International Journal of Sciences: Basic and Applied Research (IJSBAR)

ISSN 2307-4531
(Print & Online)

http://gssrr.org/index.php?journal=JournalOfBasicAndApplied

Public Policy Communications in Indonesia's Bioenergy Development

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Abstract

This study focuses on the study of bioenergy development from the perspective of public policy organization communication. Based on the Sensemaking principle, the construction of public policy communications on bioenergy development is explored to anticipate the impact of the energy crisis. The success or failure of the policy is strongly influenced by the construction of communication in the development process of policy making involving many parties. In the constructivist perspective and phenomenological method, public policy communications on bioenergy development has the top-down communications format which is telling/monologic to the public so public suggestion beyond government structure is insignificant.

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The findings indicate that the most important party in bioenergy development is the Ministry of Energy and Mineral Resources as the regulator, the Ministry of Agriculture as the feedstock provider and the Ministry of Finance as a subsidy and fare determiner. External parties involved are having a role more as consumers and mediators relating to the process of suggestion searching. The material discussed is only the economic aspect to the exclusion of environmental aspects. The implications of such communications construction, the public does not have much role because the government is less paying attention to the acceptance level of society.

Keywords: constructions; public policy; sensemaking; bioenergy.

1. Introduction

Organizational communication is the key in the process of public policy construction of renewable energy (RE) development. There are several factors that may cause the policy in RE development is not optimal. Subroto in Panigoro [1] stated that the government's lack of political will due to existing regulations is not followed by strong policies, as well as the lack of coordination and alignment between relevant government agencies and ministries. The communication factor in this case becomes important; other possibilities in the policy-making process of RE development are not well communicated to the public.

In the process of public policy making, cross-sectorial communication is very necessary. By communication, the vision and purpose of a policy can be unified. Energy policy is a strategic policy beside food policy. The threat of energy crisis requires the government to develop public policy as an effort to resolve the threat. Energy crisis occurs due to the dependence on energy derived from fossils (oil, coal and gas). The way out of crisis is the development of RE. RE in bioenergy form is one solution choice, although Indonesia's bioenergy source is abundant and has been developed, but its development is not optimal.

Communication in the arrangement of the right on the target public policy is needed to obtain a good response and support from the people. Organizational communication is required by policymakers to respond/interpret the environment and manage perceptions in order to form the chosen policy. The role of the community is an important factor in the formulation and implementation of public policy. In addition to be the foundation of reference, people's understanding is also a great power to support the implementation of a policy.

The dependency of energy consumption on fossil fuels (oil) has the potential to create a crisis. Data of the Asian Development Bank [2] shows that in 2004 the energy (oil) crisis began. The energy balance generally shows that the energy consumption growth of +3.9% is inversely proportional to the total energy production of -10.6% [3]. The threat of crisis is also related to the energy mix used. Most of the energy production comes from fossil energy, 31.49% oil, 24.82% coal and 19.04% gas [4]. The development of RE is one effort to anticipate the crisis of energy from the economic and environmental aspect.

The efforts to anticipate the energy crisis by developing RE in the form of policy need to be well formulated. The Government has made several policies, among others, Law No. 30/2007 on Energy [5], PP. 79/2014 on National Energy Policy [6], and Presidential Regulation No. 22 of 2017 on the General Plan of National Energy [7]. A comprehensive communication process is required to obtain maximum results on the policies of RE

development. The policies in RE development are not working optimally. Roadmap already exists but its implementation is very slow that it cannot fulfill the energy needs.

This study observes the communication that occurs in the organizational context of public communication planning. By definition, Sensemaking theory is a process in which organizational members understand organizational events by cues extraction to make plausible explanations. A policy should pay attention to the sensemaking characteristics which are: grounded in identity construction, retrospective, enactive of sensible environments, social, ongoing, focused on and by extracted cues and driven by plausibility rather than accuracy [8]. The use of sensemaking theory to discuss public policy relating to the energy crisis has not been found specifically. The closest issue ever discussed with sensemaking is the issue of climate change by Detten and Faber [9]. Regarding to the policy aspect, Cherni and Kentish [10] identified the policy factors that led to the slow pace of renewable energy in China. Winfield and Dolter [11], Rogers and his colleagues [12], Zoellner and his colleagues [13], West and Winter [14] and Ricci and Flynn [15] investigated the energy policy of the non-governmental aspect, whereas this study tries to analyze the communication of organizational energy policy on the government aspect.

