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Formulation of Energy Conservation Policy as Support of National Energy Security and State Defense at the Marine Education Command

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Abstract
This study aims to analyze and formulate energy conservation policies in the Marine Education Command (KODIKMAR) area. This study uses qualitative methods to obtain in-depth interview data with various competent parties in the Kodikmar environment, which is used as the object of study in the study. The results of the triangulation analysis explain that the energy conservation policy in the Kodikmar environment as an effort to support national energy security has not been carried out or there has been no decision on energy conservation actions within the TNI. Government Regulation Number 79 of 2014 concerning National Energy Policy and Presidential Regulation No. 22 of 2017 concerning the General National Energy Plan (RUEN), although it is implemented across sectors, it is not included in the field of defense and security (TNI). The inclusion of Presidential Decree 35/2018, which is coordinated by the Deputy for Coordination of Maritime Sovereignty and Energy, still focuses on six regions out of 12 civil institutions. TNI Headquarters and TNI AL Headquarters need to issue policies as the legal basis for Conservation at Kodikmar according to the TNI hierarchy, and this employee work system is still the main obstacle. For this reason, the role of the DPR is relatively needed, reviewing energy use and the need to formulate energy conservation policies within the TNI.
Keywords: energy conservation, policy formulation, energy security, national defense.
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Introduction

The problem of potential energy resources is an aspect that becomes a top priority that determines the dynamics of the social economy, politics and national resilience (Rahman, F, 2018). Sishanrata, in principle, refers to very rapid technological progress accompanied by the use of air and space dimensions, so all countries have been forced to engineer their country's security defense system that must rely on technology and defense that is total (Zuhdi, S, 2018). A total or comprehensive security defense system, of course, aims to deal with threats that are also comprehensive in nature. In this case, it is any threat that is expected to endanger the sustainability of the existence of a nation state. Now all countries are facing one of the threats that are part of the forecast for the upcoming “overall threat”, namely the threat in the form of the Corona Covid-19 Virus. At this point, it is very clear later on how countries that are facing the threat of Covid-19 develop strategies that rely on technological capabilities and total defense, which is another word that represents the term "total". At first glance, national security defenses that rely on technology and total defense seem easy to implement quickly. However, the reality on the ground proves the opposite, because it is not simple to unite steps in one operation concept against the threat of Covid-19.

Wiratnakusumah (2021), that the impact caused by Covid-19 is very complex, and relatively can be called a biological weapon that was deliberately created by certain parties to cause global chaos to get to a new balance point. Meanwhile, Ngasiman (2021), explained that Indonesia cannot view COVID-19 as a mere health threat situation. There are other perspectives that need to be explored and deepened further. It was further explained that in order for the country to be more alert in dealing with the threat of an outbreak, such as COVID-19, from the intelligence and defense perspective, the government needs to strengthen biological defense (biodefense) in military operations. This is an effort to defend against biological agents used as weapons by the parties to the conflict as well as against endemic infectious diseases.

Murziqin (2013) and Hikam (2014) report that Indonesia is weak in terms of defense and security, because the defense equipment it has is still relatively unmodern compared to neighboring countries. The Ministry of Defense also said that building a military force in a country is very important to anticipate attacks that might come from outside, so a larger budget is needed to modernize the TNI's defense equipment (Palupi, Anshori, and Suhardono, 2020). Indonesia as an archipelagic country consists of 80% of the sea area and 20% of the land area, so defense equipment and maritime security transportation are very important. Mulyadi (2019), transnational crime by sea has grown so rapidly, and Palupi, Anshori, and Suhardono (2020),

Energy management momentum is important in order to provide input and formulate national energy

policies, which currently need to find alternative management. One of the main considerations is the 2025 projection, which is predicted that Indonesia will experience an energy crisis if it does not immediately implement appropriate and effective national policies in energy management. The national policy in question is not only exploring and exploiting non-renewable or conventional energy sources, but also policies for finding, managing, and utilizing renewable energy. For this reason, the challenges for national security in the energy sector in the future include the ever-increasing energy demand, energy policies that have not run optimally,

