



## Review Article

## Decoding the epics of sustainable world: Sustainalism

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## ABSTRACT

As humanity grapples with the pressing issues of unsustainable practices, the concept of Sustainalism emerges as a transformative approach aimed at achieving global happiness and fostering world peace. The paper critically examines the existing sustainability frameworks and proposes sustainalism as a comprehensive socio-economic-environmental theory with a strong philosophical foundation. Drawing upon diverse disciplines including economics, philosophy, technology, and environmental science, sustainalism advocates for a holistic approach to address these challenges, offering practical pathways towards a more harmonious world. By synthesizing elements from minimalism, naturalism, environmentalism, and gandhism, sustainalism presents a compelling vision for sustainable living and societal harmony. It serves as a catalyst for positive societal change, fostering an egalitarian society grounded in principles of equity and justice. However, several barriers hinder the widespread adoption of Sustainalism, with stakeholders and advanced AI technologies playing pivotal roles in shaping its trajectory. By addressing these barriers and fostering collective action, sustainalism holds the promise of steering humanity toward a brighter, more sustainable future for generations to come.

## 1. Introduction

In the present day, as we navigate the complex landscape of global challenges, it becomes increasingly evident that our existing sustainability practices, socio economic development theories, and lifestyle choices are posing a formidable threat to our collective future. Prevailing development strategies often prioritize short-term gains at the expense of long-term sustainability, while the consumerism fuels lifestyles that strain our planet's resources (Gibbons, 2020). The world's prevailing economic development models, like capitalism, socialism, communism, etc. are becoming unduly obsessed with unrelenting consumption, exposing humanity to a wide range of urgent dangers and challenges. These include existential problems like climate change, natural resource depletion, pollution, medical crises like the COVID-19 epidemic, and unstable socio-economic situations (Pu et al., 2022). These crises have highlighted the critical importance of collaboration, teamwork, and a shared commitment.

Global sustainability guides decisions and actions toward a balanced world, where the interconnected threads of society, economy, and environment are interwoven (Chapman, 2020; Ellili, 2023). It can potentially bring about meaningful global changes, challenging and redefining existing development models (Bogdański, 2021; Derissen et al., 2011). Developing an environmentally friendly, knowledge-driven economy supported by a socially responsible mindset and universal education is essential to achieving the ultimate global sustainability (Amoiradis and Stankova, 2020; Torelli, 2021).

### 1.1. Overview of prominent concepts addressing "sustainability" and its limitations

Various prominent concepts have emerged within the discourse surrounding sustainability, each offering valuable insights and approaches toward achieving a more sustainable future. However, it is essential to critically examine their strengths and acknowledge their

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limitations in comprehensively addressing the multifaceted challenges of sustainability. This section highlights some key concepts that have shaped the discourse on sustainability.

**Concept of Sustainable Development:** Coined in the 1987 Brundtland Report, sustainable development refers to the foundational idea of development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Bali Swain & Yang-Wallentin, 2020). It encompasses economic, social, and environmental dimensions and emphasizes the importance of balancing economic growth with social equity and environmental protection (Henderson & Loreau, 2023).

**Doughnut Economics:** Developed by Kate Raworth, the concept of Doughnut Economics proposes a framework for human prosperity within ecological boundaries (Raworth, 2017). It visualizes a “doughnut” as a “safe and just space for humanity” where people’s basic needs (social foundation) are met without overshooting the ecological ceiling (planetary boundaries). It advocates for an economic system that operates within the Earth’s ecological limits while promoting social justice and equity (Hausdorf & Timm, 2023; Wahlund & Hansen, 2022).

**Cradle to Cradle (C2C):** Coined by architect William McDonough and chemist Michael Braungart, promotes a Cradle to Cradle (C2C) design philosophy where products are designed for disassembly and reuse, eliminating waste and creating closed-loop systems (McDonough & Braungart, 2010). It emphasizes the continuous recycling and reuse of materials at the end of their life cycle, promoting sustainable production and consumption practices (Schlosberg & Coles, 2016; Vogt et al., 2020).

**Sustainability Transformation:** This concept emphasizes the need for complete change towards a sustainable future. It involves a fundamental shift in values, policies, and practices across social, economic, and technological spheres to achieve sustainability goals. It involves transitioning towards more sustainable practices, technologies, and lifestyles at the individual, community, and global levels. This concept recognizes the need for systemic change to address sustainability challenges effectively (Bennett et al., 2019).

**Just Sustainability:** Just sustainability emphasizes the importance of integrating social justice and equity considerations into sustainability efforts (Agyeman & Evans, 2003). It highlights that environmental burdens and benefits should be distributed fairly and that everyone has a right to a healthy and sustainable future (Bennett et al., 2019). It recognizes that environmental degradation and social inequality are often interconnected and advocate for solutions that benefit marginalized and vulnerable communities. Just sustainability promotes inclusive decision-making processes, equitable access to resources, and fair distribution of environmental benefits and burdens (Dombi et al., 2023).

**Planetary boundary, resource use, and Human well-being:** Julia Steinberger’s research contributes to understanding how societies can achieve a good quality of life within the Earth’s biophysical limits (O’Neill et al., 2018). Improving physical needs such as nutrition, sanitation, access to electricity, poverty alleviation, and social provisioning systems, focusing on sufficiency and equity, could help move nations towards sustainability (Agyeman, 2008). The complex interplay between resource use, social well-being, and environmental sustainability highlights the need for a holistic approach to redefining notions of prosperity and progress in the context of finite ecological resources (Meglio & Di Paola, 2021).

**Happiness:** Jeffrey Sachs’ research on human happiness explores the link between well-being, social progress, and economic development (De Neve & Sachs, 2020). Understanding what constitutes a “good life” is essential for building a society based on sustainalist principles. Sachs emphasizes the importance of investing in education, health care, social support systems, and environmental sustainability to improve overall quality of life and happiness. He advocates for policies prioritizing holistic well-being measures beyond traditional indicators such as GDP growth (De Neve et al., 2020; Helliwell et al., 2023).

**Shortcomings/Limitations of existing concepts:** Though various

concepts provide valuable insights and significant contributions to sustainability and addressing sustainability challenges, they have some shortcomings in promoting a holistic approach to achieving a prosperous and equitable future. Sustainable development doesn’t sufficiently challenge the underlying growth-oriented economic paradigm or address the root causes of environmental degradation and social inequity. Doughnut economics doesn’t offer concrete mechanisms for systemic change or address the power structures perpetuating unsustainable practices. It may also face challenges in operationalizing the concept at the policy and governance levels. Cradle-to-cradle (C2C) may also face difficulties in implementation due to technical/economic constraints and vested interests in the linear economy, avoiding broader systemic changes. Sustainability transformation may lack specific guidance on how to navigate complex socio-economic and political barriers to transformation. The concept itself doesn’t define the end state of transformation. Just Sustainability potentially overlooks the deeper systemic issues, such as the inherent inequities within the capitalist economic system or the need for alternative socio-economic models. It can lead to disagreements about what takes priority. Julia Steinberger’s work may not explicitly address the need for systemic transformation or challenge the dominant growth-oriented economic paradigm. Jeffrey Sachs’ research may not address the underlying structural inequalities and unsustainable consumption patterns contributing to environmental degradation and social injustice.

## 1.2. Knowledge gaps

In the face of contemporary challenges, including socio-economic and environmental issues, there is a growing recognition of the need for integrated and multi-disciplinary approaches to address these complexities. In this precarious scenario, the need for a transformative ideology to counterbalance these threats and pave the way for a more harmonious and sustainable future becomes apparent. By integrating several existing concepts, a new governance and development theory model is needed for a future that is both environmentally sustainable and socially just and promotes well-being. The idea of “Sustainalism” has gained attention in recent discourse as one such approach, offering the potential to tackle these challenges effectively. However, its underlying theory, model of growth, and its philosophical view remain relatively underexplored.

## 1.3. Research questions, objective, and novelty of the study

The following inquiries drive this research work.

- How does Sustainalism, as an integrated multi-disciplinary approach, address socio-economic and environmental challenges?
- How does “Sustainalism” intersect with contemporary philosophy, and what role does it play in advancing a more sustainable world?
- How does Sustainalism influence the quality of life, social well-being, and world happiness as explored through philosophical perspectives?
- In what ways does Sustainalism contribute to the promotion of peace and justice?
- What is the role of various stakeholders in addressing these challenges?

