

Energy Justice Amid the Transition: The Role of the Humanities in Fostering Environmental Awareness and Equitable Benefits

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Abstract

Indonesia's energy transition involves social, cultural, and ethical challenges alongside technical change. Despite relatively high public awareness of environmental issues and climate change, a gap persists between awareness and action supporting the transition. This study examined the role of the humanities, encompassing narrative, cultural representation, ethical awareness, and public participation, in fostering environmental concern and promoting equitable benefit distribution. A descriptive qualitative approach combined literature review and content analysis of scholarly journal articles, books, government policy documents, and interview data from relevant informants. Four principal themes emerged: the disparity between societal values and actions; the role of local narratives and cultural values in cultivating environmental concern; limited inclusivity in community participation in renewable energy projects; and the need for more equitable energy policies. These findings frame the energy transition as a social process in which humanities perspectives can help connect technical policies with communities' social realities. The study highlights the importance of culturally grounded environmental engagement, inclusive participation, and attention to equity in transition governance. It contributes to the development of a conceptual framework integrating the humanities into energy justice studies and offers policy guidance for stakeholders seeking a more humane, participatory, and equitable energy transition in Indonesia.

Keywords: Energy Justice; Environmental Humanities; Environmental Awareness; Public Participation; Sustainable Energy Transition

INTRODUCTION

Indonesia is currently entering an energy transition phase, namely a shift from dependence on fossil fuels toward a more environmentally friendly and sustainable energy system. This step is crucial considering that the national energy composition is still dominated by fossil-based sources. Based on data from the Ministry of Energy and Mineral Resources (ESDM) in 2023, coal still leads the energy mix with a share of 40.46%, followed by oil (30.18%) and natural gas (16.28%), while new and renewable energy (NRE) accounts for only 13.09% (Ministry of ESDM, 2024). These figures indicate that the path toward a greener energy system remains long, given that dependence on fossil energy remains highly dominant in meeting national energy needs.

On the other hand, public awareness in Indonesia of environmental issues and climate change has begun to show a positive trend. A survey conducted by the *Institute for Essential Services Reform* (IESR) revealed that in 2022 and 2023, 93% of respondents considered climate change to be an urgent problem. Furthermore, in 2023, 86.3% of respondents were already aware of the issue of energy transition, and 64.4% of them stated that the use of coal as a source of electricity generation should gradually be replaced by renewable energy because of its high emissions. These data indicate that public concern and acceptance of environmental issues and changes in the energy system are increasingly strengthening, so that the energy transition is no longer solely the domain of the government and industry, but is also beginning to become a matter of public concern.

Although the level of awareness is relatively high, this has not been fully proportional to concrete and consistent environmental actions. IESR noted that concrete actions undertaken by the public to address climate change remain limited, indicating a gap between understanding and concern for environmental issues and the implementation of concrete actions in the field. This gap between environmental concern and actual behavior is also consistent with the environmental behavior literature, which shows that environmental knowledge and attitudes do not automatically translate into pro-environmental behavior because individual, social, and contextual barriers may intervene. Research on energy citizenship also emphasizes the importance of connecting environmental awareness with active forms of participation and behavior in supporting sustainable energy systems (Saputra & Suhartono, 2025). Thus, the main challenge of the energy transition lies not only in the provision of renewable energy sources, but also in efforts to encourage active public

participation so that existing concern can be translated into behavior and concrete support for the transformation of the energy system.

The relevance of this condition is increasingly significant because the energy transition will ultimately have a direct impact on people's lives. The shift from fossil energy to renewable energy involves not only infrastructure development, technological innovation, or regulatory changes, but also changes in consumption patterns, habits, values, levels of public acceptance, and public involvement. In the *Indonesia Energy Transition Outlook* document, IESR identifies public and regional participation as one of the main supporting pillars in the energy transition process in Indonesia. Furthermore, the *just energy transition* approach emphasizes that the energy transition has social, economic, energy, and environmental dimensions, thereby requiring cross-sectoral and stakeholder involvement.

Energy justice offers three interrelated pillars, namely *distributive justice*, *procedural justice*, and *recognition justice*. Distributive justice concerns the allocation patterns of benefits and burdens arising from the energy system among different social groups, regions, and generations. Procedural justice concerns fairness and inclusiveness in decision-making processes, encompassing participation, transparency, and accountability. Meanwhile, recognition justice emphasizes the recognition of the identities, knowledge, and experiences of marginalized groups (Jenkins et al., 2016; Sovacool et al., 2023). Recent research on energy justice in national energy transitions also emphasizes the importance of considering equity across social groups and generations in the design and implementation of energy transition policies (Fitriana et al., 2026).