This research analyzes organizational communication policy makers that occur in the anticipation of public policy formulation of energy crisis. Public policy communications construction research uses the foundation of a constructivist paradigm that focuses more on organizational processes than organizational stability [16]. The assumption that social action cannot be observed, but more is directed to the subjective meaning towards social action [17, 18].

The purpose of this study is to analyze the construction of organizational communication in the formulation and implementation of public policy in bioenergy development. Communication construction is observed from: (1) the role of the parties involved; and (2) the communication model used in bioenergy development.

2. Research Methodology

This research uses constructivist paradigm with qualitative method. The approach used is phenomenology approach. Phenomenology focuses on the human conscious experience; an attempt to understand the process (process knowing) through direct experience [19]. According to Orbe [20] phenomenology is a study in understanding the essence, or experience of communicating. This research is conducted operationally for emic data (how people think) by understanding the experiences of decision makers about bioenergy development.

The unit of analysis of this research is the individuals of decision makers of public policy communication of bioenergy development in the institutional level. The study obtained data from the National Energy Council (NEC), the Ministry of Energy and Mineral Resources (MoEMR), the National Development Planning Agency (Bappenas), the Ministry of Agriculture (MoA) and the Ministry of Forestry and the Environment (MoFE).

This study was extracted based on qualitative data obtained from the experience of organizational communication in bioenergy development. Perceptions of informants about the role of each party and the communication model used in bioenergy development. The communication model in this study is seen from the

material discussed, the considerations used and the format of communication. Data in the research with a phenomenological approach were stated by von Eckartsberg cited by Moustakas [21]. Data obtained by conducting focused or semi-structured in-depth interviews.

3. Result and Discussion

Energy issues cover various aspects of: economic, political, social and cultural. The range of diverse aspects create a consequences of the number parties involved. As part of the energy mix, bioenergy also involves many parties in the development process. The relevant parties play a role in the field of competence they have. Interaction between roles of related parties is expected to produce a synergy. The similarity of attitudes and perceptions in bioenergy development is required to accelerate the implementation of the policy. If the attitude and perception of the urgency of bioenergy development is not synergistic, then it is worried that the policy implementation will not work properly. A good and intense organizational communication model in order to realize a good policy.

Bioenergy development is full with technological mastery so there needs to be a comprehensive communication program that people can receive it well. This study is questioned on what is the right construction of communication model for constructing public policy on bioenergy. To facilitate the sustainable natural resource management, communication strategies, foundations and possible processes to share the effective information, the development of critical skills and collective action are required.

The arrangement of strategic design and process is important because it deals with complex issues involving multiple stakeholders with often conflicting interests. Fliert stated [22] there have to a capacity development and an abolition of institutional or political barriers. An assessment of the impact not only considers direct economic benefits, but also identifies human factors and social impacts and how this contributes to sustainable economic and environmental impacts.

The aspects in describing the construction and communication model used in preparing public policy in the field of bioenergy are observed from: (1) The Involved parties, and (2) Communication Model used in bioenergy development.

3.1 The Party Involved

Based on informant experience in this research, there are two parties involved in public policy communication of bioenergy development. The First, the internal parties are the MoEMR as regulators of energy policy in general and bioenergy in particular. According to the informant's experience, the MoA serves as a provider of bioenergy feedstock. The Ministry of Finance (MoF) is a party considered to play a role as a regulator of energy fares and subsidies. The second, the external parties that play a role as the consumers are PLN (State Owned Electricity Enterprise) and Pertamina (Indonesian state-owned oil and natural gas corporation). Independent Power Producer (IPP) in this case can have a role as consumers and producers. Other roles are mediators which are Aacademia (scientists), non-governmental organizations (NGOs) and netizens. The figure below explains the position and role of the parties involved in bioenergy development in public policy communication.