This **perspective study** aims to provide vertical and practical dimensions of sustainalism and its theoretical underpinnings for a sustainable world. Building upon the theoretical foundation of Sustainability, this study seeks to explore the philosophical perspectives to advancing a more sustainable world. We will investigate how Sustainalism addresses socio-economic and environmental challenges, examining its potential contributions to improving the quality of life, social well-being, and overall world happiness. We also highlight that integrated approaches, such as Sustainalism, can promote world peace

and justice without overemphasizing digital and artificial technology’s role in sustainable development.

1.4. Methodology

This study employed a systematic literature review to explore prominent sustainability concepts, their limitations, and their potential contributions to achieving a sustainable future.

1.4.1. Keyword selection and search strategy

Our methodology involved a systematic search to identify pertinent literature addressing sustainability and its limitations. Distinct sets of keywords were formulated to review socio-economic and environmental challenges.

Objective 1: Socio-economic and environmental challenges related to minimalist living: Keywords included “minimalism,” “naturalism,” “environmentalism,” “Gandhism,” “Sustainable Development” “Doughnut Economics”, and “Cradle to Cradle” etc.

Objective 2: Sustainable Development Goals (SDGs) and quality of life: Keywords included “SDG,” “quality of life,” and “social well-being,”

Objective 3: Achieving world peace through sustainable development: Keywords included “world peace,” “justice,” “AI/digital tools,” “stakeholder roles,” and “community roles” in sustainability.

A comprehensive search was conducted across reputable academic databases such as Google Scholar, Scopus, and Web of Science. Stringent filters were applied to ensure publications within the past decade, focusing primarily on peer-reviewed articles, conference proceedings, and technical reports.

1.4.2. Analysis and evaluation

Each identified concept of sustainable development was thoroughly

evaluated, considering its potential advantages and limitations for addressing contemporary sustainability challenges. This involved a comprehensive analysis of case studies like eco-villages, sustainable communities, sustainable living, or other initiatives that incorporate these sustainalism principles. This meticulous approach aimed to gather the most recent and relevant information on diverse sustainability concepts. The analysis of these concepts alongside their limitations provided a deeper understanding of the ongoing broader discourse on “Sustainalism” and its potential contributions to a more sustainable world.

1.5. Organisation of the manuscript

The following section outlines the organizational structure of this paper, detailing the sequence of topics and the flow of discussion. The concept of Sustainalism and its core values is explained in Section 2. Sustainalism as a Socio-Economic Environmental theory is presented in Section 3. The Philosophical perspectives of Sustainalism are introduced in Section 4. Section 5 explores the tangible impacts of Sustainalism on quality of life, human well-being, and its contribution to overall happiness. Section 6 delves into the societal dimensions of Sustainalism to promote world peace and justice globally. Section 7 discusses the role of various stakeholders and barriers in adopting Sustainalism. Finally, Section 8 concludes the study by highlighting the main findings and recommendations for future research and practical applications of Sustainalism while fostering a sustainable and harmonious world. Fig. 1 illustrates the schematic representation outlining the organizational framework of the current study.

2. Concept of sustainalism, definition and its core values

The foundational doctrines of capitalism, socialism, and communism have evolved into sustainable revolutionary perspectives. This major paradigm shift, which we call sustainalism, cuts over the lines between



Fig. 1. Structure and organization of the study.

capitalism, communism, and socialism (Verhaar et al., 2017). A fundamental transition away from either uncontrolled capitalism or moderate socialism is necessary at this point. The term “sustainalism” is an apt description of the novel and adequate socio-economic model that appeals to the present generation for the survival of the planet Earth (Verhaar, 2018.).

Sustainism is portrayed as a multifaceted concept, encompassing theory, philosophy, and ideology, focusing on fostering a sustainable way of life for the present and future generations. It envisions a future with sustainable development, clean energy, peace, welfare, and health for all—a vision described as “sustainalism.”

“Sustainalism” is an innovative socio-economic-environmental theory of societal progress and equitable well-being through responsible stewardship of the earth’s resources. Additionally, it acknowledges the role of various stakeholders in shaping sustainable outcomes (Hariram et al., 2023). Sustainalism is a holistic approach that embodies a paradigm shift from traditional models by synergizing economic resilience with social inclusivity and ecological fairness (Hariram et al., 2023). It is a model where progress is measured by resource efficiency, value creation, and quality of life, challenging the traditional linear approach to GDP growth. It emphasizes the importance of bottom-up initiatives driven by sub-national governments, corporations, and civil society organizations to address pressing global challenges.

Sustainalism is a contemporary remedial ideology that integrates several concepts of social responsibility, ecological consciousness, economic resilience, and ethical living. It emphasizes a balanced approach, recognizing that economic growth should not come at the expense of social justice or ecological health.

Sustainalism is more than just science or policy-making, socio-political, and economic development theory; it’s a comprehensive philosophy that integrates scientific knowledge, ethical considerations, and spiritual perspectives to guide human behavior toward a sustainable future. This guiding philosophy offers a comprehensive framework for addressing our time’s environmental, social, and economic imbalances, striving to restore equilibrium and secure a sustainable tomorrow.

### 2.1. Overarching objectives, principles, and vision of sustainalism

Sustainalism is built upon a foundation of core values that shape its ethical framework and guide its principles (Table 1).

**Economic Resilience and Balanced Growth:** Sustainalism prioritizes economic practices that promote long-term stability, economic resilience, and balance over unchecked growth. It prioritizes sustainable economic practices, reducing vulnerabilities to financial crises and resource shortages that support both human well-being and environmental health. It advocates for economic systems that are resilient to shocks and promote balanced growth that prioritizes long-term well-being over short-term profits (Bogdański, 2021).

**Environmental stewardship, Natural resource conservation, and Eco-consciousness:** Sustainalism recognizes the intrinsic value of the natural world and emphasizes respect for nature and ecological conservation. It acknowledges the interdependence of human societies and the natural world (Costa et al., 2022; Suchek & Franco, 2023). Protecting and conserving the environment involves mitigating ecological degradation and addressing pressing issues such as climate change, pollution, biodiversity, and habitat loss (Plummer et al., 2022).

**Table 1**

Core values and principles of Sustainalism.

- Environmental stewardship, Natural resource management, and conservation, Eco-consciousness, interconnectedness with nature, Protecting Local cultural heritage and Traditional values
- Economic resilience and balanced growth
- Social Equity, Societal Responsibility, Social Justice Social harmony, and Egalitarian perspectives.
- Respecting cultural diversity Fostering unity and integration, and Positive secularism.
- Self-sustainable, collaborative, and inclusive governance, democratic principles, Public welfare, and societal empowerment.
- Freedom of speech and expression, Ethical values, Critical thinking, Spirit of inquiry, and openness.

To encourage responsible management of natural resources, including land, water, and air, waste should be reduced, and resource use should be optimized to minimize environmental impact (Löfqvist et al., 2023). Sustainalism supports biodiversity conservation efforts, reducing pollution and waste, preserving the planet’s natural heritage, and ensuring ecosystem services for future generations (Sun et al., 2023). It is about making conscious choices, adopting sustainable lifestyles, and supporting long-term ecological health.

**Social Responsibility, Equity, and Justice:** To address social disparities and promote social justice, ensuring that the benefits of a sustainable society are accessible to all. At the heart of Sustainalism is the commitment to social justice and equitable consumption of natural resources, opportunities, and benefits for all individuals and communities (Chapman, 2020). They ensure fairness and justice in resource distribution. It can address social inequalities and enhance access to modern infrastructural facilities while striving to improve the living conditions for marginalized communities (Guimarães et al., 2020). Sustainalism places a moral responsibility on communities and individuals to preserve nature, promote social equity, and uphold ethical values in decision-making. It acknowledges the ethical duty of individuals to protect the environment and promote social Justice (Anshari et al., 2022; Chan, 2018).

**Cultural Diversity and Integration:** Valuing and preserving cultural diversity while promoting inclusivity and respect for different cultural perspectives. Valuing diverse cultures and promoting inclusivity (Yilmaz et al., 2023). Encourage community-based solutions to environmental and social issues and self-reliance in resource management (Alfatlah et al., 2021). Recognizing the diverse ways different cultures approach sustainability.

**Self-sustainability, Collaborative, and Inclusive Governance:** Sustainalism advocates for governance structures that are collaborative, inclusive, and democratic. It prioritizes public welfare and women empowerment, ensuring that decision-making processes are transparent, participatory, and accountable to all stakeholders.

