



## CHRISTIAN COMMUNITIES, GLOBAL WARMING AND ECOTHEOLOGY: CHALLENGES AND PROSPECTS

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### **Abstract**

The Christian community is more than simply a group of people who belief in a transcendent deity or a means to an afterlife. It is rather an orientation to the cosmos and her role in it church religion in it broadest sense is a means whereby humans recognizing the limitation of phenomenal reality, undertake specific practices to effect self-transformation and community cohesion. This paper which is based on the theory of environmental possibilism examined the role of Christian communities in combating global warming, challenges and prospect using phenomenological research methodology. The study pointed out how man theocentric, misunderstood the directives of God when he puts him in charge as a steward in Genesis 2:5 for dominion and exploited the environment out of the desire to exercise absolute dominion over the earth. The paper looked at the concept of global warming and how the earth trapped energy and delays it returns to space leading to global warming, it effect, challenges and the prospects. The study recommends that attention should be given to environmental reformation or an environmentally reformed religious theology. This will reinterpret basic doctrinal themes in ways that integrate environmental insight, moral and ethical values to conceived faith of a particular religion. That Environmental ethics to encompass human relationship with other being in the biosphere to utilize knowledge gained from contemporary biophysical sciences to foster a socio-religious and scientific harmony and sustainable positive responsibility in protecting the human environment, preserving biodiversity, curtailing polluting technologies, urban development, population growth and wants oriented consumerism.

**KEY WORDS:** Christian, Theocentric, Global warming, Environmental ethics and God.

### **Introduction**

The issue of environmental crisis has become a global cocern that demands more serious theological attention. Various ecological disasters such as global warming, water pollution and deforestation indicate a disconnection between humanity and the rest of creation. In the context of Christian theology, this relationship should be understood as part of the divine mandate to care for the earth, as written in Genesis 2:15 (Esti, 2026). However, religious practices have often been trapped in an anthropocentric spirituality that neglects ecological responsibility. Therefore, the emergence of the idea of ‘ecothology’ is essential to restore Christian faith to an integrated ecological awareness. Ecotheology emphasizes the importance of integrating faith, ethics, and responsibility toward creation (Conradie, 2020).

The Christian community is more than simply a group of people who belief in a transcendent deity or a means to an afterlife. It is rather an orientation to the cosmos and her role in it church religion in it broadest sense is a means whereby humans recognizing the limitation of phenomenal reality, undertake specific practices to effect self-transformation and community cohesion.



Eco-theology starts with the critic of placing humans in the centre of God's creation subverting nonhuman nature to selfish human interest. Christian churches need a theocentric theology acting with a liturgy that narrates the story how God reins God's creation. An eco-theology is a theology not only setting humans out of the centre. It becomes a radical theocentric theology "telling the story of God's work in the world" (Ojeifo, 2025).

The specific contribution of Christian theology struggling against global warming lies in telling the story of God's creation. Theology cannot provide any knowledge about the causes of global warming as the natural sciences do it. Theology cannot invent new technologies to prevent the acceleration of global warming and so on. Theology has no better ideas how humans have to change their behaviour as the global ecological movement spreads them out. Theology is doing its job explaining what it means and what the practical consequences should be if Christians believe in God the creator or not. Confronted with the ecological disaster of global warming, Christian theology started a process of learning. One of the results of this learning process is what we now call eco-theology (Runtuwene, 2025)

The church is concerned as an expert in humanity to call attention to the relationship between the creator, humans and the created order of the world. The world is not the product of any necessity; blind fate or chance but proceeds from the free will of God. God wanted to make his creatures to share in his being, intelligence and goodness.

Then God said, "And now we will make human beings; they will be like us and resemble us. They will have power over the fish, the birds, and all animals, domestic and wild, large and small". So God created human beings making them to be like himself. He created them male and female. "I am putting you in charge of all the fish, the birds and all the wild animals. I have provided all kind of grain and all kind of fruits for you to eat" (Genesis 1:26-29).

The harmony created by God between mankind and the environment was disrupted. Lots of people in different part of the world are experiencing increased hardship because of the disruption, negligence and the refusal of man to exercise responsible stewardship over the environment as instructed by God (Ojeifo, 2025).

"Then the lord God placed the man in the Garden of Eden to cultivate it and to guard it (Genesis 2:15)".