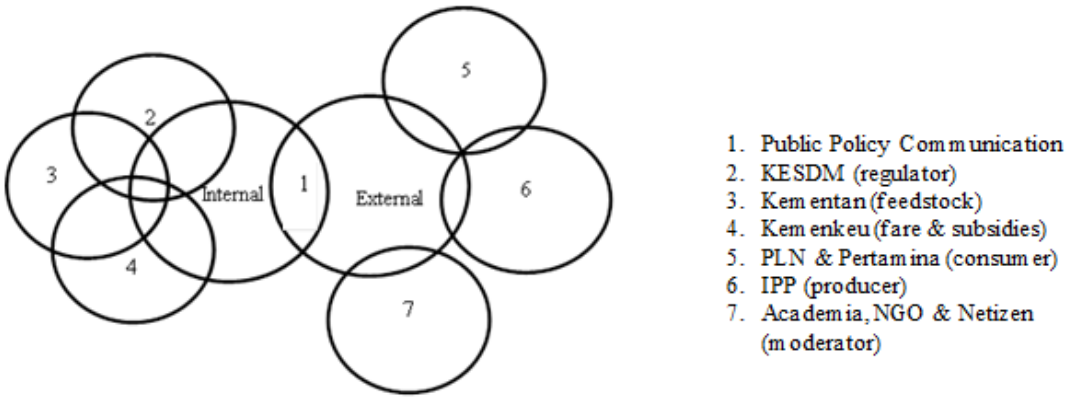

Figure 1: Parties involved based on their position and role in communication

Bioenergy development is agreed as one way to anticipate the energy crisis in addition to the new energy mix and other renewable energy. Organizational communication that discusses public policy on energy development is performed by involving internal and external parties of related institutions. NEC as it is known consists of various elements of members, the government elements as regulators and stakeholder elements. Through Presidential Regulation No. 26 of 2008, NEC was established to realize energy security in order to support the national sustainable development. NEC duties are; to design and formulate a national energy policy (KEN) to be established by the Government with the approval of the House of Representatives, to establish the General Plan of National Energy (RUEN), to establish steps to overcome crisis condition and energy emergency (Krisdaren) and supervise the implementation of cross sectorial energy policies.

In the NEC organizational structure, there are seven ministries that are members of government elements outside the MoEMR. Based on the informant's communication experience, MoEMR and the MoA, is the institution that has the greatest role in the development of bioenergy.

It was mentioned that MoEMR is the most competent element in the field of energy planning and regulation in general and bioenergy in particular. MoA was mentioned as an influential element in bioenergy development. MoA is a competent institution in the field of planning and regulation related to bioenergy feed stock. The development of feedstock becomes an additional responsibility in addition to its efforts to realize food sovereignty. Both parties should cooperate more intensely in discussing the development of bioenergy; because these two parties are considered have a big role directly.

Bioenergy for now is still a relatively expensive energy material so that government intervention is required to regulate the issue of subsidies and fares. MoF is an institution that has the authority to regulate bioenergy subsidies and fares. In informant’s opinion, MoF is the influential party for policy making.

The policy-making informants mentioned some external parties, state-owned enterprises engaged in the field of energy such as the PLN and Pertamina have a significant role in public policy communication process of bioenergy. The private sector in this case is Independent Power Producer (IPP).

PLN, Pertamina and IPP are parties that play a role in providing suggestion and act as bioenergy consumers. The role of society cannot be separated in preparing the policy of bioenergy development. In various communication forums, the community in this case is the academics/universities outside NEC members, non-governmental organizations and netizens are the parties involved and provide suggestion in the context of bioenergy development.

In Sensemaking theory, organizational communication in making policy involves the concerned parties. The concerned parties which are related to the perspective of the individual in understanding the problem then search the solution. The problem that arises is the threat of energy crisis and the solution is the development of bioenergy. The identity of the individuals involved in decision-making is the dominant factor affecting the perspective. Grounded in identity construction in this issue cannot be separated from the aspects of enactive of sensible environments which states that the communication environment affects individuals in making policies.

Decision-making can be studied with the concept of information processing model of choice, because the core of this model is a matter of concern. The organizational agenda as the most prominent or urgent issue reflects what members of the organization (actors) believe. Organizational and individual concerns are limited; agenda arrangement requires the organizations to prioritize the most urgent (rational) issues. The concern is perhaps less determined by informational reasoning and other with emotional responses to political issues, 'emotions are crucial in determining priorities [23].

