

**CLIMATE CHANGE – RECONCILING ISLAMIC
ETHICS AND PRACTICES – A CASE STUDY ON
INDONESIA**

BY

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degree of Master in International Institute of Islamic
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ABSTRACT

Islām propounds high standards for the protection of the environment. The Qur’ān explains the purpose of man’s creation as *khalīfah* on earth entrusted with its protection and Muslims as exemplifying the best community for other communities to emulate. However, countries with the highest contribution to global carbon emissions are countries where Islām has the highest number of followers. Indonesia, a country with the highest Muslim population, contributes to a high level of carbon emissions. At the same time, it is also one of the countries most vulnerable to the adverse effects of climate change. Based on the Climate Change Performance Index, Indonesia ranked thirty-eighth and is considered a “low-performing” country in its overall scorecard rating. Despite the country having the most ambitious greenhouse gas [GHG] emissions targets, deforestation in Indonesia continues to grow at an alarming rate. This paper studies the meaning and root causes of climate change, the ethical guidance from Qur’anic verses and *āhādīth* regarding the protection of the environment. The paper examines the extent of the Indonesian Muslim community’s actions that contribute towards climate change contrary to scriptural guidance. It analyses the actions that have been initiated at national level in Indonesia and those initiated by grassroots communities towards the efforts to reverse climate change.



خلاصة البحث

إنّ الإسلام يقتضي معايير عالية لحماية البيئة. فقد بيّن القرآن الكريم أنّ الغرض من خلق الإنسان هو أن يكون خليفة في الأرض وعليه حمايتها، وأنّ المسلمين هم خير أمة لتقتدي بهم الأمم الأخرى. ومع ذلك، فالدول التي بها نسبة عالية من السكّان المسلمين، تعدّ من الدول التي تساهم في أعلى نسبة لانبعاثات الكربون العالمية. ومن تلك الدول التي تساهم في نسبة عالية من انبعاثات الكربون، هي إندونيسيا، وهي دولة بها أكثر عدد سكان المسلمين في العالم، وفي نفس الوقت فهي تتعرّض للتأثيرات السلبية للتغير المناخي بشكل خطير للغاية. وحسب مؤشر الأداء للتغير المناخي، فإنّ إندونيسيا تُصنّف في المركز الثامن والثلاثين وهي تعدّ دولة ذات "أداء منخفض" في تقييم بطاقة نتائجها الإجماليّ. وعلى الرغم من أنّ إندونيسيا لها أطمح هدف لانبعاثات غاز الدفيئة، فقد ظلّت عمليّات إزالة الغابات فيها تتزايد بسرعة رهيبية. هذه الرسالة تناقش تعريف التغير المناخيّ، وأسبابه الجذريّة، والإرشادات الخُلقيّة من القرآن الكريم والأحاديث النبوية الشريفة المتعلّقة بحماية البيئة. كما تدقّق في حدّ أعمال شعب إندونيسيا المسلم التي تساهم في تغيير مناخيّ تناقض إرشادات النصوص المقدّسة. وكذلك تحلّل الرسالة الإجراءات المستهلّة في المستوى الوطني بإندونيسيا، والتي ابتدأت عند المجتمعات الشعبية ضمن الجهود لنقض التغير المناخيّ.

APPROVAL PAGE

I certify that I have supervised and read this study and that in my opinion, it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a thesis for the degree of Master in International Institute of Islamic Thought and Civilization.

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DECLARATION

I hereby declare that this dissertation is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

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This thesis is dedicated to my late father who taught me the value of knowledge. I will not forget the sacrifices he made that allowed me a successful place in university. It is also dedicated to my mother who instill in me the importance of steadfastness in effort. May Allah place you both among the righteous in Jannah.

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TRANSLITERATION

ء	'	خ	kh	ش	Sh	غ	Gh	ن	N
ب	B	د	D	ص	ṣ	ف	F	ه	H
ت	T	ذ	dh	ض	ḍ	ق	Q	و	W
ث	Th	ر	r	ط	ṭ	ك	K	ي	Y
ج	J	ز	z	ظ	ẓ	ل	L		
ح	ḥ	س	s	ع	ʿ	م	M		

Short Vowels	
اَ	a
اِ	i
اُ	u

Short Vowels	
اَ+ا	ā
اِ+ا	ī
اُ+ا	ū

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Today we know that caring for our fragile craft requires much deeper change than we imagined a few decades ago. Today's environmentalism will not save the environment. Environmental action has got to dig deeper and challenge the root causes of our problems – consumerism, misguided values, the ascendancy of money power over people power, of GDP, neglect of social justice and more.

