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# Refining Islamic Eco-Philosophy: A Comparative Assessment of Ikhwan al-Shafa's Cosmology

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## Abstract

The current global environmental crisis is seen as rooted in an anthropocentric paradigm that desacralizes nature, thereby breaking the spiritual connection between humans and the environment. This study aims to analyze the ecological principles in the cosmological theory of Ikhwan al-Shafa and its relevance to modern ecological discourse. The research was conducted using a qualitative approach, drawing on primary and secondary literature. This article uses an analytical-philosophical method to interpret the primary texts of *Rasail* with a comparative-critical reading to compare the findings of the thought of the Ikhwan al-Shafa with key concepts of modern ecology. Researchers found a principle of unity among all the elements of the universe and a universal soul. This universal soul gives life and controls all the elements of the universe. Although the Ikhwan al-Shafa was a group of 10th-century classical Muslim philosophers, its thinking remains relevant to modern ecological discourse. This research position seeks to refine previous studies that have only addressed the content of Ikhwan al-Shafa's cosmological theory and

its implications for ecological understanding. This research contributes to providing a solid ethical-theological foundation for resolving the environmental crisis.

Keywords: Ecological principle, universal soul, cosmological of Ikhwan al-Shafa

## Abstrak

Krisis lingkungan global saat ini dipandang berakar pada paradigma antroposentris yang mendesakralisasi alam sehingga memutus hubungan spiritual antara manusia dan lingkungan. Penelitian ini bertujuan untuk menganalisa prinsip-prinsip ekologis dalam teori kosmologi Ikhwan al-Shafa, dan melihat sejauh mana prinsip-prinsip tersebut berelevansi dengan wacana ekologi modern. Penelitian dilakukan dengan menggunakan pendekatan kualitatif berdasarkan studi kepustakaan primer maupun sekunder. Artikel ini menggunakan metode analisis-filosofis untuk menafsirkan teks-teks primer Rasail dengan pembacaan komparatif-kritis untuk membandingkan temuan dari pemikiran Ikhwan al-Shafa dengan konsep-konsep kunci dari para tokoh ekologi modern. Peneliti menemukan bahwa ada prinsip kesatuan antarseluruh elemen yang ada di alam semesta dan prinsip jiwa universal. Jiwa universal inilah yang memberikan kehidupan dan mengendalikan seluruh elemen yang ada di alam semesta. Meskipun Ikhwan al-Shafa merupakan kelompok filsuf muslim klasik abad 10, namun pemikirannya masih relevan dengan diskursus ekologi modern. Posisi penelitian ini berupaya untuk menyempurnakan penelitian-penelitian sebelumnya yang membahas hanya sebatas pada isi teori kosmologi Ikhwan al-Shafa dan implikasinya pada pemahaman ekologi. Penelitian ini berkontribusi dalam memberikan fondasi etika-teologis yang kokoh dalam mendukung penyelesaian krisis lingkungan.

Kata kunci: Prinsip ekologi, jiwa universal, kosmologi Ikhwan al-Shafa

## Introduction

The contemporary environmental crisis is very serious. It includes pollution, lack of resources, species dying out, and global warming (Keraf, 2010). People often don't notice this slow danger until it's too late. Seyyed Hossein Nasr uses a metaphor about a frog to explain it. A frog in slowly heated water doesn't realize the danger and dies. But if put in boiling water, it jumps out to save itself. This is like the environmental crisis: it slowly harms us while many people don't notice or care because there's no big disaster to make them see it (Sayem, 2020). The damage is huge. Over 80% of the world's forests have been deforested for profit, generating $2.8 billion daily for industries while surrounding communities suffer losses of up to $300 billion from climate-related disasters

(Bowen et al., 2024; Greenpeace, 2019; Verbruggen, 2022). Atmospheric CO2 has reached 424.7 ppm, far above the safe threshold, threatening marine ecosystems and accelerating global warming (Guardian, 2024; Morton, 2019). Some thinkers say this crisis has deeper causes. Fritjof Capra believes that losing spiritual values and focusing on material things has hurt our connection with nature (Capra, 1996). Seyyed Hossein Nasr similarly argues that the dissonance between humanity and the natural environment arises from the process of desacralization of the natural realm, which is presently perceived solely as an economic asset to be utilized without due accountability (Nasr, 1990).

Lynn White notably identified this anthropocentric perspective as rooted in Christian theological principles, attributing to it the promotion of a human-centric superiority that rationalizes ecological degradation (White, 1967). Subsequently, Ahmed Afzaal enlarged his examination to embrace further religious customs, especially Islam (Afzaal, 2012). In reaction to contemporary challenges, academic authorities endorse an eco-centric framework that acknowledges the inherent worth of all living entities and the profound interconnectedness of the cosmos (Keraf, 2006; Sutoyo, 2013). This investigation advances this paradigm transformation by resurrecting a pre-modern Islamic intellectual resource: the cosmological perspectives of the 10th-century philosophical collective, Ikhwan al-Shafa. As Nasr himself emphasized, their magnum opus, Rasail Ikhwan al-Shafa, offers profound insights into the spiritual integrity of the universe that remain remarkably relevant to contemporary ecological discourse (Nasr, 1978). From their cosmology, two eco-centric principles can be derived: the principle of unity (*alam wahid*), which posits that all elements in the universe are interconnected in a mutually dependent relationship, and the principle of the universal soul, which holds that the universe possesses a spirituality that must be respected and appreciated.

The two eco-centric principles do not stand alone; rather, they serve as the foundation that unifies ontology, cosmology, and ethics. Ontologically, these principles assert that reality is holistic, non-reductionist, and spiritual. Nature is not dead matter that can be reduced to its smallest parts, such as atoms, but a giant living being endowed with a soul and purpose. This forms the basis for viewing nature as an honorable and noble entity. Cosmologically, the universe is seen as a dynamic, integrated, and teleological system (having a purpose). The movement and interaction of all its elements, from stars to particles of dust, are governed by universal natural laws and driven by the universal soul. (Fajarini, 2026). Ethically, because nature is a living whole, ethics is not only a matter

between humans but also includes the relationship between humans and the entire cosmos. This principle requires respect, responsibility, and justice toward nature, as environmental destruction is essentially self-harm (Lestari, 2020). This ethic provides a strong foundation for rejecting modern anthropocentrism that arbitrarily exploits nature.