3.2 The Communication Model used

Based on informant's communication experience, the materials discussed involve raw material availability, access and incentives, biomass development, biofuels, bioenergy potentials, fares and energy independence. Similar with the discussions about the energy crisis, on the side of the bioenergy development discussion are also not discussing the environmental side (green energy, sustainable development and environmental conservation).

Public perception and readiness in bioenergy development according to informant's experience is the aspect of consideration in preparing public communication. Public participation is important because successful or not bioenergy development depends on public participation. The public will be able to understand the issues and participate in if they receive sufficient information on bioenergy development. This ideal situation is not found in the informant's communication experience. Found in interviews with several informants, the material on how to socialize on bioenergy was not specifically discussed. About how to communicate bioenergy policy is not found in the informants' experience in organizational communication.

An interesting finding is on the aspect of consideration in organizational communication on bioenergy is the aspect of communication readiness between institutions. Inter-institution communication must be well established before establishing the communication with the community extensively. Sectorial ego is still an unfinished discourse to resolve even though NEC has been established as an institution that contains relevant stakeholders in the field of energy in general and bioenergy in particular.

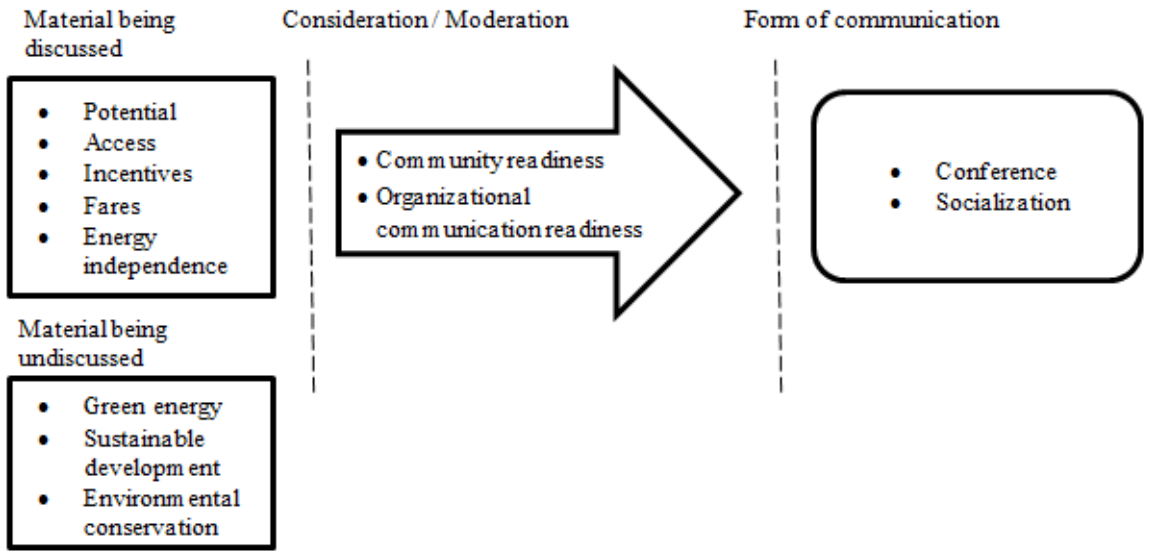

Figure 2: Material, considerations and forms of organizational communication

The sensemaking perspective on the aspects of the material discussed is a retrospective outcome, a process of reflection is necessary in making the decisions. Look back at the process that has been through. Reflection of construction / communication model in preparing public policy in the field of RE bioenergy can be analyzed from the material discussed.

The Government through Presidential Regulation No. 26 of 2008 in the energy field has established NEC as a communication forum in discussing KEN, RUEN, and supervising cross-sectorial policies in the sector of energy. It is conducted by holding conferences among members. Besides conferences, NEC and related state institutions also held socializations which aim to provide information and obtaining suggestion from stakeholders. Some of the socialization activities conducted are participative communication model and are possible to be implemented to get suggestions from the community. Specifically related to RUEN, the communication is done with top down model, meaning that direction of the communication tend to be from the government to the society.

The top down model is identical to the "telling" function or monologic function according to Roling [24], in a development communication. Communication conducted in discussing bioenergy development policy is done with three functions. The first, the policy communication is undertaken by NEC and related parties in making rules and policies that is known by related parties and the public widely. This communication is done so that the relevant parties and the community understand their rights and obligations and it became the basic materials for an empowerment. Other than that, it helps to understand the legal and administrative opportunities/restrictions so it is able to construct a realistic initiative that has a good impact on bioenergy development.