This is a quote by a new environmentalist, James Gustave [Gus] Speth (Global Leadership Dialogues, 2014:9), an honorary degree recipient from University of Massachusetts Boston, who demonstrates the new trend in thinking relating to past actions that merely addressed issues from the perspective of the physical sciences behind the phenomena of climate change, and which had not provided an effective and lasting solution to the climate problem. There is a need to have a deeper understanding of the sociological aspect of climate change. The more compelling question is - is modern social malaise related to lifestyle excesses, social injustices and misguided ethical values really the root cause of the phenomenon of climate change?

In an interview recorded by the London School of Economics and Political Science [LSE] Faith Center (2020), °Abdal Hakīm Murād provided an insight into Islamic perception about climate change activism. In his own words, “The world is, the inter-weaving and the display; the theophany of the Divine qualities...” According to Murād, the world is, simply, comprising of the concatenation of God's most beautiful names, mentioned in the Qur'ān and Muslims traditionally recite the ninety-nine beautiful names as *dzikr* or remembrance. He interestingly distinguished Islamic perspective about climate change from the secular climate change activism in the following manner, “... much activism has focused on the fact that we should worry about the degradation of the natural environment because they are now threatening our own (the human species) survival and our comfort. I think that is a short-sighted and probably not adequate grounds for bringing about the huge revolution that is globally required if we get into more sustainable habits as a species. Instead, we should be looking at the natural world not as resources to be conserved and to be husbanded but

as a natural world having rights of its own, its own integrity independent of human needs. From our perspective, we see them having an integrity because in their own way, they are praising God and bearing witness to the Majesty and the Perfection of the One who created them. Re-enchantment of our vision of the natural world is something that, I think, Islām and generally the religions can significantly contribute to the conventional, more materialistic discourse on climate change and conservation.”

In an effort to create awareness of the shared accountability of the dire state of the world’s global climate degradation, leaders from within the global Muslim community represented by the Islamic Foundation for Ecology and Environmental Sciences [IFEES] alongside Islamic Relief Worldwide, took the historic step to issue The Islamic Declaration on Global Climate Change (Islamic Foundation for Ecology and Environmental Sciences [IFEES], 2015) during the Islamic Climate Change Symposium in August 2015. The Declaration aptly summarizes humanity’s folly in article 2.5, *“We recognize the corruption (fasād) that humans have caused on Earth in our relentless pursuit of economic growth and consumption...”*

The Qur’ān warned about man’s tendency towards wantonness, “Corruption has appeared on land and sea by what people’s own hands have wrought, that He may let them taste some consequences of their deeds, so that they may turn back” (Qur’ān, *al-Rūm*:41)

1.1.1 Climate Change

Literally, climate change means “changes in the world’s weather, in particular the fact that it is believed to be getting warmer as a result of human activity increasing the level of carbon dioxide in the atmosphere.” (Cambridge University Press, n.d.). Earth experiences climate change throughout its existence. However, numerous scientific data collected provided strong evidence that climate change caused by warming of the earth’s atmosphere is more attributable to human activities than to the earth’s natural cycle. The amount of carbon dioxide and other gases emitted to the atmosphere from human activities since the industrial age of the nineteenth century measured by the instruments of National Aeronautics and Space Administration of the United States of America [NASA] is occurring at, approximately, “ten times faster than the average rate of ice-age-recovery warming” based on a study by a team of scientists led by Elizabeth

Valdes (Valdes, E., et al., 2017) and published by American Society for Engineering Education. Scientists from the National Science Foundation Ice Core Facility [NSF-ICF], established since 1993, have been studying and reporting on the atmospheric samples contained in ice cores of past millennia in comparison with more recent direct measurements (Lüthi, D., et al. 2008).

The evidence of climate change is compelling indeed. The increase in global temperatures has produced, and is still producing, various phenomena at unimaginable scales. Warming of the oceans, shrinking of polar ice sheets, which contributed to the rise in sea level, glacial retreat, decreased snow cover, increasing acidity of the oceans, which have been linked to the increase in extreme events around the globe.