Amid the global crisis caused by materialistic and reductionist worldviews, the cosmology of the Ikhwan al-Shafa emerges as a fresh and relevant alternative to enrich modern debates, such as by providing a solid philosophical foundation for environmental ethics. This perspective not only advocates for the pragmatic conservation of nature but also calls for the restoration of a spiritual and moral relationship with the natural world. The Ikhwan al-Shafa successfully offer an alternative to the mechanistic view that sees nature as a machine and an object of exploitation. Principles from the cosmology of the Ikhwan al-Shafa can be used to challenge claims of human superiority that are based solely on species. In the thought of the Ikhwan al-Shafa, ontological superiority (degrees of existence) is not the same as moral superiority (the right to act arbitrarily). In fact, human rational capacity imposes an even greater moral responsibility to treat animals justly—an argument highly relevant in modern debates on veganism and animal studies. (Somma, 2024). Earlier scholarly investigations have systematically delineated the cosmological framework of Ikhwan al-Safa (Darraz, 2012, 2025; Mohamed, 2000; Nasr, 1978). These works consistently complement and develop the cosmological thought of Ikhwan al-Shafa, with Nasr and Mohamed studying it objectively and Darraz refining it by analyzing the ecological values embedded within it. Nevertheless, these investigations frequently conclude with a mere objective description. No research to date has systematically compared the eco-centric principles of Ikhwan al-Shafa's cosmology with modern ecological thought.

This research, relying on qualitative techniques inspired by literary scrutiny, embraces a philosophical hermeneutical perspective to shed light on the essential texts of the *Rasail Ikhwan al-Shafa*, especially those that address cosmology, nature, and the human spirit. A comparative-critical analysis is then used to compare the findings with key concepts from modern ecology. In this analysis, we seek to highlight the shared principles, important contrasts, and theoretical blends tied to the present-day ecological talks. To conclude, this research indicates that enduring Islamic principles not only fit with but can also significantly boost and rectify distinct aspects of today's ecological philosophy by

offering a solid ethical-theological rationale for environmental ethics. Ultimately, this study reveals how classical Islamic philosophy not only coincides with but also holds the ability to enhance and elevate certain dimensions of current ecological discourse by supplying a significant ethical-theological framework for environmental values.

Previous researchers have identified several studies that discuss the cosmological theory of the Ikhwan al-Shafa. Nasr provides profound findings and contributions to the cosmology of the Ikhwan al-Shafa, stating that traditional Islamic science is sacred, in which every particle of the universe serves as a bridge to knowledge of the Creator (Nasr, 1978). Nasr also elaborates on the Ikhwan al-Shafa′s concept that the universe is a single organic unity, alive and possessing both soul and intellect. Its structure parallels that of humans as the microcosm. Nasr offers the Ikhwan al-Shafa′s eco-cosmology as an alternative paradigm for addressing the environmental crisis (Nasr, 1978). Darraz contributes to restoring the conception of the universe as a sacred entity with intrinsic value, in which every part of it (even minerals) participates in cosmic harmony and in devotion to the Creator (Darraz, 2012, 2025). Darraz found that the concept of nature as a macrocosm, belonging to the Ikhwan al-Shafa, forms the basis of eco-cosmology, in which the universe is regarded as a living entity possessing a soul and intellect, rather than merely a dead machine (Darraz, 2025). Then Yasien Mohamed presents key findings and contributions through a comparative analysis that clarifies the position of Ikhwan al-Shafa's cosmology within the Islamic philosophical tradition. Mohamed asserts the concept of the human being as a microcosm as the core of Ikhwan al-Shafa's cosmology.

This concept unifies the relationship between nature and humanity as an organic connection, rather than as one in which a subject dominates an object. Mohamed demonstrates that the concept of the microcosm is key to fully understanding Ikhwan al-Shafa's philosophy (Mohamed, 2000). They consistently complement and develop the cosmological thought of Ikhwan al-Shafa, with Nasr and Mohamed studying it objectively, and Darraz refining it by analyzing the ecological values embedded within it.

Simultaneously, the international conversation has sparked researchers to explore Islamic ecotheology relevant to Indonesia. Sururi et al. conducted an analysis of the *Reresik Sendang* tradition in Kudus, which interprets nature as a manifestation of the divine (Sururi et al., 2020); Sahidah investigated the divine-human-nature triad as articulated in the Quran employing Izutsu's semantic

framework (Sahidah, 2017); and Sururi juxtaposed Islamic ethical principles with ecofeminist perspectives, accentuating the tenets of love and compassion towards the natural world (Sururi, 2014).

Existing studies on the cosmology of Ikhwan al-Shafa have largely been confined to descriptive and internal analyses, focusing on reconstructing their metaphysical system without situating it within broader ecological debates. While recent works have begun to highlight the environmental implications of their thought, there remains a lack of systematic comparative engagement between Ikhwan al-Shafa's cosmological principles and modern ecological philosophy. This absence limits the potential contribution of classical Islamic cosmology to contemporary eco-centric discourse. Therefore, this study aims to continue what Nasr, Mohamed, and Darraz began by conducting a comparative-critical analysis between the key principles of Ikhwan al-Shafa and the ideas of modern ecological figures such as Arne Naess, Fritjof Capra, and Seyyed Hossein Nasr.

The academic utilizes a qualitative method rooted in literary examination, employing a philosophical hermeneutic perspective to decipher the foundational texts of the *Rasail Ikhwan al-Shafa*, particularly those that discuss cosmology, the nature, and the soul. Subsequently, an evaluative and comparative critique is undertaken to identify domains of agreement, essential discrepancies, and theoretical syntheses that are relevant to contemporary ecological discourses. Ultimately, this study demonstrates that even though Ikhwan al-Shafa's cosmological thought is classical, it remains relevant and can serve as a philosophical foundation for modern ecological discourse, offering not only resonance with contemporary ideas but also a robust ethical-theological foundation that can enrich and correct certain aspects of secular ecological paradigms.

## Islamic Eco-Cosmology of Ikhwan al-Shafa

Wimberley defines cosmology as a branch of science that studies the universe as a whole, not only limited to physical aspects such as planets and orbits but also examines the nature of the universe's origin and the value of interconnectedness that exists in the universe (Wimberley, 2009). This aligns with the cosmological discussion in Islam. Cosmology and ecology are related fields of science. In the realm of logical science, the two are encompassed in the general and particular relations of *min wajhin*, resulting in an in-depth

discussion of the two that intersect. The specific discussion is that they both talk about how the elements in the universe are interconnected and interdependent. Mickey stated that in recent years, humans have gathered information about the cosmological and ecological context of the relationship between humans and the Earth. With this information, humans have come to understand the extent to which human activity on Earth is increasingly detrimental to the conditions of life. Understanding the relationship between cosmology and ecology is crucial for comprehending the values underlying human behavior toward the environment. Mickey concluded that with these two fields of science, nature will be seen as more dynamic, rather than static, as previously believed. Consequently, humans are no longer seen as the only subject in the universe (Mickey, 2018). Berry even confirmed that anthropocentric principles guiding human life can be eliminated and replaced with non-anthropocentric principles thanks to ecological studies (Berry, 1999).

