

Transparency of Information and Public Participation in Energy Transition

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Abstract: The Just Energy Transition Partnership (JETP) initiative, a climate finance mechanism spearheaded by France, Germany, the United Kingdom, the United States, and the European Union, was established at the 26th Conference of the Parties (COP26) in Glasgow, England, in 2021. The JETP framework, specifically emphasized the participation of non-state actors, including Civil Society Organizations (CSOs), in achieving the objectives of the Paris Agreement. Following its initial launch, a JETP agreement was subsequently established for Indonesia in 2022, coinciding with the G20 Summit in Bali. This study examines the role of CSOs in influencing the energy transition policy discourse surrounding the JETP initiative in Indonesia, with a particular emphasis on their impact on policy formulation through media engagement. To this end, a comprehensive discourse analysis was conducted on 134 articles sourced from ten Indonesian online media outlets, published between August 2020 and June 24, 2024. The analytical methodology involved the application of Discourse Network Analysis (DNA) software to map discourse patterns, and the utilization of the MICMAC (Matrix of Crossed Impact Multiplications Applied to a Classification) software to identify dominant discourse themes. The analysis revealed that transparency and public participation emerged as critical factors significantly influencing the formulation of energy transition policies within the JETP framework.

Keywords: Discourse; Discourse analysis; Energy policy; Energy transition; JETP; Mass media

Introduction

Greenhouse gas (GHG) emissions, the cause of the climate crisis, in the atmosphere continue to increase. Agustiyanti (2021) refers to the International Energy Agency (IEA), in 2023, GHG emissions related to the use of fossil fuels have reached 37.4 gigatons. The Intergovernmental Panel on Climate Change (IPCC) (2023), reveals that the adverse impacts of the climate crisis have endangered the earth and all its contents.

Larsen (2024) revealed that in 2019, China was the largest GHG emitter (27%), followed by the United

States (11%), India (6.6%) and the European Union (6.4%). The use of fossil fuels is one of the causes of increasing GHG emissions. Related to this, there has been international pressure for countries to start making an energy transition. According to LCDI (2020), since 2010, developed countries have consistently succeeded in reducing emissions in the energy sector by 9% in 2019. On the other hand, emissions in the energy sector of developing countries, including Indonesia, tend to increase.

In fact, in the context of Indonesia, the energy transition also provides economic benefits. Farobie et al.

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(2022), revealed that the mandatory biodiesel policy, for example, has a significant impact on economic and social aspects. This program is projected to increase the workforce to 10,182 workers in the biodiesel industry and save foreign exchange of around US\$4.46 billion by 2030.

For developing countries, including Indonesia, the energy transition requires large funding. According to the International Renewable Energy Agency (IRENA), Indonesia will need a total investment of between USD 73 billion and USD 76 billion in the energy sector until 2050 (IRENA, 2019).

One of the energy transition funds that involves many developed countries is the Just Energy Transition Partnership (JETP). The JETP funding scheme for Indonesia was launched on the sidelines of the G20 Summit in Bali in 2022. JETP is led by the United States (USA) and Japan. The word 'just' in JETP means 'fair'. It is hoped that the JETP scheme will pay attention to the aspect of justice.

Indonesia is the second country in the world to receive the JETP funding scheme, after South Africa at COP26. According to Apresian (2021), COP 26 also produced a pact stating the importance of the involvement of non-state actors such as civil society, in achieving the goals of the Paris Agreement. One representation of civil society is civil society organizations (CSOs).

In Indonesia, environmental policies, including the energy transition, are often viewed solely from a technical perspective. However, the policy-making process is influenced by two factors: actors and the discourse of the policy itself (Birkland, 2019; Haelg et al., 2020; Isaac et al., 2022; Kartodihardjo, 2023). Meanwhile, according to Hager et al. (2020), discourse is a connection of ideas, concepts and categories whose meaning is determined to explain a phenomenon. Foucault further stated that discourse is related to the system of knowledge and power. Therefore, discourse cannot be separated from the political interests of certain parties (Freeman, 2023; Karlberg, 2005; Rogers, 2013).

Kartodiharjo (2023), revealed the influence of discourse in the policy-making process starting from determining problems and policy solutions. The discourse used by policy-making actors will vary based on their respective political interests. This difference also causes differences in the choice of solutions produced.

Apart from state and business actors, there are non-state actors involved in policy-making, these actors are civil society. One representation of civil society is CSOs. According to Kalmirah et al. (2023), the CSO movement in environmental issues in Indonesia cannot be separated from the global environmental movement that developed after the Earth Conference in Rio de Janeiro in 1992.