In the Indonesian context, the *Climate Policy Initiative* (CPI) has developed a just energy transition framework built upon four pillars: *recognitional justice*, *restorative justice*, *distributive justice*, and *procedural justice* (Climate Policy Initiative, 2025). This framework is crucial considering research findings showing that in regions dependent on coal, the sector contributes up to 80% of regional GDP. Most of the population works in the informal sector and faces serious concerns regarding the sustainability of their livelihoods after coal (International Institute for Sustainable Development [IISD] & Traction Energy Indonesia, 2025). Recent discussions of justice in Indonesia's energy transition policies likewise emphasize that the transition needs to account for the distributional, procedural, and social consequences experienced by affected communities (Huda et al., 2026).

This study focuses on the issue of energy justice amid the acceleration of the global energy transition, with particular emphasis on the role of the humanities in fostering public concern and ensuring the equitable distribution of environmental benefits. Energy justice is a conceptual, methodological, and empirical framework that has developed to reveal and correct various forms of injustice within energy systems, with an emphasis on the moral dimension concerning what is considered fair and right. In the context of the ongoing energy transition, the issue of justice can no longer be positioned as a marginal concern, but must be understood as the core of the sustainability of the energy transformation itself (Sovacool et al., 2023).

Within this framework, environmental concern plays an important role in promoting a sustainable energy transition. Concern for the environment can serve as a basis for individuals to consider the ecological impacts of energy consumption and choose cleaner energy options. A study by Wijaya and Kokchang (2023) in Jakarta found that environmental awareness and concern were correlated with attitudes toward the energy transition in Indonesia, while attitudes and perceptions of behavioral capability also influenced intentions to support the energy transition and environmentally friendly behavior. These findings affirm that environmental concern at the individual level can become an important driver in supporting the transition toward a more sustainable energy system.

The humanities approach can also help explain why people are willing or unwilling to engage in the transition toward sustainable energy. Various studies on the human dimensions of the energy transition indicate that intrinsic motivation, value systems, social influence, community engagement, and perceptions of policy justice play significant roles in shaping behavior and public support for changes in the energy system (Steg et al., 2021). This suggests that efforts to foster environmental concern are not sufficient merely by providing knowledge about the negative impacts of fossil energy, but also need to build values and deeper awareness, so that people develop a sense of connection and moral responsibility toward environmental sustainability. In this regard, the development of ecological intelligence can also be strengthened through educational approaches that integrate ecological values, social values, and sustainability literacy (Fauzi et al., 2026).

Although studies on the energy transition in Indonesia continue to develop, most discussions still focus heavily on policy, technology, financing, and energy system readiness. The IETO 2024, for example, highlights developments in fossil and renewable energy,

electricity sector readiness, and the need to accelerate the transition in the industrial and transportation sectors. At the same time, aspects of community and stakeholder engagement have also been recognized as important components in the formulation and implementation of energy transition policies. More recent planning for Indonesia's electricity system also demonstrates the importance of infrastructure development and the expansion of renewable energy within the national electricity transition (PLN, 2025). However, there remains room to deepen understanding of how human dimensions, particularly values, concern, awareness, and the ways in which people interpret the relationship between humans and the environment, can be utilized to support the formation of an energy transition that is not only ecologically sustainable but also socially just.

This gap is consistent with the study by Steg et al. (2021), which emphasizes that the social sciences and humanities have an important role in understanding the human dimensions of the energy transition. The study demonstrates that changes in the energy system cannot be adequately understood through technological and policy changes alone, because their success also depends on changes in behavior, public acceptance, values, motivation, and public support for energy policies. Steg et al. also identified that the literature on the human dimensions of the energy transition remains fragmented and requires further research into the factors that drive sustainable energy behavior, the effectiveness of interventions, and the factors shaping public support for changes in the energy system. Accordingly, the humanities approach is relevant for complementing the technical and policy approaches that have traditionally dominated discussions of the energy transition.

Furthermore, studies on public engagement in the energy transition indicate that public participation does not automatically result in a just energy transition. Suboticki et al. (2023), through a literature review, found that although *public engagement* has been widely discussed in energy transition research, justice has not always been an explicit concern. The dimension of *procedural justice* appears relatively more frequently, whereas *recognition justice* and *distributive justice* have received more limited attention. These findings indicate a need to view public engagement not merely as a form of participation in decision-making, but also as a process that takes into account the experiences, values, needs, and positions of groups affected by changes in the energy system.

In the Indonesian context, this need becomes increasingly important because the energy transition process is taking place amid continued high dependence on fossil energy

and the presence of socioeconomic consequences for communities dependent on the sector. Therefore, a sustainable energy transition cannot be measured solely through increased use of renewable energy or reduced emissions, but must also consider the extent to which communities understand, accept, and engage in these changes. Environmental concern can serve as an important starting point because such concern is related to how individuals perceive their responsibility toward the environment and their willingness to support more sustainable behaviors and policies. Research on the pro-environmental behavior of Generation Z in Indonesia also indicates that psychological and social factors need to be considered in understanding support for the energy transition.