With the anthropocentric principle, humans view animals and plants as static objects that can be enjoyed and treated at will. Animals are only seen as a source of food and labor, and they are companions of man who have no universal souls. Plants are only considered raw materials for construction and recreational objects. Even though everything in this universe has a universal soul, including animals, plants, and other creatures, it is these universal souls that govern themselves in this universe. Appreciating and caring for the intrinsic soul attached to them will benefit everything in this universe, especially human beings. When humans preserve the world around them, they maintain and preserve conditions that support human health and well-being. The non-anthropocentric principle, or what researchers call the eco-centric principle, supports efforts to protect animal rights and natural rights because the relationship between humans and animals is very close. Consequently, people will begin to pay attention to their daily activities, which can affect major phenomena such as climate or ecological crises (Mickey, 2018).

The researcher calls it the term "Islamic eco-cosmology Ikhwan al-Shafa" because the researcher found that there are eco-centric principles contained in the Islamic cosmological thought of Ikhwan al-Shafa, especially the discussion of nature, the definition of nature, and even the discussion of the macrocosm and microcosm. These eco-centric principles are of great ecological value and environmentally friendly. The researcher analyzes two eco-centric principles: the principle of unity, which can harmonize the relationship between humans and their environment, and the principle of the universal soul, which is believed

to be contained in all living things, including animals, plants, and minerals. This universal soul principle will bring respect to humans and encourage them to treat other creatures ethically.

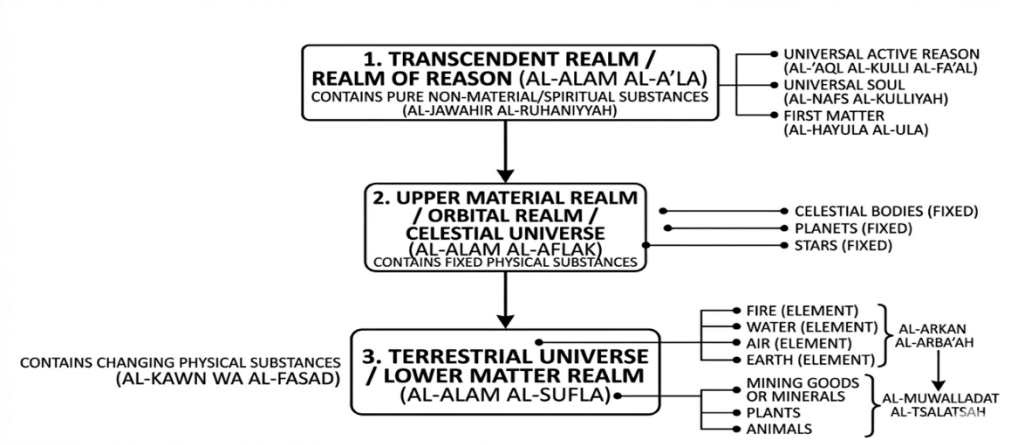


Figure 1. Hierarchical Chart of Natural Structure according to the Ikhwan al-Shafa

Ikhwan al-Shafa divides the levels of nature into three, namely, the transcendent realm/the realm of reason (*al-alam al-a'la*), the upper material realm/orbital realm/celestial universe (*al-alam al-aflak*), and the terrestrial universe (*al-alam al-sufla*). Each level of nature contains its own creatures. In the transcendent realm, there are pure non-material substances or spiritual substances (*al-jawahir al-ruhaniyyah*) such as universal active reason (*al-'aql al-kulli al-fa'al*), universal soul (*al-nafs al-kulliyah*), and first matter (*al-hayula al-ula*) (Al-Shafa, 1992d). In the upper material realm, there are physical substances or matter, such as celestial bodies, planets, and stars (Al-Shafa, 1992c). The lower material realm contains physical substances or matter that are constantly changing (*al-kawn wa al-fasad*), in contrast to the physical substances in the fixed, upper material realm. Bodily substances or matter in the lower matter realm, such as the four elements of life (*al-arkan al-arba'ah*) in the form of fire, water, air, and earth, can be transformed into three derivative organisms (*al-muwalladat al-tsalatsah*), such as mining goods or minerals, plants, and animals (Al-Shafa, 1992a).

The Ikhwan al-Shafa articulate the stratified schema of existence instituted by the Divine as the quintessential origin of all that exists, which incorporates both rational-metaphysical entities and empirical entities. It is indefensible to scrutinize physical entities in isolation, stripped of their

metaphysical framework and the presence of the Divine (Darraz, 2025). This holistic viewpoint disputes the oversimplified notions that are widespread in contemporary scientific models, often eroding the unified relationship between the material and spiritual realms of life.

All beings or things at all levels of nature are united in an inseparable relationship in which each may function as cause or effect (Al-Shafa, 1992c). This unity is the first ecocentric principle in the Ikhwan al-Shafa cosmological theory. Nature is defined as the unity of tangible objects (*al-ajsam al-maujudat*) that are interconnected and in need of each other, like the unity of a city (for example, the unity of roads, traffic, houses, buildings, shops, and others), the unity of an animal (for example, the unity of nose, mouth, heart, eyes, and others in an animal), or the unity of a human being (like the unity of the elements that exist in human beings such as the intellect, soul, skin, bones, kidneys, heart, nose, mouth, and others.) (Al-Shafa, 1992a; Nasr, 1978). Ikhwan al-Shafa wrote a particular term in his work, *alam wahid*, which indicates that all elements in this universe, whether physical or non-physical, biotic or abiotic, living or inanimate, have an interconnected unity. Ikhwan al-Shafa says (Al-Shafa, 1992c):

> *Know, my brother, that among the wisdom of God in this universe is that all the elements of existence in this universe have been bound to each other in a bond and have been arranged into a whole arrangement so that there are elements of existence that serve as cause and effect. Nature is likened to a city with connections between its parts. Nature is an extensive and closely interconnected system. Nature is likened to a fortified town, and in it, there are shopping centers, shops, cafes, big streets, alleys, markets, housing, buildings, equipment, and various necessities of life, the use of which is regulated and controlled by a king.*

This unity is further elaborated through the analogy of numbers. It is stated in the the Rasail that all entities are fundamentally interconnected and intricately interrelated across various facets in the ongoing (*baqa'*) and perpetual (*dawam*) paradigm emanating from the Prime Cause (*al-illa al-ula*), which is identified as God, the Supreme Creator. The interrelation of all these universal entities can be likened to the interrelation of numerical constructs (*ka-ta'alluq al-a'dad*), and the relationship between one part and another part of this cosmos is comparable to the relationships posited within the domain of numerical theory (Darraz, 2025; Ikhwan al-Safa', 1992b).