The second is educational communication; this function contains information on new ideas and technologies

about bioenergy development. In the context of communication at the bioenergy development, the implemented socialization has a function to build a capacity and change behavior; it also can contribute to empowerment. Further development, the function of educational communication in bioenergy development is to apply the basic principles of marketing in order to get the message and affect the decision-making of the relevant parties and the community. By conducting socialization, the communication becomes more participative and allows for dialogue and adaptation of messages as a part of the learning process.

The third is public relations or strategic communication, this function is used to provide information about organizations or initiatives to raise awareness and gain support in bioenergy development. The implemented communication in bioenergy development is cross-sectorial communication. It is required supports from various parties; it can be a financial commitment by a funding agency or private donor, as well as raising public opinion on the importance of bioenergy development as the anticipation of energy crisis. For example, the support from the Kemenkeu, is important because bioenergy development still requires a high cost. Subsidies are needed on the buyer side and there is not enough incentive to utilize RE especially bioenergy.

Bioenergy development is related to the process of applying technology, a one-way monologic approach or a top-down model related to technology transfer will not be able to accommodate the process. To encourage a favorable change for all, it requires the community involvement at all stages of planning, implementation and evaluation of the development process [25, 26]. The function of "sharing" or dialogical function in the development communication according to Roling [24]. The first is participatory communication, providing opportunities for stakeholders (communities) to express perspectives and needs, and negotiate on complex bioenergy development issues. The development of monological educational communication, participatory communication can be a foundation for collective decision-making and action, and it reinforces individual or groups confidential to support the bioenergy development programs as an action to anticipate the energy crisis.

The second is organizational communication; a structured communication is required in formulating a bioenergy development policy. With a good structure, organizational communication can accommodate the coordination interests by building information and feedback systems within an organization. The construction of good organizational communication in discussing bioenergy development policies make stakeholders know what plans, problems are there, and have the opportunity to express their views. A participative monitoring and evaluation system can help to operationalize the organizational communication function. A formal communication model by organizing conferences organized by NEC will have more implications when community's participation is possible. Public participation can be felt in the organizational communication by conducting socialization programs with related institutions, academic communities and the general public as the subjects of public policy goals.

The construction of bioenergy development policy communications cannot be separated from the environmental issues. Sustainable development is a discourse that becomes the answer of environmental problems. On the communication side, sustainable development refers to a dialogical communication model, which is based on an interactive participatory approach. The communication takes place about sharing knowledge to understand the options for a change and its implications. Communication is facilitating the involvement at every level of

society [27]. Empowerment has become increasingly important for stakeholders at all levels. In relation to bioenergy, the model of implemented communication considerate the aspects of human resources, is the community has a sufficient capacity to adopt the bioenergy as one of the available sources of energy. The capability of human resources is also related to hard skills related to the ability to process the available raw materials which is a reflection of people's readiness.

The retrospective aspect in sensemaking is taking a consideration of the process of reflection in making decisions by looking back at the processes that have been passed. The experience of communication in bioenergy development becomes the reference of policymakers. For example, the development of commodities as a fail bioenergy feedstock.

The failure of jatropha commodity development in this case is the problem of coordination (communication) between sectors. Communities are asked to plant jatropha but it cannot be processed in the end because nobody has done and advanced from the raw material significantly.

An important lesson as a reflection in the development of jatropha planting program is the unpreparedness in presenting entrepreneurs who will accommodate the harvest in the program, counseling on crop maintenance and the various preparation of production needs.

Evidently after the planting program was implemented, many of the gardens are not maintained and when the harvest has been done, farmers were confused with the sale of harvests. The economic low value is due to the traders who dare to buy the harvest but at the very low the price. It is suspected that the Jatropha program is driven by plausibility rather than accuracy, it is feared that the model determination is only based on the habit without regard to the accuracy.

The communication model should consider on focused on and by extracted cues. Signs and cues from various parties are interpreted as suggestion for the benefit of bioenergy development. With a conducted dialogue in socialization format, NEC and related institutions will achieve the same problem statement formulation. The same problem statement formulation will result in the optimal solution formula in developing bioenergy involving many parties and interests.

