is determined by the genetic information received from our parents. The color of our eyes, the shape of our stomach, the height of our body and color of our fingernails are all genetically determined, [Hefner, 1998]. Even factors or characteristics relating to our health, preferences and behavior are in many ways determined and/or heavily influenced by the types of genetic information we inherit. Yet, genetic information alone does not explain our whole story or make us a human being.

Everything that we do and know about the world and ourselves is relayed to us through a second type of information that is just as critical to our existence as the first. This second type of information is called cultural information. That we know how to conceive a baby and take care of it, turn on a faucet to receive water, take care of our teeth and seek a dentist when we have a toothache is all a part of our inherited cultural information, [Hefner, 1998]. Cultural information is all the information that is learned and taught.

While limited social learning abilities are found elsewhere in nature, humans are unique in the sense that we appear to learn just about everything about ourselves and our ability to survive from one another. That is, our survival map isn't coded into our DNA like it is for a bee or cow. Everything from motor patterns, goals in life, tools, what foods to eat and how to eat them, acts of altruism, even suicide are passed to us through social learning as forms of cultural information, [Henrich, McElreath, 2007]. The amount of cumulative cultural information that has developed and passed down in the form of behaviors, beliefs, practices, values, tools, techniques, bodies of knowledge, adaptive practices, etc. is so massive that no single individual could possibly discover and figure out all these things on their own within their own lifetime, [Henrich, McElreath, 2007].

As indicated above, cultural information takes on many forms. But, one of the most influential forms of cultural information that has developed during our history as a species is what we call religion. Whatever one's thoughts and feelings about it, there can be no denying its long history and influential role within our history. Although religion is difficult to define given that it often means different things to different people, the Merriam-Webster dictionary, defines "religion" as the "commitment or devotion to religious faith or observance: a personal set or institutionalized system of religious attitudes, beliefs, and practices: a cause, principle, or system of beliefs held to with ardour and faith."⁹ Whether one believes in the existence of a

⁹ Merriam-Webster (2007-2008), Online Dictionary. Definition available at: <http://www.m-w.com/dictionary/Religion>

universal God, a mysterious universal energy or many divine beings governing and influencing the affairs of the universe and/or our individual lives, each religious tradition provides its followers with two basic forms of cultural information: (1) It provides a unique understanding of the way the world works and; (2) it offers guidance as to how they should act in it, [Loy, 1997]. This functional definition of religion is as applicable to Christianity, Islam and Buddhism as it is for Judaism, Hinduism and Taoism. In other words, all religions do these two things.

Regardless if one attends religious services as a regular part of their everyday life experience, the cumulative religious information that has developed over the past few thousand years continues to have some level of influence on our lives today. Even as we witness from the news headlines taking place in our world today, religion continues to directly or indirectly impact and influence our lives. In fact, we can even say that there is no escaping it since “every human society has its own religions and religious traditions...every individual grows up being exposed to some version or manifestation of religion,” [Peterson, 2001: 5].

But it's not just our mere exposure to religion that has made it such an influential force in our lives. The reason why religion has become such a powerful force in our lives is because its “...central characteristic and function...is the construction of worldviews that guide individuals and communities in...decision making and action,” [Peterson, 2001: 5]. That is, it is the connection religion has been able to create between our beliefs, values and actions that has made it (and continues to make it) an influential, divisive, empowering, controversial, inspiring and useful source of cultural information to the vast majority of people that have lived on our planet. In many respects, human beings can be characterized as a religious species given its influential role.

Of course, science and its many related disciplines have made their own significant contributions to our cultural information inheritance as well. Like religion, science is also explanatory in its character about our existence and has contributed significantly to help form our worldview. It too has offered explanations about the cosmos, the order of existence, human behavior, our origins as a species, the nature of suffering and happiness. But where religion differs from science is that it goes beyond the provision of explanations. Religion does not only explain but it connects its explanations to concrete guidance as to how we should live and interact with each other and the world around us. When looked at objectively as a source of cultural information, there are few comparable sources that are able to offer such cohesive and comprehensive worldview than those set of beliefs, stories and explanations that we call “religion.”

Through its writings, myths, sacred texts, rituals and traditions religion has made significant contributions to help form what one Nobel laureate in brain research, Roger Sperry, called the most powerful thing that exist in the world today--our values, [Hefner, 1998]. According to Sperry, nuclear bombs may be incredibly powerful weapons but it is the values held by those who push the button that determine whether or not those bombs are released, [Hefner, 1998]. Again, it is this connection between values and action that continues to make religion one of the most powerful forces in our world today and is the reason why it remains one of the most “authoritative and compelling” sources of cultural information within our species today, [Peterson, 2001: 13].

Even within Karl Marx's famously misunderstood quote concerning religion as being “an opium of the people” there is the recognition of religion's broad appeal and heavy social influence. In his book, Religion and Society: A Sociology of Religion, Johnstone summarized the social function religions play in our societies by noting that religion provides a common purpose and values which help maintain social solidarity and control by defining right and

wrong behavior, [Johnstone, 2004]. Another group of authors stated that the most important role and function that traditional religious beliefs, values and institutions have historically provided (and continue to do so) has been by helping to define collective goods or bads within a society, [Snow, Rochford, Worden, Benford, 1986].

Of course, there are many acts and issues (like murder or stealing) that do not need religious support or authority for society to grasp its moral and ethical implications. But, when conflicts arise within and between individuals and groups over differences between what is socially acceptable against what might be considered to be morally or ethically ambiguous or problematic--religious beliefs and values have often proven instrumental in providing guidance to address and solve many of these types of issues. As we begin to relate all this to the issue of climate change, it becomes easier to see how religion's resources can be used to challenge a number of current popular beliefs and values that are directly contributing to the climate change problem.

Yet, even to those who prefer to call themselves "religious" in our day and age, it is difficult to overlook the fact that the way most of people commonly see and functionally interact in the world (and even with one another) has become increasingly influenced by many of the market-based values that are significantly contributing to our current environmental crisis. In many respects, the very goals/objectives in which most people within the United States define the "American Dream" or personal success in life has increasingly adopted a market-orientation or worldview that is fundamentally rooted in the acquisition of more/bigger/newer material things.

One argument that may help explain why this has happened can be attributed to where our actions, energy and attention has been collectively focused upon during the last century. Gardiner astutely noted the that primary influential questions that fueled progress during the 20th century focused around the question of "how?" How do we generate more revenue, more kilowatts, and more kilos per hectare [Gardiner, 2006]? While discovering the answers to these questions were important and led to the explosive economic growth, improvements in quality in life and social development among many of the industrialized countries in the world, he also noted that what has been overlooked or largely ignored amidst all this growth were the "what?" questions. 'What is progress? What is the purpose of wealth? What is our proper relationship to the natural environment, other people and future generations?', [Gardiner, 2006].

Obviously these are important questions and it can be argued that our failure to strategically address them has significantly contributed to our current environmental crisis and lie at the heart of many of the moral and ethical issues attached to the issue of climate change. What is also obvious is that these are not questions in which new technology or cleaner production practices can provide answers to. For all its marvels, technology cannot come up with a new definition of progress. Answers to these types of questions can only come from what we call, for lack of a better word, our values. As the United States moves forward to tackle the climate change issue, redefining progress will inevitably require that the nation's economy and society move in the direction of greater environmental sustainability instead of further away from it. To do so will require a significant readjustment in our values. And as Gardiner and others have noted, our values have often evolved when religion was the driving evolutionary force or stimulating factor.

Thomas Berry, who is a cultural historian in the United States, noted in his book The Great Work that religion, along with education, business and government, are often the sources of societal change, [Berry, 2000]. Psychologists have also recognized and determined religion to be one of the four sources that can help change an individual's behavior, [Gardiner, 2006].

Therefore, if we take all this collective evidence into consideration, it would seem--particularly within the United States--that a reasonable argument could be made that societal wide changes in values and behavior would be difficult to obtain *without* the support or attachment to religious beliefs, values and institutions.

As Posas (2008) wrote in her paper on the issue of religion and climate change (one of the few authors and papers to actually address the subject), it is because “science, technology, politics, and economics are less able to provide these perspectives and transformational services to the masses of humanity...(that religion) may in fact be a major key for sustained progress on mitigating climate change,” [Posas, 2008: 10]. While its effectiveness within our societies may simply be related to its unique ability to ‘appeal to the heart, human empathy, and higher values which have inspired people to reach beyond their narrow self interest for centuries,’ [Posas, 2008]. It is difficult to ignore its potential as a source for social change given the role and contributions it has made throughout our human history. Given our current predicament, it would appear that we can vastly afford to ignore what it has long been able to offer.

2.2 The Role of Religious Groups in U.S. Social Movements

While it is true that government policy and religious matters are not the same thing, it is also true that they are not isolated from one another either, [Helco, 2001: 8]. Some researchers have even described the relationship between religion and public policy as an “inescapable coupling.” Certainly the close nature of the relationship has revealed itself numerous times throughout American history and perhaps most clearly during its various social movements in which religious groups have often played a leading or significant public role. The existence of this “inescapable coupling” between the two should come as no surprise given that both groups “claim to give authoritative answers to important questions about how people should live...(and)...both are concerned with the pursuits of values in an obligational way,” [Helco, 2001: 8].

Undoubtedly, the claim to provide authoritative answers to difficult questions is deeply connected to what many see as perhaps the greatest asset which religious values are able to add to the cause of social reform--the ability to effectively inspire enough people within a certain population to look beyond their immediate self-interests to achieve something greater for themselves and future generations. However, there may be other factors that can help explain why religious groups and values have often found themselves increasingly intertwined within the social movements that lead to the development of government policy.

The relationship between the two appears increasingly connected when one examines the vast amount of contemporary research which has shown religious beliefs, values and institutions as a crucial component in helping contentious tactics eventually gain successful public-wide approval, [McVeigh, Sikkink, 2001]. Certainly throughout history, and particularly within the United States, there are numerous examples in which social/political movements have often co-opted religious ideology and language and/or sought to align themselves with religious groups and institutions to add moral credibility to their campaigns and to further take advantage of the enormous institutional resources and infrastructures that religious groups possess, [Billings, Scott, 1994].

Sherkat (2006) stated that from a practical point of view, religious values and resources are heavily utilized within social movements because of their flexibility and adaptability. Compared to other types of values and beliefs, one can see how religious values and resources can be more easily utilized and transposed into social movements and voluntary organizations that are highly politically motivated, [Sherkat, 2006]. Given that the aims and objectives between religion and government is already close to begin with, the adaptability of religious

beliefs and values into social movements may be easier to incorporate compared to, for example, scientifically based beliefs or theories which primarily seek to explain events and human behavior rather than guide them.

Yet, also to be considered is the interplay between what religious resources and values against the timing, circumstances and conditions of events taking place or unfolding within a society. A close examination of these social circumstances or conditions was conducted by the acclaimed American sociologist Neil Smelser who developed what is called the “value-added theory of collective behavior” which identified six elements that he believed were necessary for a social movement to emerge. According to Smelser’s theory the six criteria for a social movement to emerge are: “structural conduciveness (social organization that allows for collective behavior), structural strain (conflicts inherent in the organization of society), generalized beliefs or ideologies (as opposed to rational thought), precipitating factors or trigger events, mobilization for action, and the operation of social control,” [Moser, 2007: 126]. Even when a cursory evaluation of a social movement is conducted using Smelser’s criteria, it becomes easier to see how religious groups and values could easily find themselves playing a key role within a movement. Religious groups certainly possess the human and institutional resources to “mobilization a group for action” and certainly are able to provide “generalized beliefs or ideologies” to keep participants within a social movement inspired, educated and motivated to a cause. Certainly Smelser’s criteria can help explain why it appears easier to see how a social movement can easily assimilate and/or transfigure into a religious movement and vice versa.

Whatever social movement theory or framework one subscribes to, it is hard to overlook the fact that the vast majority of movements for social change have been heavily fueled by religious beliefs and values, [Wallis, 2005: 19]. Even when a relatively broad look is taken at some of the more significant social movements that have taken place over the last two centuries within the United States, one can see the instrumental role religion has played within many of them. Fortunately, one does not have to go back too far in the country’s history to begin to appreciate the value and level of influence religious groups and institutions have exercised when promoting social change. Religious groups have often been at the forefront of many social movements for centuries and their participation in those movements has often been viewed as a critical component to a movement’s success, [Giggie, 2001].

Table 1 at the end of this chapter offers a summarized compilation of the various social movements that have taken place within the United States in which religious groups have played either a leading or significant role. The political or legislative results that emerged from these social movements has also been provided within the table. The information compiled within Table 1 has been developed following a review of authors who examined religious engagement within various U.S. social movements, most notably: Moser (2007), Giggie (2001), Williams (2002), Helco (2001), Jelen (2006), Woods (1999) and Sherkat (2006).

While the examples listed in Table 1 point to the rich history shared between religion and democracy within the United States, (Helco, 2001) it is far from a complete or comprehensive list. While some researchers, like Moser (2007), suggest that the various social movements within the United States can be roughly divided into Pre-1960s social movements (Old Social Movements) and Post-1960s social movements (New Social Movements) based on Smelser’s six criteria for the emergence of social movements. What is clear from even a brief review of the table composed by this author is that religious engagement within these movements is both ubiquitous and broadly represented by multiple religious groups.

For example, beginning with the perhaps the earliest social movement to take place within the United States--the abolitionist movement against slavery--many authors have noted the

famously heavy involvement among evangelical and Quaker groups in leading the movement. Early Quaker leaders such as John Woolman and Benjamin Lundy were instrumental in raising awareness about the immorality of slavery in both America and Britain and helped to provide the moral justification of the cause based on their belief that all people, regardless of race, were equal in the eyes of God, [Woolman, 1909]. But even beyond the abolitionist movement, the two groups were heavily involved in other social movements. The Quakers, for example, crusaded and provided much of the leadership behind the Human Rights and Feminists social movements within the United States.

Other religious groups have also equally committed their lives and resources to the cause of other social movements within the country as well. Many Catholic and Protestant groups were deeply involved within the Progressive and Social Justice movements which lead to the passage to a whole host of worker's rights, minimum wage, public safety, and child labor laws within the United States during the late 1800s and early 1900s. Significant reforms were also made in the way in which prison and mental health facilities operated within the country thanks to the enduring commitment and efforts from religious leaders like Dorothy Dix. These religious groups can be credited for creating many improvements at these facilities including new treatment practices, improved living conditions, and greater medical and humanitarian care.

And, of course, one of the more impressive and recent social movements to have taken place within the United States is the civil rights movement during the 1960s. Not only did the success of the movement have a profound and transformative effect on the entire country but, the movement itself was one which religious leadership and participation played a clear and leading role. The civil rights movement also serves as a vivid reminder of how bitterly contentious and socially divisive social movements can be and how a social movement's success rarely occurs without the willingness to endure painful costs and sacrifice.

Despite the moral and ethical justification of the cause, participants within the civil rights movement encountered and brought to the surface a shocking amount of resentment, hostility, intolerance, cruelty and violence among many sections and populations--and even among other religious groups. Yet, many scholars have noted that religious groups, particularly African-American churches, not only provided the "ideological foundation for justifying collective action and overcoming oppression"...(but) the tangible support of leadership, physical plants, mail, literature, and other important tools" that made collective action possible, [(Morris 1984), Sherkat 2006].

Giggie (2001) has gone so far as to suggest that religion and its use may have been the difference between success and failure in the civil right movement. The author writes that "...the integration of religion and politics among southern blacks...was a crucial reason for their many victories. King and his followers found a unifying sense of political purpose and a range of cultural resources in African-American churches that ultimately ensured their triumphs. By contrast...segregationists failed to garner the popular support necessary to turn back threats to the "southern way of life" because they lacked the enthusiastic backing of most of their spiritual leaders; for them, religion was a source of dissent and fragmentation that undermined their defensive stand." [Giggie, 2001: 254].

As we briefly focus back to the climate change issue, it may be worth while to consider that if religion has shown its potency for social change with other issues, can its absence perhaps explain why the environmental movement may have thus far failed to achieve the same level of transformative success enjoyed by previous social movements? The idea has been suggested by a few researchers and most notably by Shellenberger and Nordhaus (2005) in their widely read report *The Death of Environmentalism*.

Having operated in the domain of translating values to social action and public policy for centuries, religious groups are certainly well positioned to lend their expertise and resources to help our societies (re)discover or reformulate new or existing values that can help lead us toward achieving environmental sustainability. While the recent success (or failure) of other religiously inspired or led social movements is being much debated,¹⁰ there seems no getting around the “inescapable coupling” between religion and public policy for generations to come within the United States given its high levels of religious affiliation.

¹⁰ For example, many scholars have argued that the “family values” social movement can just as much be regarded as a failure as much of a success given its inability to produced its intended legislative goals, namely the outlaw of abortion.

Table 1: 'Summary of Religious Engagement within Various Social/Cultural Movements within the United States'

Movement	Issue(s)	Time Period	Leading Religious Groups	Policy/Legislative Achievements
Abolitionist	<i>Slavery</i>	Mid 1700s to early 1870s	Quaker, Society of Friends, Moravian	<ul style="list-style-type: none"> - Importation of slaves banned in 1808 - Emancipation Proclamation in 1863. - Passage of 15th Amendment in 1870
Progressive	<i>Labor Laws, Work & Holiday Calendars, Minimum Wage, Child Labor, Organized Labor, Natural Conservation, Temperance (Alcohol)</i>	Late 1800s - Early 1900s	Multiple Protestant, Catholic and Jewish Groups	<ul style="list-style-type: none"> - 1938 Fair Labor Standards Act (Child Labor, Minimum Wage, Time and a Half for Overtime) - Alcohol Prohibition (18th Amendment) - Establishment of National Parks & Wildlife Refuges
Social Justice	<i>Progressive Movement Issues, Including Preferential Option for Poor, Environmental Justice</i>	1870s - present	Catholic Worker Movement, U.S. Conference of Bishops, other Catholic Groups	<ul style="list-style-type: none"> - Connected to Progressive achievements noted above - Some issues are without clearly identified legislative goals.
Human Rights	<i>Prison & Asylum Reform</i>	Late 1700s - Mid 1900s	Quaker, Society of Friends, Catholic, Unitarian	<ul style="list-style-type: none"> - Federal Parole Law - Asylum Improvement - Improvement in Mental Health Treatment
Feminist	<i>Women's Suffrage, Gender Equality, Reproductive Rights</i>	1830s - present	Quaker, Multiple Liberal Protestant Groups	<ul style="list-style-type: none"> - 19th Amendment (Women's Suffrage) - Access to Contraceptives and Abortion - Passage of Multiple Sexual Assault, Harassment & Domestic Violence Laws - Women Clergy Ordination
Civil Rights	<i>Racial Equality</i>	1955 - 1968	Southern Leadership Christian Conference, American Jewish Community Groups, Nation of Islam	<ul style="list-style-type: none"> - School desegregation - 1964 Civil Rights Voting Act
Family Values	<i>Restrictions Sought on Abortion, Gay Marriage, Pre-Marital Sex, Cannabis, Pornography, Obscenity in Books, TV, Music, and Film</i>	1980s - present	Protestant "Religious Right" Groups, Catholic	<ul style="list-style-type: none"> - 2003 Partial Birth Abortion Ban - Federal Communications Decency Act of 1996 - Child Online Protection Act 1996 - Children's Internet Protection Act 2000 - Parental Advisory/Explicit Lyrics Labels

Source: Moser (2007), Giggie (2001), Williams (2002), Helco (2001), Jelen (2006), Woods (1999) and Sherkat (2006)

3 Religion and Climate Change: A Theoretical Perspective

While much has been written about the relationship between religion and the environment, very little theoretical research has actually gone into the specific examination of drivers. And, consequently, absolutely no academic research to date (as far as this author can tell) has delved more specifically into the examination of religious groups and climate change drivers. Unfortunately, the situation does not improve as the amount of literature available to investigate the barriers encountered by religious groups on climate change (or even environmental issues in general) is equally non-existent. Suffice it to say, significant gaps in information exist on the subject.

Despite these challenges, the available research on the relationship between religion and the environment (in very general terms) at least gives us a place to start and an analysis is made on this relationship within section 3.1. Section 3.2 continues by providing a more focused understanding of religious engagement on environmental issues by presenting one of the few theoretical frameworks developed on the subject. And finally, section 3.3 provides a little more specificity relating to the subject of this thesis (religious groups and climate change) by patching together a number of barriers specific to the climate change issue--although, again, not specific to religious groups. Taken together, the three sections within this chapter are used to develop a theoretical framework to help provide a basic understanding of the drivers and barriers of religious groups engaged on the climate change issue. The validity of this framework is tested later against the empirical evidence gathered in Chapter 4 of this thesis.

3.1 The Role of Religion in Shaping Environmental Values

Thus far this thesis has presented religion as a potential solution or mobilizing agent that can help guide the American people toward the development of a sustainable society. However, if we are to accept that religion has played a significant role in the development of our cultural informational inheritance, then we have to also accept that it is just as likely as much to blame for the development of those values that have contributed to our current ecological crisis. In other words, it is not possible to have it both ways, so to speak, when we speak about the influence of religion. We cannot claim that religion has a major influence in the development of our cultural information and yet maintain that it has played no part in our current ecological crisis.

It is easy to fall into the temptation of viewing Christianity or any religion as either all good or all bad, as its most vocal supporters and critics have done. There is ample evidence to support either position even by simply looking at the multitude of events unfolding around us in our world today. Yet, when it comes to evaluating religion or any other complex subject for that matter, the truth is usually not so clear cut or simple.

What is more likely the case is that religions have as much to offer to help us address our current environmental crisis and as they have contributed to the development of the problem. As Gottlieb stated, "As key components of every human civilization, religions are necessarily critical elements of the environmental crisis. Yet in recent years religious institutions have also tried to alter our current destructive patterns. In short, religions have been neither simple agents of environmental domination nor unmixed repositories of ecological wisdom. In complex and variable ways, they have been both," [Gottlieb, 1996: 9].

Kinsley (1994) summarized the three main arguments made by those who have advocated that the Bible and Christianity have greatly contributed to--or even are largely responsible for having created--our environmentally destructive values. The first argument is based on the

belief that the Bible and Christianity shaped our destructive environmental values by stripping nature of all its pagan spirituality which therefore, severely diminished our ability to see nature as containing elements of the divine. The second argument rests on the position that the strongly anthropocentric worldview of Christianity and the Bible promoted humanity as divinely commanded to rule over and dominate all other species and nature rather than to be caretakers of it. And, finally that Christianity has shaped the destructive values resulting in our current ecological crisis because it generally denigrated all of nature and matter to a position lower than that of spirit, [Kinsley, 1994: 104].

Each of the three arguments described by Kinsley are compelling in their own way and have been passionately debated for years. But, perhaps the argument that has resonated most among religious critics is the charge that Christianity has too long promoted a position of dominance over nature instead of one rooted in stewardship and care. This argument was famously articulated by Lynn White in his seminal article *The Historical Roots of Our Ecological Crisis*. In it, White made a persuasive case regarding the position of arrogance against nature Christianity has long propagated when he wrote, “(While the) present increasing disruption of the global environment is the product of a dynamic technology and science...Their growth cannot be understood historically apart from distinctive attitudes toward nature which are deeply grounded in Christian dogma...No set of basic values has been accepted in our society to displace those of Christianity. Hence we shall continue to have a worsening ecological crisis until we reject the Christian axiom that nature has no reason for existence save to serve man,” [White, 1967: 6].

White’s words (written in the 1960s) certainly seem prophetic today in light of the current climate change crisis that has the ability to alter the course of our survival on this planet. Yet, on the other hand, Kinsley (1994) wrote that there is ample evidence to suggest that pagan populations were just as active in remaking their natural environments to suit their own needs as Christian ones. Additionally, for its limited talk about man dominating nature, the Bible contains far more passages commanding its followers to respect, if not revere, the natural world and to treat its animals humanely, [Kinsley, 1994: 116]. Finally, the argument against Christianity completely discounts or brushes aside the fact that Christianity has produced its own share of celebrated advocates or protectors of the environment. Early influential Christian and Catholic saints such as Irenaeus and St. Francis of Assisi embraced the wonder and immensity of nature as a mystical and necessary component of being able to understand the divine and practice one’s faith.

As we look at the role in which Christianity has played in the development of values that led to our ecological crisis, a more honest appraisal would probably lead us to conclude that its record has produced a mixed result. For all the environmental harm it is believed to have produced, there are limitless examples from many its famous and not-so-famous followers who have done more to try to protect the environment than destroy it compared to non-Christian populations. While there can be no denying the negative contribution Christianity has played in shaping the values that have led to the development of our current ecological crisis, it would be unjust to assign complete fault and blame for it as well. What is more likely the case is that Christianity may have merely reflected a more general historical Western attitude humanity has held toward nature rather than having created an entirely new one. As Gottlieb wrote, “...the enormous variability of religious attitudes towards nature may lead us to wonder if the conduct of religious institutions about the environment at any particular time is as much a product of the general culture, politics and economic structure of the wider society as it is of the religions themselves.” [Gottlieb, 1996: 49].

In some respect, we are left without clear-cut answers and final conclusions. While we can easily argue that many Christian followers within the United States have chosen to re-interpret

those “religious” beliefs to justify their own environmentally destructive behaviors or pursue their own economic/self-interests. We can also easily argue that just the opposite is also true. Irrespective of past religious events, interpretations and dogma, it is clear that religious groups today are not standing idly-by in the face of these pressing environmental problems. They are moving forward--and, not with just words but action. In the final analysis what really counts, as one author put it, is that the answers “...to our dilemmas will not be found in identifying past views...(but)...is continually set and reset by their adherents, as they engage in the complex and controversial process of reinventing traditions to meet contemporary concerns,” [Gottlieb, 1996: 9]. And, as we shall see in Chapter four, that there has been (and continues to be) plenty work done on the part of religious groups to lighten their own environmental footprint by addressing issues like global climate change.

3.2 Religious Environmental Framework Identified Through Literature

While much has been written about the relationship between religion and the environment (areas such as religious attitudes and experiences of nature, eco-feminism, and religious practices to honor the earth offer a great deal of material), little theoretical research has actually gone into the specific examination of drivers. And, as mentioned in the chapter’s introduction, absolutely no research to date (as far as this author can tell) has delved into the examination of religious groups and climate change drivers more specifically. Although the available data within this area is relatively thin, it is believed that the analysis conducted here can still provide some much needed context on the issue. The overarching motivations or drivers described within this section can further provide us with a theoretical foundation that we can use to help gain some additional insight as to why some religious groups have become motivated to engage on the climate change issue.

One of the few pieces to touch upon the issue of drivers among religious groups was developed by Laurel Kearns (1996) in her paper on Christian environmentalism in the United States. In her paper, Kearns broadly categorized the drivers motivating religious groups addressing environmental issues into three broad categories: Christian Stewardship, Eco-Justice and Creation Spirituality. While the focus of her research centered exclusively on Christian groups, the framework developed by Kearns could also be applied to other religious traditions as well given that the three models tended to reflect differences that could be essentially divided into conservative/fundamentalist, mainline, and liberal theologies or philosophical identities.

While these three theological orientations (conservative/fundamentalist, mainline, and liberal) appear to exist within other religious traditions, (they are also prevalent within Judaism and Islam as well, for example), they have undoubtedly become a staple of the Christian tradition, particularly among Protestant-based faiths. Since there are said to be well over 1,000 faith groups within North America,¹¹ there are obviously multiple ways in which these groups could be classified. Therefore, categorizing all Christian groups into three neat theological categories may be an oversimplification. Yet, it should also be noted that characteristics between the three groups are not necessarily mutually exclusive from one another or so rigidly defined given that motivating elements from one group can be found just as easily within another. Despite the effort to formally structure the groups, the three theological categories presented here can still provide us with a basic understanding as to why many religious groups are becoming increasingly motivated to approach and address a variety of environmental issues. A brief summary of each of the three groups is now presented below.

¹¹ Statistic provided by religioustolerance.org

The first motivating approach is called the Christian Stewardship model and is most closely identified with having a theologically conservative/fundamentalist orientation. Followers of this group tend to be generally motivated or driven by an evangelical or even literal interpretation of Biblical passages that call upon humans to be good stewards of the earth. According to Kearns, members of this group still maintain an anthropocentric or leadership view of humanity's role within the natural world and believe that the causes of the environmental problems are rooted in human sinfulness against God, [Kearns, 1996]. In other words, the most important driver motivating followers within this group to engage on environmental issues is the basic belief that the followers are biblically mandated to do so. Furthermore, the environmental crisis itself is a reflection of their follower's failure (or "sin") to follow God's guidance. Consequently, the focus as to what needs to be changed or addressed to obtain a proper realignment with the natural environment is simply centered on changing an individual's behavior and getting it back more inline with the divine guidance that's been provided within the Bible.