Because there is a principle of unity between creatures in this universe, harmony is necessary to maintain balance. It is not heavy or lame. Ikhwan al-Shafa illustrates the relationship between the unity of all beings in the universe

and the unity of prescriptions of medicines that consist of many substances. However, if formulated with the principle of unity and conformity, it will be a prescription medicine full of benefits. When it is mixed carelessly without consent, it can become a toxic drug that damages health (Al-Shafa, 1992a). Likewise, all creatures in this universe, including humans, animals, plants, and minerals, must be maintained in harmony with the principle of integral unity so that they can benefit all creatures living within them. Therefore, harmonization arises from the principle of unity.

The second eco-centric principle in the cosmological theory of Ikhwan al-Shafa is the universal soul, which is the universe and exists in every living being, in the transcendent realm as well as in the upper and lower material realms. This universal soul is possessed not only by living or biotic beings but also by non-living or abiotic entities. In his book, Ikhwan al-Shafa explain this through their theory of the macrocosm and microcosm. In the macrocosm, nature is likened to a great human being with both body and soul. The natural body is a whole substance that extends from the top of the outermost orbit to the center of the Earth (Al-Shafa, 1992c). The soul of nature is a whole substance that flows throughout the body of nature. The natural soul is referred to as the universal soul. The natural body is likened to a city with its various equipment, while the king who leads the city is likened to a universal soul that governs it (Al-Shafa, 1992c). In addition, nature is likened to a great human being because it has spirit, life, and knowledge. By knowing, nature also worships and obeys God, just as humans worship and obey Him. All activities of beings in this universe are governed by universal soul forces, just as particular soul forces influence all activities of individual humans (Al-Shafa, 1992d).

The Ikhwan al-Shafa articulated the notion that the cosmos represents a great human (macrocosm), comprising the celestial realms, the terrestrial sphere, and all their constituents (Darraz, 2025). Lastly, they illuminated the cosmological implications of this perspective, claiming that the universe is expressed through the synergy of the universal body and the universal soul. In their work, they caution that the bifurcation of these two entities would precipitate the great resurrection (*al-qiyamah al-kubra*), a cosmic phenomenon wherein the universal soul disengages from the universal body, resulting in the disintegration of all fundamental elements of the universe and the eventual dissolution of the cosmos (Al-Shafa, 1992d). This assertion exemplifies the profound dedication of the Ikhwan al-Shafa to a comprehensive vision that perceives nature as an integrated unity of both matter and spirit.

In microcosm theory, Ikhwan al-Shafa likens humans to a small realm. Humans are a miniature version of the universe; therefore, the laws that apply to nature also apply to humans. In humans, there are all the forces, or forces of all creatures in nature, namely, animal power, plant power, and mineral power. Humans have 12 holes in themselves, just as nature has 12 constellations. Humans have nine substances in their bodies, just as nature has nine orbital layers. Ikhwan al-Shafa also equates the human body's four organs with nature's four elements: the head with fire, breath with air, the stomach with water, and the lower abdomen with soil (Mohamed, 2000).

By looking at the theory of the macrocosm and microcosm, Ikhwan al-Shafa wants to show that not only do humans have a soul that regulates all their activities but also nature has a universal soul that regulates all phenomena that occur on all sides of the universe. This universal soul intrinsically inhabits the universe itself. The universal soul can move and regulate the universe through particular souls intrinsic to all natural beings. All beings in the realm of lower matter are derived from the universal soul within each of them, like a carpenter with his tools (Al-Shafa, 1992b).

The Ikhwan al-Shafa do not simply articulate the universe as a great human being comprising the celestial realms, terrestrial domains, and all entities residing within them (Darraz, 2025); they additionally elucidate the significant cosmological ramifications inherent in this notion. The existence of the universe depends entirely on the inseparable unity between the universal body and the universal soul. In the *Rasail*, they warn that the separation of these two fundamental substances would trigger a great doomsday (*al-qiyama al-kubra*), a cosmic event in which the universal soul is uprooted from the universal body, causing all the essential elements of the cosmos to disperse and the universe to cease to exist. Such a statement underscores the depth of the Ikhwan al-Shafa's commitment to a holistic vision that regards nature as an organic unity of matter and spirit (Al-Shafa, 1992b). This understanding sets the stage for recognizing that the soul is not merely an abstract principle but the very life force of all beings, a point that will now be explored further.

The soul is a non-physical aspect inherent in nature and all creatures. This non-physical aspect is both visible and invisible. Many humans do not realize this because they only see nature's physical and material elements, as well as all the creatures within it. Humans often consider nature as mechanical objects without spiritual elements, as they can only utilize the power of their senses to accomplish their tasks. This type of human being has an eroded spirituality, so

he has lost consciousness of the universal soul that nature has and has lost his sense of admiration for the universe (Sururi et al., 2020). However, a person who believes that the soul is the source of all forms of natural work will be able to draw lessons from the work of natural objects, such as animals, plants, and even mineral goods, and conclude that the objects in this universe cannot function at all without a soul, because the axles cannot function without a substance (Al-Shafa, 1992b). The soul is the power of God's love that makes the universe alive and moves it. Ikhwan al-Shafa explains that there is a compelling reason behind the power of love possessed by the universal soul, which has enabled it to move the universe, run orbits, stars, and planets, and animate various natural entities in the upper and lower material realms (Darraz, 2012).

The universal soul's love for nature comes from its love for God, the Creator of the universe. Ikhwan al-Shafa states that nature is the source of knowledge about God because it is a small and finite image of God (Nadzir, 2016). According to Nasr, the Divine created the natural world to serve as an enhancement to human existence and to complement human life, rather than to permit its excessive exploitation. The right to use nature should be limited by ethics rather than exploitation (Mascall, 1970). Exploitation constitutes a manifestation of oppression. The natural world was established not solely for the advantage of humanity but also serves as an embodiment of the divine's authority and grandeur. Thus, exploiting nature reveals that humans have persecuted one of the groups of worshippers of God, as nature also prays and worships God in its own way (Nasr, 2007).