Man misunderstood God putting him in charge 'to Guard' for dominion and exploited the environment out of the desire to exercise absolute dominion over the earth.

According to Bonoh & Bege (2013), the earth harbours about 9 billion people all driving their basic needs air, water, food clothing and shelter from it. In the process of getting all these basic things daily, human beings create and destroy their environment. This is seen in the way the earth's land is changing, the air, the water, the vegetation, the soil and so on to the point that these basic life elements are of great concern. In the cause of human activities, the earth's atmosphere is changing. With modern technology leading to the production of vehicles and the general industrial revolution, other anthropogenic activities and natural occurrence, more carbon dioxide is thrown



into the atmosphere. This trap energy and delays it returns to space leading to global warming (Mahfiana, 2025).

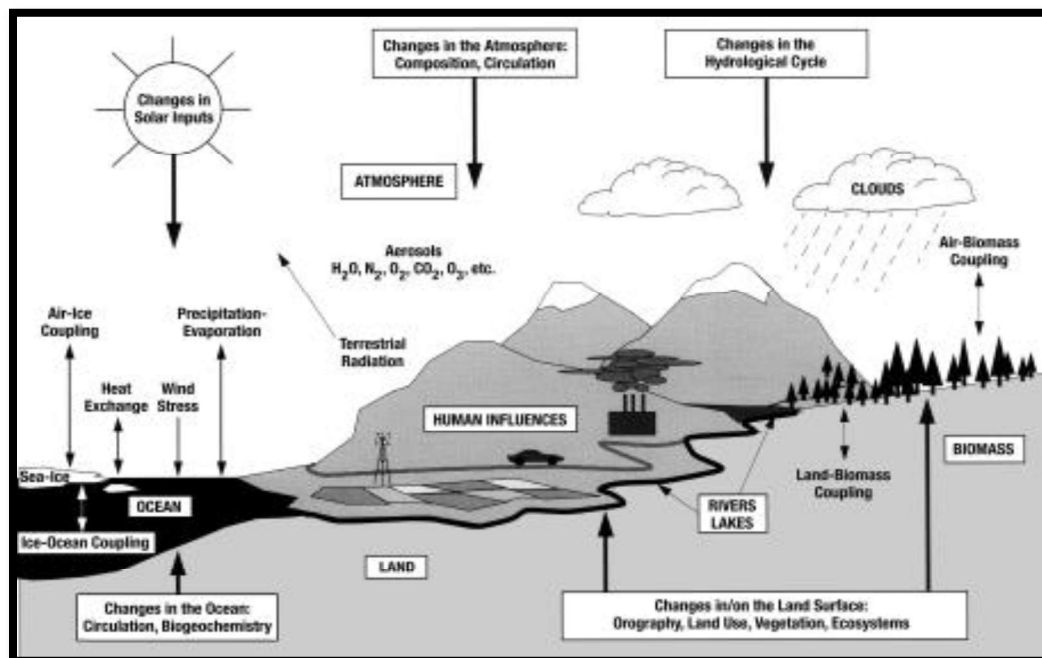
### **The Concept of Global Warming**

One of the most nagging problems facing human life today, at least in this twenty first century is environmental problems and particularly the crises of global warming. This problem has been topical issues of serious concern the world over, with everyone realizing that the world in which we live is gradually losing its capacity to sustain life. It is not untrue to say that global warming is the greatest crises ever faced collectively by mankind in both developed and the developing nations of the world aside the recent corona virus pandemic (Esti, 2026).

Global warming is refers to the average increase in the earth's surface temperature due to the release of greenhouse gases (GHG) from the industrial activities of man and the natural depletion of the ozone layer (Intergovernmental Panel on Climate Change, 2025). Naturally, earth warms and cools itself. The temperature of the sun is about  $6000^{\circ}\text{C}$  and about 83% of the solar energy penetrates the earth's atmosphere and warms the earth's surface. About 10% of the solar energy is reflected back to space to prevent overhauling of the earth's surface. While the earth retains some heat energy known as "long wave infra-red" for the evolution of life on earth (United Kingdom Environmental Agency, 2022). It has been calculated that without this heat, the average temperatures would have been between  $17^{\circ}\text{C}$  and  $23^{\circ}\text{C}$  and that the actual average temperature of the earth's surface is  $+15^{\circ}\text{C}$ . The retention of this heat is cause by oxides of carbon, sulphur, nitrogen, methane, ozone and water vapour. These gases in combination with water vapour forms a blanket of gases referred to as "Greenhouse gases" (GHG) which surround the earth. These gases absorb and retain heat (long wave infra-red) and reflect the heat back to the earth's surface. The greenhouse effect is, therefore a natural feature of warming the earth's surface to keep the average temperature of the earth at  $15^{\circ}\text{C}$  but when there is a rise in temperature it result to global warming (United Kingdom Environmental Agency, 2022).