**Ethical Values, Critical Thinking, Spirit of Inquiry, and Openness:** Sustainalism promotes ethical behavior, critical thinking, and a spirit of inquiry and openness. It acknowledges the interconnectedness of human societies and the environment, advocating for critical thinking and holistic approaches to problem-solving. It encourages individuals and institutions to question assumptions, challenge conventional wisdom, and seek innovative solutions to sustainability challenges. To promote holistic thinking and systems approaches, recognizing the interdependence of environmental, economic, and socio-political elements (Peças et al., 2023).

### 3. Sustainalism: A Socio-Economic Environmental theory

In an age marked by globalization and rapid digitalization, nations across the globe, irrespective of their size, wealth, or developmental stage, have become interdependent in multifaceted ways (Sarbu et al., 2021). This multi-lateral relationship in commercial, cultural, and socio-political spheres helps to establish the sense of interdependency, representing a tapestry of global cohesion. The scientific community has a profound understanding of the intrinsic value of this and its significant consequences for our collective well-being. Moreover, the stark disparity in the distribution of global resources presents formidable obstacles to

attaining sustainable development. Acknowledging the intricate web of interconnectedness that binds all life forms on our planet, encompassing humans, animals, and plants, is imperative. The foundation of sustainable activities lies in genuine reverence for the Earth, nature itself, and the delicate ecosystems that sustain life. This reverence is the foundation of sustainable actions (Purvis et al., 2019). In doing so, we aspire to forge a path toward a sustainable future that honors our interconnectedness, fosters global cooperation, and upholds the sanctity of our planet (Babu & Satya, 2022). The term "Sustainalism" has yet to achieve widespread recognition and acceptance within the academic and literary spheres. Its definition remains somewhat unclear and not widely acknowledged in existing literature. Sustainalism fundamentally rests on principles of social equity and inclusiveness, drawing inspiration from the foundational ideologies of capitalism, communism, and socialism. Sustainalism can be understood as an economic, environmental, and socio-political concept concerning the holistic organization of societies worldwide (Verhaar et al., 2017). It emerges as a contemporary and all-encompassing environmental, political, and socio-economic perspective and a real-life practice tailored to meet the impending challenges posed by a world soon to be inhabited by an estimated 10 billion individuals (Verhaar, 2018.). Sustainalism aims to cultivate a conscientious global society that prioritizes eco-friendly practices, integrating a socio-economic and environmental framework geared towards reducing carbon emissions in the physical economy, all while embracing green products and services. It advocates for the holistic ownership or regulation of the means of production, distribution, exchange, and the cultivation of a symbiotic lifestyle by the global community. It's worth noting that "Sustainalism" has also been employed to describe a plan of action that integrates ideologies of traditionalism and principles of Sustainability. Despite its limited recognition, Sustainalism has the potential to evolve and address the pressing concerns of our rapidly changing global landscape (Hariram et al., 2023). Within the framework of Sustainalism, the global sustainability 6S Principles emerge as a pivotal instrument for cultivating a sustainable economy. Sustainalism motivates individuals, organizations, and national governments to adopt an all-encompassing strategy for progress that smoothly combines socio-political, environmental, and economic factors globally. The "global sustainability framework" represents an innovative

and all-encompassing toolkit encompassing the 6S principles (Fig. 2). This framework is a valuable resource, empowering individuals, organizations, and governments to achieve Sustainability. Nonetheless, it is crucial to recognize that the responsibility of securing a sustainable future falls entirely on global inhabitants. We all must embrace this responsibility and join forces in a concerted effort to ensure a flourishing and sustainable world for generations yet to come (Hariram et al., 2023).

Sustainalism embodies a resource-efficient way of life where materials are derived from natural materials like wood and plant fibers. It represents a novel model for survival and a practice that leads us toward a sustainable era. Sustainalism charts a course towards what we can aptly term a "Sustainable Revolution," one that fulfills the needs of future generations (Gibbons, 2020b). Fundamentally, sustainalism is the art of social engineering; it orchestrates the shift to a greener, more sustainable way of life while fostering harmonious interactions in the environment, economy, social, political, and cultural fields. This transformative approach encompasses adopting ecological principles, embracing an eco-friendly lifestyle, de-carbonizing the physical economy, and committing to green products and services (Hariram et al., 2023; Verhaar, 2018.). To foster collaboration between different fields of knowledge, recognizing that complex sustainability challenges require diverse expertise and perspectives. Fostering cooperation among individuals, communities, organizations, and governments to address global sustainability challenges collectively (Al-Saidi, 2021; Jirapong et al., 2021). Embracing innovation and adaptability to find sustainable solutions to complex threats like pollution, global warming, climate change, and unhealthy consumption of natural resources (Dörge et al., 2018). Promoting education and public awareness as tools for building a sustainable future, empowers individuals with knowledge to make informed choices (García-González et al., 2020; Filho et al., 2018). Sustainalism is a collaborative endeavor involving all stakeholders, ranging from governments and organizations to the private and public sectors, service industries, corporations, entrepreneurs, investors, and individuals. Together, they are responsible for steering the global socio-economy away from the prevailing status quo towards a cleaner, renewable, and sustainable planet. Embracing the views of sustainalism and adopting a sustainalist lifestyle paves the way for a more sustainable



Fig. 2. 6S principles of sustainalism.

economy that harmonizes humanity’s and the environment’s needs, benefiting all parties involved. (Hariram et al., 2023).

**True Global Sustainability:** A pictorial representation of Sustainalism as a pathway for achieving True Global sustainability is presented in Fig. 3. To promote Sustainability in all aspects of life, ensuring that present and future generations can satisfy their necessities without compromising the healthy environment of the planet (Ellili, 2023). The core principles and ideologies provide a concrete foundation to achieve “True Global Sustainability.” It addresses the underlying values that drive unsustainable practices and proposes concrete strategies prioritizing well-being, resilience, and flourishing for all beings within planetary boundaries. It focuses on systemic transformation and advocates for a fundamental shift in values, policies, and practices toward a future sustainable, regenerative, and equitable society.

**4. Sustainalism (A philosophical perspective): modern doctrine of world philosophy**

In the face of mounting ecological crises, there is an urgent need for a comprehensive and interconnected world philosophy that transcends the planet’s social, geographical, and cultural boundaries (Bali Swain & Yang-Wallentin, 2020; Spaiser et al., 2017). In a rapidly changing world where climate change, biodiversity loss, and social inequalities have reached alarming proportions, a new philosophy is proposed as a symbol of hope and transformation. This section discusses the essence of sustainalism, its philosophical roots, and its profound impact on communities.

**4.1. Philosophy of sustainalism**

Sustainalism is a philosophy of co-existence that centers on the

interplay between Sustainability, ethics, peace, and human values, with sustainability at its core. Sustainalism is a modern doctrine of world philosophy that unites ethical principles, ecological integrity/wisdom, responsible stewardship of resources, and social justice into a comprehensive framework for a sustainable life. Sustainalism is considered a contemporary world philosophy because it offers a broad global perspective and ethical foundation for addressing the pressing challenges of our time as the future time for survival.

Philosophically, it aligns with a holistic worldview recognizing the interconnectedness of all life forms and the environment. The ideology of sustainalism works on decreasing disparities among human beings and between humans and the rest of the living and nonliving spheres of the earth. It challenges the notion of unlimited economic growth and advocates for sustainable practices that maintain ecological balance and social equity toward a more sustainable, equitable, and harmonious future.

Sustainalism is considered a holistic philosophy because it offers a comprehensive framework for understanding the complex interactions between humans and their environment. It advocates for responsible resource management, social equity, and the harmonious well-being of the earth’s humans and nature. It explores the practical and conceptual integrity between planet Earth, humans, and other living/non-living things and protecting natural resources as a whole, socially, ethically, and economically.

The various definitions of the “Sustainalism” are presented in Fig. 4.