1.1.2 Islamic Ethics Relating to the Environment

There have been many articles written about Islamic ethics on the environment. In an article written by Isabel Schatzschneider (2013), published by Research Center for Islamic Legislation and Ethics, Environmental Ethics and Islām, various Islamic ethical concepts pertaining to the environment were discussed. The most basic concept of Islām is that it promotes the enjoining of goodness and the forbidding of evil (Qur’ān, *an-Nisā’*:104; *al-Mā’idah*:110; *al-An‘ām*:114; *at-Tawbah*:157; *Yūsuf*:71; *Ibrāhīm*:112; *al-Mu’minūn*:17). The concept of enjoining goodness in Islām is not limited to man’s actions or deeds that affect his relationship with God or his relationship towards other human beings, it encompasses his actions and deeds that affects his relationship towards other creatures. The Qur’ān depicts creatures of God as living beings or non-living entities such as the universe and the environment including the mountains, the rocks that make the mountains, the rivers, the oceans, as submitting their will and existing in a state of worship to the Creator (*al-Haj*:18; *as-ṣaf*:1; *al-Isrā’*:44). Hence, accountability in Islām includes one’s actions towards all other creatures. Many traditions of the Prophet Muhammad, may peace be upon him, promote the protection of other creatures (al-Bukhārī, *Sahīh al-Bukhārī, The Translation of the meanings of Sahīh al-Bukhārī*, ed. 1997:294; al-Qushayrī, *Sahīh Muslim: English translation of Sahīh Muslim*, ed. 2007:257).

Vicegerency or man’s stewardship of the earth is another significant concept in Islām. The Qur’ān elucidated the creation of man as God’s *khalīfah* or representative

to carry out the important duty of providing stewardship on earth (*al-Baqarah*:30). Mankind has this sacred trust to ensure justice prevail on earth. The Qur'ān portrays God as possessing the attribute of the Most Just and hence justice is one of the Qur'ān's central ideas. The concept of justice is not an independent concept. It alludes to the concept of *mīzān* or balance in the Qur'ān. Islām promotes the ideal balance between the temporal and the eternal (Qur'ān, *ar-Rahmān*:7-9, *al-Jumu'ah*:9-10). Islām is a non-ascetic religion unlike Hinduism or Buddhism. It promotes seeking goodness in this temporal life with limitation to excesses. The concept of justice and *mīzān* when applied to environmental ethics effectuate a responsible attitude towards human consumption from the bounties of nature. Deterioration of environment or balance of nature is symptomatic of social injustice and corruption in Islām. Many verses in the Qur'ān relate big events in nature such as floods, earthquakes, sandstorms and others, to misdeeds or ingrained social injustices existing within societies of past civilizations which was often a manifestation of their rejection of the Creator and His prophets (Qur'ān, *al-a^c rāf*:78 and 84; *Hūd*:82; *al-Hijr*:74; *al-Qamr*:34; *al-Isrā'*:16-17; *al-Hāqqah*:6).

Consumption in Islām is only for the purpose of human development or improvement. Contemporary ideology of consumerism is considered as one of lifestyle excesses and highly prohibited in Islām (Qur'ān, *al-a^c rāf*:31; *al-Isrā'*:26-27). Wanton consumerism and wastage are against the concept of moderation in the Qur'ān (*al-Furqān*:67). The problems associated with the trend of increasing global consumerism has been recognized to be a major contributing factor to the deterioration of the world's natural resources as well as the contamination and pollution of the natural environment.

1.1.3 Human Activities Directly Affecting the Climate

Records have shown that global warming began at the height of the industrial age in the late nineteenth century as illustrated in below diagram published by NASA's Goddard Institute for Space Studies [GISS] (2020).