The Simplified schematic view of the components of the global warming system and their interactions components of the climate system are indicated in bold type in boxes. Larger boxes at the top and bottom indicate the potential changes. Interactions are shown by the arrows. (fig 1)

**Fig 1: The Global Warming System**



**SOURCE: Intergovernmental Panel on Climate Change (2025)**

### Causes of Global Warming

The global warming crises all started from the industrial revolution of the 1800, when the establishment of industries took centre stage. Rapid rise in industrialization has lead to an increase in motor vehicles and aeroplanes for transportation, different machines for various purposes, massive construction of roads and railway lines, large scale farming leading to deforestation, bush burning, crude, oil exploration and exploitation and combustion of fossil fuels. Each year, according to Rhaji (2022), 120,000 sq km of forest are lost as follows:

- 45% to shifting cultivation.
- 15% to commercial farming and grazing.
- 15% to road construction and dams.
- 10% to forest product for furniture.
- 10% to bush burning.

On earth, the major natural greenhouse gases (GHG) that causes global warming according to Intergovernmental Panel for Climate Change (IPCC, 2025) include:

- Carbon dioxide ( $\text{CO}_2$ )
- Carbon monoxide ( $\text{CO}$ )
- Methane ( $\text{CH}_4$ )
- Ozone ( $\text{O}_3$ )
- Sulphur dioxide ( $\text{SO}_2$ ), Nitrogen dioxide and Nitrous oxide.
- Exhaust emission from Vehicles and Air Crafts.
- Water vapour.



### **The Effect of Global Warming**

Greenhouse gases (GHG) restrict the heat from the surface of the earth from reflecting back to space and so since 1900, the global temperature has risen by 0.8<sup>0</sup>C. Rise in global temperature according to Intergovernmental Panel on Climate Change (2025); united State National Agency of Sciences, (2024); United Kingdom Environmental Agency ( 2025) has the following effects: Rise in sea level, Salt water intrusion, Heavy rains and flooding, Melting of the Ice caps, Hurricanes, Ill-health in human, Thermal inversion, Desertification, Drying up of Inland and water bodies.

### **Theoretical framework**

This study is based on theory of environmental Possibilism postulated by Paul Vidal de la Blache in 1902 as a response to the earlier theory of environmental determinism. The argument put forward in the theory is that science and technology have enhanced man's operation on the surface of the earth; consequently, man to an appreciable degree has been able to influence the forces of nature. This has led to the creation of a completely new landscape; entirely different from what had initially existed.

Thus, the crux of the possibilist's is that is possible for man to change the physical environment. They have pointed to instances such as irrigated fields, discovery of drought resistant hybrids and high yielding varieties (HYV), green houses (GH), agro-chemicals, moderns buildings, transportation and communication, industrial location, population distribution etc, these are indications that as man progress in knowledge of nature he is likely to surmount the most difficult environmental forces that tend to punctuate his operations on the surface of the earth.

This is a new concept arising from strict and uncompromising stand of the determinist. This geography viewpoint postulated by Blache (1902) holds that to some extent man has the freewill to influence the environment, the ultimate decision lies in a probable course of action provided by environment and man without emphasizes the importance of integrating faith, ethics, and responsibility toward creation Bonoh & Bege (2013).

### **Christian Communities and Global Warming**

Many Christian communities, church institutions and church leaders are today engaged in the movement to tackle the problem of global warming and other environmental crises. For instance, the Green Faith Ministry mobilizes religious institutions and people of diverse faiths to strengthen their relationship with the sacred in nature and to take action for the earth. Through its Stewardship programmed, Green Faith Ministry provides information on energy conservation for individuals and institutions. It encourages the use of renewable energy, Green Faith Ministry is working with Sun Farm Networks to place solar panels at 25 faith-based sites around the world and it adopt-a-Windmill Campaign encourages its congregation to purchase electricity from a New Jersey wind farm (Cui, 2023).