3.3 Sensemaking used in public policy communications

The findings of the study show that seven sensemaking theories in the analysis aspect discuss the communication of the parties involved in the formulation of bioenergy policies are identified using the characteristic of grounded in identity construction and enactive of sensible environments.

At the aspect of the communication model in the formulation of bioenergy policies is identified using retrospective properties, focused on and by extracted cues and driven by plausibility rather than accuracy. In detail, the position of communication analysis aspects of bioenergy development with seven sensemaking properties is described in the table below:

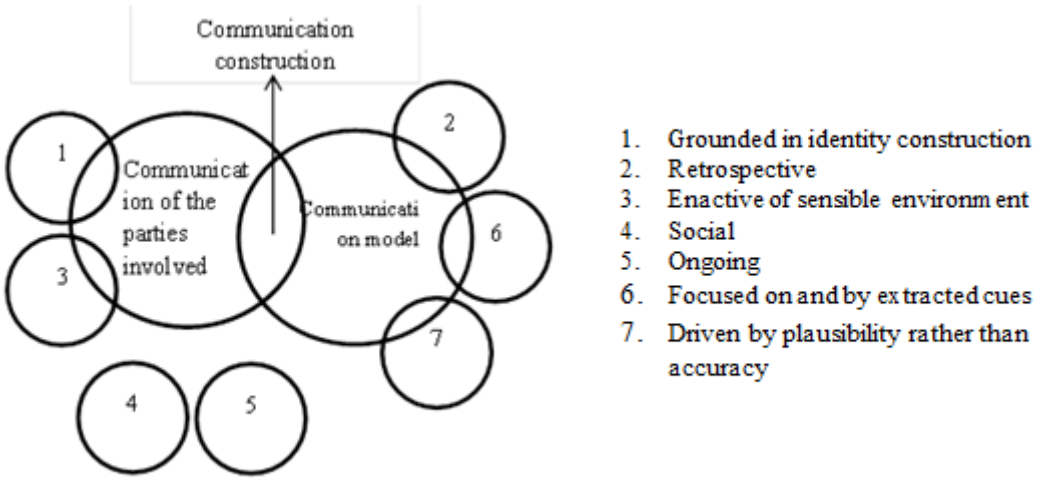

Figure 3: Sensemaking Aspect applied in the analysis

4. Conclusion and Recommendation

4.1 Conclusion

The construction of public policy communication on bioenergy development is seen from several aspects.

1. From the eight ministries that are the members of the NEC government, only three ministries are considered to have the most important role in the development discussion. The ministries are MoEMR as regulator, MoA as feedstock provider and MoF determines subsidy and fare. The external parties involved are involved more as consumers and mediators relating to the process of seeking suggestion in the context of bioenergy development.
2. The material discussed in the public policy communication of bioenergy development is focused on the economic aspect, not talking about environmental issues such as green energy and sustainable development. Society preparedness and organizational communication are considered to conduct public policy communication through conferences and socialization.
3. Public policy communications on bioenergy development are identified as top down which is telling/ monologic to the public so that public suggestion outside the government structure is not significant.
4. At the aspect of the parties involved in the formulation of bioenergy policy, the identified sensemaking properties are grounded in identity construction and enactive of sensible environments. While the communication model aspects in the formulation of bioenergy sensemaking policy that is identified are retrospective, focused on and by extracted cues and driven by plausibility rather than accuracy.

4.2 Recommendation

1. Public policy communication should involve more people. The success of public policy can be seen from the support and acceptance of the community because the principle of sensemaking is the policy

makers need to interpret the environment including the perception and expectations of the community.

2. Cross-sectorial communication in government should be expanded more by involving other parties who have strategic role not only complement role.
3. Bioenergy is believed to be a solution of the energy crisis and poverty alleviation. The real issue that is no less crucial is bioenergy placed as an alternative solution to the energy crisis on the side of environmental sustainability, sustainable development and poverty alleviation.
4. This research however, has a limitation on its coverage of the organizational structure of bioenergy development. In policy making, organizational structure can be understood as a factor that determines the direction of a policy. Structure is a reflection of the power of information in making decisions.
5. The results of this study can be followed up by using different perspectives. Further studies, for example, can use a critical perspective with the idea of structuration that sees the structural aspects of power relations among institution that arrange the energy policy.

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