**4.2. Importance of sustainalism philosophy**

Sustainalism can be categorized as an applied philosophy, as it focuses on real-world issues and practical solutions. It draws from various branches of philosophy to form a cohesive framework for sustainable

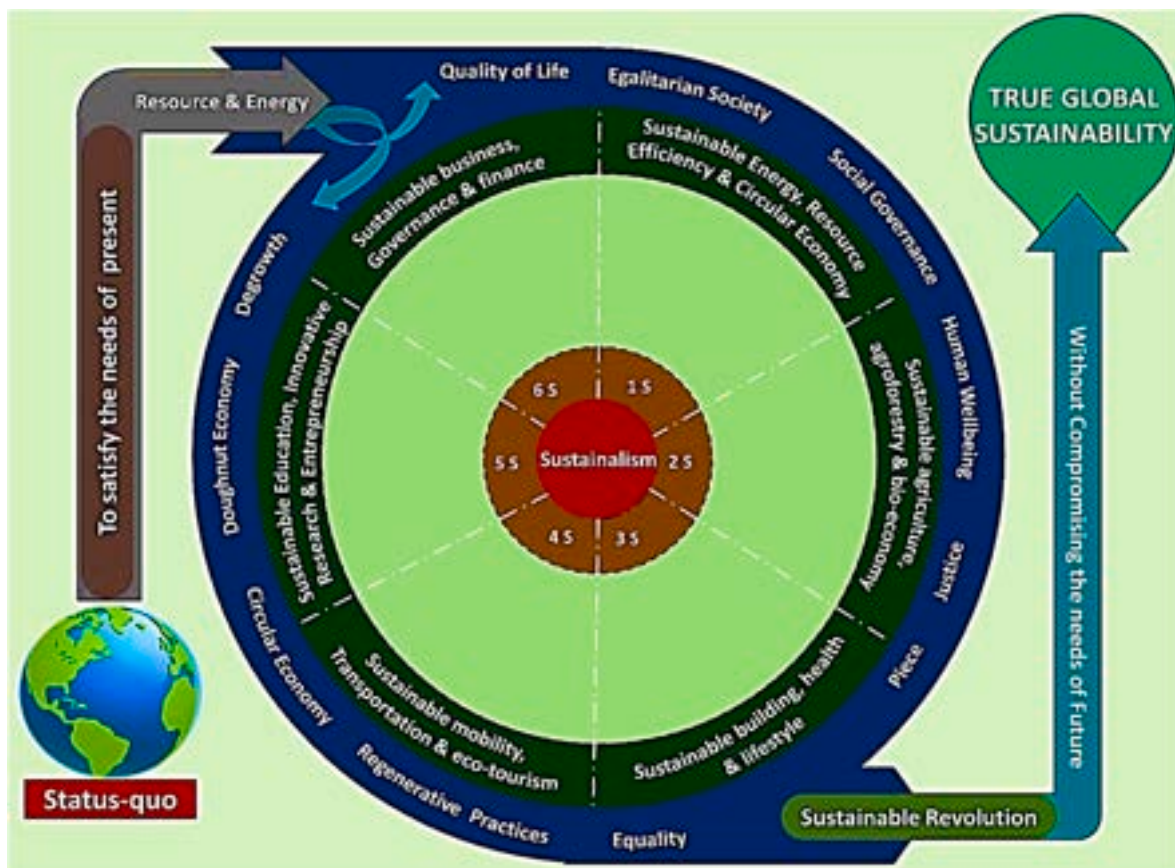


Fig. 3. Sustainalism as a pathway for achieving true global sustainability.

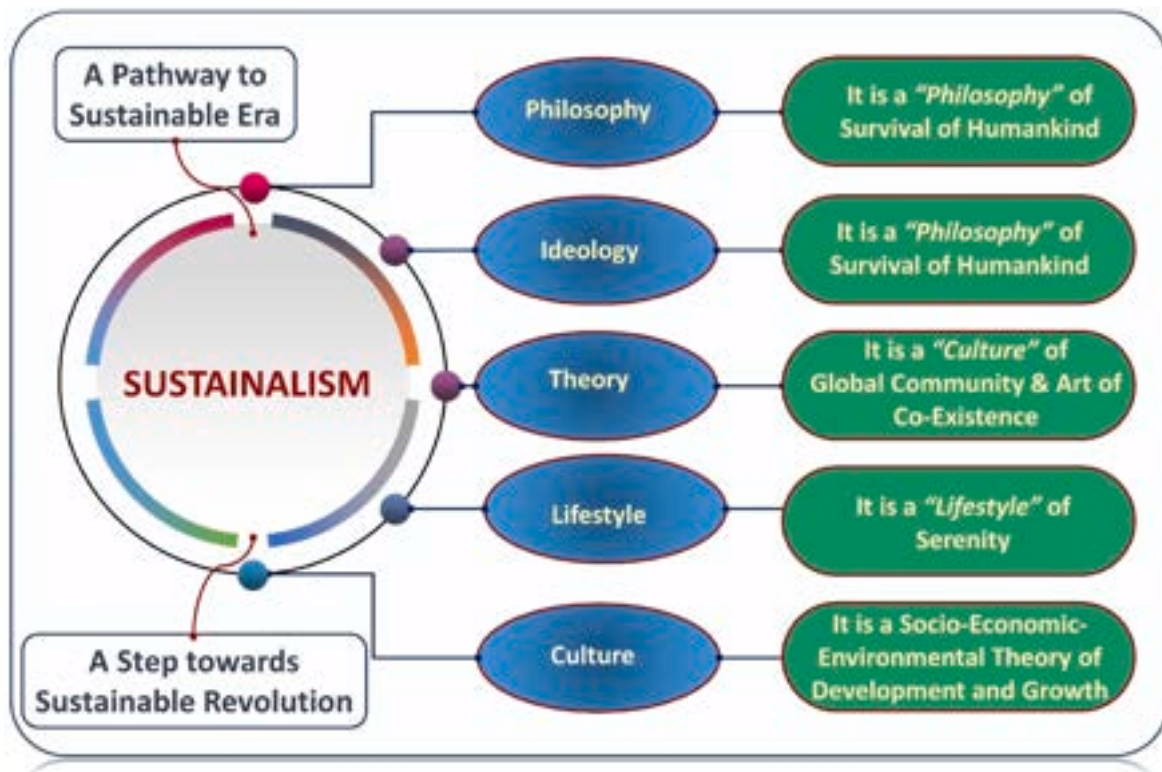


Fig. 4. Sustainalism a multifaceted concept.

living (Rukspollmuang, 2022). The ideology of sustainalism involves critical analysis, interdisciplinary collaboration, and ethical decision-making. Sustainalism aligns with scientific principles, urging evidence-based decision-making. Logical reasoning is used to develop sound arguments for sustainable practices and policies. Sustainalism employs logic to analyze the consequences of human actions on the environment and society. Table 2 summarizes the Sustainable Philosophy.

Sustainalism advocates for laws that prioritize environmental protection and social justice. Sustainalism’s epistemology focuses on acquiring knowledge about ecological systems, sustainable practices, and ethical considerations. It values experiential and empirical knowledge, encouraging active engagement with the natural world. It enables individuals to view sustainability as a practical concern and a moral imperative deeply rooted in the interconnectedness of all life. It encourages a spiritual connection with nature and a sense of responsibility towards creation.

4.3. Sustainalism doctrine inspired by minimalism, naturalism, environmentalism and gandhism

Minimalism, Naturalism, Gandhian Philosophy, and Environmentalism have unique focus and emphasis. They all share common ground in promoting simplicity, responsible consumption, and a harmonious

Table 2  
Summary of sustainalism philosophy.

- Philosophy of the future, as it seeks to address pressing global issues
- Promotes harmony between humanity and the natural world.
- Provides answers to the problems in the established norms of economic development.
- Addresses the challenges posed by unchecked consumerism
- Provides a moral compass and practical guidance for transitioning to a sustainable and equitable future generation.
- Promotes actions that minimize harm to the planet and environmental degradation.
- Perpetuates equality among all citizens, balancing the masculine or feminine nature to bring harmony to the world.
- It aims to build cooperation and create prosperity, stability, and peace for the region and the world.

relationship with the environment (Dressler, 2023; Druică et al., 2023; Fisher & van Utt, 2007; Haigh, 2010; Hassan, 2021; Kang et al., 2021; O’Riordan, 1999; Pu et al., 2022).

The Evolution of Sustainalism doctrine from the existing philosophy is highlighted in Fig. 5.

4.3.1. Minimalism

Minimalism can be a practical pathway that leads to sustainability: It advocates for reduced consumption, material wealth, mindful choices, material wealth, and simplifying one’s lifestyle to focus on what truly matters (Hassan, 2021).

- Reduced consumption
- Reduced material wealth
- Resourcefulness and reuse
- Simple life

It urges individuals and societies to adopt minimalism as a way of life for a sustainable future. Minimalism doesn’t explicitly address ecological and ethical dimensions (Kang et al., 2021).