GLOBAL LAND-OCEAN TEMPERATURE INDEX

Data source: NASA's Goddard Institute for Space Studies (GISS). Credit: NASA/GISS

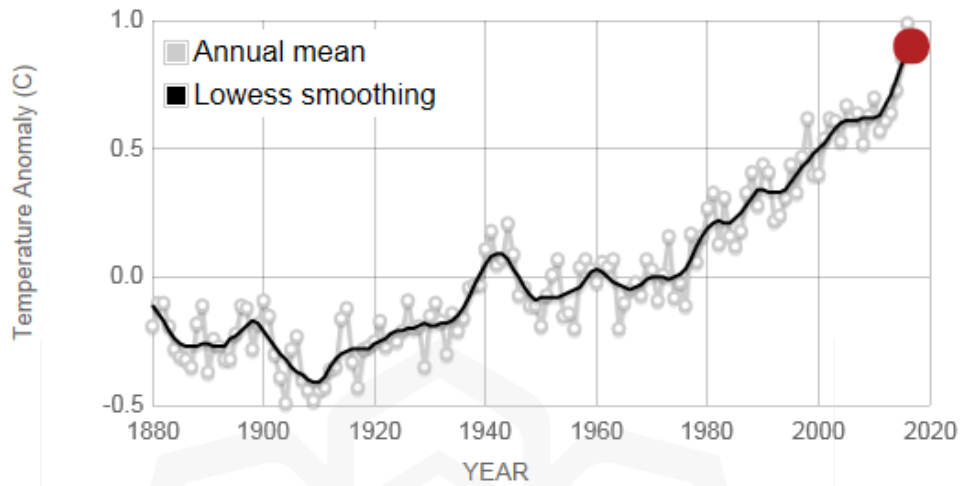
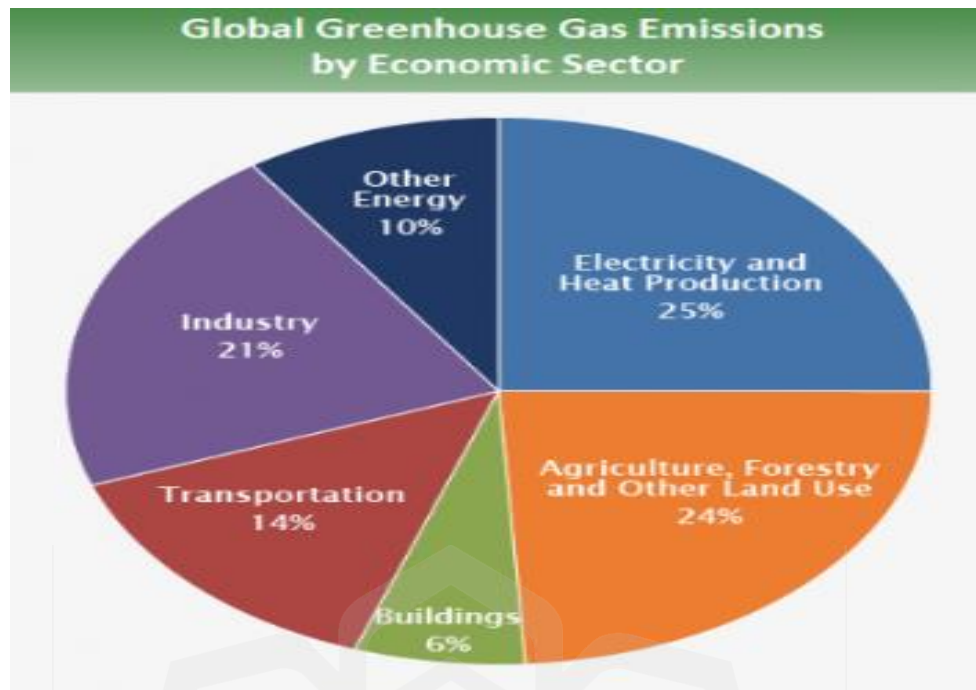


Figure 1.1 Global Land-Ocean Temperature Index

Scientific research studies have been able to identify the types of economic sector that contributed significantly towards green-house gases emissions. The diagram in Figure 1.2 below was published by the United States Environmental Protection Agency [EPA] (n.d.). Industries which are dependent on fossil fuel to mass produce products are found to have contributed substantively towards green-house gas emissions.



Source: [IPCC \(2014\)](#); [EXIT](#) based on global emissions from 2010. Details about the sources included in these estimates can be found in the [Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change](#). [EXIT](#)

Figure 1.2 Global Greenhouse Gas Emissions by Economics Sector

In Figure 1.3 below, latest information available provides an insight into the critical situation the world is facing. It reveals that despite more awareness of scientific facts on the role of human activities affecting climate change, GHGs emissions continue to rise in all but three of the economic sectors reported during the two years since the last publication (Ritchie & Roser, 2020).