The belief that nature has a soul and worships God, found in the thought of Ikhwan al-Shafa, is in line with Sururi's interpretation of QS. al-An'am: 38, that all creatures on earth and birds in the air are 'communities' (*umam*) like human beings (Sururi, 2014). Ikhwan al-Shafa provides a philosophical explanation for why they deserve to be called communities: because they are animated by the universal soul that originates from God, and by their very existence, they glorify and praise Him. This understanding transforms the status of nature from a dead object into a dignified subject that has a vertical relationship with the Creator, so that its exploitation is not merely an ecological crime but also a neglect of fellow creatures of God who worship Him. Consequently, it is imperative for individuals to suppress their innate desires to prevent the unethical exploitation of the natural environment.

## Modern Ecological Discourse in Philosophy Perspectives

The leading cause of the climate crisis or environmental crisis is the disharmonious relationship between humans and nature caused by the anthropocentric principle that positions humans as the essential creatures and the main subjects in the universe; this principle assumes that animals, plants, and minerals are only objects provided by God for the benefit of humans so that humans can be freely used. The implication of this principle is dangerous because it will give rise to a sense of superiority in humans. Although the position of humans, animals, plants, and minerals in the universe is equal, they all form a mutually influencing unity of life and possess a universal soul that must be respected. This is a key point emphasized by modern ecological figures, such as Arne Naess, Fritjof Capra, and Seyyed Hossein Nasr.

Arne Naess is a Norwegian philosopher. He became interested in ecological discourse in 1968, writing Philosophy and Ecology. Following this work, Naess published Ecology, Community, and Lifestyle in 1973, which subsequently gained popularity and has been translated into various languages. This work has greatly influenced environmental thinkers and activists worldwide (Naess, 1995). Naess is famous for his deep ecological movement. There are many similarities between the thoughts of the Ikhwan al-Shafa and those of Arne Naess; although the life gap between the two is very long, their thoughts are still in sync.

Arne Naess's deep ecology emphasizes the principle of intrinsic relations between species or organisms in the biosphere (Naess, 1995). This principle closely parallels the Ikhwan al-Shafa's eco-cosmological thought, especially in the principle of unity. In addition, in deep ecology, Naess states that all organisms have the same status, dignity, and right to live and thrive; therefore, there should be no murder or exploitation (Naess, 1995). This aligns with Ikhwan al-Shafa's view that all organisms have the same degree because they have the same spiritual value in the form of the same universal soul, which gives them equal value. All organisms must be harmonized for the universe to remain in balance. Naess also believes that species other than humans have intrinsic value in the form of a universal soul, just as Ikhwan al-Shafa conceived (Naess, 1995).

Although Naess's principle of intrinsic relations aligns with the principle of unity in Ikhwan al-Shafa, their fundamental differences must be noted. The concept of the universal soul (*al-nafs al-kulliyah*) in Ikhwan al-Shafa is rooted in a clearly theistic-emanationist framework, in which nature is a spiritual

manifestation of the Creator. In contrast, the intrinsic value of Naess's deep ecology can be interpreted in both secular and spiritual frameworks. This is precisely where Ikhwan al-Shafa's unique contribution lies: providing a strong ethical-theological foundation that can be even more binding for religious communities than divine commandments.

In addition to Naess, Fritjof Capra proposes a worldview concept similar to that of Ikhwan al-Shafa's view on holistic and natural integrity principles. Fritjof Capra is a physicist who later engaged with environmental philosophy. He views this universe as containing a complete life (Keraf, 2014). He founded the Center for Eco-literacy in Berkeley, California, United States. The purpose of this institution is to create education based on ecological principles for sustainable life arrangements (Keraf, 2014).

According to Capra, we face various ecological crises that are increasingly difficult to reverse and have damaged human lives and the biosphere. The more we study this problem, the more we realize that it is impossible to understand the universe in isolation. This problem is related to systems and their dependence on each other. However, the mechanical-linear modern worldview is causing an ecological crisis on the planet. This perspective has led to the pollution of air, water, and soil, threatening human life (Capra, 1996). Capra concluded that nature must be seen as a whole and integrated, not separated, because it forms a system of life that influences each other (Capra, 1996). The principle of holism and integrity of nature proposed by Capra resonates with the principle of natural unity conceived by Ikhwan al-Shafa, that nature has a unity system like the unity of a city and of a human being. All the elements are interconnected, which cannot be ignored, and one cannot be tampered with without affecting the balance of the entire system. Even small careless behaviors of humans will cause destruction across the universe and harm all creatures. This aligns with Edward Norton Lorenz's butterfly effect theory proposed in 1961, which suggests that flapping butterfly wings in the Brazilian jungle could theoretically impact the tornado disaster in Texas a few months later. Likewise, with the existence of a ball at the top of a hill, with a slight push, the ball falls to the bottom of the valley (Mathis, 2007).

Furthermore, Capra explained that nature is not an inanimate object but a living creature that forms a complex system of its own with a distinctive pattern of self-order. The system can optimally manage its environment so that life can continue to be maintained (Capra, 2007). Like the Ikhwan al-Shafa's cosmological thought, this universe has an universal soul that can regulate itself

to continue living and be in harmony with all beings. Capra also stated that the perspective of human greed towards nature can stem from poverty, ignorance, or a desire to amass wealth (Irawan, n.d.). The inability of human beings to control their views, passions, and greed, as well as their failure to utilize the transcendental values within them as a moral guide in their lives, leads to ecological crises. From the human perspective that Capra refers to, it can be said that the concern of religious people for the environment is highly dependent on how religious teachings about the environment are conveyed and explored by their people, especially scholars, using contemporary sustainable language and terms (Tucker, 2000).

According to Capra, his holistic and ecological worldview is also parallel with the mystical worldview of all traditions, whether from Islam, Christianity, Hinduism, or Buddhism. The holistic and ecological paradigm is a new paradigm for understanding reality. Ultimately, scientists realized that the basic concepts, language, and perspective they had thus far were insufficient to explain the phenomena that exist in the universe. They face intellectual and severe emotional problems, which may be referred to as existential crises. As a result, scientists eventually gain a deeper understanding of the principles underlying the nature of all phenomena, particularly the relationship between matter and the human mind (Capra, 1996). Based on this conclusion, Capra contributed to the concept of eco-literacy, an advanced form of ecological awareness. This concept aims to build a sustainable society (Capra, 1975).