The Interfaith Center on Corporate Responsibility (ICCR) number one priority of it members is "reversing global warming." ICCR members address climate change through ICCR's Global Warming working group, which works with corporations in those sectors most directly responsible for Green House Gas (GHG)) emissions: oil and gas; electric power; automotive; and appliance manufacturing to measure, monitor, and reduce greenhouse gas emissions. The Global Warming



Group encourages these industries to disclose the risks and opportunities posed by climate change to their shareholders (Pangihutan and Jura, 2023).

The Global Warming working group also directs shareholder efforts at the financial sector, working to encourage the top three mutual fund companies-Fidelity, Vanguard, and American Funds, whose collective assets total more than \$1 trillion-to start taking global warming seriously. The Global Warming Group, together with Co-op America, is leading consumer action to get these large mutual fund companies to vote positively on shareholder resolutions that respond to climate change (Pangihutan and Jura, 2023).

According to Butarbutar (2025) the ICCR is a thirty-year-old international coalition of 275 faith-based institutional investors including denominations, religious communities, pension funds, healthcare corporations, foundations, and dioceses with combined portfolios worth an estimated \$100 billion. As responsible stewards, they merge social values with investment decisions, believing they must achieve more than an acceptable financial return. ICCR members utilize religious investments and other resources to change unjust or harmful corporate policies, working for peace, economic justice and stewardship of the Earth.”

In her mission statement ICCR clearly states that “Our mission is to help people of faith understand that issues of ecology and economy of care for creation are at the forefront of social justice. At Faith in Place, we believe in housing the homeless, feeding the hungry, and clothing the naked. But even if we do all those things, and love our brothers and sisters with our whole heart, it will not matter if we neglect the ecological conditions of our beautiful and fragile planet” (Butarbutar, 2025).

Ecumenical Ministries of Oregon is an Interfaith Network for earth. one of the areas of activities is Global Warming Campaign educates congregations and religious bodies on global warming; assists them in reduce their climate impact through conservation, purchase of green energy, and advocacy for more sustainable forms of energy; and performs public advocacy about the need to halt global warming The Oregon Interfaith Energy and Climate Charter asks Oregonians to sign on to a more sustainable future (Öhlmann & Stork, 2024).

Ecumenical Ministries of Oregon (EMO) is an association of 17 Christian communities denominations including Protestant, Catholic, and Orthodox bodies across the United State that work together for unity and justice for creation. Through community ministry, public policy advocacy, theological education and dialogue and environmental ministry, EMO participates in the collective task of building a just and compassionate world for all people (Öhlmann & Stork, 2024).

The National Council of Churches USA Eco-justice (NCC), and its affiliated Protestant, Anglican and Orthodox member communions, to which approximately 45 million congregants belong, works to combat global warming through development of worship materials for thousands of churches, involvement in the interfaith global warming state campaigns and regional climate justice training programs for clergy and lay leaders across the country. The National Council of Churches is one of the featured partners of StopGlobalWarming.org (Cui, 2023).



United States Conference of Roman Catholic Bishops in 2001, voted unanimously today to issue a statement calling for immediate action to mitigate the effects of global climate change. The Conference of Bishops is a partner in NRPE. Carr and Glazer have been outspoken about the moral imperatives to halt climate change. The Environmental Justice Program is addressing global climate change through a three parts initiative that includes an education kit available to parishes and on the internet; small grants program to help dioceses and Catholic organizations develop local Catholic leadership on global warming; and attention to state and local policy dimensions of climate change (United States National Academy of Science, 2024).

### **Challenges of Christian Communities in Combating Global warming**

Despite the effort of the church in preaching that it is morally and ethically unacceptable not to protect the earth, water, soil and air, spreading the gospel of ecological responsibility, combined with the efforts of the world leaders and non-governmental organization, global warming continued to remain a threat to the existence of life in the universe. The Kyoto protocol agreement calls for an average reduction of 5.2% in carbon dioxide (CO<sub>2</sub>) emission by 2010 (United States National Academy of Science, 2024).