Haught (1993) described the Christian Stewardship approach as "apologetic" because it "defends the integrity of biblical religion and traditional theology without requiring their transformation," [Haught, 1993: 272]. Which is again to say that followers of this approach generally believe that if humanity had only followed the simple instructions provided within the Bible, all the environmental crises we are currently facing could have easily been avoided. However, it should be emphasized that even this interpretative approach is far from being unified. There are a number of conservative evangelicals who believe that to be a "good steward" means to continue with the "subdue-and-rule, be fruitful and multiply" approach toward nature which involves continuing to transform previously uninhabitable regions of wilderness into hospitable gardens suitable for human living, [McCammack, 2007: 648]. Nevertheless, regardless of the interpretation, the driver for this group remains the same-- which is that guidance on correct environmental behavior can found directly within the Bible without any kind of reinterpretation or theological transformation necessary.

The second motivational approach is called the Eco-Justice model. This approach is more closely identified with having a mainline or theologically moderate orientation and tends to view environmental issues as an extension of social justice issues. According to Kearns, members of this group are driven to engage on environmental issues based on the belief that exploitation and destruction of the environment is inseparable from exploitation and harm being done against usually poor and vulnerable populations. In other words, followers of this group are driven to address environmental issues based on the belief that environmental problems (or even crimes) are part of the unjust and unequal external effects produced by an immoral economic system, [Kearns, 1996]. Unlike the Christian Stewardship model, the focus of corrective action that members of this group tend to favor isn't necessarily centered on correcting individual behavior but instead focused on addressing the negative effects of an economic system that tends to favor the rich and powerful against the poor and vulnerable.

The World Council of Churches similarly described this approach as a theology based on the "liberation of life" while liberal Catholic groups would describe the approach based on an extension of its Latin American liberation theologies. Whichever the name, the concept is essentially rooted in the same belief that all forms of life have a divine right to be free from any form of oppression and have a right to live life freely because they are seen as valuable in and for themselves and by their Creator, [Birch, Eakin, McDaniel, 1996: 252]. While the worldview of this group remains essentially anthropocentric due to the belief that any destruction against other species and ecosystems will invariably harm humans as well, there appears to be little debate among members of this group concerning its interpretation, (as opposed to members within the Christian Stewardship model). Furthermore, unlike the Christian Stewardship group which see a restoring of the Christian doctrine on the part of

individuals as being what’s needed in terms of corrective measures. Followers of this model instead see government regulation as a key source and solution toward addressing these environmental inequality/injustice concerns.

The final motivational approach to be summarized here is what is called the Creation Spirituality approach and, because of its cosmological nature, the characteristics of this group is little harder to define than the two previous approaches. The primary driver motivating engagement on environmental issues from members within this group appears to be more identified with liberal theological orientations and tends to view the environment itself, not as an issue, but as an extension of the universal or divine body. According to Kearns (1996), members of this group are driven to engage on environmental issues based on the belief that proper care for creation is necessary because we, as human beings, are an integral part of the entire cosmos and to know and understand the divine means having to fully integrate ourselves within the universal order of nature, [Kearns, 1996]. For followers of this group, there is the belief that our environmental crises are not so much a reflection of our sin *against* God or the divine as much as it is more of a reflection of our alienation *from* nature and God. In other words, followers of this group believe that our destruction against the environment is an inevitable outcome of our perceived dualistic separation from it, in which we see nature as something “other” from ourselves.

Haught (1993) described the Creation Spirituality approach as the “sacramental” approach and similarly described its theological orientation being rooted less on “normative religious texts or historical revelation...and more on the allegedly sacral quality of the cosmos itself...(which)...interprets the natural world as the primary symbolic disclosure of God,” [Haught, 1993: 273]. In agreement with the Christian Stewardship approach, the Creation Spirituality model believes that it’s individuals, not social or economic systems, that are in need of correction to achieve a harmonious relationship with the environment. A diagram of three models to understanding religious engagement on the environment is presented in Table 2.

Table 2: *Three Models Driving Religious Engagement on Environmental Issues*

Characteristic	<i>Christian Stewardship</i>	<i>Eco-Justice</i>	<i>Creation Spirituality</i>
Starting Point (primary motivational appeal)	<i>Biblical Mandate</i>	<i>Social Justice</i>	<i>Cosmological Physics</i>
Theological Appeal	<i>Evangelical</i>	<i>Mainline Christian</i>	<i>Liberal/ unchurched/ ecumenical</i>
Images of God	<i>Transcendent authoritative</i>	<i>Transcendent God of liberation</i>	<i>Immanent panentheistic</i>
Images of Nature	<i>Old Testament land, fecundity; God’s creation</i>	<i>Human environment, natural resources</i>	<i>Eco-system; creation as cosmos; universe</i>
Human-Nature Relationship	<i>Gardener/ caretaker</i>	<i>Sustainable use of natural resources for human betterment</i>	<i>Proper human place in bio-system</i>
Roots of Environmental Crisis	<i>Human sinfulness & disobedience to God</i>	<i>Injustice/ inequality, economic systems</i>	<i>Dualism, human alienation from nature</i>
Prescribed Response	<i>Correct doctrine, restore Christianity as guide</i>	<i>Government regulation, grass-roots organizing</i>	<i>Correct being/ spirituality, worldview</i>

Characteristic	<i>Christian Stewardship</i>	<i>Eco-Justice</i>	<i>Creation Spirituality</i>
Social Change Orientation	<i>Homocentric = change individuals</i>	<i>Sociocentric = change society</i>	<i>Homocentric = change individuals</i>
Intellectual Tools	<i>Bible, Biology</i>	<i>Liberation theology, social sciences</i>	<i>Mysticism, evolution, physics</i>
Worldview	<i>Anthropocentric</i>	<i>Anthropocentric</i>	<i>Biocentric</i>

Source: Kearns, 1996: 56

While the three models presented above do not pretend to fully encompass or describe all the theological motivations or drivers pushing religious groups to engage on environmental issues, they do provide a usable theoretical framework and foundation to understand the basic drivers for environmental engagement. Based on the information presented thus far, we can say that religious groups are essentially motivated to engage on environmental issues based on three primary drivers: Biblical mandate, Social Justice and Cosmological Physics.

3.3 Climate Change Barriers Identified Through Literature

While discussing climate change barriers affords us the opportunity to more specifically address the main subject of this thesis, we are again faced with the same familiar problems in terms of available material that can be used to investigate the issue. Similar to the problems encountered when attempting to identify religious climate change drivers, absolutely no theoretical research has been conducted in the area of barriers encountered by religious groups engaged on environmental issues, much less on climate change. Although the limited theoretical data used within this section isn't specific to religious groups, we are fortunate that at least some scant research has been conducted on the investigation of climate change barriers in general. Which is to say that the climate change barriers identified within this section are barriers that any person or group--religious or not--would have to try to overcome to successfully conquer the issue.

Again, despite the limited amount of literary resources available, some specific climate change barriers were able to be identified. Based on the available data, climate change barriers have been categorized into four main divisions: (1) Individual and (2) Social Climate Change Barriers (based primarily on the work conducted by Lorenzoni, Nicholson-Cole and Whitmarsh, 2007) and, (3) Political Climate Change Barriers (based primarily on the work conducted by Bryner, 2008). An attempt to identify a fourth potential category of climate change barriers has been created based on the extrapolation of the previously mentioned work by Lynn White (1967) and is simply entitled "Religious Barriers". Other works, such as Wall's *Barriers to Individual Environmental Action* article (1995) as well as Abbasi's *Americans and Climate Change* (2006) comprehensive report have also been utilized to help provide some additional support to the barriers identified within this section. Finally, a handful of organizational barriers (based primarily on the work conducted by Oegema and Klandermans, 1994; and Wood, 1999) is presented as additional information in Appendix 5 and is primarily meant for religious groups engaged on the climate change issue to take into further consideration.

It goes without saying that this is an area in which additional academic research could benefit from further attention, especially if we hope to fully understand and develop tangible solutions to address an issue as large and complex as climate change. While the information provided below is arguably too thin to be considered conclusive or comprehensive by any means. Nonetheless, the limited available data that is available does offer some interesting insights

that can be used to help better understand the type and diversity of barriers that all groups are having to confront as they address the climate change issue.

3.3.1 Individual/Social Barriers

The first set of climate change barriers to be addressed are what is being termed “Individual Barriers.” These barriers are called as such because they are barriers that ordinary citizens appear to face on an individual/personal level. Beyond these “individual” level barriers there lays another group of barriers called “social” climate change barriers. These social barriers are barriers that exist within the larger social infrastructures of a society and typically lay beyond any one person’s ability to change or control. These types of barriers therefore keep even the most well intentioned individual locked into their current climate damaging behaviors despite their desire to change.

The research conducted by Lorenzoni, Nicholson-Cole and Whitmarsh (2007) on the perceived individual and social climate change barriers has been used to form the bulk of barriers presented with this category and appear to collaborate with the work previously conducted by Abbasi, (2006)¹². All the aforementioned authors appear to point out in their research that even despite a very high level of awareness and concern among the general public on the climate change issue, relatively few people have taken the necessary measures to reduce their climate damaging behaviors to positively address the issue, [Lorenzoni, Nicholson-Cole and Whitmarsh, 2007]. Given this apparent contradiction between “awareness” and “lack of action,” the authors discovered a number of individual and social barriers that allow people to continue to perpetuate their current climate damaging behaviors. The individual and social barriers identified by Lorenzoni, Nicholson-Cole and Whitmarsh (2007) are listed and summarized below as follows:

3.3.1.1 Individual Barriers

- *Lack of Knowledge:* This barrier refers to the lack of knowledge about the causes, consequences and potential solutions regarding the climate change issue among individuals (and groups). Lack of knowledge can also refer to the lack of experience, understanding, awareness and information on the issue as well as a general degree of confusion about climate change and its causes and solutions.
- *Uncertainty/Skepticism About Climate Change:* This barrier refers to the relatively high degree of skepticism or uncertainty individuals or groups maintain about the climate change issue. Even though some individuals or groups may perceive themselves to be relatively informed about the issue and its consequences, they still hold serious doubts about its validity. Uncertainty and skepticism can also refer to or apply to the causes of climate change, its seriousness, the scientific research gathered or conducted on the issue, or the necessity or effectiveness to change behavior and actions to address the issue.
- *Distrust in Information Sources:* This barrier refers to the way the mainstream media tends to portray the issue of climate change. Distrust arises when the issue is perceived to be exaggerated or sensationalized or when the information about climate change is perceived to be presented in a bias or contradictory manner. This barrier is very much

¹² While Abbasi (2006) indirectly discusses climate change barriers within his research, he does not specifically investigate or directly identify climate change barriers as compared to the work conducted by Lorenzoni, Nicholson-Cole and Whitmarsh (2007) which is why the latter’s work is heavily used within this section.

related to and tends to feed into the “Uncertainty/Skepticism About Climate Change” barrier.

- *Externalizing Responsibility and Blame:* This barrier refers to the perceived belief that the responsibility to address the climate change issue (as well as those who are most to blame for it) lays in the hands of government and industry groups (energy, automotive, airline, etc.) instead of individuals. This barrier poses a particular problem when trying to encourage changes in behavior for two reasons. First, the barrier intimately reflects the belief that climate change is still very much an environmental or regulatory issue--not a moral issue that can be strongly connected to one's individual behaviors, beliefs, practices and decisions. And second, if blame and responsibility are externalized and placed outside the individual, the incentive to address the problem and accept personal responsibility for it decreases significantly.
- *Belief that the Problem Will Be Solved Through Technology:* Like the previously mentioned barrier, this barrier reflects the belief that changes in behavior or values aren't necessary or even needed because a technological solution will effectively address the climate change problem. Again, like the previously mentioned barrier, this barrier diffuses the acceptance of personal responsibility to address the issue and prevents individuals from thoughtfully reflecting and evaluating how their beliefs, values, practices and lifestyles could be changed to make a difference.
- *Climate Change is a Distant Threat:* This barrier refers to the perceived belief that the majority of devastating effects relating to climate change will affect other people in other countries in the distant future and that climate change is not a problem that will affect them personally now or in the near future. In this sense, climate change remains more of an abstract, indirect and impersonal problem rather than something that can be tangibly and directly understood.
- *Other Problems are More Important:* This barrier refers to belief that while climate change is acknowledged by individuals to be a problem that should be addressed, there are simply too many other problems that are more immediate and relevant to people's everyday lives and which take precedence.
- *Reluctance to Change Personal Lifestyles:* Not surprisingly, this barrier refers to the reluctance on the part of individuals to make any serious changes in their lifestyle's because of the real or imagined inconvenience or cost associated with those changes. This barrier also reflects the reluctance of people to make changes in their lifestyle because they believe it will lower their standard of living.
- *Fatalism:* This barrier refers to the belief or sense of fatalism among people that it's already too late to do anything meaningful to address or mitigate the climate change issue. This sense of fatalism poses as a barrier because it removes any incentive to change or address the issue if action is perceived to be useless.
- *Helplessness:* Related to the previous barrier mentioned above (fatalism), this barrier refers to the belief that anything any individual can do is completely insignificant and won't make much, if any, difference to address the problem. This barrier also reflects a belief among many people that the scale of the problem is so big and overwhelming that it instead of inspiring a sense of urgency to address the issue, it inspires a sense of helplessness or impotence to do anything about it.

3.3.1.2 Social Barriers

- *Lack of Political Action:* While this barrier can be connected to the individual “Externalizing Responsibility and Blame” barrier, this barrier more specifically reflects the belief that no meaningful action on climate change will take place as long as local, national and international governments fail to exercise any real leadership or accept responsibility on the issue. In other words, there is no question about who is to blame or how change can come about on the issue, (through government). This barrier also reflects a deeply rooted distrust that governments will most likely never be able to do anything about the issue because of their general inability or ineffectiveness.
- *Lack of Action by Businesses and Industry:* Like the barrier directly mentioned above, this barrier is also rooted in a sense of distrust directed against businesses and industries who are seen as preventing any meaningful discussions or actions on the climate change issue. This barrier reflects the belief that no meaning actions will occur on the issue as long as business and industries remain more interested in protecting and maintaining the status quo by continuing to put profits over the needs of the planet.
- *Worry about Free-Rider Effect:* This barrier reflects the disincentive to take any interest or action to address the climate change issue simply because no else appears to be taking any meaningful action as well. In other words, the barrier reflect the belief that there is no reason to suffer changes in lifestyles, inconvenience or in a standard of living if no one else is willing to do the same thing.
- *Social Norms and Expectations:* This barrier refers to the belief that one of the most significant obstacles preventing any meaningful action to address the climate change issue is rooted in the dominating cultural beliefs, attitudes and expectations that are tied to consumption. In other words, climate change is at odds with the social expectation and belief that an individual’s primary role and function in society is to consume and that consumption leads to happiness.
- *Lack of Enabling Initiatives:* This barrier reflects the belief that even the most well-intentioned individuals are prevented or discouraged from engaging in opportunities to change their behaviors because they are essentially locked-in to current social, economic, institutional and infrastructural patterns. For example, while many U.S. citizens would gladly give up their car as a primary source of transportation, the lack of viable alternatives essentially keeps many of them dependent on their cars to get around whether they like it or not. This barrier also reflects the belief that opportunities to change behavior are also often beyond the reach of ordinary individuals in terms of cost, convenience and accessibility, [all Individual and Social barriers summarized from Lorenzoni, Nicholson-Cole and Whitmarsh, 2007].

3.3.2 Political Barriers

The second category of climate change barriers that religious groups are likely to face when engaged on the climate change issue are being called “Political Barriers.” In his article on the subject, Bryner (2008) argues that because the problem of climate change is so large in scope, it can only be solved through a political and social movement that is similarly broad and sweeping in size, much like the women’s or civil rights movements, [Bryner, 2008]. Bryner also argues that changes on the climate change issue will require a massive social transformation not only in terms of new technology or economic policy, but also in terms of values and the way we think about the think about the environment and our relationship with it. And finally, the author states that this type of social transformation cannot be handled in the manner in

which environmental groups have tried and largely failed to address the problem, which has been to try to frame it as a regulatory emissions issue, [Bryner, 2008].

The opportunity for religious groups to significantly impact the barriers within this category is certainly abundant. Whether or not religious groups can succeed by doing what environmental groups have thus far failed to achieve, (galvanizing their followers to commit to the issue with as much determination to enact positive change in the same way that was achieved through other social movements like civil rights and women's suffrage), remains to be seen. If religious groups have any hope of to make their impact and presence known on the issue, they will have to overcome the following political barriers:

- *Hostile Political Environment Toward the Environment:* According to Bryner (2008), nearly all the major achievements within U.S. environmental policies occurred during a time when there was strong bipartisan support for environmental issues. Ironically, some of the country's biggest environmental achievements--such as the Clean Water Act and establishment of the U.S. EPA--occurred under the direction and leadership of republican administrations, (Nixon in particular). However, beginning with the Reagan administration, environmental regulation has been used as a wedge issue by both parties to rally their respective bases which has thereby further created a large ideological divide between the two on environmental issues. The opportunity for religious groups on the issue is that they still hold considerable influence within the republican party, (especially evangelical groups). Therefore, if religious groups were to make climate change a key issue on par to other social issues like abortion, environmental issues (like climate change) may once again be able to enjoy the strong bipartisan support they once had.
- *Numerous Competing Interest Groups:* As stated by Bryner, interest groups play a significant role in U.S. policy making. According to the author, interest groups help "shape the way problems are defined, resources are mobilised, options are framed and selected, legal action is authorised, and policies are implemented," [Bryner, 2008: 320]. The problem for religious groups entering the political arena is that there are already so many other interest groups, (particularly at the federal/national level), competing for the attention of law and public policy makers. Furthermore, many of these competing interest groups, which have a direct interest against implementing any serious changes to current U.S. climate policy, tend to be very well funded by large multinational corporations. Getting their voices heard to influence U.S. policy-making on a national level will be a daunting task for religious groups.
- *Ineffectiveness of Environmental Groups on Climate Change Issue:* The final barrier within this category is one that can also be viewed as both challenge and opportunity to religious groups. As mentioned by Shellenberger and Nordhaus in their report, *The Death of Environmentalism: Global Warming Politics in a Post-Environmental World*, despite all the incremental advances environmental groups have made, the country is still a long way from seriously addressing an issue like climate change. While environmental groups have proven their effectiveness in blocking regressive environmental legislation proposed by recent republican administrations, they have largely failed to generate any real support for the type of broad-based policies that are necessary to address an issue like climate change, [Bryner, 2008]--despite drawing their support from millions of donors (and voters) from around the country. Therefore previous efforts by environmental groups could be seen as an impediment to engage lawmakers to address the issue based on their previous experience.

3.3.3 Religious Barriers

The final category of barriers to be addressed within this thesis can be called a "religious Barriers," but could perhaps be more specifically called a "Judeo-Christian Barrier." While

climate change itself may be a relatively new issue, many have claimed that the historical roots of our ecological crisis run centuries deep. In particular, a great deal of blame has been placed on the Biblical interpretation of humanity's relationship to the natural world based on the belief that nature has no reason for existence or value of its own except to serve man.

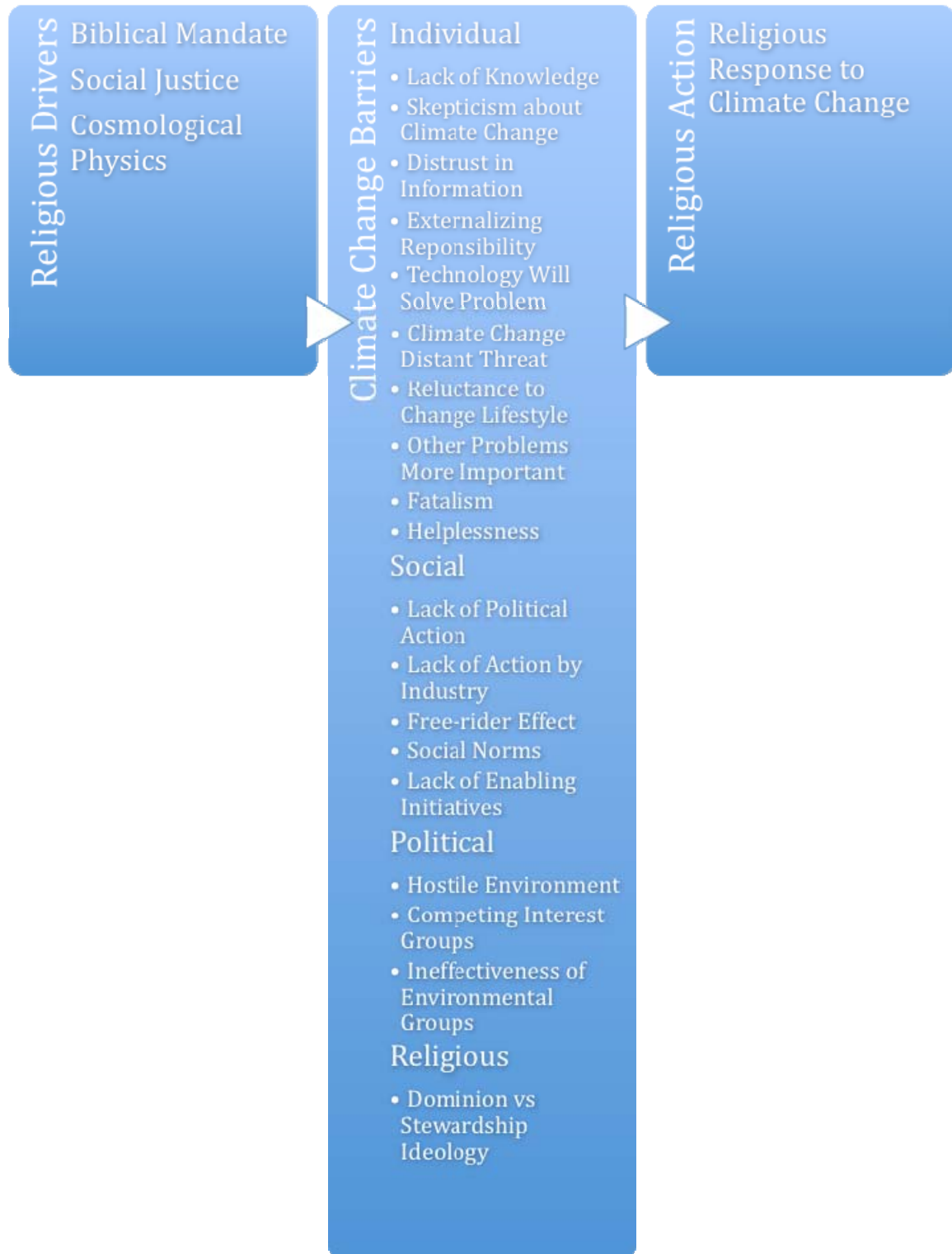
Unlike the previous climate change barriers identified above, this religious barrier is based on the argument made by Lynn White, Jr. within his renown article "The Historical Roots of our Ecological Crisis," (as well as by Kinsley, 1994). The argument made by White remains as viable today as it was when he wrote it over 30 years ago. According to White, Christianity bears a great deal of responsibility to our current ecological crisis because of the exploitative man-nature relationship it has promoted for centuries. In his piece the author wrote; "Christianity inherited from Judaism...a striking story of creation. By gradual stages a loving and all-powerful God had created light and darkness, the heavenly bodies, the earth and all its plants, animals, birds, and fishes. Finally, God had created Adam and, as an afterthought, Eve to keep man from being lonely. Man named all the animals, thus establishing his dominance over them. God planned all this explicitly for man's benefit and rule: no item in the physical creation had any purpose save to serve man's purposes," [White, 1967: 1205].

From this story of creation, two different interpretations of how humanity is to interact with his environment have arisen which appear to be based on a position of "stewardship" or "dominion". While stewardship entails assuming a sense of responsibility, care and protection for creation, dominion conveys more a sense of utility, which can easily degenerate into ruthless exploitation. Unfortunately, of these two interpretations, our general relationship with creation appears to have been largely defined by the "domination" perspective instead of "stewardship." To this day, this dominion interpretation of humanity's relationship to nature may be the most difficult religious barrier religious groups are trying to overcome as they attempt to deal with any environmental issue, including climate change.

3.4 Analytical Framework of Drivers and Barriers Based on Literature Analysis

Even though the amount of literature is rather thin, we can say that a basic framework has been developed to help us understand the complexity of drivers and barriers religious groups face on the climate change issue. Figure 1 constructed below provides an illustrated summation of this framework based the analysis conducted thus far within this chapter.

Figure 1: Drivers and Barriers Identified Through Literature for Religious Engagements on Climate Change



4 Religion and Climate Change: Empirical Overview

The idea that climate change and other environmental issues are commonly seen as merely secular, scientific or political issues may no longer be appropriate based on a surprising number of religious groups within the United States that have become actively engaged on them. A list some of the more prominent national, regional and local religious organizations actively engaged on the climate change issue within the United States, (not counting the local/regional branches or chapters for many of these groups) has been provided within Appendix 1 of this thesis.

In terms of this thesis, a “religious group” is defined either as (1) a nationally/internationally independent denominational church or religious faith (i.e., Orthodox Church, Reformed Church of America, Church of the Brethren, etc.), (2) an affiliated organization connected to a particular church or religious faith, (U.S. Conference of Catholic Bishops’ Environmental Justice Program, Episcopal Ecological Network, Quaker Earthcare Witness, etc.), or (3) a non-affiliated independent religious organization, (such as the Evangelical Environmental Network, Faith in Place, Earth Ministry, etc.). The religious groups identified within Appendix 1 are further divided into the following categories: (1) Interfaith/Ecumenical groups, (2) Denomination/religious specific groups, and/or (3) Energy/Climate/Transportation religious groups.

While the list of religious groups assembled in Appendix 1 is far from comprehensive, it does provide a clear indication that religious engagement on the climate change issue has become both a broad and growing force within the country. What can also be discerned from the number of organizations listed within Appendix 1 is that nearly every mainstream religious and Christian denomination has either created or strongly aligned itself with an affiliated group devoted to the cause. Therefore, the possible number of members these groups could claim to represent could potentially number in the tens of millions within the United States.

The religious groups listed within Appendix 1 had been compiled using the following sources:

- The *Religious Organizations Taking Action on Climate Change* report, [Allison 2007];
- A list of religious organizations included within the appendix of Gary Gardiner’s book: *Inspiring Progress: Religion’s Contributions to Sustainable Development*, [Gardiner 2006];
- A variety of online resources, such as the Harvard/Yale Forum on Religion and Ecology,¹³ National Religious Partnership on the Environment,¹⁴ and ReligionLink.org.¹⁵

The criteria for groups selected within Appendix 1 was based on the primary standard that a religious group had to demonstrate “active engagement” on the climate change issue by at least prominently promoting their climate change position and programs and/or activities on their respective Web site. In other words, while there are many religious and Christian denominational groups that have released some form of a climate change statement, this act alone was considered to be insufficient to be regarded as “actively engaged” on the issue. As an example, the United Methodist Church has issued a position on climate change within its 2004 Book of Resolutions.¹⁶ However, since the Methodist Church does not actively promote

¹³ Available at: <http://fore.research.yale.edu/religion/>

¹⁴ Available at: www.npre.org

¹⁵ Available at: www.religionlink.org

¹⁶ United Methodist Church Climate statement can be found at the following link: http://www.gbophb.org/sri_funds/issues.asp#climate

climate change as a “top issue” on its main Web site (www.umc.org), the group was determined not to be “actively engaged” or committed to the climate change issue for purposes of this thesis.

With these standards set in place, the purpose of this chapter is to provide an empirical overview of what religious groups within the United States are doing on the climate change issue. It also examines the drivers and barriers religious groups face on the climate change issue based on self-reported information obtained from the release of climate change statements, a written survey on the climate change barriers listed in chapter three and personal interviews conducted by this author with ten (10) representatives from various religious organizations.

Within this chapter, section 4.1 will offer a high-level overview of what religious groups are doing within the United States (and internationally as well) to address the climate change issue. Section 4.2 will examine the drivers for religious engagement on the climate change issue based primarily on the release of climate change statements issued by religious groups. Section 4.3 will re-examine the barriers religious groups believe they are facing on the issue based on the responses to a written survey conducted by this author and answered by a quarter of the religious groups identified in Appendix 1. And finally, Section 4.4 will present an updated analytical framework concerning the climate change drivers, barriers and activities conducted by religious groups based on the self-reported and empirical information presented within this chapter.