Based on these conditions, research on the role of the humanities in fostering environmental concern is important to expand the understanding of the energy transition in Indonesia. This approach is expected to provide a perspective that the success of the energy transition is determined not only by the availability of technology, policies, and funding sources, but also by the development of awareness, values, a sense of responsibility, and community engagement. By connecting environmental concern, the humanities dimension, and the principles of energy justice, this research is relevant to supporting the realization of an energy transition that is not only low-carbon, but also inclusive, participatory, and attentive to the equitable distribution of benefits and burdens among communities.

This study analyzes the role of the humanities, encompassing narratives, cultural representations, ethical awareness, and public participation, in fostering public concern and ensuring the equitable distribution of environmental benefits in the energy transition process in Indonesia. Specifically, this study aims to: (1) identify distributive, procedural, and recognition injustices in energy transition policies and practices in Indonesia; (2) explore the role of the humanities approach in bridging the gap between technical energy transition policies and the social realities of communities, particularly vulnerable groups in coal-producing regions; (3) develop a conceptual framework that integrates the humanities into energy justice studies as a transformative instrument for addressing structural injustices; and (4) formulate policy recommendations concerning the mobilization of narratives, art, and other humanities approaches to realize a more humane, participatory, and just energy transition in Indonesia.

METHODS

This study employed a descriptive qualitative approach using a literature study method. The qualitative approach was adopted to obtain a deeper understanding of social phenomena and various contexts related to the energy transition, particularly the roles of values, culture, environmental awareness, community participation, and energy justice. This approach is relevant because the human dimensions of the energy transition extend beyond technical considerations and also encompass values, behavior, motivation, public acceptance, and support for energy policies (Steg et al., 2021).

The research data were obtained from secondary sources, including scholarly journal articles, books, government policy documents, interview findings, and other relevant publications addressing the issues of the humanities, environmental awareness, energy justice, and sustainable energy transitions. The use of multiple sources was intended to provide comprehensive information and enable the researchers to examine energy transition issues from social, cultural, policy, and justice perspectives. The literature on energy justice indicates that energy transition research should consider distributive, procedural, and recognition dimensions, particularly in relation to affected communities (Jenkins et al., 2016).

Data collection was conducted through several stages, namely identification, selection, and critical review of literature relevant to the research focus. The selected literature focused on the human dimensions of the energy transition, energy justice, public participation, environmental awareness, and the social and cultural conditions of communities. Research on public engagement in the energy transition indicates that community participation should be understood not merely as involvement in decision-making processes but also in relation to issues of justice, needs, experiences, and the positions of affected groups (Suboticki et al., 2023).

In addition to the literature study, this research incorporated interview data as an additional source of information to enrich the understanding of empirical conditions associated with the energy transition. Interviews were conducted with informants relevant to the research topic. The use of interviews enabled the researchers to obtain insights into the gap between environmental concern and community action, the role of cultural values and local narratives, community participation, and the need for more equitable energy policies. The importance of considering the social, economic, and cultural conditions of communities

is also consistent with research examining injustice in community-based renewable energy development in Indonesia (Fathoni et al., 2021).

The data obtained were subsequently analyzed using content analysis. The analysis involved identifying key themes emerging from the various sources, organizing information according to the research focus, and interpreting the relationships among themes related to the humanities-based approach, environmental concern, and energy justice. This technique was employed to identify patterns and themes that could systematically explain the phenomenon under investigation. In the context of the energy transition, an approach that incorporates human dimensions is essential because changes in energy systems are influenced not only by technology and policy but also by behavior, values, motivations, public acceptance, and community support (Steg et al., 2021).

The findings were then presented through a descriptive-interpretive analysis to provide a systematic understanding of the role of a humanities-based approach in supporting a just energy transition. The analysis focused on the interrelationships among community social conditions, cultural values and narratives, public participation, energy access, economic capacity, and supporting policies and infrastructure. The energy justice framework emphasizes that the distribution of energy benefits and burdens, decision-making processes, and recognition of the identities, knowledge, and experiences of different social groups are essential dimensions for understanding energy justice (Jenkins et al., 2016).

RESULTS

Based on the results of interviews with an informant who works as a Sustainability Business and Governance Manager, four main themes related to energy justice in the energy transition process in Indonesia were identified, namely the gap between community values and actions, the function of local narratives and cultural values, community participation that is not yet fully inclusive, and the need for more equitable energy policies. These four findings indicate that the energy transition is not only related to changes in energy sources, but also concerns economic conditions, community habits, culture, education, participation, energy access, and policies.

1. The Gap between Community Values and Actions

The interview results indicate a gap between community concern for the environment and their ability to translate such concern into concrete actions. Communities

may have a desire to use renewable energy, but this desire cannot always be realized due to cost constraints, regulations, and limited infrastructure. One example identified was the use of solar panels. Communities interested in using solar panels still need to consider the investment costs as well as the applicable regulations. This condition makes the choice to use renewable energy not always easy for communities.