4.3.2. Naturalism

Naturalism shares a deep concern for the well-being of the natural world and protecting ecology. The interconnectedness of all life forms

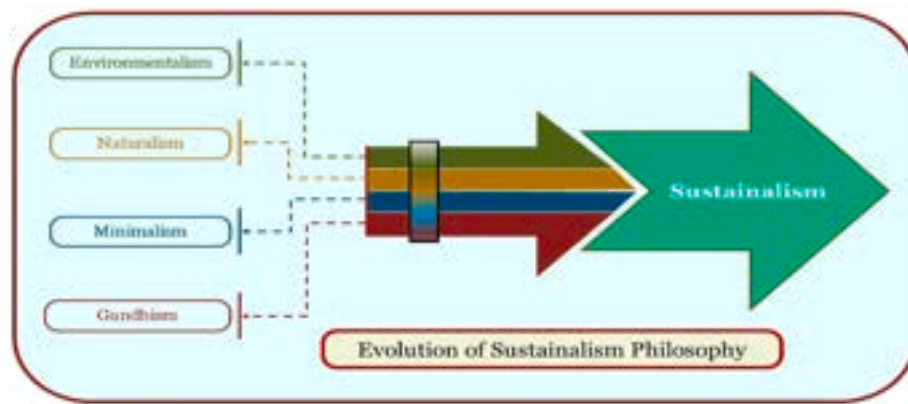


Fig. 5. Evolution of Sustainalism philosophy.

highlights the importance of maintaining ecological balance (Pu et al., 2022). Naturalism focuses on the intrinsic value of the natural world and the importance of preserving it. Naturalism may not explicitly address the ethical and social dimensions of Sustainability. It promotes responsible stewardship of resources and advocates for just distribution of resources (Fisher & van Utt, 2007).

#### 4.3.3. Gandhism

Gandhian philosophy inspires sustainability through concepts like localism (supporting localized production based on indigenous knowledge), austerity (simple living focused on purpose), and civil resistance (consumers standing up for unethical practices). The principle of non-violence extends to the environment, promoting conservation and reducing resource use caused by conflicts. It recognizes poverty as a barrier to sustainability and emphasizes collective action and individual responsibility for creating a better future. Swaraj (self-rule) emphasizes development that empowers communities and minimizes environmental damage caused by industrialization, urbanization, and resource depletion (Kakati, 2023). Gandhian philosophy emphasizes simple living, moderate life, non-violence, self-sufficiency, social justice, community welfare, equitable distribution of resources, and advocacy for the well-being of all individuals. This philosophy aligns with the core principles of sustainability, making Gandhi an inspiration for the movement (Barua, 2015).

#### 4.3.4. Environmentalism

Environmentalism primarily focuses on environmental protection, conservation, and raising awareness about ecological issues. Emphasize responsible stewardship of natural resources, promote environmental sustainability, and sustainable practices to protect the planet. Environmentalism may not always address the broader ethical and social dimensions that Sustainalism emphasizes (Johnsen, 2021; Schlosberg & Coles, 2016).

**Sustainalism** focuses on sustainable living, emphasizes the interconnectedness of all life forms, integrates ecological responsibility with ethical considerations, and advocates for responsible behavior and sustainable practices. It aims to foster a harmonious relationship between humans and nature while addressing social justice issues. Sustainalism integrates sustainability into all aspects of human life, including economics, technology, and social systems. Sustainalism addresses both the environmental crisis and social inequities by emphasizing responsible production and consumption. Sustainalism bridges these philosophies by incorporating ecological awareness, ethical considerations, and social justice dimensions, offering a holistic approach to creating a more sustainable and just world (Dressler, 2023; Fisher & van Utt, 2007; Johnsen, 2021; Kang et al., 2021). It combines minimalism and simplicity with a commitment to preserving the natural world, aligning with Gandhian values of non-violence and self-reliance

(Dressler, 2023; Fisher & van Utt, 2007; Johnsen, 2021; Kang et al., 2021).

In summary, Sustainalism goes beyond Minimalism, Naturalism, Gandhian Philosophy, and Environmentalism by offering a comprehensive approach that recognizes the interconnectedness of ecological, ethical, and societal dimensions to ensure a just and equitable future for all (Barua, 2015; Kakati, 2023; Torelli, 2021; Ziegler et al., 2014).

#### 4.4. Global perspectives of sustainalism philosophy

This section explores the essence of sustainalism, illustrating how it provides a guiding framework to navigate the complexities of our interconnected world. As we navigate the complexities of the 21st century, sustainability promises a sustainable and prosperous global future for all living beings on Earth (Torelli, 2021). Sustainalism is a global concept that transcends cultural, religious, political, and economic divisions to foster collective action for a sustainable future. It has the potential to be embraced by people of various faiths and backgrounds who share a concern for the planet's well-being. It emerges as a modern doctrine that encapsulates a holistic worldview, embracing the principles of sustainability, ethical living, ecological wisdom, and social justice into a comprehensive framework for sustainable and flourishing existence (Turnbull et al., 2021). Environmental stewardship is a fundamental principle of sustainalism, promoting responsible resource management and conservation to ensure a thriving planet for future generations (Brenner, 2018). Sustainalism is guided by ethical principles rooted in compassion, equity, and responsibility. Sustainalism acknowledges the interdependence and interconnectedness of all living beings and ecosystems (Rukspollmuang, 2022). It recognizes that humanity is an integral part of the Earth's ecosystems and that the well-being of all living beings is intertwined (Sahoo et al., 2021). It recognizes that the actions of individuals, communities, and nations impact the global ecosystem and vice versa (Plummer et al., 2022). It highlights the significance of collective efforts and interdisciplinary approaches in addressing environmental challenges towards a transformative paradigm to guide humanity toward a harmonious coexistence with the natural world (Zygmunt, 2016). To inform its comprehensive worldview, Sustainalism draws from multiple disciplines, including environmental science, ethics, economics, sociology, and spirituality (Nagatsu et al., 2020). Sustainalism has the potential to address pressing global issues effectively and offers a path towards a more sustainable, equitable, and harmonious world. Sustainalism advocates for social equity, inclusivity, and the eradication of poverty, fostering a just and compassionate society (Hull, 2019). It advocates for sustainable and regenerative economic practices prioritizing long-term prosperity (Chaisuwan, 2021). Indigenous cultures often embody principles of Sustainalism through their deep connection with nature, respect for the land, and sustainable practices that have sustained their



societies for generations (Adams et al., 2016). Many religious traditions share common ground with sustainalism, underscoring the sacredness of the natural world and promoting ethical living in harmony with nature (Fisher & van Utt, 2007). Sustainalism encourages individuals to adopt sustainable lifestyle choices, such as mindful consumption, renewable energy adoption, and waste reduction (Milutin, 2021). Sustainalism empowers communities to engage in sustainable practices, advocate for environmental conservation, and collaborate towards common sustainability goals (Meijboom & Brom, 2012). Sustainalism faces challenges in overcoming anthropocentric perspectives prioritizing human interests over environmental well-being (Chan, 2018).

## 5. Fruits of sustainalism: quality of life, social well-being and sustainable living

The specific fruits of Sustainalism can vary depending on individual actions, community context, and broader systemic changes. Establishing and following Sustainalism by individuals and societies yields multiple benefits (Fig. 6).

### 5.1. Quality of life and happiness

Sustainalism as a lifestyle philosophy is abbreviated to subsisting a life on earth to satisfy our needs, not for all our wants, with the aim of survival and existence of our future generations and saving the present phase of earth. It directly addresses the quality of life, not measured by the economic and commercial parameters but based on resilience, comfort, passion, happiness and satisfaction (Kowaltowski et al., 2006; Pissourios, 2013). Exploring our happiness, more commitments and responsibilities to nature, acting passively towards circumstances related to the environment, less noise and toxic lifestyle, providing more clarity on what to do and not to do, concentrating on more specific and straightforward things to make you comfortable and provide you inner peace to reflect ourselves to the society (Vogt et al., 2020; Štefkovičová & Koch, 2022). Sustainalism doesn't mean avoiding everything that are living in the present day. It's about preventing noises in our own life, family, and society with less impacting deeds and finding true happiness inside rather than inducing happiness from others in a non-polluting and toxic way to improve our quality of life with world peace, justice, and well-being. It is attached to healthy relations, eco-friendly objects, a keen focus on ideologies that have real value, and compassion towards people and all other living things. The result is not limiting life and sustainability, but happiness and sustainability (Sántha, 2021; Wiesli &

Hammer, 2022). Individuals find purpose and fulfillment in contributing to a more sustainable world. This aligns with the idea that living harmoniously with the environment and society can create a sense of purpose and satisfaction. Knowing that their actions align with their values and positively impact the planet and future generations brings a sense of purpose and satisfaction. This purpose-driven positive approach can lead to increased happiness and well-being. The planet benefits from reduced environmental degradation and healthier ecosystems. Sustainalism aims to contribute to the environment's well-being, recognizing the interconnectedness of all living systems and the importance of preserving ecological health. Sustainable practices mitigate harm to ecosystems, preserving biodiversity. Cleaner air, water, and soil health are vital for the well-being of both humans and wildlife to maintain ecological balance.