4.1 What Religious Groups are Doing to Address Climate Change Issue

A review of the information compiled within Appendix 1 offers some interesting insights regarding the type of events, activities, campaigns and declarations religious groups have undertaken on the climate change issue. While the list of groups and activities is far from exhaustive, it does provide an insightful overview of religious activity on the climate change issue, which can be broadly grouped into the following categories:

- Climate change statements and declarations
- Educational outreach and awareness on the climate change issue (including workshops and forums)
- Religious publications on climate change
- Public campaigns on climate change
- Support, promotion or advocacy of climate change legislative activities/efforts
- Climate change congregational support/leadership activities

As mentioned earlier, religious engagement on the climate change issue is not a new phenomena. Religious groups like the Orthodox Church have been involved on the climate change issue since the early 1990s, well before climate change became the hot-topic issue it has become today. The continued and growing involvement of an increasing number of religious groups who have adopted climate change and other environmental issues as religious issues as well may explain why the 2004 Pew Forum on Religion and Public Life Poll now shows such a strong consensus across all religious groups in the United States for greater environmental protection, [Pew, 2004]. A list of some of the more notable climate change related events, campaigns and activities conducted from a small sampling of religious groups has been provided below as an indication of religious engagement on the climate change issue:

World Council of Churches:

- Issued a “Call to action in solidarity with those most effected by climate change” at the 8th Session of the Conference of Parties at U.N. Framework Convention on Climate Change, (Oct. 2002).
- Issued new discussion paper in November 2004, “*Moving beyond Kyoto with equity, justice and solidarity*”¹⁷
- Sponsored four major events at the Montreal U.N. Climate Change Conference, which was seen the largest involvement of faith communities at any international climate change conference at the time, (December 2005).¹⁸
- Launched a new public campaign in 2006 to strengthen international agreement on climate change.¹⁹
- Issued new statement entitled “Climate Justice for All” at the U.N. Climate Conference in Nairobi, (November 2006).²⁰

Catholic Church:

- U. S. Conference of Catholic Bishops pressed the Bush Administration to accept its moral responsibility to protect God’s creation by addressing climate change issue, (June 2001).²¹
- The Vatican delivered a personal statement pressing for government intervention at 9th Conference of Parties at the U.N. Framework Convention on Climate Change, (December 2003).²²
- U. S. Conference of Catholic Bishops enacted a letter campaign to U.S. Congressional leaders urging immediate action on climate change, (February 2007).²³
- The Vatican held its first “Vatican Conference on Climate Change” and called upon all Catholics to protect God’s creation, (April 2007).²⁴
- The Pope moved to make climate action a moral obligation during his first address to United Nations, (September 2007).²⁵
- The Vatican declared pollution one of the most deadly modern sins, (March 2008).²⁶

Orthodox Church:

- With assistance of the World Wildlife Federation, the Orthodox Church hosted a “Pan-Orthodox on the Protection of the Natural Environment” environmental conference to address climate change and other environmental issues. The main presentations and papers from the conference were published under the title "So that God's Creation Might Live: The Orthodox Church Responds to the Ecological Crisis" in both English and Greek, (November 1991).²⁷

¹⁷ Download of paper available at: <http://wcc-coe.org/wcc/what/jpc/earthdocs.html#cc>

¹⁸ Information available at: <http://www.oikoumene.org/en/resources/documents/wcc-programmes/justice-diakonia-and-responsibility-for-creation/climate-change-water/09-12-05-montreal-un-climate-change-conference.html>

¹⁹ Download of campaign available at: <http://wcc-coe.org/wcc/what/jpc/earthdocs.html#cc>

²⁰ Statement available at: <http://www.oikoumene.org/en/resources/documents/wcc-programmes/justice-diakonia-and-responsibility-for-creation/climate-change-water/17-11-06-climate-justice-for-all.html>

²¹ Information available at: <http://query.nytimes.com/gst/fullpage.html?res=9A07E5DA1531F935A25755C0A9679C8B63>

²² Statement available at: http://www.vatican.va/roman_curia/secretariat_state/2003/documents/rc_seg-st_20031210_climate-change_en.html

²³ Information available at: http://www.treehugger.com/files/2007/02/catholic_bishop.php

²⁴ Information available at: <http://www.guardian.co.uk/world/2007/apr/27/catholicism.religion>

²⁵ Information available at: <http://www.independent.co.uk/news/world/europe/pope-to-make-climate-action-a-moral-obligation-403120.html>

²⁶ Information available at: http://www.treehugger.com/files/2008/03/vatican_new_sins.php

²⁷ Information available at: <http://goarch.org/en/ourfaith/articles/article8053.asp>

- The leader of the Orthodox Church, the Ecumenical Patriarch Bartholomew, also known as the “Green Patriarch,” launched the first of many semi-annual (1992, 1995, 1997, 1999, 2002, 2003, 2006) “Religion, Science and Environment” symposiums to increase awareness of climate change and other environmental issues among the world leaders, (June 1992).²⁸
- The Orthodox Church is now recognized as a religious leader on environmental issues and is often leading most of the World Conference of Churches’ environmental activities at many U. N. and other international events and conferences.

Evangelical Groups:

- Evangelical Environmental Network launched “What would Jesus Drive?” public awareness campaign to raise awareness about link between personal transportation choices and climate change impacts, (2002). The campaign is still regarded to be the most successful public awareness campaign connecting global warming to personal transportation choices within the United States.²⁹
- The National Association of Evangelicals issued its “*For the Health of the Nation: An Evangelical Call to Civic Responsibility*” to urge action on climate change and other social issues among all its members, (October 2004).³⁰
- A majority of U. S. evangelical leaders gathered in February 2006 to release a climate change statement and called upon the Bush Administration to immediately address the climate change problem, (February 2006).³¹
- The Evangelical group “Restoring Eden: Christians for Environmental Stewardship” launched a new “Evangelical Youth Climate Initiative” campaign to help ensure that climate change remains a top concern among evangelical youths within the country, (July 2008).³²

Coalition on Environment and Jewish Life (COEJL):

- COEJL issued “Global Warming: A Jewish Response” to urge its members to take immediate action on the climate change issue, (September 2000).³³
- Following up on the success of the “What would Jesus Drive?” campaign, COEJL launched its own “Clean Car Campaign” to raise awareness on link between personal transportation choices and the impacts on climate change, (November 2002).³⁴
- COEJL launched a new “Four-Part Climate Change Campaign” to help bring greater focus on promoting energy efficiency, greening synagogues and legislative activities as a means to address climate change among its members, (2006).³⁵

Other Groups:

²⁸ Information about the symposiums hosted by the Ecumenical Patriarch Bartholomew is available at:

<http://www.rsesymposia.org/>

²⁹ More information on campaign available at: <http://www.whatwouldjesusdrive.org>

³⁰ Available at:

http://64.233.183.104/search?q=cache:PJKNFQUHugJ:www.nae.net/images/civic_responsibility2.pdf+For+the+Health+of+the+Nation:+An+Evangelical+Call+to+Civic+Responsibility&hl=en&ct=clnk&cd=1

³¹ More information available at: <http://www.nytimes.com/2006/02/08/national/08warm.html>

³² More information available at: <http://www.restoringeden.org/campaigns/GlobalWarming/>

³³ More information available at: http://www.coejl.org/~coejlor/climatechange/gw_jewishresponse.php

³⁴ More information available at: <http://www.coejl.org/~coejlor/climatechange/cleancarcamp.php>

³⁵ More information available at: http://www.coejl.org/~coejlor/climatechange/cc_4part.php

- In August 1998, many Protestant, Orthodox and Jewish groups united together in an effort to press the United States to morally respond to Kyoto Protocol.³⁶
- The religious group Interfaith Power and Light of California, along with other religious groups, help to successfully push for the passage of California's "Million Solar Roofs" program as a means to address climate change and reduce fossil fuel consumption, (July 2005).³⁷
- In June 2007, media outlets reported that a variety of religious groups in the San Francisco region banded together to wage legal fight against the nation's top auto manufacturers in an effort to support California's Clean Car bill.³⁸
- In April 2008, the Interfaith Center on Corporate Responsibility successfully convinced the Ford Motor company to develop a plan to reduce its fleet emissions at least 30% by 2020.³⁹
- In January 2008, the National Council of Churches releases its influential report, "*Climate and Church: How Global Climate Change Will Impact Core Church Ministries.*"⁴⁰
- The National Religious Partnership for the Environment reported that its Interfaith Global Climate Change campaign is now established in 20 states along with an Interfaith Climate Change Network which has successfully recruited over 25,000 individuals to serve as advocates for national climate policy.⁴¹
- In May 2004, a group of internationally renown scientists and religious leaders came together to issue, "*Earth's Climate Embraces Us All: A Plea from Religion and Science for Action on Global Climate Change?*" and submitted it to the U. S. Congress in an effort to stimulate action on global climate change.⁴²

Fortunately, the list of actions described above represent just the "tip of the iceberg" regarding the amount of work being done by religious groups on the climate change issue alone. Not mentioned above are the countless stories about how churches, monasteries, religious schools and convents across the country have retrofitted their buildings to try to drastically reduce their environmental and carbon footprint. Also not included are stories detailing the actions being undertaken countless religious followers and a growing number of independent religious organizations working to address global climate change at the local level. In many seen and unseen ways, religious groups, leaders and followers have made the issue of climate change their own for well over a decade and will continue to do so for many years to come.

4.2 Climate Change Drivers Identified by Religious Groups

As one can tell from the list of highlights provided within the previous section, religious action on climate change has been on-going for years and is evolving into a potent political force. To help us why religious groups are driven and motivated to engage on the climate change issue, it is useful to look at the various "climate change statements" issued or released by the religious groups within the last decade. To date, nearly every religious and denominational group appears to have issued some form of a declaration or statement on climate change. Even Southern Baptists--which is the largest Christian denominational group after Catholics within the United States and one of the most politically and ideologically

³⁶ More information available at:

<http://query.nytimes.com/gst/fullpage.html?res=9C03E7DC113AF936A2575BC0A96E958260>

³⁷ More information available at: <http://www.interfaithpower.org/media.htm>

³⁸ Ibid.

³⁹ More information available at: <http://www.iccr.org/news/>

⁴⁰ Report available for download at: <http://www.nccecojustice.org/climate.html>

⁴¹ More information available at: <http://www.nrpe.org/whatisthepartnership/history03.htm#hist05>

⁴² More information available at: www.gwipl.org/documents/nrpe_climate_letter.pdf

conservative as well--has taken a position on the issue when 44 of its national leaders signed an official stance on global warming in March 2008.⁴³ The list of drivers inspiring religious groups to engage on climate change have been summarized following a review of the climate change statements listed below, which were collected for the Interfaith Center on Corporate Responsibility, [Heim 2007].

- American Baptist Resolution on Global Warming - American Baptist Churches
- Climate Change Resolution - Central Conference on American Rabbis
- Resolution on Global Warming/Climate Change - Church of the Brethren
- Global Warming: A Jewish Response - Coalition of the Environment and Jewish Life
- Global Warming Resolution - The Episcopal Church
- Climate Change: An Evangelical Call to Action - Evangelical Climate Initiative
- A Resolution Concerning Energy Conservation in Congregations - Evangelical Lutheran Church in America
- God's Earth is Sacred Theological Statement - National Council of Churches
- Restoring Creation for Ecology and Justice - Presbyterian Church U.S.A.
- Resolution on Global Warming and Endangered Species - The Rabbinical Assembly
- Climate Change Update - Reformed Church in America
- Global Climate Change: A Plea for Dialogue, Prudence and the Common Good - U. S. Conference of Catholic Bishops
- About Responsibility to Address Global Climate Change - Society of Friends (Philadelphia Yearly Meeting)
- Threat of Global Warming/Climate Change & Statement of Conscience - Unitarian Universalist Association
- Resolution "Global Warming" - United Church of Christ
- SRI Issue Areas: Climate Change - United Methodist Church, [Heim, 2007].

Based on a review of the 16 climate change statements above, a number of primary drivers for religious engagement on the climate change issue have been consistently identified and are summarized as follows:

4.2.1 Scientific Consensus that Climate Change is Human-Induced and Real

Within nearly all the statements or declarations issued by religious groups, the most consistent driver mentioned as a reason for engagement on climate change is the legitimization of the science behind the issue. Even though the scientific analysis behind climate change continues to mature and our understanding of the problem continues to evolve, there appears to be little debate among religious groups on the legitimacy of its science.⁴⁴

Considering the bitter divisions that occasionally separate religious and science communities (hot-button issues like evolution/creationism is a prime example), it is remarkably striking how fully religious groups have not only accepted the scientific data behind climate change but cite it as a primary motivation for engaging on the issue. In other words, the biggest and most consistent driver motivating religious groups to engage on the climate change issue isn't religious--it's scientific.

⁴³ More information about late shift by Southern Baptists on the climate change issue can be found on the following story issued by the New York Times: <http://www.nytimes.com/2008/03/10/us/10baptist.html>. It is also worth mentioned that the entire Southern Baptist convention did not officially endorse the stance. The global warming declaration signed by 44 of its most prominent members remains at odds and continues to split from the official stance taken by the Convention.

⁴⁴ It is true that some groups like the Southern Baptist Convention have yet to officially accept the science behind climate change. Some of its most prominent leaders like James Dobson of Focus on the Family, still calls the science behind climate change as "debatable."

Very often data from reports issued from scientific bodies and institutions like the IPCC and the National Academy of Sciences are cited and referred to in the climate declarations issued by many religious groups. In the “*Climate Change: An Evangelical Call to Action*” statement issued by the Evangelical Climate Initiative in January 2006, the legitimacy of the science to support climate change theory is deemed critical to their engagement on the issue because, in their words, “all religious/moral claims about climate change are relevant only if climate change is real and mainly human-induced.”⁴⁵

While it is not necessary to go into the specifics behind the scientific data supporting climate change theory, it is worth pointing out that religious groups often make the point of mentioning that the nature of the climate change problem is human-induced. The implication is an important one because even though there has been warming and cooling periods on our planet, global climate change is this instance isn’t being viewed as a natural phenomena. This recognition that the nature of the problem is human-induced--or to state it even more bluntly, a matter of human choice--further supports the argument that a human response is therefore needed to address the problem.

In other words, religious groups aren’t just engaging on the issue because the planet is warming and the rise in temperatures is causing great ecological harm. That is certainly another motivating reason or driver in itself. But, religious groups are responding to the issue because all the scientific data appears to suggest that the cause of our ecological malaise is rooted within ourselves. In other words, since humans have created the problem, humans have a responsibility and are the only ones who have the ability to solve it as well.

4.2.2 The Poor Likely to Suffer Most From Climate Change

Because the plight of the poor has always held special significance within most religious traditions, it is not surprising then that the projected impact climate change is expected to have on the poor throughout the world is often cited as another primary driver for religious engagement on the issue. Many of the statements issued by religious groups often cite the devastating impacts the poor are likely to suffer as a result of heat related deaths, drought, flooding, famine, starvation and violent conflicts brought about by climate change. In essence, the Catholic social teaching principle of how a country’s morality is reflected in how treats its poorest and most vulnerable populations is being extended to take into account the effects of climate change and our response to it as well.

While “the poor” has often meant poor nations and poor people living in countries outside the United States, this definition is starting to broaden to also include the poor within the United States as well. Even before the release of the latest National Science and Technology Council (NSTC) report which included new projections on how the nation’s poor and vulnerable populations (young, frail and elderly) are likely to suffer a disproportionately heavier burden from the effects of climate change as compared to other populations.⁴⁶

⁴⁵ Text taken from “An Evangelical Call to Action”, p.4. The legitimacy of the scientific data certainly figures very prominently among all religious groups engaged on the cause, even evangelical groups which are often inhospitable toward many scientific theories that contest their religious beliefs.

⁴⁶ The recent report of the *Scientific Assessment of the Effects of Global Climate Change on the United States* released by the National Science and Technology Council (NSTC) paints a troubling picture for the country and the probable effects it likely encounter due to global climate change. According to the report increases in global temperature are expected to negatively effect (and in some cases quite severely) the country’s agricultural production, coastal regions, fisheries, water resources, social systems, weather patterns, number and intensity of hurricanes, droughts, social and physical infrastructures, bio-diversity, ecosystems, energy delivery systems, energy consumption, transportation systems, and human health [NSTC, 2008]. The NSTC report was belatedly released three years after its required publication date by

Awareness of the devastating effects natural disasters could have on the poor and vulnerable populations within the United States was painfully brought to light as a result of hurricanes Rita and Katrina.

Although it remains debatable as to whether the intensity storms like Hurricane Katrina and Rita were caused by climate change, the 2006 Statement of Conscience issued by the Unitarian Universalists noted that the devastating effects those storms had on poor populations provides a painful omen as to how the poor are particularly vulnerable and likely to suffer hardest from future climate change related events. At the very least, storms like Katrina illustrated how the poor often lack the necessary resources to escape, cope or protect themselves from devastating natural events. The estimations relating from the effects of Hurricane Katrina certainly reflect how the poor, elderly, ill, handicapped and children suffered disproportionately more in terms of number of deaths, displacement of lives and families, job losses, and financial recovery from property damage and insurance, [Knabb, Rhome, Brown 2005]. The effects of climate change will certainly impact every population but as we've seen from Hurricane Katrina, the poor and the vulnerable are most likely to bear a heavier cost.

4.2.3 There is a Moral Obligation to Repond to the Climate Crisis

One of the basic tenets and moral values that can be found within all the major religious traditions is a variation of the golden rule which simply states that we are treat one another as we would like to be treated. Whether it is within Christianity, Judaism, Buddhism, Islam, or Hinduism, the golden rule reflects humanity's moral obligation to care and to take of one another. Another moral value found within every major religious tradition is the command to take care of the earth and live responsibly with all other life within it. As the issue of climate change has emerged, these two moral values have increasingly become interconnected to one another and is the reason why "the moral obligation to respond" to the potential climate crisis is mentioned by nearly every religious group as another primary driver for engagement on the issue.

Within many of the statements issued by religious groups, passages from the Bible and other sacred books are often referenced to lend additional credibility to this driver and to perhaps remind religious followers of the basic moral obligation being expected of them. Examples pulled from various statements are listed below:

- "(The) Bible is clear in its call to us to be caretakers...of God's creation (Genesis 2:15), and in the covenant between God and Noah and "every living creature" we are called to care for God's creatures and to protect the means of creation that we may "be fruitful and multiply" (Genesis 9:10)." - United Church of Christ Statement⁴⁷
- "Christians must care about climate change because we are called to love our neighbors, to do unto others as we would have them do unto us, and to protect and care for the least of these as though each was Jesus Christ himself, (Matthew 22:34-40; 7:12; 25:31-46)." - Evangelical Call to Action Statement
- "As American Baptist Christians we have been growing in our awareness of the implications of our faith related to ecological concerns. Our earlier Policy Statement on Ecology reminded us of our responsibility to God for the care

the current Bush administration and only after environmental groups had successfully sued the administration for its mandatory completion. The report was finally released under court order in May 2008.

⁴⁷ <http://www.webofcreation.org/ncc/statements/ucc.html>

of creation (Genesis 1:1, 11-12) and of God's displeasure with humanity's misuse of creation. Further reflection calls us to consider more seriously the implications of God's call to "love your neighbor as yourself." - American Baptist Climate Statement⁴⁸

- "As people of faith, we are convinced that "the earth is the Lord's and all it holds" (Ps 24:1). Our Creator has given us the gift of creation: the air we breathe, the water that sustains life, the fruits of the land that nourish us, and the entire web of life without which human life cannot flourish. All of this God created and found "very good." We believe our response to global climate change should be a sign of our respect for God's creation." - U.S. Conference of Catholic Bishops climate statement⁴⁹
- From the Coalition on the Environment and Jewish Life's "Global Warming: A Jewish Response," "See my works, how fine and excellent they are! All that I created, I created for you. Reflect on this, and do not corrupt or desolate my world; for if you do, there will be no one to repair it after you." - Midrash Ecclesiastes Rabbah 7:13.⁵⁰
- "WHEREAS, Psalms 24 declares, 'the earth is the Lord's and the fullness thereof,' we human beings do not possess the earth but are called to care for it as good stewards;" - A Rabbinic Call to Environmental Action.

Of course, part of this moral obligation to respond to the climate change crisis is not only applicable to suffering that is likely to be encountered by the poor and vulnerable populations. Many religious groups have also reiterated that they believe that the United States has a basic moral obligation to future generations as well. Similar to the people living in the poorest countries in our world today, future generations (rich and poor) are certain to inherit a potentially devastating environmental problem in which they are blameless in creating. Yet, despite their innocence, they are virtually guaranteed to suffer the full effects of a world unnaturally damaged through climate change.

In the U.S. Conference of Catholic Bishop's climate statement, the Bishop's write that one of the most important questions climate change confronts our current generation to answer is what level of responsibility is owed to future generations. The Bishops write that "passing along the problem of global climate change to future generations as a result of our delay, indecision, or self-interest would be easy. But we simply cannot leave this problem for the children of tomorrow. As stewards of their heritage, we have an obligation to respect their dignity and to pass on their natural inheritance, so that their lives are protected and, if possible, made better than our own."⁵¹ A representative from the World Council of Churches succinctly summarized their reasons for engaging on the climate change issue as that they had "no choice" but to be involved on the issue given the ethical imperativeness of it and the effect it will have on future generations, [Gardner, 2006].

4.2.4 A Reponse to the Crisis is Urgently Needed

The burning of fossil fuels is widely recognized as the chief culprit causing global climate change. Therefore, the need to drastically reduce its consumption is viewed as a necessary step to mitigate any further and future damages. Religious groups understand and recognize that the longer the country waits to change its consumption habits, implement new alternatives,

⁴⁸ <http://www.abc-usa.org/resources/resol/globwarm.htm>

⁴⁹ <http://www.usccb.org/sdwp/international/globalclimate.shtml>

⁵⁰ http://www.coejl.org/climatechange/gw_jewishresponse.php

⁵¹ <http://www.usccb.org/sdwp/international/globalclimate.shtml>

and fuel and energy efficiency standards, the more expensive, drastic and devastating these efforts and effects will be.

In their climate statement, the Reformed Church in America wrote that “...dealing with the threat of climate change will require changes in technology, in public policy, and in our ways of thinking and living. We should not expect that it will be easy, and we should try to find ways in which the burdens of change are shared. But the longer we wait to deal with global warming, the more harm will occur and the greater will be the human, environmental, and economic costs for our children and grandchildren.”⁵² Other religious groups have also echoed the same sense of urgency in their statements by saying that the time to act is now and that everyone--governments, businesses, churches and individuals--must be a part in the solution process if we are do deal with the climate change problem effectively.

4.2.5 The Climate Crisis is a Reflection of Humanity’s Sin

This driver directly falls in line with Kearns’ (Conservative) Christian Stewardship model. In agreement with other climate statements issued by religious groups, the Evangelical Lutheran Church argued that our engagement on the climate change issue is necessary because the environmental crisis itself is a reflection or product of human sin. The Evangelical Lutheran authors write, “As did the people of ancient Israel, we experience nature as an instrument of God's judgment (cf., Deut 11:13-17; Jer 4:23-28). A disrupted nature is a judgment on our unfaithfulness as stewards.”⁵³

Interestingly, this argument is not only being made by religiously conservative groups. Mainline and liberal religious groups have also expressed the same belief that human sinfulness is driving or causing environmental disasters around the world. The National Council of Churches (NCC), (which would be considered part of the mainline Protestant tradition), wrote that many current environmental crisis’ facing humanity today can be attributed to humanity’s inability to follow many of the rules and guidelines set through biblical standards. NCC leaders wrote that instead of being good stewards, we are suffering an environmental crisis because we’ve listened to and followed a false gospel that has encouraged us to exploit the earth and all its resources for our own ends, (NCC, 2008)⁵⁴ instead of following the religious traditions promoted within the bible.

4.2.6 The Climate Crisis Offers an Opportunity to Re-evaluate Consumer-Focused Lifestyles

The final driver to be mentioned here is one that is also widely shared by many of the religious groups investigated for this thesis. This driver reflects the belief that climate change must be confronted because it gives the people in the United States an opportunity to reevaluate and readjust lifestyles that have become overly concerned and centered on excessive and wasteful consumption. With only five percent of the world’s total population, the United States is responsible for producing nearly a quarter of the world’s CO2 emissions. The U.S. Conference of Catholic Bishops suggest that one of the most important ways that affluent nations like the United States can begin to assume responsibility and make a real difference on the climate change issue is by acknowledging the impact “voracious consumerism” has had in creating the problem.

⁵² <http://www.rca.org/NETCOMMUNITY/Page.aspx?&pid=1616&srcid=200>

⁵³ <http://archive.elca.org/socialstatements/environment/>

⁵⁴ More information on the statement can be read at the following:
<http://www.ncccusa.org/news/14.02.05theologicalstatement.html>

More than ever, the Bishops suggest, people living in affluent countries have the need and opportunity to move their lifestyles in a direction that is “...based on traditional moral virtues...(which)...can ease the way to a sustainable and equitable world economy in which sacrifice will no longer be an unpopular concept. For many of us, a life less focused on material gain may remind us that we are more than what we have. Rejecting the false promises of excessive or conspicuous consumption can even allow more time for family, friends, and civic responsibilities. A renewed sense of sacrifice and restraint could make an essential contribution to addressing global climate change.”⁵⁵

4.3 Climate Change Drivers Confirmed by Religious Groups

From the list of climate change drivers identified above, we can surmise that at least two of the three environmental drivers identified through literature in chapter three have been largely confirmed, if not more precisely defined, by religious groups within their climate change statements. The “biblical mandate” driver identified in literature remains a very strong and influential driver among religious groups given that its influence can be found within two of the drivers identified within the climate statements, (i.e. “moral obligation to respond” and “climate change is a reflection of humanity’s sin”). Similarly, the “social justice” driver identified from literature sources also remains influential as indicated and confirmed with the “poor must likely to suffer from the effects of climate change” driver identified by religious groups within their climate change statements. Since the third driver identified through literature (cosmological physics) does not appear consistently within even a handful of the climate change statements reviewed within this chapter it cannot, therefore, be considered to be a “valid” driver for religious groups as it pertains to the climate change issue.

4.4 Climate Change Barriers Confirmed by Religious Groups

As mentioned earlier, the identification of climate change barriers that religious groups are confronting is both complicated and difficult to ascertain for numerous reasons. Within religious groups themselves the identification of barriers is often poorly defined or even acknowledged due to a lack of awareness or consensus about the barriers and how they should be addressed. For example, during one interview conducted by this author with the Executive Director of one of the more prominent national eco-religious organizations in the country, the Executive Director surprisingly stated that she believed that her organization did not face any barriers as they worked on the climate change issue.

Nevertheless, an attempt was made to test the relevancy and legitimacy of the climate change barriers identified through literature in the previous chapter through a written survey developed and sent to all the groups listed within Appendix 1 of this thesis. Within the survey, religious groups were asked to rate on a scale of 1 to 5 (1 = that they strongly agreed and 5 = that they strongly disagreed) if a particular barrier posed a challenge in their work on climate change. The survey was electronically delivered to religious groups via email on July 17, 2008 and participating groups were given two weeks to respond to the survey. Survey responses were returned by religious groups electronically to the author in confidence.

Again, the purpose of the survey was to help support or invalidate the barriers identified and gathered through literature analysis and identified in chapter three of this thesis. The survey questionnaire developed for this purpose and sent to religious groups has been provided within Appendix 2. Since the survey received a 26.7% response rate (8 out of 30 religious groups participated in the survey), at least 75% of the respondents (6 out of 8) needed to rate a particular barrier as being either as a 1 or 2 (strongly agree or agree) in order for a climate

⁵⁵ Ibid

change barrier to be considered “relevant or valid” for purposes of this thesis. Individual responses to the survey can be found in Appendix 3 of this thesis, however, individual and group names have been removed for confidentiality purposes.

Although not identified through literature, an additional barrier category was included within the survey entitled “Demographic/Geographic Barriers.” Questions within this added barrier category asked religious groups to consider whether or not demographic and/or geographic barriers may exist among certain populations and/or areas within the country as they worked on the climate change issue. According to the 75% standard set for the survey, none of the barriers within this added category were deemed to be relevant or significant. Additionally, another religious barrier was added to the survey which asked if religious groups believed that a consensus was needed among religious groups in order for them to effectively engage the climate change issue. This additional religious barrier also failed to achieve the 75% consensus standard within the survey.