These findings indicate that environmental concern does not automatically result in behavioral change. The desire to use more environmentally friendly energy is still influenced by the ability of communities to access and use such technologies. Communities with a high level of environmental concern may still experience difficulties when the required costs are too high or supporting facilities are not yet available.

In addition to economic factors, the interview results also indicate that the conditions of each region need to be considered in the development of renewable energy. Each region has different energy resource potential. Areas with high levels of solar exposure can utilize solar energy, while regions with favorable wind conditions can develop wind energy. This indicates that energy development needs to be adapted to the environmental conditions and potential of each respective region.

Thus, increasing public awareness needs to be accompanied by the availability of tangible opportunities to use renewable energy. Communities not only need information about the importance of clean energy, but also require access to technology, infrastructure, and economic conditions that enable them to implement it in their daily lives.

2. The Function of Local Narratives and Cultural Values

The interview results indicate that cultural values and local narratives play a role in shaping community concern for the environment. The informant provided an example of a community belief in certain trees that are considered sacred and therefore must not be cut down. Such beliefs, although originating from practices and values that have developed within the community, can encourage people to protect the trees and the surrounding environment.

This finding indicates that environmental concern can develop through values that are already familiar and accepted in community life. Therefore, the delivery of messages concerning the environment and energy does not always have to employ a formal approach.

Values, habits, stories, and experiences that are already closely connected to community life can be used to introduce the importance of environmental conservation.

The interview results also indicate that the way information is conveyed needs to be adapted to community habits. Communities accustomed to gathering and engaging in conversations can obtain information through small-group discussions or informal activities. Such an approach can make information regarding the environment and energy transition more closely connected to people's daily lives.

Thus, cultural values not only function as part of community identity, but can also serve as a means of communication in developing environmental awareness. The use of culture in the dissemination of information can help communities connect energy issues with their everyday experiences and lives.

3. Community Participation that Is Not Yet Fully Inclusive

The interview results indicate that local communities can be involved in discussions concerning energy projects, but such involvement does not necessarily provide them with equal influence in the decision-making process. Communities may attend forums or consultation activities, but their needs and interests are not necessarily incorporated as central elements of the resulting decisions.

These findings indicate that the presence of communities in a forum cannot be used as the sole measure of successful participation. Community involvement needs to be viewed in terms of their opportunities to express their needs, provide opinions, obtain information, and raise objections to matters that may affect their lives.

In addition, the informant emphasized the importance of preserving community culture when new technologies are introduced. Communities need to be given opportunities to become familiar with and use new technologies, but their implementation still needs to take into account the culture and way of life of local communities. Thus, technological changes should not eliminate the values and practices that have developed within the community environment.

The media and community leaders were also found to play a role in increasing attention to energy-related issues. They can help communicate community conditions to parties with decision-making authority, particularly when there are areas that have not yet

obtained adequate access to energy. Through such communication, community needs can be more easily identified and discussed in the decision-making process.

Therefore, community participation in the energy transition needs to provide genuine space for communities to communicate their needs and interests. Communities should not only be positioned as recipients of programs, but also as parties who directly experience the impacts of changes in the energy system.

4. The Need for More Equitable Energy Policies

The research results indicate that the government plays an important role in ensuring the equitable distribution of the benefits of the energy transition. Based on the interview results, the government needs to identify areas that have not yet obtained adequate energy access and adjust policies according to the conditions of each area. Each region has different social, economic, environmental conditions and energy resource potential, and therefore its energy needs are not necessarily the same.

The economic conditions of communities are also an important concern in achieving equitable energy distribution. Communities with more vulnerable economic conditions may experience difficulties in obtaining and using renewable energy. Therefore, support such as subsidies or other forms of assistance can be one effort to help communities obtain energy access according to their needs. However, such forms of support need to be adjusted to the conditions of the communities and the characteristics of each region.

The interview results further indicate that regulations and infrastructure remain aspects that need attention in supporting the energy transition. The availability of technology alone is insufficient if communities do not have access to infrastructure and regulations that enable such technologies to be used. Therefore, renewable energy development needs to be supported by policies and infrastructure that can facilitate communities in accessing and utilizing it.

Education is also an important component in ensuring the equitable distribution of energy benefits. Communities need knowledge about the resources available in their regions and how to utilize them. Such knowledge can help communities understand energy options that are appropriate to their environmental conditions and needs. Thus, energy equity is not only related to the provision of facilities, but also to improving community knowledge and

DISCUSSION

Disparities between Values and Actions in the Energy Transition

The interview findings reveal a gap between community concern for the environment and their capacity to translate such concern into concrete actions that support the energy transition. The source explained that communities may have an interest in shifting toward renewable energy, but such interest cannot always be realized due to economic and regulatory constraints. One illustration provided was the use of solar panels. Communities interested in installing solar panels need to consider investment costs and applicable regulations, meaning that the utilization of renewable energy is not always perceived as an economically beneficial option.