### 5.2. Social well being

In recent years, there has been a rising recognition of the complex relationship between social well-being and Sustainability. As the world grapples with various challenges, such as climate change, social inequality, and environmental degradation, a new paradigm is emerging - one that acknowledges the inextricable link between human prosperity and the planet's health (Helne, 2021). The connection between social well-being and sustainalism paves the way for a thriving and sustainable future. Sustainalism, at its essence, underscores the profound importance of interconnectedness, highlighting that the well-being of ecosystems is undeniably intertwined with the health and happiness of societies. Social well-being is a fundamental pillar of Sustainalism. It centers on the quality of life, safety, and welfare of individuals within a community (Di Fabio, 2017; Kjell, 2011). By recognizing that humans are an integral part of the ecosystem, Sustainalism simultaneously emphasizes the need to prioritize social equity, environmental protection, and economic prosperity. Through collective efforts at the individual, community, and global levels, we can forge a path toward a flourishing world where both people and the planet thrive harmoniously (Bellantuono et al., 2021; Berejnoi et al., 2020). It investigates the symbiotic relationship between social well-being and the environment, exploring how a holistic approach to sustainability can foster thriving communities and a harmonious planet (Henderson & Loreau, 2023; Meglio & Di Paola, 2021). Social inequalities are reduced, and marginalized communities experience improved living conditions. Sustainalism seeks to address social injustices and promote fairness, aiming to create a more equitable and inclusive society where everyone has equal opportunities



Fig. 6. Fruits of sustainalism.

and resources to thrive.

### 5.3. Sustainable living

Promotes eco-friendly practices such as reducing waste, conserving energy, using public transportation, and supporting sustainable products. This reflects the philosophy of living in a manner that minimizes one's impact on the cleaner environment and supports the planet's well-being. By integrating these practices into their lifestyle, individuals minimize their environmental footprint and contribute to the planet's long-term health. Future generations inherit a world with more excellent prospects for sustainable living. Sustainalism is oriented towards ensuring that the well-being of future generations is safeguarded through sustainable practices and thoughtful decision-making.

### 5.4. Egalitarian society

Sustainalism emphasizes making choices that consider the long-term impact on the environment and society, reflecting an ethical and responsible approach to decision-making. It contributes to ethical decisions prioritizing Sustainability, equity, and environmental responsibility. It promotes sustainability education and awareness at all levels, empowering individuals to make informed choices. It advocates for policies and practices that align with the values of sustainalism, including environmental protection and social justice. This highlights the importance of education, raising awareness, and advocating for policies that support sustainability and social equity. Individuals become empowered to make informed choices and advocate for policies that align with Sustainalism values.

## 6. Sustainalism: addressing world peace and social justice

Sustainalism is the foundation upon which peace can flourish. The role of sustainalism in world peace is multifaceted and extends to various aspects. Without sustainalism, pursuing environmental protection, social progress, and economic stability becomes significantly more challenging. Therefore, fostering peace, resolving conflicts, and promoting cooperation are critical components of sustainalism to create a better world for current and future generations. With peaceful,

sustainable living as our guide, we infuse existence with a sense of continuity, interwoven with the intergenerational harmony of shared values and aspirations (Simangan et al., 2022).

### 6.1. Sustainalism's role in enhancing world peace

The 2030 Agenda recognizes that sustainable development is linked to peace and security. While it addresses pressing issues such as poverty, inequality, and climate change, it also acknowledges the role of conflict prevention, peacebuilding, and the rule of law in achieving sustainable development. The agenda aims to create conditions that contribute to peace and stability by promoting economic growth, social inclusion, and environmental sustainability. Sustainalism has the roots of the 2030 Agenda further by emphasizing the peace-promoting potential of each SDG (Sharifi, Simangan, Kaneko, et al., 2021). At the heart of sustainalism, peace stimulates an environment conducive to resolving conflicts and harmonizing diverse aspirations. It lays the groundwork for societies to participate in the collective journey towards a harmonious and regenerative future. Peace radiates as the universal enabler of cooperative partnerships, dissolving boundaries between nations and ideologies. In embracing peace, the human spirit is resilient to rise above calamity, transforming problems into successful solutions and overcoming inertia (Sharifi, Simangan, & Kaneko, 2021). Some critical aspects of sustainalism's role in enhancing world peace are presented in Fig. 7.

**Conflict prevention and resolution:** Peace is essential for resolving conflicts, both at the local and international levels. Conflicts can lead to displacement of communities, destruction of ecosystems, disruption of livelihoods, and hinder progress towards sustainable development goals. Sustainalism recognizes and addresses issues like poverty, inequality, and access to resources (SDGs 1, 5, 6, and 10), which can mitigate the root causes of conflict. By promoting sustainable livelihoods and social equity, these goals contribute to peace (Almulhim et al., 2022; Leal Filho et al., 2022a). In the realm of Sustainalism, peace is not just an ideal; it's a call to action. It intends to prevent the escalation of conflicts and avoid war-like situations on our planet. It emphasizes the importance of peaceful resolutions in our interconnected world.

**Cooperation and Partnerships for Peace:** Global challenges like climate change, pollution, and resource depletion require collective



Fig. 7. Roles of sustainalism in justice and peace.

efforts from nations and various stakeholders. Sustainalism encourages partnerships (SDG 17) between governments, civil society, and the private sector to work together in pursuit of peace and sustainable development. Peaceful relations between countries foster international cooperation and partnerships, enabling the sharing of knowledge, technology, and resources to address sustainability challenges on a global scale. This vision is a call to action for peace, intending to prevent war-like scenarios on our planet. It calls for proactive measures to uphold and safeguard every person’s human rights and dignity. This action involves judiciously applying timeless tools such as diplomacy, dialogue, and collaboration to de-escalate tensions and resolve conflicts peacefully (Brantmeier, 2013; Sharifi et al., 2023; Simangan et al., 2021).

**Economic stability and environmental sustainability:** Peace is crucial in attracting domestic and foreign investments. When nations, societies, or communities experience prolonged periods of conflict, their economies suffer, and development becomes challenging. Stable and peaceful environments, on the other hand, promote economic growth, trade, and investment, contributing to sustainable economic development (Bong et al., 2023; Derissen et al., 2011). Environmental degradation and resource scarcity (SDGs 13, 14, and 15) can lead to conflicts over land, water, and other natural resources. In times of conflict, conservation efforts often take a back seat, and natural resources may be exploited recklessly. Sustainable environmental practices foster cooperation and conservation efforts and reduce potential conflicts. Peace fosters an environment for better resource management, protection of biodiversity, and the promotion of sustainable land use (Ahmed et al., 2021; Wu et al., 2022).

**Resilience and adaptation:** A peaceful society is better equipped to respond to environmental and social changes. Sustainable development requires resilience and adaptability to cope with challenges like natural disasters and climate change impacts. Peaceful communities can work together to develop effective adaptation strategies and reduce vulnerability (Derissen et al., 2011; Ossewaarde et al., 2021; Sharifi, 2023).

6.2. Sustainalism and social justice

Sustainalism, an evolving philosophy that synergizes the principles

of sustainability and humanism, transcends conventional development paradigms. The hierarchical representation of sustainalism and world peace is presented in Fig. 8.