The concept has six underlying ecological principles that are: networks, cycles, solar energy, partnership, diversity, and dynamic balance (Capra, 2002; Keraf, 2014; Widianarko, 2008). After the concept of eco-literacy is established, the next step is to change the mindset and behavior patterns that can lead to a sustainable life, both physically and socially, economically, and politically, by respecting nature rather than just taking advantage of it. This concept is called eco-design (Keraf, 2014). Capra encourages humans to build in harmony with nature, based on the wisdom of nature itself, through eco-design. Nature has extraordinary technologies and designs that can preserve it sustainably, such as spider webs, which are very complex yet remarkably amazing (Keraf, 2014). The extraordinary technology and design stored in nature resonate with the universal soul that exists in Ikhwan al-Shafa's ecological thought. The universal soul has the power to design itself to live sustainably. Not only Naess and Capra, but the ecological thought of Islamic philosopher Seyyed Hossein Nasr is also highly relevant to the classical eco-cosmological thought of Ikhwan al-Shafa. Even in

his *Introduction to Islamic Cosmological Doctrine*, Nasr specifically discusses the Ikhwan al-Shafa's cosmological thought, arguing that this thinking is still relevant to the concept of modern cosmology and can help illuminate the modern ecological crisis. According to Nasr, the elaboration of Ikhwan al-Shafa's cosmological thought can reveal the wisdom of God as the Creator and allow the harmonization of all existing beings (Nasr, 1978).

Nasr's cosmological thought is theophany-based on the epistemology of Scientia Sacra. He began pursuing ecological issues to help find solutions to increasingly critical environmental crises. According to Nasr, the reductionist worldview of modern humans is the leading cause of climate crises. This reductionist standpoint in Western modern civilization has a profound influence on the decline of spiritual awareness among the majority of scientists, leading to irresponsible actions toward nature. The problem is that the Eastern world also tends to refer to Western ideas without the slightest selectivity (Anas, 2017). Nasr mentioned four characteristics of the modern world: *first*, modern people are human-centered and human-focused (anthropocentric); *second*, the contemporary world recognizes no eternal principles, resulting in relativism and reductionism; and third, humanism and secularism cause the modern world to lose sensitivity to the sacred and metaphysical. *Fourth*, the metaphysical aspect, which lies behind the physical and empirical aspect, has disappeared from contemporary society (Anas, 2017). In his epistemology, Nasr asserts that modern humans who adhere to the Cartesian Newtonian paradigm have compromised their understanding of the universe's sacredness and spirituality. The environmental crisis stems from the loss of these two visions of the world. Nature is considered an inanimate object with no meaning or value other than financial gain. Nature becomes a slave that can be exploited at will, without guilt. Consequently, nature is damaged. Exploding populations, lack of breathing space, traffic congestion in cities, lack of natural resources, destruction of natural beauty, environmental pollution, and increased physical and mental illness result from a domineering attitude towards nature (Nasr, 1990).

Nasr asserted that the universe possesses spiritual and sacred values that sustain its existence. This is the same as what Ikhwan al-Shafa believed. In the end, the environmental crisis, as Nasr said, is a significant problem that a combination of various elements of multifaith/interfaith collaboration, including Islam, Catholicism, Protestantism, Judaism, Hinduism, Buddhism, and Taoism, can help solve. Even two seemingly opposing camps, theism and atheism, must work together to resolve this crisis and set aside their differences for the time

being. Like a house that burns, everyone who lives around it must work together to extinguish the fire without having to ask about the homeowner's religious identity and beliefs first (Sayem, 2020).

## Implications for Contemporary Environmental Ethics

The eco-cosmology of Ikhwan al-Shafa carries significant implications for contemporary environmental discourse, especially in religious contexts. First, the Ikhwan al-Shafa's perspective radically surpasses other views that remain predominantly anthropocentric. The Ikhwan al-Shafa emphasize that all entities or creatures—from minerals, plants, animals, to humans—equally possess souls and worship God in their own way. The implication is that this view succeeds in deconstructing anthropocentrism and moves toward a cosmo-centrism that places the entire natural world as a central and integral part of life, not just humanity. Although humans are the most superior creation or creature endowed with reason by God, this does not mean that humans are entitled to exploit other entities. The superiority of human reason does not automatically grant permission to exploit, but rather signifies the burden of moral responsibility borne by humans in this universe (McCready-Flora, 2023).

Humans are obligated to treat nature and other beings fairly and not arbitrarily, because of the fundamental equality of all beings. Not only to animals or plants, humans must also act justly toward and respect all kinds of minerals. *Second*, the thought of Ikhwan al-Shafa, which holds that nature possesses a universal soul and worships God, can provide a stronger theological foundation for religious communities than mere dogmatic commandments from revelation. Since all entities in nature equally worship God, they can be regarded as religious groups on par with humans. When humans exploit nature, they are oppressing fellow worshippers of God. This can transform the status of nature from an inanimate object to a dignified subject that equally maintains a vertical relationship with the Creator, thereby strengthening the theological foundation for the rights held by nature (Karim et al., 2024).

*Third*, the thought of Ikhwan al-Shafa offers a spirituality that views nature as a path to God. This aligns with Seyyed Hossein Nasr's concept of the resacralization of nature, which resacralizes nature previously regarded in a secular or profane manner. Resacralizing nature is an effort to resolve the spiritual crisis of modern humans that constitutes the main cause of the ecological crisis (Nasr, 1990). The principle of *Hamemayu Hayuning Bawono* in Javanese cosmology, which emphasizes harmony and the beauty of nature, aligns

with Nasr's concept of tawhid, which teaches the unity of God, humanity, and nature. Both Javanese cosmology and Nasr recognize that disrespectful treatment of nature reflects a spiritual crisis experienced by humans, building an environmental ethic based on spiritual awareness as well as local values becomes highly important within the framework of nature conservation in Indonesia (Rahmayani et al., 2025).

Both Ikhwan al-Shafa and Nasr invite us to see nature not merely as containing physical phenomena, but also as a spiritual realm filled with Divine signs. This approach can have implications for understanding the sanctity of nature, thereby improving human relations with the environment and addressing the ecological crisis through the restoration of spiritual values in daily life.