These findings are consistent with the study by Prihantoro et al. (2025), which examined the willingness and ability of communities in DKI Jakarta to pay for renewable energy. The study demonstrated the importance of considering the economic capacity of communities when discussing changes in energy prices in the transition toward increased use of renewable energy. This indicates that people's willingness to support renewable energy needs to be distinguished from their ability to pay the associated costs. In the context of the interview, community interest in renewable energy may not necessarily be realized when investment costs and economic conditions are not supportive.

These findings indicate that environmental concern does not automatically result in actions that support the energy transition. Community actions are also influenced by factors beyond the individual, such as regulations, costs, and infrastructure availability. Therefore, efforts to increase public awareness need to be accompanied by the creation of conditions that enable people to adopt more sustainable energy choices. From the perspective of energy justice, this issue concerns the equitable distribution of opportunities for communities to obtain benefits from changes in the energy system, rather than merely individuals' willingness to change their behavior (Fathoni et al., 2021).

This disparity is also related to people's understanding of the potential of resources available in their surroundings. The source stated that each region has diverse energy resource potential that needs to be developed according to its environmental characteristics. For example, areas with strong solar exposure can utilize solar panels, while areas with favorable wind conditions can rely on wind energy.

This demonstrates that the energy transition requires alignment between technology, environmental conditions, and people's ability to access it. Jupesta et al. (2011) discussed the transition toward sustainability in Indonesia through energy mix policies and REDD+ programs. The study provides a context in which efforts toward sustainable growth are associated with energy policies and environmental management. In relation to the interview findings, renewable energy development needs to consider regional characteristics as well as the socioeconomic conditions of the communities that will utilize it.

Therefore, public awareness needs to be supported by an understanding of regional potential and policies that create opportunities for the utilization of local energy resources. The utilization of local potential concerns not only the availability of technology, but also how communities obtain opportunities to use and experience the benefits of such energy resources.

The Function of Local Narratives and Cultural Values

The second finding indicates that cultural values and local narratives can be utilized as means of fostering environmental concern among communities. The source gave the example of beliefs concerning trees that are considered sacred and prohibited from being cut down. Although such beliefs may be regarded as superstition, the source considered them to have positive value because they indirectly encourage communities to protect trees and their surrounding environment (Setyowati, 2026).

This finding demonstrates that environmental conservation values can develop through cultures that are deeply rooted in communities. In the context of the energy transition, this condition demonstrates that the relationship between communities and the environment is shaped not only by technological and economic considerations, but also by social and cultural values. Fathoni et al. (2021) discussed injustice in community-based renewable energy development in rural Indonesia, demonstrating the relevance of local community contexts in understanding renewable energy development. Accordingly, the implementation of the energy transition needs to consider the social conditions and relationships that have developed within communities.

This means that approaches to fostering environmental concern do not always have to be scientific or formal, but can also utilize values and practices that are already familiar to communities. In the interview findings, local beliefs can serve as one means of protecting

the environment, provided that their use continues to consider the community context and does not disregard accountable knowledge.

Cultural values can also be utilized in delivering information about the energy transition. The source explained that education for communities should be conducted by adapting to local habits and patterns of interaction. Communities that are accustomed to gathering and engaging in conversations, for example, can receive education through small groups and informal activities rather than solely through formal seminars.

These findings demonstrate that the dissemination of knowledge about the energy transition needs to consider how communities receive and share information. Jupesta et al. (2011) situated the sustainability transition within the context of Indonesian policies and conditions, indicating that changes toward a more sustainable system cannot be separated from the context of its implementation. In this interview, this context is reflected in the importance of adapting education to community habits and interaction patterns.

Thus, the humanities approach to the energy transition can be realized by understanding communities based on the context of their lives. Culture does not only function as a community identity, but can also serve as a medium for disseminating knowledge and fostering environmental concern. The use of cultural values in education can also help bridge knowledge about renewable energy with people's everyday experiences.

Non-Inclusive Community Participation

The subsequent interview findings indicate that issues of community participation in energy projects do not always take the form of direct non-involvement. According to the source, local communities may be invited to participate in project discussions, but their level of influence in decision-making may not necessarily be equal to that of other parties with interests in the project.

This condition demonstrates a distinction between formal involvement and influence in decision-making. Communities may attend a forum, but such attendance does not necessarily make their interests a central part of the decisions taken. In the context of energy justice, community participation is crucial because energy projects can directly affect the environment and the lives of communities in the area. Fathoni et al. (2021) discussed injustice and inequality in community-based renewable energy development in rural Indonesia. This study is relevant for understanding that community-based energy development needs to be

examined not only in terms of the existence of projects, but also in terms of the justice issues associated with them.

The interview findings demonstrate that participation needs to be understood through two aspects, namely community involvement in the process and the extent to which their interests are considered in decision-making. Thus, the existence of consultation forums or invitations to communities is insufficient to describe meaningful participation when communities do not have space to express their needs and influence decisions related to their lives.