While the results of the survey may be considered statistically valid given the relatively high response rate, this author believes that more confidence could be attached to the results if the response rate had reached closer to the 50% mark. Therefore, the results of the survey should not necessarily be considered final or beyond reproach. On the other hand, given the small number of groups identified within this thesis to begin with, it is believed that the survey results still offer some value concerning the barriers encountered by religious groups as they engage on the climate change issue--particularly those barriers that rated highest and lowest from the survey.

According to results obtained from the survey sent to religious groups, those climate change barriers that rated highest by religious groups were identified as follows:

Individual Barriers:

- Lack of Knowledge about Climate Change (87.5% strongly agreed or agreed with this barrier)
- Believe Problem Will be Solved Through Technology (75% strongly agreed or agreed with this barrier)
- Other Problems More Important (100% strongly agreed or agreed with this barrier)
- Reluctance to Change Behavior/Personal Lifestyles (75% strongly agreed or agreed with this barrier)
- Sense of Fatalism (75% strongly agreed or agreed with this barrier)

Social Barriers:

- Lack of Political Action (87.5% strongly agreed or agreed with this barrier)
- Lack of Action by Business/Industry (100% strongly agreed or agreed with this barrier)
- Worry about Free-Rider Effect (75% strongly agreed or agreed with this barrier)
- Social Norms and Expectations (75% strongly agreed or agreed with this barrier)
- Lack of Enabling Initiative (100% strongly agreed or agreed with this barrier)

Political Barriers:

- Hostile Political Environment (75% strongly agreed or agreed with this barrier)

- Numerous Competing Interest Groups (75% strongly agreed or agreed with this barrier)

Those climate change barriers that were rated lowest by religious groups were identified as follows:

Individual Barriers:

- Externalizing Blame/Responsibility (only 25% strongly agreed or agreed with this barrier)

Demographic/Geographic Barriers:

- Generational Divide (only 25% strongly agreed or agreed with this barrier)
- Socio-Economic Divide (only 25% strongly agreed or agreed with this barrier)
- Geographic Divide (only 12.5% strongly agreed or agreed with this barrier)

Political Barriers:

- Prior Ineffectiveness by Environmental Groups (only 25% strongly agreed or agreed with this barrier)

Religious Barriers:

- Consensus Among Religious Groups is Necessary to Address Climate Change Issue (only 12.5% strongly agreed or agreed with this barrier)

A complete scoring of all the barriers listed in the survey sent to religious groups has been compiled in a chart which can be found at the very end of Appendix 3.

4.5 Updated Analytical Framework of Drivers and Barriers Based on Empirical Overview

With the collection of the data provided within this chapter, a new basic framework has been redeveloped to help us understand the multiple drivers and barriers cited and confronted by religious groups as they engage on the climate change issue. Figure 3 constructed below offers an updated driver/barrier illustrated framework using the summarized data provided within this chapter. Compared to Figure 2 provided in Chapter three, there are two noticeable differences between the two diagrams. First, the number of drivers identified by religious groups for engagement on the climate change issue has doubled. And second, the number of barriers identified by religious groups based on the survey results compiled by this author has been reduced by nearly half. Of course, this does not mean that the climate change barriers not included within this updated framework do not remain formidable challenges. The results compiled within this new framework should only infer that among the religious groups identified within this thesis, significant climate change barriers exist for these groups engaged on the issue. Additionally, we can further infer that the barriers identified within this new framework represent the most challenging barriers identified by a quarter of the religious groups identified for this thesis.

Figure 2: *Drivers and Barriers Identified Through Empirical Analysis Concerning Religious Engagements on Climate Change*



5 Case Studies

The two case studies presented in the thesis have been developed to help provide additional insight as to how religious groups are addressing and overcoming climate change barriers. Even though the two groups presented below can be similarly identified as regional/local independently-unaffiliated religious groups, the differences in terms of geographic scope, operational efforts and group size still offered some interesting results. The selection of the two groups as case studies for this thesis was not only based on the differences noted above, but more importantly, on their consent and willingness to participate within this research. Efforts were made to recruit a larger/national religious group as a case study for this thesis to help provide a more balanced and broader perspective of religious group activities. However, due to a variety of conflicts, the author was unable to secure a large national religious group to participate as a case study. While this narrowly focused examination on local/regional religious groups certainly serves as a limitation within this thesis, the author is very grateful for the participation and contribution of the two groups highlighted within it.

The first religious group presented as a case study within this thesis is Earth Ministry located in the Seattle, Washington area. A general overview of the group will be provided as well as more detailed information about the group's activities and how the group is attempting to address the barriers associated with the climate change issue. The second case study group examined for the thesis is Eco-Justice Ministries located in Denver, Colorado. The same overview of the group and its activities will be provided in a similar format so that a comparison between the two groups can be more easily made between them. As noted above, the two groups selected as case studies for this thesis was based on the differences that exist between the two groups in terms of geographic scope, operational efforts and group size as well as their willingness to participate within the research. A discussion and evaluation of the two case studies is presented at the end of the chapter.

5.1 Case Study 1: Earth Ministry, (Seattle, WA)



Earth Ministry is an ecumenical non-profit religious organization founded in 1992 with the mission to “inspire and mobilize the Christian community to play a leadership role in building a just and sustainable future.”⁵⁶ The group describes itself as working “in partnership with congregations and individuals to practically respond to this great moral challenge through education, individual and congregational lifestyle choices, and organizing for social change through environmental advocacy. Earth Ministry directly supports a network of 150 congregational activists (Colleagues) representing

over 100 Puget Sound area congregations, and has a national membership. While rooted in the Christian faith, many of...(its)...members come from diverse spiritual traditions...(Its)... programs and resources are available to all.”⁵⁷

The primary focus of its activities are centered on the local and state/regional levels. The number of paid-staff members supported by the group (see box on right) is rather large in comparison to similar, better known independent-unaffiliated religious groups operating on a national level. However, the given amount of work

Earth Ministry Staff

LeeAnne Beres, Executive Director
Jessie Dye, Program & Outreach Director
Jim Mulligan, Editor, Earth Letter
Kaitlin Torgerson, Outreach Coordinator
Beth Anderson, Outreach Coordinator
Deanna Akre Matzen, Operations Manage

⁵⁶ http://www.earthministry.org/about_us.htm

⁵⁷ Ibid.

accomplished by the group--even on the issue of climate change alone--their efforts are impressive given the usual budget/personnel constraints non-profit groups of a similar size often face.

5.1.1 Summary of Main Programs/Activities

All of the information provided below is based on information gathered from interviews conducted with representatives from the Earth Ministry group, as well as from the content available from the group's Web site located at: <http://www.earthministry.org/index.htm>.

5.1.1.1 Education

- *Earth Letter Quarterly Journal*: The group's Earth Letter is touted by the group as a nationally acclaimed quarterly journal composed of articles, stories, and book reviews that highlight Christian environmental spirituality, theology, and action and reflect on the Christian call to care for all creation. It has published works by Wendell Berry, Bill Moyers, Barry Lopez, Rosemary Radford Ruether and other well known authors.
- *Books and Publications*: There are a surprising number of books and publications that have been developed by the group to promote Christian/environmental efforts. All of the material listed below is available to the public on its Web site. Some of the more notable books include:
 - *The Cry of Creation: A Call for Climate Justice*;
 - *Greening Congregations Handbook: Stories, Ideas, and Resources for Cultivating Creation Awareness and Care in Your Congregation*;
 - *Simpler Living, Compassionate Life: A Christian Perspective*; and
 - *Food and Faith: Justice, Joy, and Daily Bread*.
- *Events*: There are two big events that the group hosts annually: The first is an Earth Day celebration event that takes place in April and other is called the Celebration of St. Francis (the patron saint of the environment) which takes place in October. In addition to these two events, the group actively participates and/or promotes a number of environmental and/or eco-religious events taking place within the Seattle metro area to help raise awareness of environmental issues among religious populations.
- *Speaking, Preaching, and Teaching*: According to the group's Web site, "Earth Ministry staff, volunteers and Board members are available as speakers, preachers and teachers at worship services and other organized events. In addition, Earth Ministry co-sponsors many local and national events each year, including lectures, workshops, field trips, and conferences."⁵⁸
- *Field Trips*: The group offers numerous guided field trips to state and national parks located within the region with the purpose to connect people with each other and nature "in the context of their faith." According to the group, field trips can include "meditative hikes, bird watching, habitat restoration and retreats."⁵⁹ The group is currently promoting an upcoming eco-tour in January 2009 to the Israeli and Palestinian areas with the goal to provide its participants a first hand look of well-known religious sites and of the environmental and social issues facing the region.

⁵⁸ Ibid.

⁵⁹ Ibid.

5.1.1.2 Action

- *Church-Based Programs*: Earth Ministry offers the following church based programs to help congregations and churches in the Seattle area promote environmental justice issues while also helping them to lighten their ecological footprint:
 - *Colleague Support Program*: This program is composed of volunteers in the local Seattle region representing over 100 congregations who actively organize, educate and support their congregations on issues such as green remodeling, environmental advocacy and toxic-free grounds care.
 - *Caring for All Creation*: This is a four-part series focused on promoting environmentally sustainable practices for churches and individual households regarding transportation, food, home maintenance, and water conservation. According to the group, “each module is designed to be celebrated as part of a Sunday worship service to engage congregants in caring for creation as part of their faith practice and life choices. The organizers' packets contain worship, education, sermon, promotion, and follow-up resources.”⁶⁰
 - *Greening Congregations Program*: This is a partnership/consultation program that helps congregations develop a comprehensive annual action plan to help move a church in a more sustainable/environmentally friendly direction. Eighteen congregations in the Seattle region have thus far enrolled in the program.
- *Advocacy*: The group states on its Web site that it “firmly believes that “addressing the degradation of God’s sacred Earth is the moral assignment of our time...comparable to the Civil Rights struggles of the 1960s and the worldwide movement to achieve equality for women” (from The National Council of Churches’ Eco-Justice Working Group’s statement, “God’s Earth is Sacred”).⁶¹ To achieve this end, the group has sought to aggressively mobilize its membership base and partners to advocate on behalf of a number of environmental issues at the state political level. In partnership with over 20 statewide organizations working on environmental issues, the group has focused its efforts on a number of legislative priorities dealing with climate change, child safety, toxic chemical use, evergreen cities, clean air and clean fuel, and local foods.

5.1.2 Climate Change Drivers

Since the group has not release a climate change statement, there are no specific climate change drivers that have been identified by the group. However, if we were to assign Earth Ministry to one of the three religious model groups developed by Kearns, (1996), (See Figure 1, Section 3.3), Earth Ministry would likely fall into the Eco-Justice/Mainline Protestant category given its apparent theological orientation. In other words, based on a review of the material produced by the group, Earth Ministry appears to be primarily motivated to address environmental issues from a social justice perspective. Although it should also be noted that the other elements between the two models (Christian Stewardship and Creation Spirituality) also appear to exist within some of the group’s materials as well.

⁶⁰ Ibid.

⁶¹ Ibid.

5.1.3 Climate Change Barriers

According to Earth Ministry's response to barrier survey conducted by this author, the group identified the following climate change barriers as being the most significant and challenging during its work on the issue:

Individual Barriers:

- Lack of Knowledge about Climate Change
- Other Problems Regarded as More Important
- A Sense of Fatalism about Climate Change

Social Barriers:

- Lack of Action by Business/Industry
- Worry about Free-Rider Effect
- Lack of Enabling Initiatives

Demographic/Geographic Barriers:

- The Existence of a Generational Divide on the Issue of Climate Change
- The Existence of a Ethnic/Culture Divide on the Issue of Climate Change
- The Existence of a Socio/Economic Divide on the Issue of Climate Change
- The Existence of a Educational Divide on the Issue of Climate Change

5.1.4 Summary of Earth Ministry's Climate Change Actions

In order to help gain a better evaluate and frame the climate change activities being conducted by religious groups, this thesis author has utilized previous research conducted by Allison (2007) and Posas (2008) to help evaluate the effectiveness of religious activity addressing climate change barriers. Building upon the research conducted by Allison (2007), Posas' developed eight criteria for measuring action by religious groups on the climate change issue. The criteria developed by Posas are listed as follows:

- Maintains Website providing information on climate change,
- Educates adherents/followers on the science of climate change,
- Educates adherents/followers on the ethical dimensions of climate change,
- Provides scriptural justification for action,
- Hosts events/forums/workshops on climate change,
- Provides recommendations for further learning and action on the issue regarding lifestyle and behavior,
- Has issued a formal statement on climate change
- Leads or participates in efforts that go beyond these actions, [Posas, 2008: 14]

What can be discerned when reviewing the criteria listed above is that the first seven actions are heavily dependent or based upon education/communication efforts. Therefore, we can conclude that religious groups that are not continuously communicating or educating their followers on the climate change issue cannot be said to be effectively addressing the barriers associated with it. The last criterion developed by Posas (Leads or participates in efforts that go beyond these actions) appears to be a rather catch all "other" category that deserves a little more explanation. According to Posas, this last criterion is meant to capture the range of initiatives, innovative programs and political advocacy efforts conducted by religious groups that go beyond the standard educational/communication activities on climate change, [Posas, 2008]. For purposes of this research, this last criterion will focus more heavily on political

advocacy efforts since political barriers were rated very high among religious groups on the survey conducted by this author.

Therefore, using all the criteria above, a summary of Earth Ministry's climate change activities are presented as follows:

- Maintains Website providing information on climate change: The group maintains a comprehensive Web site detailing its activities and offers a variety of resources on climate change and other environmental issues. The group's Web site is located at: www.earthministry.org. Earth Ministry also maintains a blog that is updated regularly by staff and other supporting members which covers a variety of topics to educate its members. The blog can be found at: <http://www.earthministry.blogspot.com/>.
- Educates adherents/followers on science of climate change: A variety of tools and resources have been used to educate its followers on the science of climate change. They include:
 - *Earth Ministry Blog:* <http://earthministry.blogspot.com/search/label/Climate%20Change>
 - *The Pattern Map:* Located on its Web site, the group maintains an interesting mapping educational tool which provides comprehensive explanations and visions as to what a sustainable economy would look like and how it might function. "The Pattern Map" is located at <http://www.earthministry.org/3e/pattern.htm> and was first developed by a group called Ecotrust.⁶² Climate change related scientific information can be found under the "climate services" category within the map.
 - *Publications:* There are a number of publications written and/or organized by the group that provide its followers with scientific information and statistics about climate change. The publications include *The Cry of Creation: A Call for Climate Justice - An Interfaith Study Guide on Global Warming* and *Caring for All Creation: On the road, At the Table, In the Home, By the Waters*.
 - *Speakers Network:* The group offers a speaker's network composed of scientists, educators, environmentalists, and theologians who are available to speak to churches and organizations in the Seattle metro area on a variety of topics including climate change. Through this program Earth Ministry can also help interested parties design a program based on their educational needs.
- Educates adherents/followers on ethical dimension of climate change: All of the same resources listed within the "Educates adherents/followers on the science of climate change" are also used to help educate members and partners on the ethical/religious dimensions of climate change. Additional resources used to increase the ethical awareness of the climate issue include the following:
 - *Greening Congregations Handbook: Stories, Ideas, and Resources for Cultivating Creation Awareness and Care in Your Congregation*
 - Greening Congregations Program (described earlier)
 - Earth Ministry's Resource Library: Earth Ministry maintains a resource library that allows local members to check out over 200 books, videos and other materials that address the issue of faith and ecology, including climate change.

⁶² More information about the Pattern Map and Ecotrust is available at: <http://www.conservationeconomy.net/>

- Provides scriptural justification for action: Within many of the publications written and compiled by the group, scriptural justification is often mentioned to justify action on climate change and other environmental issues.
- Hosts events/forums/workshops on climate change: As mentioned earlier, Earth Ministry is often engaged on promoting a number of events, forums and/or workshops that directly address climate change and other environmental issues. Recent events promoted by the group include a workshop entitled “Green Discipleship: Fostering Spirit-Inspired Hope on a Warming Planet” as well as a photo exhibit called the “Irreplaceable Campaign” presenting visual documentation concerning the impacts of global climate change.
- Provides recommendations for further learning and action on the issue regarding lifestyle and behavior: One of the most successful ways Earth Ministry has been able to provide recommendations for further learning and action on the climate change issue regarding lifestyles and behavior has been through its publications. In addition to many of the publications already mentioned (the Earth Letter quarterly journal, Caring for Creation handbook, Greening Congregations Handbook, etc.), the group has also produced a number of additional publications that offer lifestyle and behavior recommendations to help them members live a healthier and more sustainable lifestyle. These publications include: *Simpler Living*, *Compassionate Life: A Christian Perspective* (offers tools and alternatives to help individuals and groups live a more simple lifestyle), and *Food and Faith: Justice, Joy, and Daily Bread* (which offers a religious perspective on a variety of food choices).
- Has issued a formal statement on climate change: Currently, the group has not developed a formal statement on climate change.
- Leads or participates in efforts that go beyond these actions: As previously mentioned, the group is actively engaged on the state political level and advocates on a number of key environmental bills and statues that address climate change and other environmental issues. Earth Ministry believes that religious communities hold considerable influence in promoting legislative issues and will actively work in cooperation with numerous religious organizations, (such as the Christian Environmental Network, Church Council of Greater Seattle, National Council of Churches of Christ, Washington Association of Churches and the World Council of Churches) and environmental groups (such as Climate Solutions, Community Coalition for Environmental Justice, Earthjustice National Wildlife Federation, Natural Resources Defense Council, Sierra Club, Sustainable Seattle, Washington Environmental Council, and others) on a variety of issues. Examples of previous climate legislative efforts and accomplishments include:
 - *Clean Air -- Clean Fuels (HB 1303, SB 5586):* This is a state legislative package providing incentives for the use of more clean fuels and vehicles, including “commercialization incentives that will enable (the state of) Washington to compete successfully for national leadership in advancing biofuel technology that turns plant waste into fuels; and market incentives to support the introduction of Washington-grown biodiesel crops, like Canola.”⁶³
 - *SB 6001: Washington State Climate Bill:* This bill sets targets for “reducing global warming pollution, reducing energy import costs, and increasing clean energy jobs. (Additionally, it...) establishes an emissions performance standard which limits the amount of climate pollution from new power sources and protects Washington rate-

⁶³ <http://www.earthministry.org/advocacy/legislation.htm>

payers from huge future costs that will be imposed on fossil fuel power plants; authorizes additional financial incentives for utilities to invest in energy conservation; (and) allows electric utilities to continue to invest in reducing global warming pollution.”⁶⁴

5.2 Case Study 2: Eco-Justice Ministries, (Denver, CO)



Eco-Justice Ministries is an ecumenical non-profit organization founded in 2000 with the mission to help “churches answer the call to care for all of God’s creation, and develop ministries that are faithful, relevant and effective in working toward social justice and environmental sustainability.”⁶⁵ The group is located in Denver, CO with the majority of its efforts focused along the Denver Metro and Colorado front range area. The group currently is composed of two paid staff members, (Rev. Peter Sawtell, who is the Executive Director of the group, and Brian Ray James, Outreach Coordinator) and is primarily dependent on individual donations to fund its operations. The primary focus of the group’s work centers on providing “greening” consultancy services to regional Christian churches in the Colorado area. These consultancy services can take many forms but are primarily focused on helping members of a church raise their level of environmental awareness and profile by helping a member church craft environmental educational programs and activities.

5.2.1 Summary of Primary Program/Activities

All of the information provided below is based on information gathered from interviews conducted with representatives from the Eco-Justice Ministry group, as well as from the content available from the group’s Web site located at: <http://www.eco-justice.org>.

5.2.1.1 Education

In sharp contrast to the Earth Ministry case study presented above, Eco-Justice Ministries has taken a decidedly different approach with its attempts to address climate change and other environmental issues. Instead of operating out of a type of business model in which Eco-Justice Ministries reaches out to recruit members and then has them financially support the groups own environmental efforts and activities, Eco-Justice Ministries instead operates under a type of consultancy business model. The group sustains itself by lending its expertise to support and encouragement to other regional churches and groups to help them establish programs that encourage the development of faith-based environmental initiatives. Given this operational focus, the primary programs/activities offered by Eco-Justice Ministries is much narrower in scope in comparison to the first case study.

- *Partner Church Program:* The first of the three primary educational activities undertaken by the Eco-Justice Ministries group is called the “Partner Church Program,” which appears to be very similar to Earth Ministry’s “Greening Congregation’s Program”. Like the Earth Ministry program, Eco-Justice’s Partner Church Program offers its services to churches to help a church move in a more sustainable/environmentally friendly direction. The group does this by helping churches develop an action plan and coordinate environmental leadership teams to work on church projects while providing resources and consultancy services to help churches officials develop their environmental programming, (sermons, activities, and material).

⁶⁴ Ibid.

⁶⁵ <http://www.eco-justice.org/>

- *Educational Outreach/Preaching/Speaking/Teaching*: The second primary educational activity undertaken by the Eco-Justice Ministries group is one that appears to take a substantial amount of the group's time, which are its Educational Outreach/Preaching/Speaking and Teaching engagements. The group's Executive Director is often invited to deliver a variety of environmental sermons at various churches within the state of Colorado, as well as to give more "academic presentations" regarding the link between faith and environment action to assorted secular groups inside and outside of the state.
- *Eco-Justice Notes*: The group's most consistent and wide-ranging educational program is a weekly newsletter distributed to over 1,700 individuals throughout the country. According to the group's Executive Director, the Eco-Justice Notes newsletter blends educational functions, resources, political advocacy, theological/ethical reflection, and encouragement for activists. The weekly distribution of the newsletter is shaped by what the Executive Director refers to as the sociological notion of "everyday reality" in which marginal worldviews and identities need to be reinforced frequently to make an impact.

5.2.1.2 Action

- *Cluster Meetings*: Regional meetings are organized by the Eco-Justice Ministries group at least three to four times a year in order to bring together "clusters" of churches within a particular geographic area to offer training, encouragement and share advice on environmental efforts being done by the various churches. Eco-Justice Ministries organizes these cluster meetings along five locations in the Denver region, the latest of which involved over 120 participants from 50 congregational churches in the Colorado region.

5.2.2 Climate Change Drivers

Similar to the first case study, Eco-Justice has not issued a formal climate change statement. Therefore, specific climate change drivers cannot be identified. However, if we were again to assign the Eco-Justice Ministry to one of the three religious model groups developed by Kearns, (1996), the group would also undoubtedly fall into the Eco-Justice/Mainline Protestant category given its belief that social justice and environmental issues are deeply interconnected.

5.2.3 Climate Change Barriers

According to Eco-Justice Ministry's response to the barrier survey conducted by this thesis author, the group identified the following climate change barriers as being the most significant and challenging during its work on the issue:

Individual Barriers:

- Externalizing Responsibility and Blame
- Belief that the Climate Change Problem Will be Solved Through Technology
- Belief that Climate Change is a Distant Threat
- Other Problems More Important
- Reluctance to Change Behavior/Personal Lifestyles
- A Sense of Fatalism Regarding Climate Change

Social Barriers:

- Lack of Political Action
- Lack of Action by Business/Industry
- Social Norms and Expectations
- Lack of Enabling Initiatives

Demographic/Geographic Barriers:

- The Existence of a Socio/Economic Divide on the Issue of Climate Change

Political Barriers:

- Hostile Political Environment
- Numerous Competing Interest Groups

5.2.4 Summary of Eco-Justice Ministries' Climate Change Actions

Utilizing the framework presented in the previous case study, the same criteria developed by Posas (2008) will be used below to help frame and evaluate the Climate Change activities conducted by the Eco-Justice Ministry group.

- Maintains Website providing information on climate change: The group maintains a basic Web site detailing some of its activities and offers some additional resources on climate change and other environmental issues. The group's Web site is located at: www.eco-justice.org.
- Educates adherents/followers on science of climate change: Through the group's weekly newsletter, speaking engagements and cluster meetings, information is shared among its members regarding the science behind climate change.
- Educates adherents/followers on ethical dimension of climate change: As mentioned above, through the group's weekly newsletter, speaking engagements and cluster meetings, information is similarly shared among its members regarding the ethical dimensions behind climate change.
- Provides scriptural justification for action: Yes, through the same methods mentioned above.
- Hosts events/forums/workshops on climate change: Although, the group does not specifically host or sponsor events on its own due to its limited (financial and human) resources, Eco-Justice Ministries is often a presenter at many events, forums and workshops related to the climate change issue. But, again, it has not as of yet hosted events, forums or workshops on climate change.
- Provides recommendations for further learning and action on the issue regarding lifestyle and behavior: Similar to other actions mentioned above, the group does provide recommendations for further learning and action on the climate change issue regarding lifestyle and behavior through the group's weekly newsletter, speaking engagements and cluster meetings.
- Has issued a formal statement on climate change: Similar to the previous case study, Eco-Justice Ministry has not issued a formal statement on climate change to date.
- Leads or participates in efforts that go beyond these actions: While lobbying efforts cannot be said to be a main activity or focus for the group, it has participated in the following political activities:
 - 2004 Renewable Energy Ballot Initiative: The Colorado Renewable Energy Ballot Initiative (Amendment 37) established a renewable energy standard for all state electric companies to increase the total generation of electricity from renewable sources to 10% by 2015.⁶⁶

⁶⁶ Information about the ballot initiative can be found at: http://www.ucsusa.org/clean_energy/clean_energy_policies/the-colorado-renewable-energy-standard-ballot-initiative.html

The Ballot Initiative passed on voter approval thanks to efforts of many groups within the state, including groups like Eco-Justice Ministry who helped to generate active support for the measure by reaching out to regional churches to generate support on the issue.

- *People of faith Set it Up for Global Warming Campaign:* In April 2007, Eco-Justice Ministries organized a faith community event on the national day of action on climate change called “Set it Up.” The Colorado event included over 250 participants representing 20 churches with U. S. House of Representative Speak Diana DeGette as the keynote speaker. The purpose of the event was to help frame climate change as a moral issue and lobby the U. S. Congress to take the lead on the climate change issue.⁶⁷

⁶⁷ More information at: http://www.environmentcolorado.org/news-releases/global-warming/global-warming-news/people-of-faith-to-step-it-up-for-global-warming-rep_-degette-joins

6 Analysis

An analysis is made within this chapter by focusing on some of the more important topics under investigation within this thesis. Section 6.1 begins the chapter by presenting a brief analysis on the two case study groups presented in chapter five. Section 6.2 then continues with an analysis concerning the topic of drivers among religious groups engaged on the climate change issue. And finally, section 6.3 concludes the chapter with an analysis on climate change barriers by presenting some suggestions as to how religious groups may be able to more effectively address them.

6.1 Analysis on Case Study Groups

Despite the similarity of drivers, theological orientation and identified barriers significant differences in outcomes exist between the two case study groups examined for this thesis. These differences in outcomes are summarized in Table 3. Given the extensive amount of work accomplished by Earth Ministry (particularly when evaluated using Posas’ eight criteria for action on climate change), we can readily assume that Earth Ministry is effectively addressing the climate change issue and a majority of the barriers identified in the previous chapter of this thesis. The same, however, cannot necessarily be said for the Eco-Justice Ministries group. When compared to the Earth Ministry group, the Eco-Justice Ministries group appears to fall drastically short in being able to address the barriers that exist on the climate change issue given its limited outcomes. (An estimated match up between climate change barriers and group action on the issue was conducted for both case study groups and presented in Appendix 4.)

Table 3: Comparison Between Case Study Groups on Climate Change Actions

<i>Climate Change Actions</i>	Earth Ministry	Eco-Justice Ministries
<i>Maintains Web site with Climate Change Information</i>	¶	¶
<i>Educates followers on climate change science</i>	¶	TM
<i>Educates followers on climate change ethics</i>	¶	TM
<i>Provides scriptural justification for action</i>	¶	TM
<i>Hosts events, forums, workshops on climate change</i>	¶	
<i>Provides recommendations for further learning and action</i>	¶	TM
<i>Issued formal statement on climate change</i>		
<i>Leads/participates in efforts that go beyond these</i>	¶	¶

¶ = Action appears to directly address climate change barriers through the development of formal programs, publications, legislative activities, etc.

TM = Action may indirectly address climate change barriers through more informal actions such as through speaking/preaching/teaching engagements and activities.