6.2.1. Moral equality Utopia (social, economic and environmental justice)

In the spirit of Sustainalism’s commitment to social justice, the vision is a ‘Moral Equality Utopia’ in the modern world, where the paramount dharma is the recognition of all individuals as free and equal. Sustainalism advocates for treating people as free and equal individuals, irrespective of their background. Sustainalism embodies the belief that there can only be one moral equality in the modern world, where all individuals are treated with fairness and respect. Sustainalism strongly emphasizes social justice, which means ensuring fairness, equality, and the protection of human rights within society. It seeks to address and rectify social inequalities and disparities, working towards a more equitable distribution of resources and opportunities (Clark & Miles, 2021; Stumpf et al., 2015). At its core, sustainalism strongly emphasizes social justice, which means ensuring fairness, equality, and the protection of human rights within society. Sustainalism encourages proactive measures to uphold and protect every person’s human rights and dignity, ensuring no one is marginalized or oppressed. It seeks to address and rectify social inequalities and disparities, working towards a more equitable distribution of resources and opportunities (Boone, 2010). Social justice forms the moral compass guiding Sustainalism towards its noble objectives and transformative potential as a catalyst for global progress. When integrated successfully, social justice-driven policies lead to a resilient and equitable future. Social justice addresses disparities, promoting inclusivity and ensuring equitable access to opportunities and resources (Boone, 2010; McGregor et al., 2020). Economic justice calls for fair wealth distribution, bridging income gaps, and creating opportunities for prosperity across all strata of society (Bong et al., 2023). Meanwhile, environmental justice calls for safeguarding vulnerable communities from environmental hazards and acknowledging the impacts of environmental degradation on marginalized groups (Schlosberg & Coles, 2016).

6.2.2. Self-sustainable participatory governance and transparency

Sustainalism advocates for self-sustainable governance to achieve a



Fig. 8. Hierarchical representation of Sustainalism and World peace.

harmonious coexistence between human societies and the natural world, recognizing the interconnectedness of all living systems. Self-sustainable governance, within the framework of Sustainalism, underscores the importance of local communities and institutions having the autonomy and resources needed to meet their own needs and address environmental challenges (Agrawal et al., 2022). The model prioritizes empowering communities to manage their resources, make participatory decision-making, and shape policies aligning with long-term environmental, cultural diversity, and social inclusivity. It envisions decentralized systems where local authorities and stakeholders actively manage natural resources, promote social equity, and foster resilience. It enables a sense of ownership among local populations and equips the communities with the knowledge, tools, and policies needed to thrive while safeguarding the planet (Brantmeier, 2013; McGregor et al., 2020). Sustainable development is intricately linked with social progress. Peaceful societies are more likely to invest in education, healthcare, and infrastructure, vital components of sustainable development. A peaceful and caring economy allows for the equitable distribution of resources and opportunities, thereby contributing to social progress (Melgar-Melgar & Hall, 2020). Equity is a central value in Sustainalism, emphasizing the need to create a society where everyone can access the same opportunities and resources. It goes beyond mere equality by considering individual needs and circumstances. Sustainalism prioritizes social harmony, aiming to create a society where different individuals and groups coexist peacefully and cooperatively. This fosters understanding, dialogue, and cooperation among diverse communities (Chapman, 2020; Löfqvist et al., 2023). Sustainalism underscores the importance of inclusive, fair, open, and accountable governance (SDG 16) as a cornerstone of peace. Good governance helps in preventing corruption and fostering political stability. Openness is a core value that encourages transparency, accountability, and accessibility in governance and decision-making processes. It allows for public participation and engagement in shaping policies and practices (Agrawal et al., 2022; Naciti et al., 2022).

**Education, Awareness, and Critical Thinking:** Education (SDG 4) is vital in promoting tolerance, understanding, and intercultural dialogue, essential for peaceful coexistence in a diverse world. Sustainalism fosters a spirit of inquiry, encouraging critical thinking, research, and exploration to find innovative and sustainable solutions for world peace (García-González et al., 2020; Leal Filho et al., 2018).

While justice and Sustainalism present a compelling vision for a better world, the path toward their realization is not without challenges. It's high time to discuss strategies to surmount these challenges and emphasize the significance of collaboration and global solidarity in pursuing justice-driven Sustainability (McGregor et al., 2020). A cohesive agenda for policymakers, stakeholders, and individuals to embrace justice-driven Sustainalism. It calls for a paradigm shift towards equitable governance, ethical business practices, and a conscious commitment to environmental preservation. By placing social, economic, and ecological justice at the center of development efforts, we can envision a world where every individual, community, and ecosystem thrives in unison. Justice and Sustainalism are inextricably intertwined, forming the pillars of a balanced and prosperous future (Pape, 2022; Stumpf et al., 2015). Justice-driven sustainable Practices can empower sustainable development initiatives. From community-based conservation projects to inclusive urban planning, justice integration in Sustainalism yields tangible benefits. Different regions have embraced justice as a transformative force in shaping sustainable policies, projects, and governance structures (Mensah, 2019).

## 7. Barriers and benefits in adopting sustainalism, role of stakeholders and advanced AI technologies

### 7.1. Barriers to adopting sustainalism

There may be several potential challenges in implementing and

adopting this concept at various levels. In this section, the barriers to the practicability of Sustainalism are discussed. Sustainalism is the concept that should be practiced in daily life in every aspect for the co-existence of mankind with planet Earth. While the idea of sustainalism is inspiring, the biggest dilemma involves navigating trade-offs between Social, Economical, Environmental, political, and cultural Priorities. Achieving Sustainalism solutions may not address all five domains simultaneously (Hariram et al., 2023). For instance, a policy promoting economic growth might have environmental consequences. Balancing these priorities requires thoughtful decision-making. This could involve resource allocation, technological feasibility, or balancing individual needs with community benefits. Resource allocation is next, and the key navigator perspective needs to be addressed. Allocating resources (financial, human, and natural) involves trade-offs. For instance, investing in renewable energy may require diverting funds from other sectors. Striving for social equity may sometimes conflict with economic efficiency (Energy Agency, 2020). Decisions about resource distribution impact both people and the planet. Integrating social, environmental, and financial aspects requires breaking down traditional disciplinary boundaries. Now, the world is driven by advanced AI systems, but the immaturity of specific sustainable technologies, scalability, and infrastructure limitations will stagnate the advancement of Sustainalism. In the political and economic aspects, vested interests, policy inertia, financial costs, and uneven resource allocation and distribution are some of the biggest challenges of implementing Sustainalism (Kopka & Grashof, 2022). In the social and cultural domains, lack of awareness, resistance to change, cultural norms, and individual behavior patterns will be barriers that cause less acceptance of this ideology. Without proper social acceptance, it is challenging for Sustainalism to achieve its foothold worldwide and address the present global challenges (Leal Filho et al., 2022).

Social leaders and educators play a pivotal role in fostering sustainable mindsets. Inadequate professional training and learning is one of the significant threats to spreading the ideologies of sustainalism. Misinterpretation may cause severe issues and deviate from sustainalism concepts. Often, educational systems and institutions operate in silos, hindering holistic development. Educational systems usually prioritize standardized testing and high-stakes assessments. These assessments may not adequately measure sustainability competencies, leading to a focus on routine learning rather than critical thinking and problem-solving. However, many educators feel unprepared to teach sustainability concepts effectively. Regarding practical applications, logistics, capacity building, information access, and education are potential challenges. Professional development opportunities must align to attain true global sustainability.

### 7.2. Role of stakeholders

Sustainalism is a visionary and proactive response to the pressing challenges of our time. It is viewed as a pathway to achieving sustainability and leading to a sustainable era. It offers a coherent, ethically-driven philosophy guiding individuals, communities, and nations toward a more sustainable and equitable future. It includes a focus on social and ecological innovation. It embodies a holistic and integrated approach to sustainable development, calling for collaboration between governments, businesses, and society to drive positive change. To follow Sustainalism, one must adopt sustainable practices in daily life, engage in ethical decision-making, support policies that prioritize Sustainability, and foster collaboration with like-minded individuals and organizations. It advocates for a more socially oriented approach to sustainability and encourages individuals to be sustainalist (active participants) in the sustainable revolution. Sustainalist are individuals who actively promote sustainable practices, advocate for policies aligned with Sustainalism, and work toward a better world. By embracing Sustainalism, individuals can lead more fulfilling lives rooted in ethical principles (Hariram et al., 2023). Through collective action and a

commitment to Sustainability, humanity can steer towards a flourishing future that cherishes the well-being of all living beings and nurtures the planet’s health. By embracing interconnectedness, ethical responsibility, and holistic well-being, Sustainalism offers a compelling and principled foundation for navigating the complexities of our interconnected world (Meijboom & Brom, 2012; Torelli, 2021).