The source also emphasized the importance of preserving community culture when new technologies are introduced. Communities need to remain open to new knowledge and technologies, but their implementation should not eliminate local culture and ways of life.

This finding demonstrates that the implementation of renewable energy technologies needs to consider the relationship between technological change and the sustainability of community social life. Jupesta et al. (2011) discussed green growth policies and the transition toward sustainability in Indonesia through energy mix policies and REDD+. In relation to the interview findings, changes in the energy system need to be considered in relation to the environmental and community conditions affected by the process. Therefore, the development of energy technologies should not only consider technical achievements, but also the sociocultural context of the areas in which they are implemented.

In addition to local communities, the media and community leaders are also considered to play a role in increasing attention to energy-related issues. The source explained that influential actors within communities can utilize their influence to highlight areas that have not yet received adequate energy access and to build public attention to these issues.

This role demonstrates that public communication can serve as a means of conveying community needs to those with authority. In the context of energy justice, communicating information about areas that have not yet obtained energy access can help reveal issues concerning the distribution of the benefits of the energy transition. This is consistent with the discussion by Fathoni et al. (2021) concerning injustice and inequality in community-based renewable energy development in Indonesia.

Thus, participation in the energy transition concerns not only the number of people involved, but also the extent to which community voices can be taken into account in decision-making processes. Meaningful participation needs to provide communities with

space to express their needs, preserve values considered important, and obtain information about energy projects that affect their lives.

The Need for More Equitable Energy Policies

The final theme concerns the role of the government in realizing the equitable distribution of the benefits of the energy transition. The source viewed the government as the party bearing substantial responsibility for ensuring community access to energy. One crucial step is to identify areas that have not yet obtained adequate energy access and to adjust policies to the conditions of communities in each respective area.

This perspective is related to the discussion by Jupesta et al. (2011) concerning energy mix policies and REDD+ in efforts to achieve green growth in Indonesia. The study demonstrates that the transition toward sustainability is associated with energy and environmental policy choices. In the context of the interview, energy policies need to consider equitable access and regional conditions so that renewable energy development is not oriented solely toward increasing the use of technology, but also toward the needs of the communities that will receive its benefits.

The source also explained that community economic conditions need to be considered in achieving energy equity. Communities with more vulnerable economic conditions require support, such as energy cost subsidies, so that access to energy can still be obtained. Thus, energy equity cannot be achieved through a uniform approach for all community groups because the needs and economic capacities of each group differ.

These findings are supported by the study of Prihantoro et al. (2025), which specifically examined the willingness and ability of communities in DKI Jakarta to pay for renewable energy. The study distinguished willingness to pay from ability to pay and positioned cost affordability as an important aspect in discussions of the energy transition. These findings are relevant to the interview with Olivia, which emphasized that community economic conditions need to be considered in designing energy policies.

In this context, government support, including the possibility of subsidies or assistance mechanisms for vulnerable groups, can be discussed as an effort to address energy affordability. However, the form and targets of such policies need to be adjusted to community conditions and needs in each region. Thus, energy justice concerns not only the availability of energy, but also people's ability to access and utilize it.

In terms of policy, the source specifically mentioned that regulations and infrastructure are areas that still need to be improved to support the energy transition. This demonstrates that the shift toward renewable energy requires systemic support that enables communities to access and utilize renewable energy technologies.

Jupesta et al. (2011) discussed energy mix policies as part of efforts toward the transition to sustainability in Indonesia. This discussion is relevant to the interview findings because changes in the energy system require policy support that can guide renewable energy development. Meanwhile, Prihantoro et al. (2025) demonstrated the relevance of cost affordability in discussions of the energy transition in Jakarta. Both studies provide a context in which energy transition policies are associated with aspects of the energy system and the economic capacity of communities.

Education is also an important component in supporting the equitable distribution of the benefits of the energy transition. According to the source, more equitable knowledge can help communities understand the potential resources available in their regions. Communities can then identify the possible utilization of energy sources that are appropriate to the conditions of their respective areas.

This finding demonstrates that energy policies need to operate alongside community education and empowerment. Communities need not only access to technology, but also knowledge about the technology and how to utilize it according to environmental conditions and their needs. In the context of the sustainability transition in Indonesia, Jupesta et al. (2011) provide a foundation for understanding that changes toward sustainability are associated with energy and environmental policies. Based on the interview findings, community education and empowerment can be understood as part of efforts to support the implementation of these policies at the local level.

Thus, the equitable distribution of the benefits of the energy transition requires linkages among policy, infrastructure, cost affordability, and community knowledge. These efforts need to consider differences in economic conditions and resource potential across regions so that communities can obtain opportunities to utilize renewable energy.

The Energy Transition as a Social and Humanities Process

The four themes identified demonstrate that the energy transition cannot be understood merely as a shift from conventional energy use to renewable energy. Based on

the interview findings, the energy transition is also a social process involving values, knowledge, culture, interests, and relationships between communities and government.