*Fourth*, in countries with a religious population, such as Indonesia, the thought of Ikhwan al-Shafa has practical applications for education and culture, including the development of an environmental education curriculum grounded in holistic spirituality. This curriculum not only teaches scientific knowledge but also moral and spiritual knowledge that inspires awareness of the trust to protect the environment, in accordance with the role of the khalifah in Islam. In addition, this curriculum can incorporate the value of moderation to foster a tolerant attitude while maintaining national unity. *Fifth*, the Ikhwan al-Shafa's principle of the unity of nature (nature as one) shows an interesting parallel with concepts from Eastern traditions, such as Brahman in Hinduism and *Pratityasamutpada* in Buddhism. Thus, the cosmology of the Ikhwan al-Shafa can serve as a bridge between spiritual traditions to build a solid global environmental ethic. This can open space for deeper dialogue and understanding between Islamic, Hindu, and Buddhist traditions in the context of esoteric and universalistic thought.

In Hindu tradition, particularly Vedanta philosophy, it affirms the absolute unity that transcends worldly fragmentation and pluralism as manifestations of a single source. Although all these phenomena appear different, they are in fact an inseparable unity (Nicholson, 2013). In the Buddhist tradition, *Pratityasamutpada* is the principle stating that everything continually arises and exists within a close network of cause and effect, without any single independent entity. This principle emphasizes that there is no existence that stands alone, but rather, all things are mutually dependent on one another (Yakup, 2024).

## Conclution

This study demonstrates that the eco-cosmological thought of Ikhwan al-Shafa is not merely a historical artifact but rather a form of perennial ecological wisdom, providing a spiritual and philosophical foundation to complement and correct the modern ecological paradigm, which is often trapped within a secular-materialistic framework. The principles in Ikhwan al-Shafa's eco-cosmology thought are relevant to the ideas of modern ecological discourse by Arne Naess, Fritjof Capra, and Seyyed Hossein Nasr. These thinkers want to emphasize that nature must be treated in harmony to preserve human life and must not be destroyed, as it would threaten ecological harmony. In addition, nature has its own spirituality that must be appreciated because it reflects God's spirituality. The spirit of nature will continue to regulate itself for the comfort of human existence. When humans attempt to protect nature, they defend their homes and mates.

The implications of these findings are significant in several ways. The concept of the resacralization of nature advanced by the Ikhwan al-Shafa, which views nature as a living entity that worships God, can be translated into a foundation for developing a spirituality-based environmental education curriculum in educational institutions, particularly in countries with predominantly religious populations such as Indonesia. Although this study focuses on the dialogue between Islamic and Western traditions, expanding it to include Eastern traditions is an urgent agenda. The principle of unity promoted by the Ikhwan al-Shafa (*alam wahid*) shows an interesting parallel with the concept of Brahman in Hinduism or *Pratītyasamutpada* (interdependence) in Buddhism. Exploring these points of convergence will not only enrich the discourse but also build bridges between spiritual traditions as the foundation for a global environmental ethic.

## Referensi


Afzaal, A. (2012). Disenchantment and the Environmental Crisis: Lynn White Jr., Max Weber, and Muhammad Iqbal. *Worldviews: Environment, Culture, Religion*, *16*(3), 239–262. https://doi.org/10.1163/15685357-01603004

Al-Ṣafā', I. (1992a). *Rasā'il Ikhwān al-Ṣafā' I*. Dar Islamiyah.

Al-Ṣafā', I. (1992b). *Rasā'il Ikhwān al-Ṣafā' IV*. Dar Islamiyah.

Anas, M. (2017). Kritik Hossein Nasr atas Problem Sains dan Modernitas. *KALAM*, *6*(1), 21. https://doi.org/10.24042/klm.v6i1.391

Berry, T. (1999). *The Great Work: Our Way into the Future*. Bell Tower. https://projects.iq.harvard.edu/files/retreat/files/berry_the_great_work.pdf

Bowen, S., Kerschner, B., & Ng, J. Z. (2024). *Natural Catastrophe and Climate Report: 2023 Data, Insights, and Perspective* (Issue Januari). https://www.ajg.com/gallagherre/-/media/files/gallagher/gallagherre/news-and-insights/2024/january/natural-catastrophe-and-climate-report-2023.pdf

Capra, F. (1975). The Tao of Physics. In *Shambala Publications*. https://doi.org/10.4324/9780203147283-52

Capra, F. (1996). *The Web of Life: A New Scientific Understanding of Living Systems*. Doubleday.

Capra, F. (2002). The Hidden Connections: Integrating the Biological, Cognitive, and Social Dimensions of Life into a Science of Sustainability. In *ABA Journal* (Vol. 94, Issue DEC.). Doubleday.

Capra, F. (2007). *The Turning Point Titik Balik Peradaban: Sains, Masyarakat, dan Kebangkitan Kebudayaan* (Terjemahan). Jejak.

Darraz, M. A. (2012). Islamic eco-cosmology in Ikhwan al-Safa's view. *Indonesian Journal of Islam and Muslim Societies*, *2*(1), 133–161. https://doi.org/10.18326/ijims.v2i1.133-161

Darraz, M. A. (2025). The universe as a great human being: Eco-cosmology in Rasāʾil Ikhwān al-Ṣafāʾ. *Journal of Islamic Ethics*, *1*(aop), 1–24. https://doi.org/https://doi.org/ 10.1163/24685542-20250002

Fajarini, S. D. (2026). Kosmologi dalam Pemikiran Ikhwan al-Shafa. *Mazalat: Jurnal Pemikiran Islam*, *7*(1), 1–10. https://doi.org/https://doi.org/10.64367/m-jpi.v7i1.32

Greenpeace. (2019, June). Countdown to Extinction: Whats will it take to get companies to act? *Greenpeace International*, 140. https://storage.googleapis.com/planet4-international-stateless/2019/09/98db6c73-gp_cte_report_lowres.pdf

Guardian, T. (2024). *CO2 Tracker*. The Guardian. https://www.theguardian.com/uk/environment

Ikhwan al-Safa'. (1992a). *Rasā'il Ikhwān al-Ṣafā' II*. Dar Islamiyah.

Ikhwan al-Safa'. (1992b). *Rasā'il Ikhwān al-Ṣafā' III*. Dar Islamiyah.

Irawan, B. (n.d.). Kearifan Ekologis dalam Perspektif Sufi. *Conference Procedings*

*Annual International Conference on Islamic Studies (AICIS XII)*.