However, the protocol has virtually failed to address the purpose for which it was signed. These is highly attributed to the fact to the fact that as nations emerge from poverty they build their economic foundation on energy systems like coal, oil or natural gas, which in more ways than one contribute to greenhouse emission.

According to the United States National Academy of Science (2024) these countries like Brazil, Russia, India, China and some African countries such as South Africa the newly industrialized powers are chafing that a rigid emission cuts, even that envisaged by the Kyoto protocol will not be feasible. Also that those asking for emission cut went through the industrialization process, they are going through today. The posture of these nations is that “let us finish developing and then we can start talking about global warming and climate change. Even though there is a consensus that that the world should try to cut its greenhouse emission by 2050 some big countries like India, China and the United State of America has bluntly refused to signed the Kyoto protocol agreement to limit their level of greenhouse emission.

### **Prospects of Christian Communities in Combating Global Warming**

Christian communities combating global warming has a lot of potential prospects. It helps in telling repeatedly the unbelievable biblical story that God the creator is at the same time God the saviour. That God still reigns over creation and leads it to consummation despite of all the destructive interventions of human beings in the God-given natural conditions of life. It makes Christian communities to understand their life in the light of the story of God’s creative and redemptive work gives hope and the courage to act thoughtfully in combating global warming.

Combating global warming using theology approach makes the celebration of the liturgy telling the story of God’s creation and salvation. The liturgy transforms theology in a human resource of repeatedly getting hope and opportunities to be part of God redemptive mission from human activities in the midst of ecological distress of global warming. Fulfilled with hope Christian communities can act on the forefront of the sustainability transition of the global society. They can act to promote global unity, ecumenism, interfaith and awareness of the ecological crises of global



warming as well as the engagement to struggle with it. They can use all scientific knowledge they can get to investigate the causes of climate change and global warming and undertake projects to materialize sustainability transitions using, for example, new sustainable methods of agriculture. (Mahfiana, 2025).

Christian communities know that they are creatures. And as creatures, combating global warming they do not mean that it is their obligation to save other creation, but they know that they are in charge for good stewardship only. Moreover, that includes not to struggle with the ecological problem only. Christian communities see the connections of the ecological crises with the realization of social justice (Cui, 2023).

A good ecotheology will encourages Christians to believe that God holds his beloved creation still in his hands. Therefore, they have good reasons not to give up hope to find solutions for an effective sustainability transition of the global society. In other word they enhance their struggle for a sustainability transition in all the spheres of the society. Christian communities fight at the forefront of the ecological movement as agents of civil society searching for best ways of sustainability transition in all spheres of society.

### **Conclusion**

The religions of the world cannot remain indifferent to what is happening particularly on the global warming crises, for the deterioration of anyone part of the planet affects us all. Therefore, the study concludes that attention should now be given to environmental reformation or an environmentally reformed religious theology. This will reinterpret basic doctrinal themes in ways that integrate environmental insight, moral and ethical values to conceived faith of a particular religion. That Environmental ethics to encompass human relationship with other being in the biosphere to utilize knowledge gained from contemporary biophysical sciences and foster a socio-religious and scientific harmony and sustainable positive responsibility in protecting the human environment, preserving biodiversity, curtailing polluting technologies, urban development, population growth and wants oriented consumerism (Esti, 2026).

### **Recommendations**

The study therefore recommends that:

1. There is the need for an inter-religious co-operation and a multi-dimensional approach and strategies in combating global warming;
2. There is the need to reconstructs affirmation about God, World, and soul/body in relations to sin, evil, redemption and death with environmental consciousness.
3. There the need for the religions of the world to re-examine the elements of their sacred books, scriptures, and traditions then refocuses their affirmations and ethics in environmental alert terms.
4. There is the need to emphasize human obligations in every place pursuit that express respect and care for earth, water, air, soil and seek justice for biodiversity and mankind.
5. That religious theology should play a key role in cultural and environmental malformation by giving impetus to the rational scientific conquest of nature.
6. That all religion should preach and teach bio-moral and spiritual responsibility for places, species and respect the evolutionary wisdom and divine activity embodied in the natural world, with theological pointers and ethical imperatives for technolog.



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