The disparity between concern and action demonstrates that communities require regulatory and infrastructural support to implement sustainable energy choices. This finding is related to Prihantoro et al. (2025), which discussed the ability and willingness to pay for renewable energy in Jakarta. Cost affordability is one aspect that needs to be considered so that support for the energy transition can be translated into access to and utilization of energy.

Meanwhile, the role of culture demonstrates that local values can serve as a foundation for fostering environmental concern. Community participation also needs to be considered because formal involvement does not necessarily reflect equal influence in decision-making. Both aspects are related to the issues of justice and inequality in community-based renewable energy development discussed by Fathoni et al. (2021).

In this context, the humanities approach has the potential to help understand the energy transition from the perspective of people and communities. Education can increase knowledge, culture can serve as a basis for shaping environmental values, communication can be adapted to community practices, while participation can provide space for communities to express their needs and interests.

This perspective is also related to the discussion by Jupesta et al. (2011) concerning the sustainability transition in Indonesia, which encompasses energy policies and environmental management. The energy transition is a process involving changes in the energy system as well as policies directed toward sustainability. Based on the interviews, these changes also need to consider how communities understand, accept, and engage in their implementation.

Ultimately, the source emphasized that the primary objective of the energy transition should not be oriented toward one-sided benefits, but toward shared benefits for communities and the environment. This perspective is consistent with the energy justice issues discussed by Fathoni et al. (2021), particularly regarding inequalities in community-based renewable energy development. This finding reinforces the four previous themes that energy justice requires attention to the distribution of benefits, community involvement, environmental conditions, and policies that support equitable distribution.

Based on the overall interview findings, it can be understood that a just energy transition requires more than technological change. The transition needs to be supported by increased community knowledge, the utilization of local cultural values, meaningful participation, and policies and infrastructure that enable the benefits of energy to be experienced by various groups within society. Thus, the humanities approach can serve as one perspective for understanding how the energy transition process can proceed while continuing to consider people, the environment, and the sociocultural context of communities.

This study implies that energy transition policies need to integrate social, cultural, educational, and community participation aspects in addition to technological and economic aspects. The government and stakeholders need to strengthen education based on local culture, provide meaningful opportunities for participation, and ensure affordability, equitable access, and infrastructure support so that the benefits of the energy transition can be distributed more equitably.

This study has limitations because it employs a descriptive qualitative approach using a literature study and interviews involving a limited number of informants. Therefore, the findings cannot yet comprehensively represent the diversity of community experiences across different regions and socioeconomic conditions. This study also does not empirically measure the impact of implementing a humanities-based approach on behavioral changes or the success of energy transition policies.

CONCLUSION

Based on the research findings, the energy transition in Indonesia is not only a shift from fossil fuels to renewable energy, but also a social process involving values, culture, knowledge, community participation, and policies. The study identified four main themes, namely the gap between community values and actions, the role of local narratives and cultural values, community participation that is not yet fully inclusive, and the need for more equitable energy policies. Environmental awareness needs to be supported by access, infrastructure, regulations, and economic conditions that enable communities to use sustainable energy. Cultural values and local narratives can serve as means of increasing knowledge and concern regarding the energy transition, while community participation needs to provide space for communities to express their needs and influence decision-making.

Thus, energy justice concerns not only energy availability, but also equitable access, affordability, and opportunities to obtain the benefits of the transition. The humanities approach through education, communication, cultural values, and community participation is important for supporting a sustainable and just energy transition.

This study contributes to the development of environmental humanities and energy justice scholarship by demonstrating that the energy transition needs to be understood as a social process involving values, culture, knowledge, and community participation. This study also strengthens the conceptual perspective that a humanities-based approach can complement technical and policy approaches in understanding and supporting a sustainable, inclusive, and just energy transition.

For future research, studies on the role of the humanities in the energy transition can be developed by involving more respondents and community groups from regions with different social, economic, cultural conditions, as well as energy potential. Future research can also further examine how culture-, education-, and public participation-based approaches can be implemented and evaluated in supporting the development of more sustainable and equitable energy behaviors and policies.