Annual greenhouse gas emissions by sector

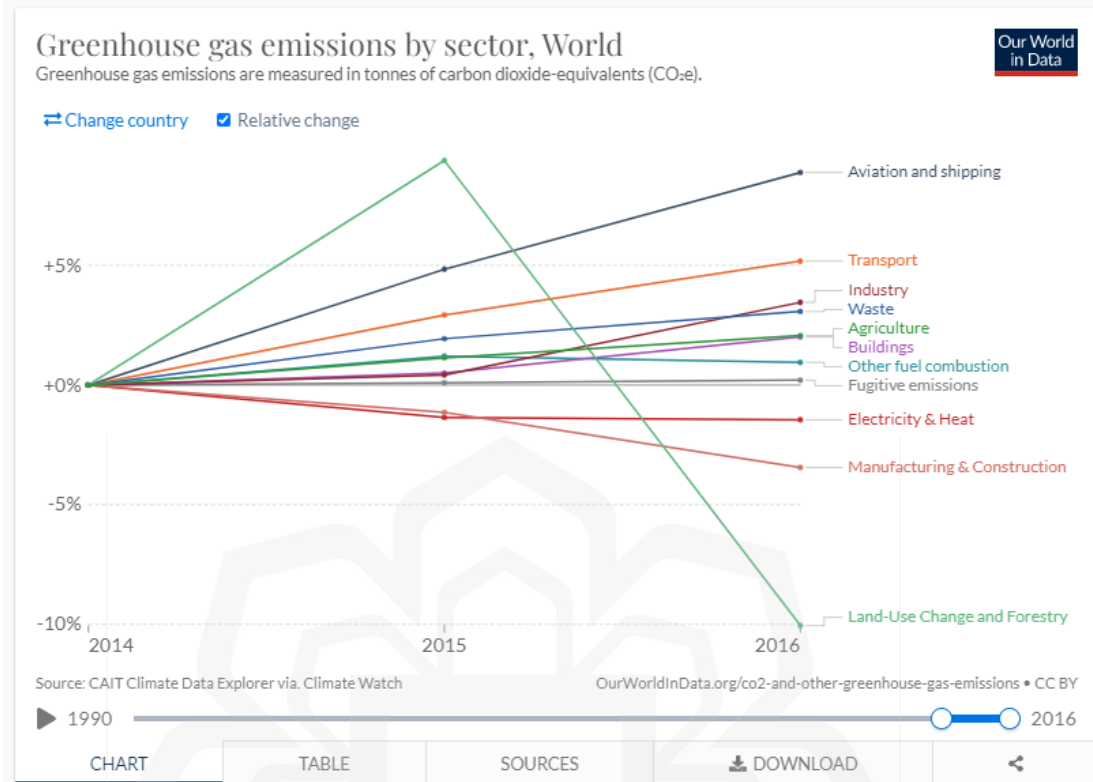


Figure 1.3 Annual Greenhouse Gas Emission by Sector

1.2 STATEMENT OF THE PROBLEM

Islām propounds high standards for the protection of the environment. The Qur’ān explains the purpose of man’s creation as *khalīfah* on earth entrusted with its protection (Qur’ān, *al-Baqarah*:30) and Muslims as exemplifying the best community (Qur’ān, *Alī Imrān*:110) for other communities to emulate. Yet, among the countries with the highest contribution towards global carbon emissions are countries where Islām has the highest number of followers. Indonesia, a country with the highest Muslim population, is one of those countries contributing towards high level of carbon emissions while at the same time, it is also one of the countries which is the most vulnerable to the negative effects of climate change. Based on the Climate Change Performance Index published by Germanwatch, the NewClimate Institute and the Climate Action Network in its 2019 edition (Burck et al., 2018) had ranked Indonesia in thirty-eighth place and had rated Indonesia as a “low-performing” country in its overall scorecard rating. Despite the

country having the most ambitious greenhouse gas [GHG] emissions targets, deforestation in Indonesia continues to grow at an alarming rate, driven by the pulp and palm oil industry. Latest Climate Change Performance Index published had shown improvement in Indonesia's ranking to twenty-fourth in 2020 but fell to twenty-seventh in 2021 (Burck et al., 2021).

1.3 RESEARCH QUESTIONS

The framework of this research is based on the following research questions.