Karim, A. R., Hasanuddin, M. I., Fuad, A. Z., Bakar, M. Y. A., Muhaemin, M., & Arifuddin, A. (2024). Exploring The Rationality of Religious-Rational Islamic Thinkers Towards The Compatibility of The Islamic Education System. *Tarbiyah: Jurnal Ilmiah Kependidikan*, *13*(2), 187–208. https://jurnal.uin-antasari.ac.id/index.php/jtjik/article/download/13638/4168

Keraf, A. S. (2006). *Etika Lingkungan*. Kompas.

Keraf, A. S. (2010). *Krisis & Bencana: Lingkungan Hidup Global*. Kanisius.

Keraf, A. S. (2014). *Filsafat Lingkungan Hidup: Alam sebagai Sebuah Sistem Kehidupan Bersama Fritjof Capra*. Kanisius.

Lestari, A. (2020). *Implikasi nilai-nilai ekologis dalam teori kosmologi Ikhwan Al-Safa'*. Sekolah Pascasarjana UIN Syarif Hidayatullah Jakarta.

Mascall, E. L. (1970). Seyyed Hossein Nasr. The Encounter of Man and Nature. The Spiritual Crisis of Modern Man. Pp. 152. (London: George Allen and Unwin, 1968.) 30s. *Religious Studies*, *6*(1), 103–104. https://doi.org/10.1017/s0034412500000123

Mathis, N. (2007). *Storm Warming: The History of A Killer Tornado*. Touchstone.

McCready-Flora, I. C. (2023). Aristotle on reasoning and rational animals. *Australasian Journal of Philosophy*, *101*(2), 470–485. https://doi.org/https://doi.org/10.1080/00048402.2021.1986081

Mickey, S. (2018). Cosmology and ecology. In *Encyclopedia of the Anthropocene* (Vols. 1–5, pp. 151–157). Elsevier Inc. https://doi.org/10.1016/B978-0-12-809665-9.10447-1

Mohamed, Y. (2000). The Cosmology of Ikhwān al-Ṣafā', Miskawayh and al-Iṣfahānī. *Islamic Studies*, *39*(4), 657–679. http://www.jstor.org/stable/23076118

Morton, A. (2019). *Australia's Carbon Emissions Rise Again, Largely Thanks to LNG Industry*. The Guardian. https://www.theguardian.com/environment/2019/aug/30/australia-carbon-emissions-rise-again-greenhouse-gas-lng

Nadzir, T. (2016). *Konsep Mikrokosmos Perspektif Ikhwan al-Shafa'*. UIN Syarif Hidayatullah Jakarta.

Naess, A. (1995). The Shallow and the Deep, Long-Range Ecology Movements: A Summary. In G. Sessions (Ed.), *Deep Ecology fot the Twenty-First Century* (pp. 1–488). Shambhala Publications. https://doi.org/10.1007/978-1-4020-4519-6_87

Nasr, S. H. (1978). *An Introduction to Islamic Cosmological Doctrines: Conceptions of Nature and Methods Used For its Study by the Ikhwan al-Safa'. al-Biruni, anad Ibn Sina* (Revised Ed). Thames and Hudson.

Nasr, S. H. (1990). *Man and Nature: The Spiritual Crisis in Modern Man*. Unwin Hyman Limited.

Nasr, S. H. (2007). Masalah Lingkungan di Dunia Islam Kontemporer. In *Menanam Sebelum Kiamat: Islam, Ekologi, dan Gerakan Lingkungan Hidup*. Yayasan Obor Indonesia.

Nicholson, A. J. (2013). *Unifying Hinduism: Philosophy and identity in Indian intellectual history*. Columbia University Press.

Rahmayani, D., Hidayah, I. N., sifa Rohmah, I. A., Ibrahim, S. F., & Habibi, R. (2025). Integrasi Kosmologi Jawa dan Ekoteologi Islam dalam Pemikiran Seyyed Hossein Nasr. *Panangkaran: Jurnal Penelitian Agama Dan Masyarakat*, *9*(2), 276–300.

Sahidah, A. (2017). Hubungan Antara Tuhan, Manusia dan Alam dalam al-Quran: Aplikasi Semantik Toshihiko Izutsu. *FIKRAH*, *5*(2), 287–308. https://doi.org/http://dx.doi.org/10.21043/fikrah.v5i2.2722

Sayem, M. A. (2020). Interview: Religious Perspective on Environmental Issues: A Conversation with Seyyed Hossein Nasr. *Islamic Studies*, *59*(2), 255–268.

Somma, B. (2024). The Brethren of Purity on Justice for Animals and the Moral Demands of Rational Hierarchy. *Journal of the History of Philosophy*, *62*(1), 25–48. https://doi.org/https://doi.org/10.1353/hph.2024.a916710

Sururi, A. (2014). Menggapai pelestarian lingkungan hidup di Indonesia: Studi perbandingan etika Islam dan etika ekofeminisme. *Fikrah*, *2*(1). https://doi.org/http://dx.doi.org/10.21043/fikrah.v2i1.552

Sururi, A., Kuswanjono, A., & Utomo, A. H. (2020). Ecological Sufism Concepts in the Thought of Seyyed Hossein Nasr. *Research, Society and Development*, *9*(10), 24. https://doi.org/10.33448/rsd-v9i10.8611

Sutoyo. (2013). Paradigma Perlindungan Lingkungan Hidup. *Adil: Jurnal Hukum*, *4*(1), 192–206. https://doi.org/https://doi.org/10.33476/ajl.v4i1.33

Tucker, M. E. (2000). *Hinduism and Ecology*. Harvard University Press.

Verbruggen, A. (2022). The geopolitics of trillion US$ oil & gas rents. *International Journal of Sustainable Energy Planning and Management*, *36*, 3–10. https://doi.org/10.54337/ijsepm.7395

White, L. (1967). The Historical Roots of Our Ecologic Crisis. *Science*, *155*(3767), 1203–1207. https://doi.org/10.1126/science.155.3767.1203

Widianarko, B. (2008). *Menelusuri Jejak Capra: Menemukan Integrasi Sains, Filsafat, dan Agama*. Kanisius.

Wimberley, E. T. (2009). *Nested Ecology: The Place of Humans in the Ecological Hierarchy*. The Johns Hopkins University Press.

Yakup, A. (2024). Pratītyasamutpāda, the Doctrine of Dependent Origination in Old Uyghur Buddhism: A Study of Printed Texts. *Religions*, *15*(12), 1432. https://doi.org/https://doi.org/10.3390/rel15121432