REFERENCES

- Fathoni, H. S., Setyowati, A. B., & Prest, J. (2021). Is community renewable energy always just? Examining energy injustices and inequalities in rural Indonesia. *Energy Research & Social Science*, 71, Article 101825. <https://doi.org/10.1016/j.erss.2020.101825>
- Fauzi, N., Rosardi, R. G., Sudrajat, & Putri, E. (2026). Prophetic ecopedagogy in social studies learning: Integration of Islamic values and SDGs literacy to strengthen ecological intelligence. *PAEDAGOGIA*, 29(2), 313–323. <https://doi.org/10.20961/paedagogia.v29i2.117804>
- Fitriana, W., Paradongan, H. T., Hafnidah, N., Hariyanto, N., Rahmawan, A. B., & Rahmadita, Y. D. (2026). Applying Heffron's energy justice framework to national energy transitions: A study of intergenerational and intragenerational equity. *Sustainability*, 18(2), 1–24. <https://doi.org/10.3390/su18010001>
- Institute for Essential Services Reform. (2025). *Indonesia energy transition outlook (IETO) 2026*. <https://iesr.or.id>
- Jenkins, K. E. H., McCauley, D., Heffron, R., Stephan, H., & Rehner, R. (2016). Energy justice: A conceptual review. *Energy Research & Social Science*, 11, 174–182. <https://doi.org/10.1016/j.erss.2015.10.004>
- Jupesta, J., Boer, R., Parayil, G., Harayama, Y., Yarime, M., Puppim de Oliveira, J. A., & Subramanian, S. M. (2011). Managing the transition to sustainability in an emerging economy: Evaluating green growth policies in Indonesia. *Environmental Innovation and Societal Transitions*, 1(2), 187–191. <https://doi.org/10.1016/j.eist.2011.08.001>

- Kementerian Energi dan Sumber Daya Mineral. (2024). *Laporan Kinerja Kementerian ESDM Tahun 2023*. <https://www.esdm.go.id>
- Muhammad, F. (2025). Justice in Indonesia's energy transition policies. In M. S. Huda, S. Seah, & J. Qiu (Eds.), *Energy and decarbonization in Southeast Asia* (pp. 42–61). ISEAS–Yusof Ishak Institute. <https://www.cambridge.org/core/books/abs/energy-and-decarbonization-in-southeast-asia/justice-in-indonesias-energy-transition-policies/ADD5B622CDEF75A1B83C2FF04400CAFB>
- Prihantoro, W., Wardhana, Y. M. A., & Hamzah, U. S. (2025). Willingness and ability to pay for renewable energy in Jakarta. *Jurnal Ilmu Lingkungan*, 23(4), 937–949. <https://doi.org/10.14710/jil.23.4.937-949>
- PT PLN (Persero). (2025). *Rencana Usaha Penyediaan Tenaga Listrik (RUPTL) 2025–2034*. <https://www.pln.co.id/investor-relations-en/company-update-en/ruptl-en>
- Saputra, N. D., & Suhartono, E. (2025). Green campus and ecological citizenship: The mediating role of energy citizenship. *Jurnal Riset Sosial Humaniora dan Pendidikan (Soshumdik)*, 4(4). <https://doi.org/10.56444/soshumdik.v4i4.3100>
- Setyowati, A. B. (2026). Geothermal narratives and grassroots resistance in Indonesia: Decolonial frameworks for energy transitions and environmental justice. *Journal of Environmental Policy & Planning*. <https://doi.org/10.1080/1523908X.2026.2297888>
- Siagian, A. P., & Yusuf, B. (2025). *Investment needs of Indonesia's just energy transition: A framework*. Climate Policy Initiative. <https://www.climatepolicyinitiative.org/publication/investment-needs-of-indonesiasjust-energy-transition-a-framework/>
- Sovacool, B. K., Bell, S. E., Daggett, C., Labuski, C., Lennon, M., Naylor, L., Klinger, J., Leonard, K., & Firestone, J. (2023). Pluralizing energy justice: Incorporating feminist, anti-racist, Indigenous, and postcolonial perspectives. *Energy Research & Social Science*, 97, Article 102996. <https://doi.org/10.1016/j.erss.2023.102996>
- Steg, L., Perlaviciute, G., Sovacool, B. K., Bonaiuto, M., Diekmann, A., Filippini, M., Hindriks, F., Bergstad, C. J., Matthies, E., Matti, S., Mulder, M., Nilsson, A., Pahl, S., Roggenkamp, M., Schuitema, G., Stern, P. C., Tavoni, M., Thøgersen, J., & Woerdman, E. (2021). A research agenda to better understand the human dimensions of energy transitions. *Frontiers in Psychology*, 12, Article 672776. <https://doi.org/10.3389/fpsyg.2021.672776>
- Suboticki, I., Heidenreich, S., Ryghaug, M., & Skjølsvold, T. M. (2023). Fostering justice through engagement: A literature review of public engagement in energy transitions. *Energy Research & Social Science*, 99, Article 103053. <https://doi.org/10.1016/j.erss.2023.103053>
- Sundari, R. M., Firmansyah, A. D. A., Oktavilia, S., Azyzia, S. H., Prayogi, R., & Vazi, B. (2025). *Coal transition impacts and the approach to inclusive just transition policies in Indonesia*. International Institute for Sustainable Development. <https://www.iisd.org/publications/report/just-transition-coal-indonesia>
- Wijaya, D. I., & Kokchang, P. (2023). Investigating factors influencing generation Z's pro-environmental behavior to support the energy transition in Jakarta, Indonesia. *BIO Web of Conferences*, 62, Article 04005. <https://doi.org/10.1051/bioconf/20236204005>