- 1- What is the meaning and root causes of climate change?
- 2- What is ethical guidance on protection of the environment from the *Qur'ān* and *āhādīth*?
- 3- What are the malpractices of Muslims in Indonesia and their perception on climate change?
- 4- What could be the possible reasons for the discord between belief and practice and the possible solutions to bridge the gap?

1.4 OBJECTIVE OF THE RESEARCH

This research aims to provide an analysis and study of the following salient topics.

- 1- The meaning, development, and the root causes of climate change.
- 2- The ethical guidance from Qur'anic verses and *āhādīth* on the protection of the environment.
- 3- Examine the extent of climate change in Indonesia and malpractices of the Muslim community in Indonesia against Islamic principles and teachings that contribute towards climate change.
- 4- Examine the possible reasons for the discord between Islamic beliefs and the malpractices of the Muslim community in Indonesia that negatively impact climate change.

1.5 SCOPE AND LIMITATION OF THE STUDY

The scope of this study is limited to a case study in Indonesia. The study includes some comparisons with countries within the South-East Asian region.

1.6 SIGNIFICANCE OF THE RESEARCH

Demography of Muslims in Indonesia is significant. In its online publication on “Religious Composition by Country, 2010-2015”, Pew Research Center (2015) estimated that more than eighty percent of the world population are Muslims. This research is significant because it attempts to explain the reason why Islamic ethos related to world environment which has been neglected and unheeded by Muslims. In addition, Muslim community should be awakened from their slumber and propelled to individual actions in addition to supporting efforts at national and international levels in combating climate change. This case study may assist in a better understanding of similar challenges relating to climate change faced by Muslim communities in other Muslim-majority countries.

1.7 RESEARCH METHODOLOGY

The researcher uses secondary research methodology and relies on data and materials published on the internet from government as well as Non-Governmental Organizations [NGO].. The research is desktop research which was conducted using descriptive and analytical methods. The research begins with literature review data. The researcher studies various results of scientific research data published by international research institutions to describe the root causes of climate change.

The researcher refers to the Qur’ān and *āhādīth* when quoting Islamic ethical concepts. The researcher also uses data results of international research conducted to measure global contributions toward climate change and studies and analyses the country research results pertaining to Indonesia. Thereafter, the researcher compares the country results of Indonesia against those of neighboring countries in terms of efforts and contributions, whether positive or negative.

The researcher adopts the descriptive methodology and, thereafter, proceeds using the analytical method to analyze the issues and problems identified.

1.8 LITERATURE REVIEW

Reconciling Islamic Ethics, Fossil Fuel Dependence, and Climate Change – Saleem H. Ali, *Review of Middle East Studies* 50 (2) 172-178, 18 January 2017.

This article was written in response to the “Islamic Declaration on Climate Change”; a symposium held in August 2015, initiated by non-profit organizations involved in environmental education in Muslim societies. The symposium produced an exceptional outcome of unifying the Islamic community around the Declaration, proclaiming the aim to cultivate ownership on the issue of climate change within the community. The significance of the event was recognized by the author from the participation of The Islamic Educational and Cultural Organization [ISESCO], an institution modeled after United Nations Educational and Cultural Organization [UNESCO], the Organization of Islamic Conference [OIC] and The International Islamic Fiqh Academy.

Some topics were described as “bold” by the author, including the “willingness to challenge the fossil-fuel economies of the Middle East”. One possible reason posited by the author for this new openness in the region is the success story of Dubai relinquishing its dependence on oil and transforming its economy to one that is service based instead. The realization by Saudi leadership of the direct consequences of climate change in the region was another reason offered by the author for the change.

According to the author, it is timely for Islamic scholars to reinvigorate the pilot effort from a 2008 forum where a detailed “Seven Year Plan for Islamic Action on the Environment” through “harness(ing) the teachings, values and ethical law of the Islamic faith in the service of humanity” was drafted. Although the author had recognized that there was no detailed review of that earlier effort, the opportunity to provide more meaningful insights into the reasons for the inaction of that earlier forum was missed by the author.

The recognition of the significance of the bold call to businesses in Muslim countries to divest from fossil fuels by the author is appropriate and congruent to Islamic teachings from the Scriptures (*Quran*) and traditions (*Sunnah*) of the Prophet of Islām.

The article made an interesting reference to the concept of *mīzān* in the material and immaterial worlds, *dunyā* and *dīn*, and compared this concept in the light of