In this regard, this study aims to examine transparency and public involvement in energy transition policies in Indonesia. There are at least two novelties in this research: (a) This research will uncover issues of transparency and public involvement in the formation of energy transition policies. (b) This study uses two software tools (Discourse Network Analysis and MicMac) to analyze media coverage to assess the extent of transparency and public involvement in energy transition policies.

This research is expected to contribute to scientific knowledge by enriching the methodology of policymaking processes related to energy and climate transitions. It is also expected to strengthen the role of civil society movements in improving the quality of future energy transition policies in Indonesia.

Method

Location and Time of Research

This research was conducted in Jakarta and Wawonii, Southeast Sulawesi, from June to December 2024.

Research Tools and Materials

DNA software is one way to visualize the relationship between actors and discourse (Laifeld et al., 2012). Furthermore, from the discourse that appears in online media, key discourse variables will be determined using MICMAC (Matrix of Crossed Impact Multiplications Applied to a Classification) software. This software is a structural analysis method that is often used to identify key factors (Soesanto, 2021).

Research Materials

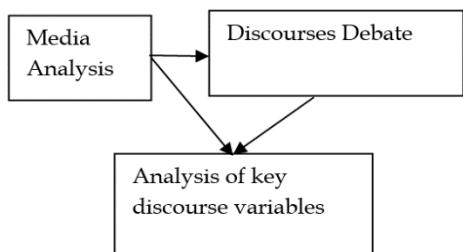
The online mass media analyzed in this study are: (a) Kompas.id; (b) CNN Indonesia; (c) Coverage 6; (d) Detik.com; (e) Tempo.com; (f) Tribunnews.com; (g) Java Post; (h) Merdeka.com; (i) Sindonews.com; (j) Kumparan.com; (k) Suara.com; (l) Tirta.id. These online mass media were chosen because based on a Reuters Institute survey, they are the most trusted online mass media in Indonesia (Steele et al., 2023).

Research Methods

This research used literature review, media content analysis, and in-depth interviews with selected informants.

Research Stages

This study uses a framework of thought that relates discourse, policy space and the political interests of the actors involved in the formulation of energy transition policies.

**Figure 1.** Framework of thought

The stages of this research are as follows: (a) Conducting media analysis using DNA tools. (b) The DNA analysis results were analyzed using MicMac software. (c) To validate the results of the actor and discourse analysis, researchers conducted in-depth interviews with stakeholders related to energy transition policies. The informants interviewed included government circles (KLHK, JETP Secretariat), businesses (rooftop solar entrepreneurs), energy transition experts, and activists from the Indonesian CSO movement.

Table 1. Map of Actors and Discourse

Discourse	The actor agrees	Counter Actor
Electricity Liberalization	CSIS	Serikat Pekerja PLN, Center for Energy Policy
Electricity prices from Renewable Energy	IESR, CTI (Carbon Tracker Initiative), IBEKA	LPEM UI, Center for Energy Policy
Debt scheme in JETP	CSIS, Trend Asia, 350.org, IBEKA,	Menteri BUMN, Kemenkomarves
Early retirement of PLTU	Dubes Inggris, Greenpeace, Bank Dunia, Komisi VII DPR RI, Kementerian ESDM, IESR, Celios	PLN
The JETP Secretariat is not transparent and participatory	Climate Rangers Cirebon, 350.org	Sekretariat JETP, Kementerian ESDM
Renewable Energy Supports Economic Growth	Dubes Inggris, IBEKA	Kemenkomarves
Co-firing of PLTU is a false solution	Trend Asia	Kemenkomarves, METI

Key Discourse on Energy Transition in Online Media

The values given by the informants were then entered into the MICMAC software. The following are the dominant and influential variables in the energy transition in Indonesia. The number 3 indicates a variable that has a very strong influence. The lower the number, the smaller the influence of a variable on other variables.

The discourse variable of transparency and participation in JETP (TP_JETP) has a very strong influence on the discourse of Electricity Liberalization (L_Electricity), Electricity Price (H_Electricity), JETP Debt (U_JETP), Moratorium or early retirement of PLTU (M_PLTU), and Use of Co-Firing (Co_firing). The discourse of transparency and participation in JETP also has a strong influence on the discourse of renewable energy prices (ET_Ekonomi).

The variable that influences other discourse variables is Debt in JETP (U_JETP). The debt discourse variable in JETP has a very strong influence on the electricity liberalization discourse variable (L_Listrik),

Result and Discussion

The Energy Transition Discourse Debate in Online Media

The discourse analysis of the equitable energy transition in Indonesia was conducted by analyzing 134 articles in 10 online media in Indonesia (Steele et al., 2023) during the period from August 2020 to June 24, 2024. The discourse analysis in this media used the keyword 'Energy Transition'. Furthermore, the analysis of actor and discourse networks was carried out using DNA software tools (table 1).