### 7.3. Role of AI and digital technologies

Advanced artificial intelligence (AI) has the immense potential to act as a catalyst in promoting and adopting Sustainalism. AI can analyze massive datasets to identify resource use and energy consumption inefficiencies, monitor traffic congestion and air pollution, track supply chain issues, manage urban waste, and understand ecological dynamics (Mondejar et al., 2021). AI facilitates the integration of renewable energy sources into existing power grids by predicting energy demand, optimizing distribution, and managing fluctuations in supply. AI can create complex simulations and has the potential for predictive analytics of natural systems and human behavior. Automation AI tools can provide informed strategies for sustainable practices like resource efficiency, clean energy adoption, circular economy approach, process optimization, waste minimization, and reduced environmental footprint. This allows us to test different sustainability strategies and predict their long-term effects before real-world implementation to improve quality (Kopka & Grashof, 2022). AI algorithms are only as good as the data they are trained on, and biased data can intensify inequalities or environmental problems. Automation driven by AI may displace jobs, necessitating workforce retraining and social safety nets. However, the significant computing power required to train and run complex AI models can contribute to the environmental impact of data centers. Responsible development and deployment of AI must consider ethical concerns like transparency, accountability, and potential misuse, especially given the opacity of AI models (Palomares et al., 2021). Additionally, ensuring the quality and representativeness of data remains a challenge, which is crucial for accurate predictions and decisions. The unequal accessibility of advanced AI technologies can exacerbate social inequalities, necessitating inclusive deployment and addressing disparities in resource access (Walshe et al., 2021). The rapid advancement of AI outpaces regulatory frameworks and ethical guidelines, posing risks such as privacy breaches and algorithmic bias. Overreliance on technology-driven solutions may divert attention from holistic approaches, emphasizing the importance of balancing innovation with traditional knowledge and community participation for long-term resilience and a truly sustainable future (Khamis et al., 2019).

### 7.4. Summary of practical cases studies aligned with sustainalism philosophy

This section presents a selection of practical case studies that demonstrate the principles of Sustainalism. Real-world examples like sustainable communities, ecovillages, and sustainable living labs demonstrate how communities are adopting the holistic approach of sustainalism towards sustainable development (Table 3).

### 7.5. Benefits to the communities

While Auroville is an inspiring innovation in sustainable living practices that addresses environmental and economic aspects (e.g., renewable energy, local production), its emphasis on mindfulness and social harmony could provide additional benefits like reduced conflict, increased cooperation, personal growth, well-being and improved mental health within the community – aspects not directly addressed by the triple bottom line TBL. A university as a living lab can cultivate future generations of changemakers with a holistic understanding of sustainability challenges, and benefits such as fostering a sense of belonging and purpose among students, faculty, and community

**Table 3**  
Illustrative case studies aligned with sustainalism philosophy.

Paper Title	Research Methods	Major Findings	Reference
A critical examination of a community-led ecovillage initiative: a case of Auroville, India	Case study analysis, qualitative interviews.	Auroville demonstrates the potential of community-led ecovillages initiatives and highlights its successes in developing sustainable solutions like low-cost ecological practices. It highlights the importance of balancing ideals with practicalities in achieving sustainable development. However, it also acknowledges challenges faced by the ecovillage, such as economic and social issues arising as the community grows	(Koduvayur and Joshi, 2022)
Sustainable campuses as living labs for sustainable development: An overview of a Brazilian community university.	Case study analysis.	Community universities serve as living labs for experimenting and implementing sustainable practices thereby promoting interdisciplinary collaboration and innovation. It discusses how the university integrates sustainability principles into its operations, potentially serving as a model for other educational institutions.	Berchin et al. (2020)
Evolution of the slow living concept within the models of sustainable communities	Participatory action research, surveys, interviews.	The importance of slow living within the framework of a sustainable community is explored. It discusses how the values and practices of slow living, the importance of local engagement, empowerment, reducing consumption, and focusing on well-being, can contribute to creating more sustainable communities.	Botta (2016)

members, promoting interdisciplinary collaboration including cultural aspects, social justice, and societal growth – aspects beyond TBL’s core. Sustainable communities that embrace slow living practices may promote lower ecological footprints, reduced stress and burnout, improved mental and physical health (through reduced stress), stronger social bonds, deeper appreciation for the natural world and further enriching community life beyond TBL’s environmental and economic focus. These case studies provide a glimpse into how communities might embrace aspects of sustainalism philosophy for a more holistic approach to sustainability and bring additional benefits beyond traditional sustainability approaches like the triple bottom line. Overall, Sustainalism, with its focus on human well-being in addition to environmental and

economic concerns, can offer communities benefits like.

- Stronger social bonds and a sense of belonging.
- Reduced conflict and increased cooperation.
- Improved mental and physical health.
- Increased innovation and creativity for sustainability solutions.
- A more holistic approach to sustainable living within planetary boundaries

In summary, sustainalism isn't a straightforward path; it involves overcoming barriers, making tough choices, and finding synergies. Yet, achieving such systemic reforms involves navigating intricate challenges beyond merely reallocating financial resources. It requires robust policy frameworks, efficient implementation mechanisms, and a sustained commitment to social welfare, societal progress, and prosperity. Sustainalism is a relatively new concept, and its long-term effectiveness needs further exploration. While pondering the alternative path of "Sustainalism" is worthwhile, achieving meaningful change necessitates a holistic approach addressing systemic challenges across various domains. Recognizing these complexities ensures a more balanced and pragmatic approach toward a sustainable future. We can collectively strive towards realizing the "True Global Sustainability" vision for humanity.

## 8. Conclusion

In a world facing social inequities, environmental crises, and ethical dilemmas, Sustainalism emerges as a thoughtful approach to redefining our relationship with people, society, and nature. This holistic ideology encapsulates a vision for a harmonious and flourishing society emphasizing the interconnectedness of human well-being, economic prosperity, social equity, and planetary health.

- ✓ Sustainability Transformation aligns with Sustainalism's goal of a complete societal transformation. Cradle to Cradle aligns with Sustainalism's focus on circularity and minimizing environmental impact. Just Sustainability aligns with Sustainalism's goals of building a more equitable world. The concept of "Living a good life" within the planetary boundaries" is crucial for defining the limitations within which sustainalism needs to operate. While the concepts of sustainable development, Doughnut Economics, Cradle to Cradle design, Sustainability Transformation, Just Sustainability, and other research contributions of scholars offer valuable insights on addressing sustainability challenges, they often fall short in promoting a truly holistic approach that addresses the root causes of environmental and social challenges while ensuring a prosperous and equitable future for all.
- ✓ Sustainalism offers a comprehensive framework that integrates diverse perspectives, emphasizing the need for continued interdisciplinary collaboration and innovative solutions that challenge underlying economic paradigms, address power structures, and navigate complex socioeconomic and Geo-political barriers. The ideology of Sustainalism transcends temporal boundaries, serving as a timeless guide for humanity's journey towards sustainable development.
- ✓ Sustainalism builds upon existing sustainability frameworks by offering a holistic, socio-economic-environmental theory with a solid philosophical foundation. It's a moral framework and practical guidance to navigate our time's complexities and pressing challenges. Inspired by principles of Minimalism, Naturalism, Environmentalism, and Gandhism, Sustainalism has the potential to transform our world into a sustainable future.
- ✓ As we march forward, Sustainalism lights the path toward a more peaceful, equitable, and prosperous world, resonating with the aspirations of a progressive society. By embracing its core values and principles, societies can cultivate the quality of life, social well-

being, and sustainable living, paving the way for a harmonious world. Furthermore, Sustainalism encompasses a forward-looking approach to promoting peace and justice, underscoring its significance in shaping a more inclusive and resilient global community.

- ✓ Advanced Artificial Intelligence offers powerful tools to accelerate the transition towards achieving true global sustainability. However, addressing the limitations and potential downsides of deploying AI is crucial. Striking a balance between technological progress, ethical considerations, societal involvement, and collective action is essential to leveraging the full benefits of AI to achieve the principles of Sustainalism.

In conclusion, Sustainalism is not just a philosophy but a call to action for individuals, communities, and nations to embrace true global Sustainability, equity, and ethical responsibility. Let us heed this call and embark on a sustainable revolution together, building a modern world where sustainability is not just a goal but a way of life.

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## CRedit authorship contribution statement

**N.P. Hariram:** Writing – original draft, Resources. **K.B. Mekha:** Visualization, Investigation, Formal analysis. **Vipinraj Suganthan:** Visualization, Validation, Resources, Data curation. **K. Sudhakar:** Writing – review & editing, Supervision, Resources, Funding acquisition, Conceptualization.

## Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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