Empty Box = Does not appear to address climate change barriers

At first glance, the two religious groups may appear to present a disparate reality among religious groups engaged on climate change issue. While it is true that there are many religious groups (like Earth Ministry) are accomplishing a great deal of work on climate change and other environmental issues through a variety of methods (production of publications, events, speaking engagements, legislative lobbying activities, etc). It is likely also true that there are many other religious groups who--although equally committed in their cause--either remain too fragmented and disorganized to be effective on the issue or simply too small in stature (like Eco-Justice Ministries) to generate a comparable impact with their efforts.

It would also be easy to make a strong connection between the number of full-time staff members a group is able to employ (i.e. size of the group) and the work the group is able to produce. Certainly, as it relates to the two cases studies presented within this thesis, the amount of human and financial resources a group has at its disposal does appear to have some correlation to the amount of action, programs and publications that a group is able generate and devote to a particular cause like climate change. All this leads us to simply say that a bigger, better funded organization may be better positioned to produce more identifiable and measurable actions to address an issue like climate change compared to smaller, modestly funded groups.

Yet, it is premature to jump to any conclusions regarding the effectiveness of religious engagement on the climate change issue based on the investigation of these two religious groups alone. Additional research is required before theories or conclusions can be made in this regard. Furthermore, it should be noted that both groups investigated for this thesis are local/regional groups. If this thesis author had had the opportunity to investigate a larger, national religious organization like the Catholic Church or the National Religious Partnership for the Environment, the information gained from that research certainly would have helped to provide a richer picture regarding the effectiveness of the various types of religious groups engaged on the climate change issue. However, due to limitations in availability and willingness on the part of national religious groups to participate in this research, such an investigation could not be made.

6.2 Analysis on Drivers: Climate Change Itself is Driving Unification Among Religious Groups

Although it is too early to quantify the influence climate change will play in shaping humanity's future on the planet. It is already possible to say that the event or phenomenon itself is playing a very powerful role in reshaping our worldviews and the vast amount of cultural information contained within them. Far beyond the severity of storms, droughts and changing weather conditions, climate change is also starting to influence the world economy in many unexpected and tangible ways. Today, for example, many companies are starting to rethink their production processes and to market themselves and/or some of their products as "climate friendly" while a few are even trying to reposition themselves as "climate neutral" as a form of competitive advantage. In fact, whole new businesses have come into existence to help other business offset or lower their carbon impact, (i.e. The Carbon Neutral Company, Climate Care, and Native Energy).⁶⁸ Climate change is further forcing employers of every type

⁶⁸ The legitimacy and effectiveness of many of the "carbon neutral" companies is being widely debated. One of the key points of contention is whether or not these companies actually provide a disincentive to dirtier companies to make any real/fundamental changes in their business practices if they can simply support a "carbon neutral" program instead and for far less money. There are many good academic reports available on the subject and many free resources on the Internet providing reviews and comparisons of these "carbon neutral" companies, (such as:

to rethink the way they typically do business by offering telecommuting options for many positions and instituting a four-day work-week as an effective means to save on energy costs and climate impact.⁶⁹

Beyond the business world, climate change is also slowly shaping the worldview of everyday people in entirely new ways as consumers now apply new questions and criteria to their purchasing decisions that were relatively unheard of even 10 years ago. For example, many people are just as likely to ask how far the food they buy has been shipped, how well-insulated a home's envelope is rated, or what kind fuel efficiency standard the car they may want to buy is able to achieve as they are likely to ask about the price for any of those items. In very real and tangible ways, climate change is powerfully forcing many people to rethink about the way they view the world and how we should functionally interact in it.

Given its widespread influence and global interconnections to so many aspects within our lives, it shouldn't come as a surprise that climate change also appears to be reshaping the way in which religious groups and their followers practice their faith and how they interact with one another. As mentioned within this thesis, discovering common purposes and drivers motivating various religious groups to become engaged on the climate change issue has certainly been a much easier task than identifying the barriers these groups face. More often than not, the climate change drivers discovered within the statements issued by religious groups tended to be clearly defined and broadly agreed upon across religious and denominational lines.

While the framework developed by Kearns (1996) was helpful in allowing us to understand the underlying differences in motivations driving religious groups to engage on environmental issues in general, these differences tended to fade away as it pertained to the climate change issue. In a very real sense, we can likely say that Kearns' framework already appears outdated or ill-suited toward helping us understand the various drivers motivating religious groups engaged on the climate change issue. The lines separating conservative, mainline and liberal religious have become far less rigid in comparison to other social (and perhaps other environmental) issues given the very broad agreement concerning the drivers among these groups. Despite a group's theological orientation (i.e. conservative, mainline and liberal), we can say that in most cases the drivers detected within the various climate change statements investigated for this thesis appeared far more similar to one another than different.

As evidence of this "convergence of drivers" taking place among religious groups on the issue, this thesis author found that conservative/evangelical (Christian Stewardship) groups were just as likely to cite climate changes' disproportionately harmful impact on the poor and vulnerable populations as a reason for engagement on the issue as mainline (Eco-justice) and liberal groups (Cosmological Spirituality). Mainline and liberal groups were just as likely to cite biblical passages as reasons for engagement on the issue as evangelical groups. And, conservative groups were just as likely to advocate for government action as an appropriate means to address the issue as Eco-justice groups.

All this leads this thesis author to conclude that perhaps the most important observation among the drivers motivating religious groups engaged on the issue is that climate change itself has become a major driver unifying many religious groups. Numerous authors have

http://www.ecobusinesslinks.com/carbon_offset_wind_credits_carbon_reduction.htm, and [http://www.carbonoffsetreview.com/.](http://www.carbonoffsetreview.com/))

⁶⁹ The Utah state government, for example, recently converted to a four-day work week as a means to save energy and cut costs. More information about the transition can be read at the following link:

<http://climate.weather.com/articles/4daywork2008.html>

echoed Posas' observation when she wrote that what is most fascinating about how religious groups have engaged on the climate change issue is that the issue is not only "...promoting social solidarity...at the level of individual religions but among religions...(In) the present day climate crisis there is an overarching spirit of looking past differences, reaching out across faith communities, and arising to realize common goals," [Posas, 2008: 9].

Indeed, it is hard not to over-emphasize this stunning side-effect climate change has produced among religious groups. This new spirit of cooperation and unity taking place among them within the United States probably hasn't been witnessed since the civil rights movement during the 1960s. Which is also to say that perhaps for the first time in a very long time religious groups are acting very "religious" in the sense that the differences between them are being far less emphasized than the common goals they share, and that, in itself, is certainly a very welcomed change.

6.3 Analysis on Barriers: Opportunities Exist to Reduce Climate Change Barriers by Refocusing Religion's Role on the Issue

In analyzing how religious groups may be able to reduce and overcome the climate change barriers they face, one way to approach the problem is by investigating the role of religion on the climate change issue in very general terms. The suggestions put forth within this section touch upon these two basic questions (What is the role of religion on climate change? How can religious groups reduce and overcome climate change barriers?) by addressing them as one. As is the case for any group working on a complicated program, project or problem, opportunities usually exist for improvements in efficiency and effectiveness of action. In this thesis author's opinion, this case offers no exceptions as religious groups may be able to more effectively reduce and overcome the barriers associated with climate change by being very clear about their role and function on the issue.

However, before proceeding directly to the suggestions, a quick thought is shared on the climate change barriers themselves. It was interesting that religious groups tended not see religion itself as a potential barrier hindering effective action on the climate issue. There are a number of ways to look at this result. The result may simply reflect that the staff within these groups spend most of their time working along side other religious followers equally committed to the cause. Which is to say that in that circumstance, religion isn't a barrier--it's a binder and driver between them. On the other hand, the results may reflect a real change in consciousness on the part of religious and non-religious followers regarding the old "dominion" oriented ideology.

6.3.1 Reducing Climate Change Barriers Through Specialization

The first suggestion to more effectively reduce climate change barriers is based on the collective impressions and observations obtained while gathering data for this thesis, particularly on the two case study groups presented within it. In a sense, the suggestion is really more based on the simple observation that not all religious groups are exactly alike nor should they be viewed as such. For anyone to equate the value that religious groups of all types and sizes bring to the climate change issue on one measuring stick can be unfair and short-sighted to the groups being evaluated as well as to our understanding of the issue. Instead, it may be more appropriate to evaluate the effectiveness of a religious group based on the primary function or role the group plays on the issue.

Just as is the case for businesses operating in the world today, we can say that religious groups similarly operate to meet a desired need being demanded by their constituents within their "marketplace." If we were view religious groups in this manner, an alternative approach to evaluate the performance of a religious group on an issue like climate change might be better

understood by dividing them into two functional categories: Inspiration and Action. The primary function of the first group, the “inspiration” group, is to simply try to inspire unorganized individual action on the climate change issue by raising its constituents level of awareness through the group’s preaching, speaking, teaching and writing efforts. In a sense, the function of these “inspirational” groups would be very similar to what the old Methodist itinerant preachers set out to achieve as they traveled from town to town to try to “awaken” the American public during the “Great Awakening” period of the late 1700s. If we were to apply the itinerant model to the climate change issue, the objectives of these “inspirational” groups becomes more narrowly focused and clearer, (i.e. increasing the levels of awareness and acceptance on global climate change and humanity’s interdependent relationship and responsibility to the planet). By extending the economic idea that the market helps to create greater operational efficiency among its individual actors through specialization and competition, religious groups may be in a stronger position to better utilize their limited resources.

Of course, consciously or not, this may already be happening within their “marketplace” and all that’s lacking is the formal recognition. We can say, with some confidence, that some small and large religious groups are already operating in this manner without any conscious awareness or intention about it. For example, it may be just a matter of coincidence that larger, better funded action-oriented groups like Earth Ministry or Interfaith Power and Light are operating in states like Washington and California (which are coincidentally more politically liberal leaning states as well) where the level of environmental awareness is much broader and higher. And, it may also be just another coincidence that small groups like Eco-Justice Ministries and the Evangelical Environmental Network are located in parts of the country where the level of awareness about these types of issues may be much lower (Colorado and Georgia which are more politically conservative leaning states) and who also appear to spend more of their time preaching, speaking, and teaching than putting definable programs to action. Again, these observations are simply meant to suggest that the “religious market” may be already creating these efficiencies among religious groups without any conscious intention on the part of the groups operating within it.

Yet, as it applies to future and further research in this area, the primary functions of these groups as well as the external circumstances in which they operate should not be so completely overlooked or ignored when it comes to judging the effectiveness of these groups. It may not at all be the case that a group like Eco-Justice Ministries is far less effectively engaged on the climate change issue and addressing its barriers in comparison to a group like Earth Ministry. Instead, it may more appropriately be the case that the two groups are fulfilling two very different roles and functions on the issue and there happens to be no evaluative framework available at this time to measure the effectiveness of “inspirational” groups like Eco-Justice Ministries.

That being said, since none of the religious groups investigated for this thesis defines itself as being “inspirational” or “action” oriented in its purpose and function, it is appropriate to judge the groups with the only evaluative framework available at this time. Moving forward and without some sort of acknowledged functional differentiation between these religious groups, small groups like Eco-Justice Ministries (and even Evangelical Environmental Network) run the risk of being perceived as being ineffective on the issue compared to bigger, better funded, more fully staffed religious groups.

Finally, by suggesting that an acknowledged difference should take place between religious groups in terms of their function doesn’t mean to insinuate that “action” oriented groups don’t have a role or responsibility to inspire unorganized individual action on the issue. Or, conversely that “inspirational” oriented groups don’t have a similar right to develop programs

to address the climate issue. That argument is not being suggested here. Instead, this thesis author is advocating that some sort of functional recognition on the part of academics and religious groups themselves may be needed to help better differentiate and understand religious engagement on the issue.

Again, in the business world, this concept is stated as “the business of the business is ‘X’,” and it should be the same for religious groups as well. The business of the business for Eco-Ministries is to inspire action on climate change. The business of the business for Earth Ministries is to develop programs and resources that allow the group and its members to take action on the issue. If religious groups were to adopt this more focused “specialized” approach, it is quite possible that they may be able to address the issue and its corresponding barriers in a much more effective way.

6.3.2 Reducing Climate Change Barriers By Transforming Climate Change from an Environmental Issue to a Human Issue

The next suggestion is far less theoretical in nature than the previous suggestion mentioned above and is being directly relayed from religious groups themselves. During interviews conducted with various representatives from religious groups a recurring suggestion was made about how to catapult the climate change movement within the United States. According to a number of religious representatives interviewed for this thesis, the key to successfully developing climate change into a united social movement hinges on its proponents ability to transform it from an environmental issue to a human issue.

As one interviewee stated during a telephone interview the biggest barrier climate change faces as a religious or moral issue is the ability to connect the issue to people. The representative went on to say that as long as a human face remains missing from the climate change problem, churches will resist participating because they will see other issues as being more important to people’s everyday lives, [Anderson, B., 2008]. Another interviewee put it more bluntly and stated that the biggest mistake climate change advocates have made thus far with the issue is that they essentially promoted it as an issue that’s been ‘more about polar bears than people,’ [Gill, 2008].

The suggestion of transforming the climate change issue from an environmental issue to a human issue is an interesting and important one since it could be reasonably argued that the most successful social movements within the United States have really been “human-value movements.” For example, the abolition of slaves, women’s rights, worker rights, and civil rights movements have all essentially been about the country’s ability to honor its sacrosanct belief to revere all human life as it is written in the U. S. Declaration of Independence, (i.e. ‘all men are created equal and endowed from their creator with the unalienable rights of life, liberty and the pursuit of happiness.’)⁷⁰

From a religious perspective, this belief echoes the transcendent spiritual belief that all forms of human life are invaluable and holy in the eyes of God and must be respected above our own economic self-interests or collective social norms. As one author stated, the success of many “...religious-motivated political movements in the U.S. history are based on some notice of the unqualified value of human live (e.g. anti-war, pro-life) or on the basic, irreducible value of each person, regardless of circumstance (Abolitionist, civil rights),” [Jalen, 2006: 333].

⁷⁰ The complete Declaration of Independence (as well as more information about it) can be read at the following link: <http://www.archives.gov/exhibits/charters/declaration.html>

Admittedly, the task before religious groups and climate change advocates to transform the climate change issue into a human-value issue is a difficult challenge. It is far easier to put a “human face” on the abolitionist, women’s rights and civil rights movements than it is with an issue like climate change. Yet, there can also be no denying that climate change is and will increasingly become more of an “human-issue” as more people feel the effects of starvation, drought, famine, disease, and wars induced by climate change. If religious groups can successfully elevate and transform the issue into a fundamentally human-centric issue (instead of a planet-centric cause), that profound change in perspective alone might be able to do more to advance the issue than any other moral, environmental and economic argument that has been put forth thus far.

6.3.3 Reducing Climate Change Barriers by Reclaiming its Prophetic Voice

The final suggestion also comes from information gathered during interviews with representatives from religious groups and speaks more directly to the role of religion in-general. The suggestion was articulated by one interviewee as the most important challenge before religious groups today which is their need to reclaim their prophetic voice within the American community, [Street, 2008]. Another representative stated the problem in another way by saying that religious groups today have lost their prophetic voice because they have become far more interested in creating a sense of community among their followers instead of instilling a sense of change within them, [Sawtell, 2008].

It can easily be argued that religious engagement on the climate change issue is essentially following the same well-worn path traveled by environmental groups over the last decade. The only difference may be that religious groups are expecting a different outcome because they are speaking with a different voice, using different words, and inspired by different motivations. While that may be enough to create change in some instances (and certainly has in some states in the country), it is doubtful that when placed in the context of trying to create a national social movement on the issue that all that is really needed from religious groups is another form of environmentalism.

Instead, perhaps what is needed most to advance the cause of climate change and other issues is, as advocated by representatives interviewed for this thesis, is for churches and religious groups to play the same role they’ve historically played in other social movements. Instead of trying to create more awareness on the science behind climate change, religious groups should instead be playing the same transformative/go against the normative grain/speak truth to power/take risks for the greater good type of leadership role that other religious groups have played in the past.

The insinuation that many religious groups and churches appear far more interested in creating a sense of community among its followers instead of instilling a sense of change within them certainly isn’t without its evidential merit. While many community churches today within the United States are now just as likely to have recreation rooms, athletic programs and basketball courts available for their followers as they are to have pews in their churches. Many other churches are also starting to offer other business-like services as a means of generating and attracting more revenue and followers to their churches. A recent article reported a wide variety of business-like ventures and services that churches have now started to engage in such as; bookstores, music and video production, ice cream parlors, tanning beds, child care programs, and retirement communities for the well-to-do. One mega-church in Florida has even gone so far as to open its own biblical theme park which includes, among other things, a wilderness climbing wall, toy and gift shops, and cafe and snack bars serving “Goliath Burgers” to its customers, [Henriques, 2008]. One certainly has to wonder not only if it is

appropriate for these “services” to be fulfilled by churches and religious groups but how far it distracts churches and religious groups from their original prophetic mission.

While these new business ventures certainly offer new opportunities for churches to generate new sources of revenue, one also has to further wonder if it also creates an economic disincentive among these churches to avoid taking tough stances on controversial issues. In other words, would a church be less likely to make the moral argument, for example, that the full-cost of our products be reflected in their prices (i.e. a price that takes into account the cost of its externalities)? Or, would a church be hesitant to argue in support of a ban on all plastic bags within the United States as legitimate moral responses to our environmental crisis? because it uses so many of them itself within in its own business ventures? Are churches today refraining from making such arguments and taking more tough positions on issues because they are afraid that such positions would turn people away from their churches and hurt their business enterprises? Whether it is fair to even ask these types of questions or not, these were certainly not questions that religious groups engaged within earlier social movements had to consider.

In comparison to the churches and religious groups from previous social movements, many have argued that churches and religious communities today have shown little willingness to make any comparable sacrifices, risks or commitments to prophetically push the country to address the moral issues confronting it. Today’s churches have not called for boycotts against certain products to change a company’s or industry’s practice. They have not come out strong enough against the over-obsessive compulsion to acquire more and more material goods which has become fixed ideology within America’s consumer-oriented culture. Nor have they even asked their followers to make simple adjustments or sacrifices in their lifestyles that can make a tremendous difference to the environment and their own quality of life, (like stop eating beef or whether or not it is appropriate to limit the number of natural-born children in each family to two). Obviously these are delicate issues but addressing them is necessary and, quite frankly, too many religious groups have even excused themselves from the debate on many of them. The trend that has developed instead among the larger mega-churches within the country is that they have become more intent on developing more bookstores and incorporating more athletic programs into their services.

If religious groups have failed to become a powerful voice on the national stage when it comes to an issue like climate change, it may be in part due to their own failure to claim any real ownership on the issue. Instead of leading the charge on the movement, it may very well be the case that too many religious groups appear all too content to be nothing more than another voice to “me too” chorus. It is all well and good to promote energy efficiency programs and work to increase awareness on science behind climate change. But, it can hardly be said that those are unique “religious” contributions to the problem either. Until religious groups are able to assert their own vision and speak with their own voice on the issue, their role in the matter may very well remain largely overlooked, seemingly irrelevant and fittingly solved without them.

7 Discussion

Thus far this thesis has been able to address the three initial research questions posed within it. It has addressed the first research question by identifying the drivers and barriers of religious groups engaged on the climate change issue. General drivers for religious engagement on environmental issues were identified through an analysis of academic literature and then more specifically defined climate change drivers were identified through a review of climate change statements issued by religious groups within the last decade. A number of climate change specific barriers were further identified through an analysis of academic literature and then later refined and confirmed as significant barriers by a number of religious groups who participated in a survey conducted by this author.

Additionally, this thesis has been able to address the second research question posed within it by investigating how religious groups have actively engaged on the climate change issue. Section 4.1 provided a high-level overview of some of the more notable actions achieved by local/regional and national/international religious groups on the climate change issue. The information contained within Appendix 1 identified over 30 religious groups determined to be “actively engaged” on the climate change issue within the United States and offered further details concerning the climate change activities undertaken by these groups. Furthermore, additional insight was provided through the two case study groups contained within this thesis that offered an intimate perspective regarding the type of climate change activities undertaken by religious groups. An evaluative framework developed by Posas (2008) was further utilized and applied to the two case study groups to help frame and measure the effectiveness of the climate change activities undertaken by the two groups. Finally, the final research question within this thesis was addressed in the previous chapter when an analysis was conducted on climate change barriers encountered by religious groups and suggestions were made regarding how religious groups may more effectively reduce and overcome them. Moving forward, this chapter will now offer a few thoughts as to why religious groups should remain engaged on the climate change issue and what assets they can bring to bear on it.

7.1 Why Religious Groups Need to be Engaged on Climate Change Issue

Despite the sharp tone and criticisms levied within the previous chapter, there should little doubt that there remains an important role for religion and religious groups on the climate change issue. If anything, this thesis has tried to show that their increased involvement on the issue is very much warranted. Beyond the moral and ethical reasons for their engagement, there are a few other practical reasons that will be shared below in which primary climate change stakeholders may wish to consider when weighing whether or not to encourage greater religious participation on the issue. Section 7.1 will provide some supporting arguments as to why primary climate change stakeholder groups should engage religious groups on the climate change issue. And, then finally section 7.2 will present a number of assets religious groups are able to apply to the climate change issue.

7.1.1 The Modern Environmental Movement Has Stalled

Of course, it goes without saying that the environmental movement has experienced its fair share of victories since it became a major movement in the 1960/70s given that the United States has seen noticeable improvements in its air, soil and water quality. Yet, while these achievements cannot be discounted nor their importance overlooked, these advances by environmental groups haven’t done enough to address an issue like climate change.

As Micahel Shellenberger and Ted Nordhaus point out in their report, *The Death of Environmentalism: Global Warming Politics in a Post-Environmental World*, despite all the incremental advances, the country is still a long way from seriously addressing issues like climate change. The authors conclude in their report that "...modern environmentalism is no longer capable of dealing with the world's most serious ecological crisis" because it hasn't been able to sufficiently lay the groundwork that is necessary to address the serious ecological crises confronting it [Schellenberger, M., Nordhaus, T., 2005: 6]. Ironically, the authors suggest in the conclusion of their report that the environmental movement may ultimately have to tap into religion to not only help better sell its policy proposals, but to address the fundamental question of who we are and who we need to be [Schellenberger and Nordhaus, 2005: 34].

The conclusions by Schellenberger and Nordhaus have been supported by a number authors in other articles published in a variety of academic journals. Authors such as Kearns, Dowie, Dunlap and Douglas have similarly suggested that the current formula and tool kits used in the past by environmental groups have largely proven themselves to be ineffective and unable to meet the challenges of our current environmental situation. Dowie writes that mainstream environmental groups are too heavily focused on technocratic government legislation (and their own self-perpetuation) than on changing the cultural worldviews that are creating and exacerbating problems like climate change, [Dowie 1996]. Other academics have suggested their lack of success on the problem can be partially explained by the degree of dependency in which these groups are unable to sustain themselves without mass memberships and corporate donations as well as their connections to the circles of power within government and business which may have led them to compromise too willingly or easily, [Douglas and Wildavsky 1982; Dowie 1996; Dunlap and Metrig 1992; Kearns 1996].

7.1.2 Government Legislation is Aimed at Increasing Consumption-- Not Reducing It

Promoting economic development is one of the core functions of government within nearly every Western country. There is nothing wrong with economic development especially when it is aimed at improving the standard of living for needy populations. With economic development we've seen accompanying increases in education, health standards, food and water quality, and environmental protection.

However, we've also seen that most governments have grown dependent on the idea that equates economic growth for economic development. This economic measuring stick that is suppose to reflect the health of a country and its standard of living is encapsulated by the conventional indicators of GDP or GNP, (Gross Domestic Product/Gross National Product). But, as it was so famously articulated by Robert F. Kennedy during an address at the University of Kansas (quoted below in footnote⁷¹), such indicators tend to reflect everything

⁷¹ Robert F. Kennedy, "Robert F. Kennedy On What GNP Means:"

"Too much and too long, we seem to have surrendered community excellence and community values in the mere accumulation of material things. Our gross national product ... if we should judge America by that - counts air pollution and cigarette advertising, and ambulances to clear our highways of carnage. It counts special locks for our doors and the jails for those who break them. It counts the destruction of our redwoods and the loss of our natural wonder in chaotic sprawl. It counts napalm and the cost of a nuclear warhead, and armored cars for police who fight riots in our streets. It counts Whitman's rifle and Speck's knife, and the television programs which glorify violence in order to sell toys to our children...Yet the gross national product does not allow for the health of our children, the quality of their education, or the joy of their play. It does not include the beauty of our poetry or the strength of our marriages; the intelligence of our public debate or the integrity of our public officials. It measures neither our wit nor our courage; neither our wisdom nor our learning; neither our compassion nor our devotion to our country; it measures everything, in short, except that which makes life worthwhile. And it tells us everything about America except why we are proud that we are Americans." quote available at:

associated with economic activity except those things that are most important to a healthy and sustainable society. Despite Kennedy's warning, the United States as well as most other governments remain on the path of equating rising GDP and economic growth for economic development. Given this standard or measurement of success, this can explain why there's a continued reliance on policy measures within the United States that myopically focus on increasing consumer spending and translating that activity as a cure all to many of the country's social problems. A step in the right direction would be to replace the GDP for a measurement indicator that better reflected a country's actual development or progress rather than simple economic growth. However, until that happens, it is likely that a majority of governmental policies will continue to focus on promoting economic growth and increased consumption as a measure of success.

7.1.3 Religious Institutions may be Only Viable Partner Available

The critical need for the country's citizens to adopt sustainable lifestyles is likely to encounter strong resistance in a world that has grown literally and figuratively dependent on continuous economic growth. Finding a large and influential partner committed to the mission is going to be extremely difficult as climate change stakeholders inevitably begin to call for changes in consumer behavior. Finding committed partners within large multinational corporations or even governmental institutions to strongly promote de-growth/reduced consumption principles and strategies may, at best, only lead to further watered-downed policies and flawed initiatives. Practically speaking, the difficult decisions that must be made to solve our ecological crisis through changes in consumer behavior will eventually stand against the economic interests of entrenched powerful entities.

For the climate change/sustainable consumption voice to be heard and its suggestions to be seriously considered and further put into practice, it will need a titanic partner to help champion its cause. Given this dilemma, traditional religious communities represent perhaps the only remaining major stakeholder available that possesses a sufficient amount of resources, credibility and communication channels to push the cause. As unlikely as the alliance may be, engagement with the religious community may very well be the science/sustainable development community's only remaining viable choice.

7.1.4 Religious Groups Offer an Alternative Vision to Happiness

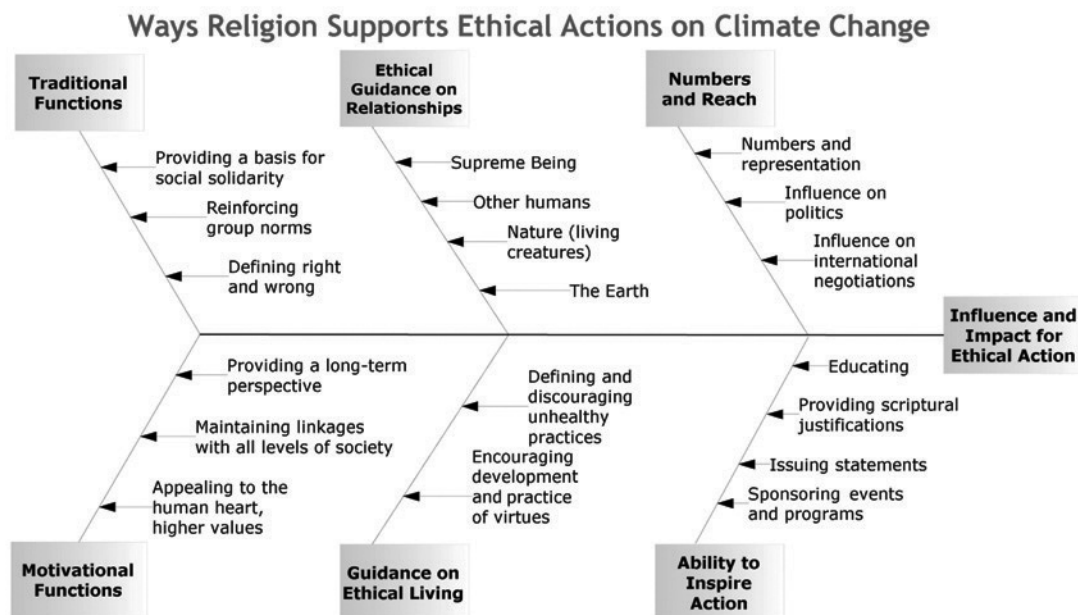
It is highly unlikely that people consume because they are committed to supporting an immoral value-system. As countless studies have indicated, people tend to consume because they have been thoroughly convinced (through countless advertisements and through every imaginable media channel) that consumption will make them happy. Therefore, much of our lives have been reordered around this purpose. While it is true that consumption does not always lead to happiness, our attempt to try to achieve happiness through consumption remains one of the strongest motivating factors driving consumption patterns and its environmental effects like climate change worldwide. Of course, it is true that every person on the planet must consume to survive. Everyone needs food, clothing, and shelter. But, until a compelling vision to obtain human happiness can be convincingly promoted, the global market's appeal to achieve happiness through the consumption of things will remain strongly pursued.