From DNA in online media, discourses were found that became variables of energy transition in Indonesia. From the 7 variables of discourse on energy transition and JETP in Indonesia, informants in the interview gave values to determine the key discourse variables that were most influential in the equitable energy transition in Indonesia.

Moratorium/early retirement of PLTU (M_PLTU), Transparency and participation in JETP (TP_JETP). The debt discourse in JETP also has a strong influence on Electricity Prices (H_Listrik), renewable energy prices (ET_Ekonomi) and Co firing (Co_Firing).

From the map of the influence of discourse variables, it can be seen that the issue of transparency in JETP is a key discourse variable that influences other discourse variables.

Figure 2 shows that Transparency and participation in JETP (TP_JETP) are independent variables and have a strong influence. Debt in JETP (U_JETP) is the second discourse variable that has a strong influence, but is also more influenced by other variables. Moratorium/Early retirement of PLTU is the third strong discourse variable but this variable is more influenced by other variables. The JETP transparency discourse has the potential to indirectly strongly influence the PLTU moratorium (early retirement of PLTU) and also future electricity prices.

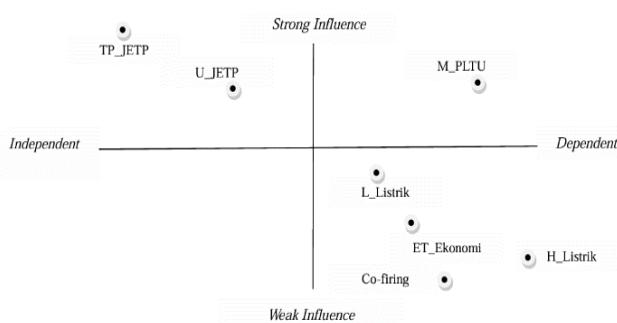


Figure 2. Map of discourse influence

The results of interviews with several informants with civil society organization activist backgrounds revealed that the public consultation held by the JETP Secretariat was more about socialization rather than actual public consultation. The limited policy space also occurred in energy transition projects at the operational level in the field. Table 1 shows several project implementations in the field that have problems with information transparency and public participation.

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Public Engagement Beyond the JETP Scheme

Outside the JETP mechanism, the implementation of energy transition projects in the field also has problems with transparency and civil society involvement. Several projects that have problems related to information transparency and public involvement are the geothermal development project in Pocoleok and nickel mining for raw materials for electric cars.

Geothermal project in Pocoleok, East Nusa Tenggara (NTT). In the case of geothermal development, which was funded by the German Development Bank (Kreditanstalt für Wiederaufbau/KfW). Local communities feel they do not get enough information and are not involved in the project. Some civil society protested the project, some local people and journalists experienced intimidation and criminalization (Walhi, 2024).

The nickel mining project in the name of energy transition for electric cars in Wawonii, Southeast Sulawesi, has also raised issues related to information transparency and public involvement. Wawonii is one of the small islands in Southeast Sulawesi. Most of the residents on the small island of Wawonii farm to meet their daily needs. Their crops include cloves, nutmeg, coconuts and cashew nuts. From the results of their farming, they can not only meet their daily needs but also pay for their children's school fees.

Based on a focused discussion with residents on November 28, 2024, it was revealed that the Wawonii community admitted that they did not receive sufficient information regarding the nickel mine. The residents' legal efforts to sue the nickel mining company have been won by the residents, but the nickel mine continues to operate. Several residents who fought the company were criminalized.

Conclusion

Energy is related to the livelihood of many people. Energy policies will affect people's lives, including policies related to energy transition. In relation to this, energy transition policies need to be more open and involve the community. Civil society organizations have an important role in strengthening community involvement in energy transition policies. From the discourse analysis using DNA tools and then analyzed using MICMAC tools, it can be seen that the discourse of transparency and community involvement in energy transition policies in the JETP scheme is a key discourse variable, which can influence other discourse variables. The discourse of information openness and civil society involvement is a policy space in the energy sector. The issue of information transparency and public involvement also occurs in the practice of energy transition in the field, such as in the geothermal project in Pocoleok and also the nickel mine in Wawonii. This narrowing energy transition policy space will hinder a just energy transition. An unjust energy transition is not in accordance with the principles of sustainable development (SDGs).

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Author Contributions

Conceptualization Dr. Ir. Soeryo Adiwibowo and Dr. Ir. Edy Hartulistiyo; methodology, Dr. Ir. Soeryo Adiwibowo; funding acquisition, Auriga and Dala Institute.

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Conflicts of Interest

The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript; or in the decision to publish the results.

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