Whether it is because sustainable lifestyles and consumption habits are relatively new solutions being promoted within the environmental movement itself, we must admit that thus far environmentalism has been unable to offer a compelling, alternative vision to achieve happiness and combat the market's dominating influence. In other words, compelling criticisms against the market's contribution to climate change have been offered in far greater supply than viable and compelling solutions to counteract against it. As the community and cause continues to mature, we can probably expect the balance between criticisms and solutions to begin to even out. However, until climate change stakeholders are able to offer a compelling vision to achieve human happiness, it becomes increasingly necessary to promote solutions that tap into the visions, values and practices offered through traditional religious principles.

7.2 Assets Religious Groups Bring to Climate Change Issue

Finally, to close out this chapter, one final argument will be made to encourage increased religious participation on the climate change issue. As previously noted, there are significant assets that religious groups are able to bring to the climate change cause. While various authors have obviously cited the moral or ethical authority as a primary asset of religious groups, there are certainly many other assets that these groups possess which can be used able to positively affect the climate change issue. Other authors have mentioned additional assets such as organizational and educational outreach [Stults 2006], the ability to present the climate change issue as a moral issue to faith communities [Millais 2006], and the influence religious groups have been able to exert on modern day affairs [Peterson, 2001]. Figure 3 provides a summarized illustration that depicts the various assets or ways in which religious groups can ethically influence the climate change issue.

Figure 3: *Summary of Ethical Action on Climate Change*



Source: Posas, 2008

Posas, (2008) grouped the assets that religious groups can use to influence the climate change issue into four main categories:

1. Ability to utilize existing traditional and unique functions religious groups currently maintain within society;

2. Ability to access the breadth of ethical teachings that can be applied to the climate change cause;
3. Ability to take advantage of the significant degree of institutional reach and influence religious groups maintain over large segments of the population; and
4. Their ability to inspire their followers to action, [Posas 2008].

Similar to Posas' argument, Gardiner (2006) goes a step further by including a few more tangible and concrete assets that religious groups could leverage to promote and pressure social and political change and categorizes the assets into the following five categories:

1. Ability to Provide Meaning: Just as important as providing moral and ethical guidance, religious teachings, values and beliefs are able to provide its followers with a sense of meaning and purpose. Gardiner advocates that addressing the climate change issue from a religious perspective offers an opportunity for followers to practice their faith and live their lives in a new way and with a greater sense of meaning and purpose.
2. Ability to Provide Moral Capital: As mentioned by Posas and others scholars, one of the most significant assets religious groups have to offer to help create social change is their ability to leverage and use their moral capital and authority into a cause.
3. Number of Adherents: According to the latest Pew Research study, [Pew Forum on Religion and Public Life, 2007] the number of self-identified religious followers within the United States remains at nearly 80% of the population. Certainly, the recent success of the "Religious Right" in promoting its "Family Values" agenda offers a good example as to the type of success that can be achieved when even a minor but active segment of the population is committed to its cause.
4. Land and Other Physical Assets: Although the financial assets of many religious institutions like the Catholic Church are not entirely known, it is widely believed that religious groups and institutions hold and control considerable amounts of financial resources. The land holdings by many of these groups alone is believed to be quite substantial.
5. Social Capital: This final asset speaks to religious groups ability to create bonds of trust and strong socially active communities by effectively communicating information through a variety of communication channels, [Gardiner, 2006].

Despite the numerous assets noted by the two authors above, perhaps what makes religious groups an attractive ally in social movements may be simply due to the fact that its followers tend to be more actively engaged and committed to social issues as compared to those segments of the population that are not religiously active, [Sherkat, 2006, (Wilson & Janoski 1995)]. The point is a very important and practical one to keep in mind because no matter how high-minded a belief or just the ethical argument, without the active engagement and participation from a group of people who are committed to trying to create the type of change they want to see take place in the world, social movements of any kind are unlikely to be successful. If anything, religious groups can be seen as a bounty of readily mobilized citizens seeking new opportunities to deepen their faith in the social arena and who are willing to commit their financial, communication and institutional resources to the cause.

8 Conclusions

Through its investigation this thesis has been able to touch upon many different aspects of religious engagement on the climate change issue. In its introduction, information was provided concerning the acknowledged need stated by numerous researchers, government bodies and scientific groups that climate change will not be solved by focusing on technological solutions regarding industry production practices alone. Beginning with the Agenda 21 document produced from the Earth Summit in Rio, the necessity to address consumer consumption as a significant factor contributing to many of the world's environmental problems, including climate change, was also equally recognized.

As our awareness on these issues continues to evolve, new attention is now being paid on the values inciting consumer consumption. According to prestigious reports, such as the latest Stern and IPCC reports, many researchers now believe that long-term environmental sustainability will not be achieved without a fundamental shift in consumer behavior and values. Other reports and modeling scenarios, like the one conducted by the Global Scenario Group, have further concluded that while government-led market and policy initiatives and adjustments along with advances in technology and production practices are all going to be necessary, reaching environmental sustainability appears unlikely without a significant a shift in values also taking place, [Raskin, Banuri, Gallopin, Gutman, Hammond, Kates, Swart, 2002: 47]. Given this wide recognition that a change in values is going to be needed, this paper questioned why then aren't religious groups more involved, or at least more recognized, as a significant resource that could help address the climate change issue.

With this overarching question in mind, the thesis author then investigated the influential role religion has played in shaping humanity's worldviews and values. The information provided within chapter two detailed how religion operates as a significant source of cultural information and powerfully influences the way in which people view the world and their place in it and further influences their actions. The second half of the chapter supported this argument by showing how religious groups have often played a significant or leading role within the various social movements in the United States. Information was provided on the role and outcomes religious groups helped to create within the abolitionist, worker's rights, and civil rights movements.

Having presented the influence religion has played within people's lives, this thesis author then examined the positive and negative contributions religion has played in shaping environmental values from a theoretical perspective and identified a framework in which the drivers for religious engagement on environmental issues could be understood. Chapter three proceeded with its theoretical investigation by examining specific barriers associated with the climate change issue. Although limited research and information exists on the subject, four types of climate change barrier groups were identified: individual, social, political and religious.

In the following chapter (chapter four), this thesis author specifically defined and further refined the drivers and barriers identified through literature. Specific climate change drivers were identified through an examination of a variety of climate change statements released by religious groups over the last decade. Additionally, climate change barriers were refined based on the results of a survey conducted by this author in which a number of religious groups confirmed and invalidated many of the climate change barriers identified in literature.

Chapter five then presented two case studies of religious groups to provide a more intimate and deeper look as to the type of activities religious groups have undertaken to address the issue. An evaluative framework developed by Posas (2008) was further used to help frame and measure the effectiveness of the climate change activities taken by the groups.

Chapter six presented an analysis on some of the more poignant material presented within the thesis. The chapter started by offering a brief comparison in outcomes between the two case study groups presented in chapter five and then continued its analysis by detailing how climate change itself has become a powerful driver among religious groups. Finally, the chapter concluded by offering three recommendations as to how religious groups might be able to better reduce and overcome climate change barriers, (specialization, transforming climate change into a human issue, and reclaiming its prophetic voice).

Chapter seven then presented an additional argument as to why religious groups should remain engaged on the climate change issued and highlighted some pointed arguments made by other authors as to the type of assets religious groups are able to apply to the climate change issue.

All the information presented, thus far, within this thesis has led to the following conclusions regarding religious engagement on the climate change issue:

- We can say with a high degree of confidence that religious groups of various types and sizes and from nearly every faith and denomination are and have been actively engaged on the climate change issue for many years now.
- We know, based on the two case studies presented in this thesis, there may be significant differences in actions and outcomes among religious groups who are addressing the climate change issue.
- We also know, based on the release of various climate change statements issued by religious groups, that there is a general consensus among religious groups regarding the drivers/reasons for engagement on the climate change issue.
- And finally, we know, based on a survey conducted by this author and confirmed by a number of participating religious groups, that religious groups continue to face a number of challenging barriers on the issue.

On the other hand, this thesis author also recognizes that substantial gaps continue to exist on the subject. This author took only one of many possible approaches to try to understand the issue before it. Among some of the many questions still left unanswered are:

- We can't really say if local/regional religious groups are anymore effective in helping to promote and pass key pieces in climate change legislation on a state level than national/international religious groups operating within national/international arenas.
- We don't really know if other activities that religious groups are engaged in (i.e. see third suggestion made within chapter six) are hindering their involvement or commitment to the issue.
- Outside the passage of key piece of legislation in a number of states, we don't know how effective the efforts of religious groups have been in changing people's behaviors and lifestyles.

Despite all the information and results presented within this thesis and its attempts to answer its three research questions, it is time to finally ask if the answers discovered have helped to provide additional insight into the larger problem statement. The initial problem statement asked if the investigation of drivers and barriers would help us understand why religious groups and institutions appear to be largely marginalized or excluded from the climate change conversation. We also might further ask ourselves at this point, if religious groups are being marginalized from the climate change conversation, and if so, who is doing it? Are religious groups marginalizing themselves? Or, are the primary climate change stakeholders (governments, business groups, environmental groups, scientists, etc.) guilty of making a

conscious or unconscious effort to avoid engaging religious groups as a potential ally in the fight against climate change?

Even though the research work conducted for this thesis has, at times, been conducted in broad strokes and can scarcely be called definitive, this thesis author believes the examination of drivers and barriers on the climate change issue has yielded some insights regarding the problem statement. On the one hand, one can reasonably argue that religious groups are not being marginalized and excluded on the climate change issue when it comes to addressing the issue on a local/state political level. There is ample evidence to suggest that the voices of religious groups are being heard and their influence is being felt, given the successful track record these groups have had regarding the passage of a number of new initiatives and innovative programs within various states, (see Appendix 6 for summary of climate accomplishments achieved at state level). Beyond the information obtained through the Earth Ministry case study, other local/regional groups such as Interfaith Power and Light have been very instrumental in passing key pieces of legislation states like California, New York and others. Other religious groups such as Interfaith Center on Corporate Responsibility have also been equally effective in working with some of the world's largest corporations to change their reporting, investment and production habits. Which is to say that, in a very real sense, religious groups have been very effective and active on the climate change issue.

However, there are many reasons that can explain this discrepancy in achievement at the state and national levels beyond the influence and activities of religious groups. First, we are making an assumption that a key component regarding the passage of these pieces of climate legislation on the state level is due in some measure to the activities of religious groups. This may or may not be the case and further research is needed before we can draw that conclusion. Second, religious activity on the national level may not reflect any less of a commitment or effectiveness on the part of large/national religious groups engaged on the issue compared to religious groups engaged on the issue at the state level. The discrepancy in legislative outcomes more simply reflect a lack of willingness on the part of the U.S. federal government to address the climate change with any seriousness as opposed to various state governments. But, yet again, a great deal of research is needed before any kind of conclusion can be made in this regard as well. While religious groups have certainly been active on the climate change issue for quite some time (i.e. Orthodox Church and, more recently, the Catholic Church), a significant amount of investigation and research is further needed before we can begin to fairly evaluate the effectiveness and impacts of these groups on the international level.

Finally, through this thesis' investigation of drivers, barriers and actions on the climate change issue, we can conclude that it is not possible to easily determine any clear explanations as to why religious groups may not be seen as a valuable resource by the primary climate change stakeholders to help address the issue. It is possible that strong biases continue to divide religious and scientific communities which are further preventing the two groups from coming together to address the issue in a unified fashion. But again, this assumption cannot be made without additional research. What we can conclude based on the work conducted within this thesis is that, whether or not religious groups are being seen as a valuable resource to address the climate change issue, they are making their presence and impact known at least on the state-political level throughout the country. We can also conclude that they will likely continue to do so as long as the drivers inspiring them to action remain viable.

Moving forward, the real measure of effectiveness religious groups are able to bring to the climate change issue may only be equal to the degree in which these groups passionately accept their own sense of ownership and responsibility to address it. In other words, it is likely completely up to religious groups themselves how much they demand that their voice be

heard on the issue. Whether or not the primary climate change stakeholders want to accept the role of religious groups as part of the solution process may not matter if, according to Lynn White, the historical roots of our ecological crisis are essentially religious in nature. If the problem of climate change and other environmental issues are at least partly religious in nature, then religious groups have a very real responsibility to help all of us address the values that are driving the country toward its ecological demise, whether too, they wish to accept it or not.

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Appendix 1: Religious Groups Actively Engaged on Climate Change Issue in the United States

Religious Group/Organization	Type	Association/Affiliation	Regional/National	Climate Related Actions/Programs
Earth Ministry	Interfaith	Christian	Puget Sound area (Washington)	Educational Outreach, Publications, Resource Center, Speaking Engagements, Legislative Advocacy (State level)
Faith in Place	Interfaith	Christian, Jewish, Muslim, Hindu, Buddhist, Sikh, Zoroastrian, Baha'i, Unitarian	Illinois region	Partner with Interfaith Power and Light, Educational Outreach, Community Events
Green Faith	Interfaith	Christian, Jewish	New Jersey area	Educational Outreach, Speaking Engagements, Retreats, Seminars, Classes, Legislative Advocacy, Litigation, Diesel Emissions Reduction Campaign
Interfaith Center on Corporate Responsibility	Interfaith	Protestant, Catholic, Jewish	National	Encourages companies to report global warming "footprints" and related risks and opportunities to shareholders; works with companies to proactively reduce emissions to sustainable levels; Publications
Wisconsin Interfaith Climate and Energy Campaign	Interfaith/Energy & Climate	Christian	Wisconsin	Educational Outreach, Legislative Advocacy (State level), Energy Stewardship Collaborative Program
Interreligious Eco-Justice Network	Interfaith	Jewish, Christian	Connecticut	Educational Outreach
National Religious Partnership for the Environment	Interfaith	Coalition on the Environment and Jewish Life, US Conference of Catholic Bishops, National Council of Churches of Christ, Evangelical Environmental Network	National	Educational Outreach, Publications, Speaking Engagements, Legislative Advocacy (Local and National), Briefings and Training

Religious Group/Organization	Type	Association/Affiliation	Regional/National	Climate Related Actions/Programs
The Regeneration Project (Interfaith Power and Light)	Interfaith/Energy & Climate	Episcopal, Christian	National: Has Partnerships in Nearly 30 States	Educational Outreach, Helping Congregations Buy Energy Efficient Lights/Appliances, Energy Audits, Legislative Advocacy, Large Scale Renewable Energy Projects
Religious Witness for the Earth	Interfaith	All Faiths	New England area	Educational Outreach, Event Sponsor--Interfaith Walk for Climate Rescue, Prayer & Witness for Climate and Creation, Prayer and Witness for Climate Action
World Council of Churches	Interfaith	Nearly all Christian faiths (heavily led by Orthodox Church)	International (with National Organizations and Councils)	Publications, Legislative Advocacy, Educational Outreach, Event Sponsor at U.N. Conferences on Climate Change, Public Campaign on Climate Change
Eco-Justice Collaborative	Interfaith	All Faiths	National	Educational Outreach, Publications, Resources, Speaking Engagements, Legislative Advocacy, Workshops
Voices for Earth Justice	Interfaith	All Faiths	Michigan	Light bulb Project, Interfaith Climate Change Campaign, Educational Outreach, Workshops, Speaking Engagements
Ecumenical Ministries of Oregon: Interfaith Network for Earth Concerns	Ecumenical	Christian	Oregon	Educational Outreach, Congregational Support, Leadership Development, Forums, Workshops
National Council of Churches Eco-Justice Programs	Ecumenical	Christian	National	Publications, Legislative Advocacy, Educational Outreach, Congregational Support
Eco-Justice Ministries	Ecumenical	Christian	Colorado	Educational Outreach, Congregational Support
Evangelical Climate Initiative	Evangelical/Climate	Christian	National	Legislative Advocacy, Educational Outreach, Congregational Support

Religious Group/Organization	Type	Association/Affiliation	Regional/National	Climate Related Actions/Programs
Evangelical Environmental Network	Evangelical/Transportation	Christian	National	What Would Jesus Drive Campaign, Legislative Advocacy, Educational Outreach, Congregational Support, Speaking Engagements, Evangelical Youth Climate Initiative
Restoring Eden	Evangelical	Christian	National	Legislative Advocacy, Educational Outreach, Congregational Support, Speaking Engagements, Evangelical Youth Climate Initiative
Coalition on the Environment and Jewish Life	Jewish	Jewish	National	Four-Part Climate Change Campaign, Take a Scientist to Synagogue, Educational Resources and Outreach, Clean Car Campaign, Legislative Advocacy
Religious Action of Reform Judaism	Jewish	Jewish	National	Legislative Advocacy, Educational Resources
The Rabbinical Assembly	Jewish (Conservative)	Jewish	National	Educational Outreach and Resources, Legislative Advocacy
U.S. Conference of Catholic Bishops - Environmental Justice Program	Catholic	Catholic	National	Educational Outreach and Resources, Legislative Advocacy, Congregational Support, Leadership Training and Resources
Catholic Coalition on Climate Change	Catholic/Climate	Catholic	National	Educational Outreach, Workshops/Hearings, Connecting Catholics Program, Provide Grants, Legislative Advocacy
Tri-State Coalition for Responsible Investment	Catholic	Catholic	New York Metropolitan area	Working with Corporations to Increase Social/Environmental Responsibility
Church of the Brethren	Christian	Christian	National	Educational Outreach and Resources, Legislative Advocacy
Episcopal Ecological Network	Christian	Christian	National	Educational Outreach and Resources, Congregational Support
Presbyterian Church	Christian	Christian	National	Educational Outreach and Resources, Legislative Advocacy

Religious Group/Organization	Type	Association/Affiliation	Regional/National	Climate Related Actions/Programs
Reformed Church in America	Christian	Christian	National	Educational Outreach and Resources
Quaker Earthcare Witness	Christian	Christian	National	Educational Outreach and Resources, Legislative Advocacy, Publications, Meetings/Events, Friends Testimony on Economics
Unitarian Universalist Association	Interfaith	All Faiths	National	Educational Outreach and Resources, Congregational Support
United Church of Christ	Christian	Christian	National	Educational Outreach and Resources

Source: Allison, 2006; Gardiner, 2007, and the following online resources: Harvard/Yale Forum on Religion and Ecology,⁷² National Religious Partnership on the Environment,⁷³ and ReligionLink.org.⁷⁴

⁷² Available at: <http://fore.research.yale.edu/religion/>

⁷³ Available at: www.npre.org

⁷⁴ Available at: www.religionlink.org

Appendix 2: Climate Change Barriers Survey to Religious Groups

According to recent research, religious groups face a number of barriers when engaging on the climate change issue. Based on your work as a religious group addressing the climate change issue, please rate whether or not the barriers listed below pose a challenge as you attempt to promote effective change on the issue.

A 1-5 rating system is being used for this survey and is described below:

- 1 = This rating indicates that you **strongly agree** or rate this to be a **very high or significant barrier** in your work on climate change.
- 2 = This rating indicates that you **agree** or rate this to be a **high barrier** in your work on climate change.
- 3 = This rating indicates that you are **indifferent or undecided** as to whether or not this barrier poses any kind of challenge in your work on climate change.
- 4 = This rating indicates that you **disagree** or rate this to be a **low barrier** in your work on climate change.
- 5 = This rating indicates that you **strongly disagree** or rate this to be a **very low or nonexistent barrier** in your work on climate change.

Please place your rating in the respective boxes.

Rating (1-5)	Individual Barriers
	<i>This category of barriers refers to the possible challenges, obstacles or hurdles you've encountered and/or feel you must try to overcome among individuals you try to engage on the climate change issue.</i>
	<i>Lack of knowledge:</i> About the causes, consequences and potential solutions regarding the climate change issue among individuals (and/or groups).
	<i>Uncertainty/Skepticism About Climate Change:</i> Can refer to the causes of climate change, its seriousness, the scientific research gathered or conducted on the issue, or the necessity or effectiveness to change behavior and actions to address the issue.
	<i>Distrust in Information Sources:</i> Can refer to the way the mainstream media portrays the issue of climate change—which is that it is perceived to be exaggerated or sensationalized.
	<i>Externalizing Responsibility and Blame:</i> Refers to the perceived belief that government and/or businesses are to blame for the climate change problem and are responsible to fix it.
	<i>Problem Will Be Solved Through Technology:</i> Refers to the perceived belief that changes in behavior or values aren't necessary and that the climate change problem will be addressed through technological solutions.
	<i>Climate Change is a Distant Threat:</i> Refers to the perceived belief that negative effects of climate change will affect people in the future, but it is not a problem that will affect people now or in the near future.

	<i>Other Problems More Important:</i> Refers to the belief that while climate change is a threat, there are other, more immediate problems (family, finances, economy, etc.) that are more important.
	<i>Reluctance to Change Behavior/Personal Lifestyles:</i> Refers to the reluctance on the part of individuals to make any serious changes in their lifestyles because of the real or imagined inconvenience or cost associated with those changes.
	<i>Fatalism:</i> Refers to the perceived belief that it's already too late to do anything meaningful to address or mitigate the climate change issue.
	<i>Helplessness:</i> Refers to the belief that anything any individual can do is just a drop in the ocean and won't make any difference to the problem.
Rating (1-5)	Social Barriers <i>This category of barriers refers to the possible challenges, obstacles or hurdles that individuals believe may exist on a social/societal level that are preventing any progress on climate change.</i>
	<i>Lack of Political Action:</i> Refers to the belief that no meaningful action on climate change will take place as long as local, national and international governments fail to exercise any real leadership or accept responsibility on the issue.
	<i>Lack of Action by Businesses/Industry:</i> Refers to the belief that no meaningful action on climate change will occur as long as businesses/industries remain more interested in putting profits over the planet.
	<i>Worry about Free-Rider Effect:</i> Refers to the perceived belief that there is no need to take action or make any serious changes if no one else is willing to do the same thing.
	<i>Social Norms and Expectations:</i> Refers to the belief that the dominating cultural beliefs, attitudes and expectations remain strongly tied to promoting consumption and therefore little progress will be made on the climate change issue as long as these norms and expectations remain.
	<i>Lack of Enabling Initiatives:</i> Refers to the belief that individuals are prevented or discouraged from engaging in any meaningful action on climate change because they are locked into current social, economic, institutional and infrastructural patterns.
Rating (1-5)	Demographic/Geographic Barriers <i>This category of barriers refers to the possible demographic and geographic challenges, obstacles or hurdles that you believe may exist on the climate change issue among certain populations and areas within the United States.</i>
	<i>Generational Divide:</i> Refers to the belief that there is a tangible divide between older and younger populations in how they recognize and wish to approach the climate change issue.
	<i>Ethnic/Cultural Divide:</i> Refers to the belief that there is a tangible divide between white and ethnic (and/or minority) cultural populations in how they recognize and wish to approach the climate change issue.
	<i>Socio-Economic Divide:</i> Refers to the belief that there is a tangible divide between socio-economic groups (rich, middle class and poor) that is reflected in how they recognize and wish to approach the climate change issue.
	<i>Educational Divide:</i> Refers to the belief that there is a tangible divide between individuals/groups that have high or low educational levels, which is reflected in how they recognize and wish to approach the climate change issue.
	<i>Geographic Divide:</i> Refers to the belief that there is a tangible divide between urban and rural populations in how they recognize and wish to approach the climate change issue.

Rating (1-5)	Political Barriers
	<i>This category of barriers refers to the challenges, obstacles or hurdles that groups like yours encounter in the political arena as you try to address the climate change issue.</i>
	<i>Hostile Political Environment:</i> Refers to the belief that it remains difficult to effectively address an issue like climate change because the bipartisan environment has become too bitter and divisive between the two political parties.
	<i>Numerous Competing Interest Groups:</i> Refers to the belief that it remains difficult to get your voice heard by lawmakers on the climate change issue because there are so many competing and often better-funded interest and/or oppositional groups.
	<i>Prior Ineffectiveness of Environmental Groups:</i> Refers to the belief that previous work done by environmental groups and their subsequent lack of success on the issue has made it harder for your group to work on the issue.
Rating (1-5)	Religious Barriers
	<i>This barrier category refers to the challenges, obstacles or hurdles that groups like yours encounter among religious groups/individuals as you try to address the climate change issue.</i>
	<i>Dominion vs. Stewardship Ideology:</i> Refers to the belief that one of the biggest challenges among religious followers that is preventing them from seriously addressing environmental issues like climate change is the biblical belief that all of creation has been created for humanity to use as it sees fit for its own purposes.
	<i>Consensus among Religious Groups is Necessary:</i> Refers to the belief that a consensus among religious groups is necessary before any significant work or action can be undertaken on the issue.

If there are any barriers that have not been mentioned relating to your work on the climate change issue, please list them below:

Appendix 3: Climate Change Barriers Survey Responses from Religious Groups

Religious Group #1:

Rating (1-5)	Individual Barriers
	<i>This category of barriers refers to the possible challenges, obstacles or hurdles you've encountered and/or feel you must try to overcome among individuals you try to engage on the climate change issue.</i>
2	<i>Lack of knowledge:</i> About the causes, consequences and potential solutions regarding the climate change issue among individuals (and/or groups).
3	<i>Uncertainty/Skepticism About Climate Change:</i> Can refer to the causes of climate change, its seriousness, the scientific research gathered or conducted on the issue, or the necessity or effectiveness to change behavior and actions to address the issue.
2	<i>Distrust in Information Sources:</i> Can refer to the way the mainstream media portrays the issue of climate change—which is that it is perceived to be exaggerated or sensationalized.
1	<i>Externalizing Responsibility and Blame:</i> Refers to the perceived belief that government and/or businesses are to blame for the climate change problem and are responsible to fix it.
1	<i>Problem Will Be Solved Through Technology:</i> Refers to the perceived belief that changes in behavior or values aren't necessary and that the climate change problem will be addressed through technological solutions.
2	<i>Climate Change is a Distant Threat:</i> Refers to the perceived belief that negative effects of climate change will affect people in the future, but it is not a problem that will affect people now or in the near future.
2	<i>Other Problems More Important:</i> Refers to the belief that while climate change is a threat, there are other, more immediate problems (family, finances, economy, etc.) that are more important.
2	<i>Reluctance to Change Behavior/Personal Lifestyles:</i> Refers to the reluctance on the part of individuals to make any serious changes in their lifestyles because of the real or imagined inconvenience or cost associated with those changes.
4	<i>Fatalism:</i> Refers to the perceived belief that it's already too late to do anything meaningful to address or mitigate the climate change issue.
2	<i>Helplessness:</i> Refers to the belief that anything any individual can do is just a drop in the ocean and won't make any difference to the problem.
Rating (1-5)	Social Barriers
	<i>This category of barriers refers to the possible challenges, obstacles or hurdles that individuals believe may exist on a social/societal level that are preventing any progress on climate change.</i>
1	<i>Lack of Political Action:</i> Refers to the belief that no meaningful action on climate change will take place as long as local, national and international governments fail to exercise any real leadership or accept responsibility on the issue.
2	<i>Lack of Action by Businesses/Industry:</i> Refers to the belief that no meaningful action on climate change will occur as long as businesses/industries remain more interested in putting profits over the planet.
1	<i>Worry about Free-Rider Effect:</i> Refers to the perceived belief that there is no need to take action or make any serious changes if no one else is willing to do the same thing.

1	<i>Social Norms and Expectations:</i> Refers to the belief that the dominating cultural beliefs, attitudes and expectations remain strongly tied to promoting consumption and therefore little progress will be made on the climate change issue as long as these norms and expectations remain.
2	<i>Lack of Enabling Initiatives:</i> Refers to the belief that individuals are prevented or discouraged from engaging in any meaningful action on climate change because they are locked into current social, economic, institutional and infrastructural patterns.
Rating (1-5)	Demographic/Geographic Barriers <i>This category of barriers refers to the possible demographic and geographic challenges, obstacles or hurdles that you believe may exist on the climate change issue among certain populations and areas within the United States.</i>
2	<i>Generational Divide:</i> Refers to the belief that there is a tangible divide between older and younger populations in how they recognize and wish to approach the climate change issue.
3	<i>Ethnic/Cultural Divide:</i> Refers to the belief that there is a tangible divide between white and ethnic (and/or minority) cultural populations in how they recognize and wish to approach the climate change issue.
3	<i>Socio-Economic Divide:</i> Refers to the belief that there is a tangible divide between socio-economic groups (rich, middle class and poor) that is reflected in how they recognize and wish to approach the climate change issue.
2	<i>Educational Divide:</i> Refers to the belief that there is a tangible divide between individuals/groups that have high or low educational levels, which is reflected in how they recognize and wish to approach the climate change issue.
2	<i>Geographic Divide:</i> Refers to the belief that there is a tangible divide between urban and rural populations in how they recognize and wish to approach the climate change issue.
Rating (1-5)	Political Barriers <i>This category of barriers refers to the challenges, obstacles or hurdles that groups like yours encounter in the political arena as you try to address the climate change issue.</i>
2	<i>Hostile Political Environment:</i> Refers to the belief that it remains difficult to effectively address an issue like climate change because the bipartisan environment has become too bitter and divisive between the two political parties.
1	<i>Numerous Competing Interest Groups:</i> Refers to the belief that it remains difficult to get your voice heard by lawmakers on the climate change issue because there are so many competing and often better-funded interest and/or oppositional groups.
3	<i>Prior Ineffectiveness of Environmental Groups:</i> Refers to the belief that previous work done by environmental groups and their subsequent lack of success on the issue has made it harder for your group to work on the issue.
Rating (1-5)	Religious Barriers <i>This barrier category refers to the challenges, obstacles or hurdles that groups like yours encounter among religious groups/individuals as you try to address the climate change issue.</i>
2	<i>Dominion vs. Stewardship Ideology:</i> Refers to the belief that one of the biggest challenges among religious followers that is preventing them from seriously addressing environmental issues like climate change is the biblical belief that all of creation has been created for humanity to use as it sees fit for its own purposes.
2	<i>Consensus among Religious Groups is Necessary:</i> Refers to the belief that a consensus among religious groups is necessary before any significant work or action can be undertaken on the issue.

Religious Group #2:

Rating (1-5)	Individual Barriers
	<i>This category of barriers refers to the possible challenges, obstacles or hurdles you've encountered and/or feel you must try to overcome among individuals you try to engage on the climate change issue.</i>
1	<i>Lack of knowledge:</i> About the causes, consequences and potential solutions regarding the climate change issue among individuals (and/or groups).
3	<i>Uncertainty/Skepticism About Climate Change:</i> Can refer to the causes of climate change, its seriousness, the scientific research gathered or conducted on the issue, or the necessity or effectiveness to change behavior and actions to address the issue.
3	<i>Distrust in Information Sources:</i> Can refer to the way the mainstream media portrays the issue of climate change—which is that it is perceived to be exaggerated or sensationalized.
3	<i>Externalizing Responsibility and Blame:</i> Refers to the perceived belief that government and/or businesses are to blame for the climate change problem and are responsible to fix it.
1	<i>Problem Will Be Solved Through Technology:</i> Refers to the perceived belief that changes in behavior or values aren't necessary and that the climate change problem will be addressed through technological solutions.
2	<i>Climate Change is a Distant Threat:</i> Refers to the perceived belief that negative effects of climate change will affect people in the future, but it is not a problem that will affect people now or in the near future.
1	<i>Other Problems More Important:</i> Refers to the belief that while climate change is a threat, there are other, more immediate problems (family, finances, economy, etc.) that are more important.
1	<i>Reluctance to Change Behavior/Personal Lifestyles:</i> Refers to the reluctance on the part of individuals to make any serious changes in their lifestyles because of the real or imagined inconvenience or cost associated with those changes.
2	<i>Fatalism:</i> Refers to the perceived belief that it's already too late to do anything meaningful to address or mitigate the climate change issue.
2	<i>Helplessness:</i> Refers to the belief that anything any individual can do is just a drop in the ocean and won't make any difference to the problem.
Rating (1-5)	Social Barriers
	<i>This category of barriers refers to the possible challenges, obstacles or hurdles that individuals believe may exist on a social/societal level that are preventing any progress on climate change.</i>
1	<i>Lack of Political Action:</i> Refers to the belief that no meaningful action on climate change will take place as long as local, national and international governments fail to exercise any real leadership or accept responsibility on the issue.
1	<i>Lack of Action by Businesses/Industry:</i> Refers to the belief that no meaningful action on climate change will occur as long as businesses/industries remain more interested in putting profits over the planet.
3	<i>Worry about Free-Rider Effect:</i> Refers to the perceived belief that there is no need to take action or make any serious changes if no one else is willing to do the same thing.

1	<i>Social Norms and Expectations</i> : Refers to the belief that the dominating cultural beliefs, attitudes and expectations remain strongly tied to promoting consumption and therefore little progress will be made on the climate change issue as long as these norms and expectations remain.
2	<i>Lack of Enabling Initiatives</i> : Refers to the belief that individuals are prevented or discouraged from engaging in any meaningful action on climate change because they are locked into current social, economic, institutional and infrastructural patterns.
Rating (1-5)	Demographic/Geographic Barriers <i>This category of barriers refers to the possible demographic and geographic challenges, obstacles or hurdles that you believe may exist on the climate change issue among certain populations and areas within the United States.</i>
3	<i>Generational Divide</i> : Refers to the belief that there is a tangible divide between older and younger populations in how they recognize and wish to approach the climate change issue.
3	<i>Ethic/Cultural Divide</i> : Refers to the belief that there is a tangible divide between white and ethnic (and/or minority) cultural populations in how they recognize and wish to approach the climate change issue.
3	<i>Socio-Economic Divide</i> : Refers to the belief that there is a tangible divide between socio-economic groups (rich, middle class and poor) that is reflected in how they recognize and wish to approach the climate change issue.
2	<i>Educational Divide</i> : Refers to the belief that there is a tangible divide between individuals/groups that have high or low educational levels, which is reflected in how they recognize and wish to approach the climate change issue.
4	<i>Geographic Divide</i> : Refers to the belief that there is a tangible divide between urban and rural populations in how they recognize and wish to approach the climate change issue.
Rating (1-5)	Political Barriers <i>This category of barriers refers to the challenges, obstacles or hurdles that groups like yours encounter in the political arena as you try to address the climate change issue.</i>
1	<i>Hostile Political Environment</i> : Refers to the belief that it remains difficult to effectively address an issue like climate change because the bipartisan environment has become too bitter and divisive between the two political parties.
1	<i>Numerous Competing Interest Groups</i> : Refers to the belief that it remains difficult to get your voice heard by lawmakers on the climate change issue because there are so many competing and often better-funded interest and/or oppositional groups.
4	<i>Prior Ineffectiveness of Environmental Groups</i> : Refers to the belief that previous work done by environmental groups and their subsequent lack of success on the issue has made it harder for your group to work on the issue.
Rating (1-5)	Religious Barriers <i>This barrier category refers to the challenges, obstacles or hurdles that groups like yours encounter among religious groups/individuals as you try to address the climate change issue.</i>
2	<i>Dominion vs. Stewardship Ideology</i> : Refers to the belief that one of the biggest challenges among religious followers that is preventing them from seriously addressing environmental issues like climate change is the biblical belief that all of creation has been created for humanity to use as it sees fit for its own purposes.
3	<i>Consensus among Religious Groups is Necessary</i> : Refers to the belief that a consensus among religious groups is necessary before any significant work or action can be undertaken on the issue.

Religious Group #3:

Rating (1-5)	Individual Barriers
	<i>This category of barriers refers to the possible challenges, obstacles or hurdles you've encountered and/or feel you must try to overcome among individuals you try to engage on the climate change issue.</i>
1	<i>Lack of knowledge:</i> About the causes, consequences and potential solutions regarding the climate change issue among individuals (and/or groups).
1	<i>Uncertainty/Skepticism About Climate Change:</i> Can refer to the causes of climate change, its seriousness, the scientific research gathered or conducted on the issue, or the necessity or effectiveness to change behavior and actions to address the issue.
1	<i>Distrust in Information Sources:</i> Can refer to the way the mainstream media portrays the issue of climate change—which is that it is perceived to be exaggerated or sensationalized.
1	<i>Externalizing Responsibility and Blame:</i> Refers to the perceived belief that government and/or businesses are to blame for the climate change problem and are responsible to fix it.
2	<i>Problem Will Be Solved Through Technology:</i> Refers to the perceived belief that changes in behavior or values aren't necessary and that the climate change problem will be addressed through technological solutions.
1	<i>Climate Change is a Distant Threat:</i> Refers to the perceived belief that negative effects of climate change will affect people in the future, but it is not a problem that will affect people now or in the near future.
1	<i>Other Problems More Important:</i> Refers to the belief that while climate change is a threat, there are other, more immediate problems (family, finances, economy, etc.) that are more important.
1	<i>Reluctance to Change Behavior/Personal Lifestyles:</i> Refers to the reluctance on the part of individuals to make any serious changes in their lifestyles because of the real or imagined inconvenience or cost associated with those changes.
2	<i>Fatalism:</i> Refers to the perceived belief that it's already too late to do anything meaningful to address or mitigate the climate change issue.
1	<i>Helplessness:</i> Refers to the belief that anything any individual can do is just a drop in the ocean and won't make any difference to the problem.
Rating (1-5)	Social Barriers
	<i>This category of barriers refers to the possible challenges, obstacles or hurdles that individuals believe may exist on a social/societal level that are preventing any progress on climate change.</i>
2	<i>Lack of Political Action:</i> Refers to the belief that no meaningful action on climate change will take place as long as local, national and international governments fail to exercise any real leadership or accept responsibility on the issue.
2	<i>Lack of Action by Businesses/Industry:</i> Refers to the belief that no meaningful action on climate change will occur as long as businesses/industries remain more interested in putting profits over the planet.
2	<i>Worry about Free-Rider Effect:</i> Refers to the perceived belief that there is no need to take action or make any serious changes if no one else is willing to do the same thing.

2	<i>Social Norms and Expectations</i> : Refers to the belief that the dominating cultural beliefs, attitudes and expectations remain strongly tied to promoting consumption and therefore little progress will be made on the climate change issue as long as these norms and expectations remain.
1	<i>Lack of Enabling Initiatives</i> : Refers to the belief that individuals are prevented or discouraged from engaging in any meaningful action on climate change because they are locked into current social, economic, institutional and infrastructural patterns.
Rating (1-5)	Demographic/Geographic Barriers <i>This category of barriers refers to the possible demographic and geographic challenges, obstacles or hurdles that you believe may exist on the climate change issue among certain populations and areas within the United States.</i>
1	<i>Generational Divide</i> : Refers to the belief that there is a tangible divide between older and younger populations in how they recognize and wish to approach the climate change issue.
5	<i>Ethnic/Cultural Divide</i> : Refers to the belief that there is a tangible divide between white and ethnic (and/or minority) cultural populations in how they recognize and wish to approach the climate change issue.
4	<i>Socio-Economic Divide</i> : Refers to the belief that there is a tangible divide between socio-economic groups (rich, middle class and poor) that is reflected in how they recognize and wish to approach the climate change issue.
4	<i>Educational Divide</i> : Refers to the belief that there is a tangible divide between individuals/groups that have high or low educational levels, which is reflected in how they recognize and wish to approach the climate change issue.
4	<i>Geographic Divide</i> : Refers to the belief that there is a tangible divide between urban and rural populations in how they recognize and wish to approach the climate change issue.
Rating (1-5)	Political Barriers <i>This category of barriers refers to the challenges, obstacles or hurdles that groups like yours encounter in the political arena as you try to address the climate change issue.</i>
2	<i>Hostile Political Environment</i> : Refers to the belief that it remains difficult to effectively address an issue like climate change because the bipartisan environment has become too bitter and divisive between the two political parties.
3	<i>Numerous Competing Interest Groups</i> : Refers to the belief that it remains difficult to get your voice heard by lawmakers on the climate change issue because there are so many competing and often better-funded interest and/or oppositional groups.
4	<i>Prior Ineffectiveness of Environmental Groups</i> : Refers to the belief that previous work done by environmental groups and their subsequent lack of success on the issue has made it harder for your group to work on the issue.
Rating (1-5)	Religious Barriers <i>This barrier category refers to the challenges, obstacles or hurdles that groups like yours encounter among religious groups/individuals as you try to address the climate change issue.</i>
3	<i>Dominion vs. Stewardship Ideology</i> : Refers to the belief that one of the biggest challenges among religious followers that is preventing them from seriously addressing environmental issues like climate change is the biblical belief that all of creation has been created for humanity to use as it sees fit for its own purposes.
5	<i>Consensus among Religious Groups is Necessary</i> : Refers to the belief that a consensus among religious groups is necessary before any significant work or action can be undertaken on the issue.

Additional Comments:

Major issues missing for me are:

1. Lack of spiritual leadership from the clergy on green issues, with the unfortunate result that the connection to this current issue to our religious traditions is not being made in a visible, effective way. This is a problem in all Christian denominations as far as I know. For every clergy that has a passion for this, there are 20 that don't, they're more concerned with social justice.
2. Within the church, the issue has been broadly co-opted by liberals who are really interested more in politics than spiritual formation (heart, values, morality). This makes it a divisive issue between liberal clergy and conservative laity, and there is already great friction there over gay ordination and marriage. Plus the clergy generally avoid conflict and are not well trained in it.
3. Many of the things you mention above are symptoms rather than causes. The main problem is that there is no compelling vision that offers an attractive alternative to consumerism, so people go with their genetically inherited instincts...can never be too rich. Who can deliver that vision? I think religion, once the spiritual leadership issue is resolved.

Religious Group #4:

Rating (1-5)	Individual Barriers
	<i>This category of barriers refers to the possible challenges, obstacles or hurdles you've encountered and/or feel you must try to overcome among individuals you try to engage on the climate change issue.</i>
2	<i>Lack of knowledge:</i> About the causes, consequences and potential solutions regarding the climate change issue among individuals (and/or groups).
1	<i>Uncertainty/Skepticism About Climate Change:</i> Can refer to the causes of climate change, its seriousness, the scientific research gathered or conducted on the issue, or the necessity or effectiveness to change behavior and actions to address the issue.
2	<i>Distrust in Information Sources:</i> Can refer to the way the mainstream media portrays the issue of climate change—which is that it is perceived to be exaggerated or sensationalized.
4	<i>Externalizing Responsibility and Blame:</i> Refers to the perceived belief that government and/or businesses are to blame for the climate change problem and are responsible to fix it.
2	<i>Problem Will Be Solved Through Technology:</i> Refers to the perceived belief that changes in behavior or values aren't necessary and that the climate change problem will be addressed through technological solutions.
3	<i>Climate Change is a Distant Threat:</i> Refers to the perceived belief that negative effects of climate change will affect people in the future, but it is not a problem that will affect people now or in the near future.
2	<i>Other Problems More Important:</i> Refers to the belief that while climate change is a threat, there are other, more immediate problems (family, finances, economy, etc.) that are more important.
4	<i>Reluctance to Change Behavior/Personal Lifestyles:</i> Refers to the reluctance on the part of individuals to make any serious changes in their lifestyles because of the real or imagined inconvenience or cost associated with those changes.
2	<i>Fatalism:</i> Refers to the perceived belief that it's already too late to do anything meaningful to address or mitigate the climate change issue.
1	<i>Helplessness:</i> Refers to the belief that anything any individual can do is just a drop in the ocean and won't make any difference to the problem.
Rating (1-5)	Social Barriers
	<i>This category of barriers refers to the possible challenges, obstacles or hurdles that individuals believe may exist on a social/societal level that are preventing any progress on climate change.</i>
1	<i>Lack of Political Action:</i> Refers to the belief that no meaningful action on climate change will take place as long as local, national and international governments fail to exercise any real leadership or accept responsibility on the issue.
1	<i>Lack of Action by Businesses/Industry:</i> Refers to the belief that no meaningful action on climate change will occur as long as businesses/industries remain more interested in putting profits over the planet.
2	<i>Worry about Free-Rider Effect:</i> Refers to the perceived belief that there is no need to take action or make any serious changes if no one else is willing to do the same thing.

4	<i>Social Norms and Expectations</i> : Refers to the belief that the dominating cultural beliefs, attitudes and expectations remain strongly tied to promoting consumption and therefore little progress will be made on the climate change issue as long as these norms and expectations remain.
2	<i>Lack of Enabling Initiatives</i> : Refers to the belief that individuals are prevented or discouraged from engaging in any meaningful action on climate change because they are locked into current social, economic, institutional and infrastructural patterns.
Rating (1-5)	Demographic/Geographic Barriers <i>This category of barriers refers to the possible demographic and geographic challenges, obstacles or hurdles that you believe may exist on the climate change issue among certain populations and areas within the United States.</i>
5	<i>Generational Divide</i> : Refers to the belief that there is a tangible divide between older and younger populations in how they recognize and wish to approach the climate change issue.
5	<i>Ethnic/Cultural Divide</i> : Refers to the belief that there is a tangible divide between white and ethnic (and/or minority) cultural populations in how they recognize and wish to approach the climate change issue.
4	<i>Socio-Economic Divide</i> : Refers to the belief that there is a tangible divide between socio-economic groups (rich, middle class and poor) that is reflected in how they recognize and wish to approach the climate change issue.
4	<i>Educational Divide</i> : Refers to the belief that there is a tangible divide between individuals/groups that have high or low educational levels, which is reflected in how they recognize and wish to approach the climate change issue.
4	<i>Geographic Divide</i> : Refers to the belief that there is a tangible divide between urban and rural populations in how they recognize and wish to approach the climate change issue.
Rating (1-5)	Political Barriers <i>This category of barriers refers to the challenges, obstacles or hurdles that groups like yours encounter in the political arena as you try to address the climate change issue.</i>
2	<i>Hostile Political Environment</i> : Refers to the belief that it remains difficult to effectively address an issue like climate change because the bipartisan environment has become too bitter and divisive between the two political parties.
1	<i>Numerous Competing Interest Groups</i> : Refers to the belief that it remains difficult to get your voice heard by lawmakers on the climate change issue because there are so many competing and often better-funded interest and/or oppositional groups.
2	<i>Prior Ineffectiveness of Environmental Groups</i> : Refers to the belief that previous work done by environmental groups and their subsequent lack of success on the issue has made it harder for your group to work on the issue.
Rating (1-5)	Religious Barriers <i>This barrier category refers to the challenges, obstacles or hurdles that groups like yours encounter among religious groups/individuals as you try to address the climate change issue.</i>
5	<i>Dominion vs. Stewardship Ideology</i> : Refers to the belief that one of the biggest challenges among religious followers that is preventing them from seriously addressing environmental issues like climate change is the biblical belief that all of creation has been created for humanity to use as it sees fit for its own purposes.
5	<i>Consensus among Religious Groups is Necessary</i> : Refers to the belief that a consensus among religious groups is necessary before any significant work or action can be undertaken on the issue.

Religious Group #5:

Rating (1-5)	Individual Barriers
	<i>This category of barriers refers to the possible challenges, obstacles or hurdles you've encountered and/or feel you must try to overcome among individuals you try to engage on the climate change issue.</i>
3	<i>Lack of knowledge:</i> About the causes, consequences and potential solutions regarding the climate change issue among individuals (and/or groups).
4	<i>Uncertainty/Skepticism About Climate Change:</i> Can refer to the causes of climate change, its seriousness, the scientific research gathered or conducted on the issue, or the necessity or effectiveness to change behavior and actions to address the issue.
4	<i>Distrust in Information Sources:</i> Can refer to the way the mainstream media portrays the issue of climate change—which is that it is perceived to be exaggerated or sensationalized.
2	<i>Externalizing Responsibility and Blame:</i> Refers to the perceived belief that government and/or businesses are to blame for the climate change problem and are responsible to fix it.
2	<i>Problem Will Be Solved Through Technology:</i> Refers to the perceived belief that changes in behavior or values aren't necessary and that the climate change problem will be addressed through technological solutions.
2	<i>Climate Change is a Distant Threat:</i> Refers to the perceived belief that negative effects of climate change will affect people in the future, but it is not a problem that will affect people now or in the near future.
1	<i>Other Problems More Important:</i> Refers to the belief that while climate change is a threat, there are other, more immediate problems (family, finances, economy, etc.) that are more important.
1	<i>Reluctance to Change Behavior/Personal Lifestyles:</i> Refers to the reluctance on the part of individuals to make any serious changes in their lifestyles because of the real or imagined inconvenience or cost associated with those changes.
2	<i>Fatalism:</i> Refers to the perceived belief that it's already too late to do anything meaningful to address or mitigate the climate change issue.
4	<i>Helplessness:</i> Refers to the belief that anything any individual can do is just a drop in the ocean and won't make any difference to the problem.
Rating (1-5)	Social Barriers
	<i>This category of barriers refers to the possible challenges, obstacles or hurdles that individuals believe may exist on a social/societal level that are preventing any progress on climate change.</i>
1	<i>Lack of Political Action:</i> Refers to the belief that no meaningful action on climate change will take place as long as local, national and international governments fail to exercise any real leadership or accept responsibility on the issue.
1	<i>Lack of Action by Businesses/Industry:</i> Refers to the belief that no meaningful action on climate change will occur as long as businesses/industries remain more interested in putting profits over the planet.
4	<i>Worry about Free-Rider Effect:</i> Refers to the perceived belief that there is no need to take action or make any serious changes if no one else is willing to do the same thing.
1	<i>Social Norms and Expectations:</i> Refers to the belief that the dominating cultural beliefs, attitudes and expectations remain strongly tied to promoting consumption and therefore little progress will be made on the climate change issue as long as these norms and expectations remain.
1	<i>Lack of Enabling Initiatives:</i> Refers to the belief that individuals are prevented or discouraged from engaging in any meaningful action on climate change because they are locked into current social, economic, institutional and infrastructural patterns.
Rating (1-5)	Demographic/Geographic Barriers
	<i>This category of barriers refers to the possible demographic and geographic challenges, obstacles or hurdles that you believe may exist on the climate change issue among certain populations and areas within the United States.</i>
3	<i>Generational Divide:</i> Refers to the belief that there is a tangible divide between older and younger populations in how they recognize and wish to approach the climate change issue.

3	<i>Ethic/Cultural Divide</i> : Refers to the belief that there is a tangible divide between white and ethnic (and/or minority) cultural populations in how they recognize and wish to approach the climate change issue.
2	<i>Socio-Economic Divide</i> : Refers to the belief that there is a tangible divide between socio-economic groups (rich, middle class and poor) that is reflected in how they recognize and wish to approach the climate change issue.
3	<i>Educational Divide</i> : Refers to the belief that there is a tangible divide between individuals/groups that have high or low educational levels, which is reflected in how they recognize and wish to approach the climate change issue.
3	<i>Geographic Divide</i> : Refers to the belief that there is a tangible divide between urban and rural populations in how they recognize and wish to approach the climate change issue.
Rating (1-5)	Political Barriers <i>This category of barriers refers to the challenges, obstacles or hurdles that groups like yours encounter in the political arena as you try to address the climate change issue.</i>
1	<i>Hostile Political Environment</i> : Refers to the belief that it remains difficult to effectively address an issue like climate change because the bipartisan environment has become too bitter and divisive between the two political parties.
1	<i>Numerous Competing Interest Groups</i> : Refers to the belief that it remains difficult to get your voice heard by lawmakers on the climate change issue because there are so many competing and often better-funded interest and/or oppositional groups.
3	<i>Prior Ineffectiveness of Environmental Groups</i> : Refers to the belief that previous work done by environmental groups and their subsequent lack of success on the issue has made it harder for your group to work on the issue.
Rating (1-5)	Religious Barriers <i>This barrier category refers to the challenges, obstacles or hurdles that groups like yours encounter among religious groups/individuals as you try to address the climate change issue.</i>
5	<i>Dominion vs. Stewardship Ideology</i> : Refers to the belief that one of the biggest challenges among religious followers that is preventing them from seriously addressing environmental issues like climate change is the biblical belief that all of creation has been created for humanity to use as it sees fit for its own purposes.
4	<i>Consensus among Religious Groups is Necessary</i> : Refers to the belief that a consensus among religious groups is necessary before any significant work or action can be undertaken on the issue.

Additional Comments:

My reaction on "externalizing responsibility" was to mark "True" in the box. From the work that I'm doing, the barrier in working with individuals is that climate is so often approached as a matter that can be fixed by individual consumer choices, instead of calling on business and government to change systems.

I had a difficult time working through the questions, in part because I'm in the final preparation stage for a course dealing with "strategic framing" and prophetic ministry. This accentuates the unusual niche that Eco-Justice Ministries fills, with an emphasis on worldviews and social transformation, more than personal behaviors or political action. In the course, we'll be looking closely at the barrier that emerges when there is a disconnect between our decisions on policy issues or behaviors, and our core values and beliefs. That's where the "other problems are more important" challenge hits -- many of the people I work with have a rational sense that climate is the most important issue, but a gut-level prioritizing for other issues.

Religious Group #6:

Rating (1-5)	Individual Barriers
	<i>This category of barriers refers to the possible challenges, obstacles or hurdles you've encountered and/or feel you must try to overcome among individuals you try to engage on the climate change issue.</i>
2	<i>Lack of knowledge:</i> About the causes, consequences and potential solutions regarding the climate change issue among individuals (and/or groups).
1	<i>Uncertainty/Skepticism About Climate Change:</i> Can refer to the causes of climate change, its seriousness, the scientific research gathered or conducted on the issue, or the necessity or effectiveness to change behavior and actions to address the issue.
2	<i>Distrust in Information Sources:</i> Can refer to the way the mainstream media portrays the issue of climate change—which is that it is perceived to be exaggerated or sensationalized.
3	<i>Externalizing Responsibility and Blame:</i> Refers to the perceived belief that government and/or businesses are to blame for the climate change problem and are responsible to fix it.
1	<i>Problem Will Be Solved Through Technology:</i> Refers to the perceived belief that changes in behavior or values aren't necessary and that the climate change problem will be addressed through technological solutions.
3	<i>Climate Change is a Distant Threat:</i> Refers to the perceived belief that negative effects of climate change will affect people in the future, but it is not a problem that will affect people now or in the near future.
1	<i>Other Problems More Important:</i> Refers to the belief that while climate change is a threat, there are other, more immediate problems (family, finances, economy, etc.) that are more important.
2	<i>Reluctance to Change Behavior/Personal Lifestyles:</i> Refers to the reluctance on the part of individuals to make any serious changes in their lifestyles because of the real or imagined inconvenience or cost associated with those changes.
4	<i>Fatalism:</i> Refers to the perceived belief that it's already too late to do anything meaningful to address or mitigate the climate change issue.
3	<i>Helplessness:</i> Refers to the belief that anything any individual can do is just a drop in the ocean and won't make any difference to the problem.
Rating (1-5)	Social Barriers
	<i>This category of barriers refers to the possible challenges, obstacles or hurdles that individuals believe may exist on a social/societal level that are preventing any progress on climate change.</i>
1	<i>Lack of Political Action:</i> Refers to the belief that no meaningful action on climate change will take place as long as local, national and international governments fail to exercise any real leadership or accept responsibility on the issue.
1	<i>Lack of Action by Businesses/Industry:</i> Refers to the belief that no meaningful action on climate change will occur as long as businesses/industries remain more interested in putting profits over the planet.
2	<i>Worry about Free-Rider Effect:</i> Refers to the perceived belief that there is no need to take action or make any serious changes if no one else is willing to do the same thing.

2	<i>Social Norms and Expectations</i> : Refers to the belief that the dominating cultural beliefs, attitudes and expectations remain strongly tied to promoting consumption and therefore little progress will be made on the climate change issue as long as these norms and expectations remain.
2	<i>Lack of Enabling Initiatives</i> : Refers to the belief that individuals are prevented or discouraged from engaging in any meaningful action on climate change because they are locked into current social, economic, institutional and infrastructural patterns.
Rating (1-5)	Demographic/Geographic Barriers <i>This category of barriers refers to the possible demographic and geographic challenges, obstacles or hurdles that you believe may exist on the climate change issue among certain populations and areas within the United States.</i>
3	<i>Generational Divide</i> : Refers to the belief that there is a tangible divide between older and younger populations in how they recognize and wish to approach the climate change issue.
1	<i>Ethic/Cultural Divide</i> : Refers to the belief that there is a tangible divide between white and ethnic (and/or minority) cultural populations in how they recognize and wish to approach the climate change issue.
2	<i>Socio-Economic Divide</i> : Refers to the belief that there is a tangible divide between socio-economic groups (rich, middle class and poor) that is reflected in how they recognize and wish to approach the climate change issue.
4	<i>Educational Divide</i> : Refers to the belief that there is a tangible divide between individuals/groups that have high or low educational levels, which is reflected in how they recognize and wish to approach the climate change issue.
3	<i>Geographic Divide</i> : Refers to the belief that there is a tangible divide between urban and rural populations in how they recognize and wish to approach the climate change issue.
Rating (1-5)	Political Barriers <i>This category of barriers refers to the challenges, obstacles or hurdles that groups like yours encounter in the political arena as you try to address the climate change issue.</i>
3	<i>Hostile Political Environment</i> : Refers to the belief that it remains difficult to effectively address an issue like climate change because the bipartisan environment has become too bitter and divisive between the two political parties.
2	<i>Numerous Competing Interest Groups</i> : Refers to the belief that it remains difficult to get your voice heard by lawmakers on the climate change issue because there are so many competing and often better-funded interest and/or oppositional groups.
3	<i>Prior Ineffectiveness of Environmental Groups</i> : Refers to the belief that previous work done by environmental groups and their subsequent lack of success on the issue has made it harder for your group to work on the issue.
Rating (1-5)	Religious Barriers <i>This barrier category refers to the challenges, obstacles or hurdles that groups like yours encounter among religious groups/individuals as you try to address the climate change issue.</i>
3	<i>Dominion vs. Stewardship Ideology</i> : Refers to the belief that one of the biggest challenges among religious followers that is preventing them from seriously addressing environmental issues like climate change is the biblical belief that all of creation has been created for humanity to use as it sees fit for its own purposes.
3	<i>Consensus among Religious Groups is Necessary</i> : Refers to the belief that a consensus among religious groups is necessary before any significant work or action can be undertaken on the issue.

Additional Comments:

I would say the a barrier I personally struggle with and run into in my discussions with Christian economists, revolves around the economics of the issue. Economics is such a strong driver in our western culture and I continually find competing positions on the costs and benefits of the issue as a whole or its solutions. Examples of these thoughts I have recently seen are located at...the acton institute <http://www.acton.org/> and Scientific American see my attached pdf.

Religious Group #7:

Rating (1-5)	Individual Barriers
	<i>This category of barriers refers to the possible challenges, obstacles or hurdles you've encountered and/or feel you must try to overcome among individuals you try to engage on the climate change issue.</i>
2	<i>Lack of knowledge:</i> About the causes, consequences and potential solutions regarding the climate change issue among individuals (and/or groups).
2	<i>Uncertainty/Skepticism About Climate Change:</i> Can refer to the causes of climate change, its seriousness, the scientific research gathered or conducted on the issue, or the necessity or effectiveness to change behavior and actions to address the issue.
1	<i>Distrust in Information Sources:</i> Can refer to the way the mainstream media portrays the issue of climate change—which is that it is perceived to be exaggerated or sensationalized.
3	<i>Externalizing Responsibility and Blame:</i> Refers to the perceived belief that government and/or businesses are to blame for the climate change problem and are responsible to fix it.
4	<i>Problem Will Be Solved Through Technology:</i> Refers to the perceived belief that changes in behavior or values aren't necessary and that the climate change problem will be addressed through technological solutions.
2	<i>Climate Change is a Distant Threat:</i> Refers to the perceived belief that negative effects of climate change will affect people in the future, but it is not a problem that will affect people now or in the near future.
1	<i>Other Problems More Important:</i> Refers to the belief that while climate change is a threat, there are other, more immediate problems (family, finances, economy, etc.) that are more important.
2	<i>Reluctance to Change Behavior/Personal Lifestyles:</i> Refers to the reluctance on the part of individuals to make any serious changes in their lifestyles because of the real or imagined inconvenience or cost associated with those changes.
2	<i>Fatalism:</i> Refers to the perceived belief that it's already too late to do anything meaningful to address or mitigate the climate change issue.
2	<i>Helplessness:</i> Refers to the belief that anything any individual can do is just a drop in the ocean and won't make any difference to the problem.
Rating (1-5)	Social Barriers
	<i>This category of barriers refers to the possible challenges, obstacles or hurdles that individuals believe may exist on a social/societal level that are preventing any progress on climate change.</i>
2	<i>Lack of Political Action:</i> Refers to the belief that no meaningful action on climate change will take place as long as local, national and international governments fail to exercise any real leadership or accept responsibility on the issue.
1	<i>Lack of Action by Businesses/Industry:</i> Refers to the belief that no meaningful action on climate change will occur as long as businesses/industries remain more interested in putting profits over the planet.
2	<i>Worry about Free-Rider Effect:</i> Refers to the perceived belief that there is no need to take action or make any serious changes if no one else is willing to do the same thing.

2	<i>Social Norms and Expectations</i> : Refers to the belief that the dominating cultural beliefs, attitudes and expectations remain strongly tied to promoting consumption and therefore little progress will be made on the climate change issue as long as these norms and expectations remain.
2	<i>Lack of Enabling Initiatives</i> : Refers to the belief that individuals are prevented or discouraged from engaging in any meaningful action on climate change because they are locked into current social, economic, institutional and infrastructural patterns.
Rating (1-5)	Demographic/Geographic Barriers <i>This category of barriers refers to the possible demographic and geographic challenges, obstacles or hurdles that you believe may exist on the climate change issue among certain populations and areas within the United States.</i>
3	<i>Generational Divide</i> : Refers to the belief that there is a tangible divide between older and younger populations in how they recognize and wish to approach the climate change issue.
2	<i>Ethnic/Cultural Divide</i> : Refers to the belief that there is a tangible divide between white and ethnic (and/or minority) cultural populations in how they recognize and wish to approach the climate change issue.
3	<i>Socio-Economic Divide</i> : Refers to the belief that there is a tangible divide between socio-economic groups (rich, middle class and poor) that is reflected in how they recognize and wish to approach the climate change issue.
4	<i>Educational Divide</i> : Refers to the belief that there is a tangible divide between individuals/groups that have high or low educational levels, which is reflected in how they recognize and wish to approach the climate change issue.
3	<i>Geographic Divide</i> : Refers to the belief that there is a tangible divide between urban and rural populations in how they recognize and wish to approach the climate change issue.
Rating (1-5)	Political Barriers <i>This category of barriers refers to the challenges, obstacles or hurdles that groups like yours encounter in the political arena as you try to address the climate change issue.</i>
2	<i>Hostile Political Environment</i> : Refers to the belief that it remains difficult to effectively address an issue like climate change because the bipartisan environment has become too bitter and divisive between the two political parties.
2	<i>Numerous Competing Interest Groups</i> : Refers to the belief that it remains difficult to get your voice heard by lawmakers on the climate change issue because there are so many competing and often better-funded interest and/or oppositional groups.
1	<i>Prior Ineffectiveness of Environmental Groups</i> : Refers to the belief that previous work done by environmental groups and their subsequent lack of success on the issue has made it harder for your group to work on the issue.
Rating (1-5)	Religious Barriers <i>This barrier category refers to the challenges, obstacles or hurdles that groups like yours encounter among religious groups/individuals as you try to address the climate change issue.</i>
1	<i>Dominion vs. Stewardship Ideology</i> : Refers to the belief that one of the biggest challenges among religious followers that is preventing them from seriously addressing environmental issues like climate change is the biblical belief that all of creation has been created for humanity to use as it sees fit for its own purposes.
3	<i>Consensus among Religious Groups is Necessary</i> : Refers to the belief that a consensus among religious groups is necessary before any significant work or action can be undertaken on the issue.

Religious Group #8:

Rating (1-5)	Individual Barriers
	<i>This category of barriers refers to the possible challenges, obstacles or hurdles you've encountered and/or feel you must try to overcome among individuals you try to engage on the climate change issue.</i>
2	<i>Lack of knowledge:</i> About the causes, consequences and potential solutions regarding the climate change issue among individuals (and/or groups).
3	<i>Uncertainty/Skepticism About Climate Change:</i> Can refer to the causes of climate change, its seriousness, the scientific research gathered or conducted on the issue, or the necessity or effectiveness to change behavior and actions to address the issue.
3	<i>Distrust in Information Sources:</i> Can refer to the way the mainstream media portrays the issue of climate change—which is that it is perceived to be exaggerated or sensationalized.
3	<i>Externalizing Responsibility and Blame:</i> Refers to the perceived belief that government and/or businesses are to blame for the climate change problem and are responsible to fix it.
3	<i>Problem Will Be Solved Through Technology:</i> Refers to the perceived belief that changes in behavior or values aren't necessary and that the climate change problem will be addressed through technological solutions.
3	<i>Climate Change is a Distant Threat:</i> Refers to the perceived belief that negative effects of climate change will affect people in the future, but it is not a problem that will affect people now or in the near future.
1	<i>Other Problems More Important:</i> Refers to the belief that while climate change is a threat, there are other, more immediate problems (family, finances, economy, etc.) that are more important.
3	<i>Reluctance to Change Behavior/Personal Lifestyles:</i> Refers to the reluctance on the part of individuals to make any serious changes in their lifestyles because of the real or imagined inconvenience or cost associated with those changes.
2	<i>Fatalism:</i> Refers to the perceived belief that it's already too late to do anything meaningful to address or mitigate the climate change issue.
3	<i>Helplessness:</i> Refers to the belief that anything any individual can do is just a drop in the ocean and won't make any difference to the problem.
Rating (1-5)	Social Barriers
	<i>This category of barriers refers to the possible challenges, obstacles or hurdles that individuals believe may exist on a social/societal level that are preventing any progress on climate change.</i>
3	<i>Lack of Political Action:</i> Refers to the belief that no meaningful action on climate change will take place as long as local, national and international governments fail to exercise any real leadership or accept responsibility on the issue.
2	<i>Lack of Action by Businesses/Industry:</i> Refers to the belief that no meaningful action on climate change will occur as long as businesses/industries remain more interested in putting profits over the planet.
2	<i>Worry about Free-Rider Effect:</i> Refers to the perceived belief that there is no need to take action or make any serious changes if no one else is willing to do the same thing.

3	<i>Social Norms and Expectations</i> : Refers to the belief that the dominating cultural beliefs, attitudes and expectations remain strongly tied to promoting consumption and therefore little progress will be made on the climate change issue as long as these norms and expectations remain.
2	<i>Lack of Enabling Initiatives</i> : Refers to the belief that individuals are prevented or discouraged from engaging in any meaningful action on climate change because they are locked into current social, economic, institutional and infrastructural patterns.
Rating (1-5)	Demographic/Geographic Barriers <i>This category of barriers refers to the possible demographic and geographic challenges, obstacles or hurdles that you believe may exist on the climate change issue among certain populations and areas within the United States.</i>
2	<i>Generational Divide</i> : Refers to the belief that there is a tangible divide between older and younger populations in how they recognize and wish to approach the climate change issue.
2	<i>Ethnic/Cultural Divide</i> : Refers to the belief that there is a tangible divide between white and ethnic (and/or minority) cultural populations in how they recognize and wish to approach the climate change issue.
2	<i>Socio-Economic Divide</i> : Refers to the belief that there is a tangible divide between socio-economic groups (rich, middle class and poor) that is reflected in how they recognize and wish to approach the climate change issue.
2	<i>Educational Divide</i> : Refers to the belief that there is a tangible divide between individuals/groups that have high or low educational levels, which is reflected in how they recognize and wish to approach the climate change issue.
3	<i>Geographic Divide</i> : Refers to the belief that there is a tangible divide between urban and rural populations in how they recognize and wish to approach the climate change issue.
Rating (1-5)	Political Barriers <i>This category of barriers refers to the challenges, obstacles or hurdles that groups like yours encounter in the political arena as you try to address the climate change issue.</i>
3	<i>Hostile Political Environment</i> : Refers to the belief that it remains difficult to effectively address an issue like climate change because the bipartisan environment has become too bitter and divisive between the two political parties.
3	<i>Numerous Competing Interest Groups</i> : Refers to the belief that it remains difficult to get your voice heard by lawmakers on the climate change issue because there are so many competing and often better-funded interest and/or oppositional groups.
4	<i>Prior Ineffectiveness of Environmental Groups</i> : Refers to the belief that previous work done by environmental groups and their subsequent lack of success on the issue has made it harder for your group to work on the issue.
Rating (1-5)	Religious Barriers <i>This barrier category refers to the challenges, obstacles or hurdles that groups like yours encounter among religious groups/individuals as you try to address the climate change issue.</i>
3	<i>Dominion vs. Stewardship Ideology</i> : Refers to the belief that one of the biggest challenges among religious followers that is preventing them from seriously addressing environmental issues like climate change is the biblical belief that all of creation has been created for humanity to use as it sees fit for its own purposes.
4	<i>Consensus among Religious Groups is Necessary</i> : Refers to the belief that a consensus among religious groups is necessary before any significant work or action can be undertaken on the issue.

Scoring Sheet: Six out of eight religious groups must label barrier either as 1 or 2 in order for barrier to be confirmed.

Barriers	1	2	3	4	5	6	7	8	Barrier Confirmed?
<i>Lack of Knowledge</i>	2	1	1	2	3	2	2	2	Yes
<i>Uncertainty/Skepticism about CC</i>	3	3	1	1	4	1	2	3	No
<i>Distrust in Information Sources</i>	2	3	1	2	4	2	1	3	No
<i>Externalizing Responsibility/Blame</i>	1	3	1	4	2	3	3	3	No
<i>Technology Will Solve Problem</i>	1	1	2	2	2	1	4	3	Yes
<i>CC is Distant Threat</i>	2	2	1	3	2	3	2	3	No
<i>Other Problems More Important</i>	2	1	1	2	1	1	1	1	Yes
<i>Reluctance to Change Behavior</i>	2	1	1	4	1	2	2	3	Yes
<i>Fatalism</i>	4	2	2	2	2	4	2	2	No
<i>Helplessness</i>	2	2	1	1	4	3	2	3	No
<i>Lack of Political Action</i>	1	1	2	1	1	1	2	3	Yes
<i>Lack of Action by Business/Industry</i>	2	1	2	1	1	1	1	2	Yes
<i>Worry about Free-Rider Effect</i>	1	3	2	2	4	2	2	2	Yes
<i>Social Norms/Expectations</i>	1	1	2	4	1	2	2	2	Yes
<i>Lack of Enabling Initiatives</i>	2	2	1	2	1	2	2	3	Yes
<i>Generational Divide on Issue</i>	3	3	1	5	3	3	3	2	No
<i>Ethnic/Cultural Divide on Issue</i>	3	3	5	5	3	1	2	2	No
<i>Socio-Economic Divide on Issue</i>	3	3	4	4	2	2	3	2	No
<i>Educational Divide on Issue</i>	2	2	4	4	3	4	4	2	No
<i>Geographic Divide on Issue</i>	2	4	4	4	3	3	3	3	No
<i>Hostile Political Environment</i>	2	1	2	2	1	3	2	3	Yes
<i>Numerous Competing Interests</i>	1	1	3	1	1	2	1	3	Yes
<i>Prior Ineffectiveness of Environmental Groups</i>	3	4	4	2	3	3	1	4	No
<i>Dominion vs Stewardship Ideology</i>	2	2	3	5	5	3	1	3	No
<i>Consensus Needed Among Religious Groups</i>	2	3	5	5	4	3	3	4	No

Appendix 4: Comparisons Between Climate Change Barriers Identified by Religious Groups Against Criteria from Measuring Action on Climate Change

Earth Ministry Group

	<i>Maintains Web site with CC information</i>	<i>Educates followers on CC Science</i>	<i>Educates followers on CC ethics</i>	<i>Provides scriptural justification for action</i>	<i>Hosts events, etc. on CC</i>	<i>Provides recommendations for further learning & action</i>	<i>Issued formal statement on CC</i>	<i>Leads/participates in efforts that goes beyond these</i>
Individual Barriers								
Lack of Knowledge	☐	☐	☐		☐			☐
Belief that Technology Will Solve Problem	TM	☐	☐		TM			
Other Problems More Important	☐	☐	☐	☐	☐	☐		☐
Reluctance to Change Personal Lifestyles	☐	☐	☐	☐	☐	☐		☐
Fatalism		☐				☐		
Social Barriers								
Lack of Political Action	☐	☐	☐	TM	☐			☐
Lack of Action by Business/Industry	TM	☐	☐		TM			☐
Worry about Free-Rider Effect	☐	☐	☐	☐	☐	☐		☐
Social Norms & Expectations	☐		☐	☐	☐	☐		☐
Lack of Enabling Initiatives			TM		☐	☐		☐
Political Barriers								
Hostile Political Environment		TM	TM	TM	TM			☐
Numerous Competing Interests	TM				☐			☐

¶ = Action appears to directly address climate change barrier

™ = Action may indirectly address climate change barrier

Empty Box = Action does not appear to address climate change barrier or is non-applicable to climate change barrier.

Eco-Justice Ministries Group

	<i>Maintains Web site with CC information</i>	<i>Educates followers on CC Science</i>	<i>Educates followers on CC ethics</i>	<i>Provides scriptural justification for action</i>	<i>Hosts events, etc. on CC</i>	<i>Provides recommendations for further learning & action</i>	<i>Issued formal statement on CC</i>	<i>Leads/participates in efforts that goes beyond these</i>
Individual Barriers								
Lack of Knowledge	¶	™	™	™	¶			¶
Belief that Technology Will Solve Problem	™	™			™			
Other Problems More Important	¶	™	™	™				
Reluctance to Change Personal Lifestyles	™							
Fatalism		¶						
Social Barriers								
Lack of Political Action		¶	¶	™				¶
Lack of Action by Business/Industry								
Worry about Free-Rider Effect								
Social Norms & Expectations			¶	¶				™
Lack of Enabling Initiatives			™					¶
Political Barriers								
Hostile Political Environment								¶

	<i>Maintains Web site with CC information</i>	<i>Educates followers on CC Science</i>	<i>Educates followers on CC ethics</i>	<i>Provides scriptural justification for action</i>	<i>Hosts events, etc. on CC</i>	<i>Provides recommendations for further learning & action</i>	<i>Issued formal statement on CC</i>	<i>Leads/participates in efforts that goes beyond these</i>
Numerous Competing Interests								¶

¶ = Action appears to directly address climate change barrier

™ = Action may indirectly address climate change barrier

Empty Box = Action does not appear to address climate change barrier or is non-applicable to climate change barrier.

Appendix 5: Organizational Barriers in Social Movements

While the number of individual, social, political and religious barriers that religious groups must confront on the climate change issue is daunting enough, there may be other barriers these groups face as well. Another category of barriers worth briefly mentioning here that could also affect the ability and overall influence of religious groups are what is termed “organizational barriers.” While organizational barriers can take many forms within a religious (or any) group--from funding and staffing to organizational strategy--the organizational barriers addressed within this section have been narrowed to those that are believed to be most connected to the building and sustaining of a social movement.

According to sociologists and social movement theorists, participation in social movements usually evolves in four steps:

- (1) An individual becomes interested in a cause,
- (2) The individual is then either targeted by or reaches out to a mobilized group addressing the cause,
- (3) The individual becomes motivated to participate and actively engage on the cause, and
- (4) The individual overcomes the barriers to participate in the cause. (Klandermans and Oegema, 1987) (Ref: Klandermans, Bert and Dirk Oegema. 1987. "Potentials, Networks, Motivations, and Barriers: Steps Toward Participation in Social Movements." *American Sociological Review* 52: 519-31).

While the steps above may be simplified, it is still possible to discern a number of fundamental barriers that organizations must try to overcome as they try to encourage and keep interested individuals to participate and actively engage on a specific issue or cause. According to Richard Wood, who examined the dynamic between religious groups and political action, the organizational barriers religious groups must confront when trying to create engagement on an issue can be grouped into three broad headings: (1) Eliciting participant engagement, (2) Providing opportunities and resources for participants to interpret and engage on the cause, and (3) Doing both tasks in such a way to create constant political pressure while also being willing and able to compromise and negotiate on the issue, [Wood, 1999].

The following organizational barriers listed below identified by Woods could be considered significant barriers in which religious groups must try to overcome when engaging their respective audiences on the climate change issue:

- *Communication:* Effective communication on the climate change issue is probably one of the most important activities and biggest challenges all religious groups must be able to do well and continuously if they wish to create social change. Yet, effective communication is difficult to achieve, especially on an issue like climate change because of its complexity. While effective communication is often dependent on numerous factors, it can essentially be boiled down to a honing and refining of three important elements: method, message and messenger. All three elements are needed to effectively raise the awareness of a targeted audience about a particular issue. To be able to do so in an effective way is key to inspiring their intended audience or individuals to respond and take action. Effective communication in the context of social movements also involves convincing an audience

that the benefits to be received from their participation will greatly outweigh the costs. According to Klandermans and Oegema, “the lower the perceived costs of participation and the higher the benefits, the more motivated...(an individual)...will be to participate (in a social movement), (Klandermans 1984; Opp 1989a),” (Klandermans and Oegema, 1994: 3). Therefore, if religious groups fail to effectively reach out to interested individuals or fail to communicate the benefit/cost ratio in favorable manner or fail to do both in such a way that it keeps the interested individuals motivated over time, then a group’s communication efforts are likely to fall short of achieving their intended goal.

- *Organizational Longevity/Stability*: Perhaps not too surprising, another key factor in a social movement’s success is its ability to survive through the long haul. In other words, the longer an organization is around, the greater the possibility that its demands will be met and put into action, (Woods,1999). Of course, a group’s longevity depends on a number of factors: It’s ability to organize and lead group meetings, take advantage of opportunities, and develop political relationships among many other things. Yet, a group’s longevity also depends on its stability and continuity in key leadership positions, (Woods, 1999).
- *Leadership*: It has often been said that a group can travel about as far its leadership can take it. Businesses certainly recognize the need to replace and/or bring in new executives when the company needs to grow in a new or different direction or to a whole new level. Therefore, having the right leaders in place within any group or organization is an integral part to its success. And, just as it is the case in the business world, social movement leaders need to know where to identify the advantages and opportunities exist to promote their cause and how and when to take advantage of them.
- *Organizational Effectiveness*: According to Woods, participants are likely to invest their time and resources to organizations they believe can make a difference and offer some kind of return for their investment. Therefore, the challenge facing religious groups trying to address the climate change issue is that they must convince the people they are trying to engage that their participation can make a difference and then simply they must follow through and deliver. The failure to do so will lead participants to invest their time or money to other groups or halt their investment altogether, (Woods, 1999: 314-315).
- *Interest and Momentum*: While this barrier is closely tied the first organizational barrier mentioned within this category (communication), another constant barrier religious groups face on the climate change issue is maintaining interest and momentum on the cause. Being able to maintain interest and momentum requires continuous communication on the issue. The inability to do so either means that participants who were once interested and engaged on the issue have lost interest due to a lack of communication and/or inability on the group’s part to effectively keep once interested participants engaged on the issue.

If the majority of barriers associated with climate change can be addressed through education and communication efforts, then it appears as though religious groups are appropriately concentrating their efforts along these lines. Not all arguments for or against the reality or effects of climate change can be convinced through scientific bodies. Nor can action to address the issue of climate change simply be inspired by scientific bodies or reports alone. It is both certain and obvious that religious groups can play and must play a significant role in providing their voice and ethical reasoning to address the issue. What is not addressed with this thesis however is a critically important question relating to these efforts on the part of religious groups and climate change--How effective are or have their efforts been?

As noted in the development of barriers associated with social movements, effective communication is dependent upon the perfect mix of message, method and medium (messenger). For example, religious groups maybe communicating all the right points on the climate change issue but executing it poorly in that their voice on the issue may not appear to be any different than any other group attempting to address the issue. The role of messenger should also not be discounted or overlooked here as well. It is impossible to imagine the civil rights movement being just as effective without the eloquence and impressive communication skills of Martin Luther King, Jr. There were many heros and leaders of the civil rights movement who all contributed to the success of the movement in their own way. But, none of the captivated the nation or articulated and epitomized the justness of the cause like Dr. Martin Luther King, Jr. It is quite possible that the success of religious groups is also dependent on the rising of a MLK-esque counterpart to lead the cause. Without a strong and credible leader to head the cause, it is likely that the religious movement to address the climate change issue may only achieve the same degree of incremental success enjoyed by environmental groups.

Appendix 6: Climate Change Legislative Accomplishments Achieved at State Political Level - Pew Center on Global Climate Change

The following examples have been compiled by the Pew Center on Global Climate Change. Information on each of the examples listed below can be found at the following link: http://www.pewclimate.org/what_s_being_done/in_the_states/state_legislation.cfm

State Climate Change Commissions

- Alaska Climate Impact Assessment Commission
- Arkansas Governor's Commission on Global Warming
- North Carolina Legislative Commission on Global Climate Change
- Arizona Climate Action Initiative

Climate Action Plans

- Connecticut Climate Action Plan
- Maine Climate Action Plan
- Colorado Climate Action Plan
- Florida Energy and Climate Action Plan

Green House Gas Reporting

- California Climate Action Registry
 - California SB 1771 & California SB 527
- Wisconsin Legislation
 - Wisconsin Mandatory Greenhouse Gas Reporting Program
 - Wisconsin Voluntary Greenhouse Gas Reporting Program
- West Virginia Inventory and Reporting Program

Economy-Wide Greenhouse Gas Reductions

- California SB 1368
- Washington SB 6001
- Minnesota Out-of-State Carbon Sequestration

Greenhouse Gas Performance Standards for Vehicles

- California AB 1493
- New Jersey Vehicle Emissions Standards Legislation
- Washington Vehicle Emissions Standards Legislation
- Other States Poised to Adopt California Vehicle Emission Standards
 - Washington, Oregon, New Mexico, Colorado, Utah, Arizona, Florida, New York, Pennsylvania, Maryland, Delaware, Vermont, Massachusetts, and Connecticut

Emission Reductions in the Transportation Sector

- Washington HB 2815
-

Source: Pew Center on Global Climate Change, (2008) (link provided above)

Appendix 7: World Watch Institute's Vital Signs Statistics

- **FOOD**
 - Developing countries produced more meat and dairy products than industrial countries for the first time since 1995.
 - Livestock are the single largest anthropogenic user of land. Meat production accounts for 70% of all agricultural land and 30% of the land surface.
 - 70% of previously forested land in the Amazon is used for cattle.
 - Livestock account for 18% of greenhouse gas emissions, which is higher than the share contributed by cars and sport utility vehicles.
 - Livestock account for 37% of methane emissions, which are 20 times more potent than carbon dioxide emissions.
- **AIR TRAVEL**
 - In 2005, the number of passengers on scheduled airlines passed 2 billion for the first time.
 - One plane crossing the Atlantic uses as much fuel as one driver consumes in 50 years.
- **FUEL USE**
 - The United States uses 20.7 million barrels of oil per day—24% of the global total.
 - Global coal use increased 4.7%, with most of the growth occurring in China.
 - The United States used about one fifth of the world's coal in 2005.
 - 150 new coal plants could come online in the United States alone by 2030.
 - The International Energy Agency projects that, if left unchecked, global energy use will rise more than 50% by 2030 with fossil fuels remaining the dominate energy source.
- **ECONOMIC GROWTH**
 - Humans are now using the equivalent of 1.25 planets' worth of resources.
 - Only 1% of China's 560 million urban residents breathe air that is considered safe by European Union standards.
 - The European Union now accounts for 21% of GWP (gross world product), making it the largest economy in the world.
- **OCEANS**
 - The U.N. Environment Programme estimates that 46,000 pieces of plastic litter (including bits of packaging, cigarette lighters, plastic bags, and diapers), are floating on every square miles of the world's oceans.
 - Conservation groups estimate that more than one million seabirds and 100,000 mammals and sea turtles die each year getting tangled in or ingesting plastics.
 - Run off from fertilizers, large livestock farms and septic tanks have created large blooms or "dead zones" in the ocean that make it difficult for marine creatures to survive. There are now 200 of these zones in the world—one third more than two years ago.
 - At the same time, the growing consumption of seafood may drive major fish populations to extinction in the coming decades.
- **POPULATION**
 - The world's population grew to over 6.5 billion in 2006.
 - The U.S. population grew by nearly 1% or 3 million people per year.
 - People in the United States and Europe use twice as much water, more than twice as much crop land and produce 17 times as much carbon emissions as people in low-income countries.

Source: World Watch Institute's "Vital Signs Online" database, available at: <http://www.worldwatch.org/online>