According to several research reports as explained by Syamsir (2016), Yuniarti, Sukisno and Wiyono (2017), and Sugiyono (2017), that the pattern or model of energy conservation policies until now is still of a production-consumption pattern, and is not suitable for maintaining national energy availability. . For this reason, it is necessary to stimulate potential sectors that support the creation of an energy mix and the search (exploration) of new energy sources as new reserves. However, the research report of Setyawan, Yoesgiantoro, and Boedoyo (2020) which examines the use and conservation of energy for the benefit of military education, which since this educational institution was founded has never conducted an energy audit on buildings and their operations. Azhar and Satriawan (2018), analyzing the implementation of new energy and renewable energy policies in the context of national energy security shows that there are gaps in policy implementation, namely that they do not yet have an effective model for energy conservation. So (2014), explains that the factors that influence the successful implementation of energy conservation policies are disposition factors, environment, communication, and bureaucratic structure factors, which are supported by neutral resources in the implementation of energy conservation policies; and Yuniarti, Sukisno, and Wiyono (2017), conclude that the trend of rising costs related to energy issues is increasingly crucial, due to diversification and inefficient energy conservation. explain the factors that influence the successful implementation of energy conservation policies are disposition factors, environment, communication, and bureaucratic structure factors, which are supported by neutral resources in the implementation of energy conservation policies; and Yuniarti, Sukisno, and Wiyono (2017), conclude that the trend of rising costs related to energy issues is increasingly crucial, due to diversification and inefficient energy conservation. explain the factors that influence the successful implementation of energy conservation policies are disposition factors, environment, communication, and bureaucratic structure factors, which are supported by neutral resources in the implementation of energy conservation policies; and Yuniarti, Sukisno, and Wiyono (2017), conclude that the trend of rising costs related to energy issues is increasingly crucial, due to diversification and inefficient energy conservation.

With regard to the utilization of national energy resources, especially in military education institutions such as the Kodikmar Surabaya with reference to one of the strategies for utilizing renewable energy sources from the types of water energy, geothermal energy, marine energy, and wind energy directed to electricity, it is still dominated by the use of renewable energy sources. electricity (PLTA) and fuel. The reports of Yuniarti, Sukisno, and Wiyono (2017), and So (2014), provide conclusions about the need to develop a governance model that can work with the management administration system which has been relatively ineffective and constrained by political factors and the bureaucratic system.

Review Energy Conservation Policy

Anderson (Suharto, 2010), public policy is a purposive of action followed by an actor or set of actors in dealing with a problem or matter of concern. The concept has the understanding that the understanding of public policy is the level that aims to achieve the resolution of a problem followed by the making of an agreement between the relevant stakeholders. Theodoulou (Nugroho, 2012) suggests that the public policy process is a movement from identifying problems which are then included in the policy agenda and finally implemented and seen for their effectiveness. Eyestone (in Winarno, 2012), that broadly public policy can be defined as the relationship between a government unit and its environment. Dye (Winarno, 2012), said that public policy is whatever the government chooses to do or not to do. According to Winarno (2012), the definition proposed by Dye, although quite accurate, is actually not sufficient to describe the substance or essence of the real public policy.

Nigro and Nigro (Islamy, 1997) mention that he does not distinguish between decision-making and policy-making, saying that there is no absolute distinction to be made between decision-making and policy-making, because every policy-making is a decision. But wisdom forms a course of action that directs the many kinds of decisions that are made in order to carry out the goals that have been chosen. Every decision maker views politics differently from other decision making. Not necessarily a problem that is considered by the community to be solved by policy makers can become a political issue that can enter the government's agenda which is then processed into policy. The process of formulating policies that are so difficult and complicated to carry out is still confronted with problems: whether the state policies have been anticipated to be smooth or will be easy to implement. The results of the policy implementation either have an impact or have an effect on the next policy formulation process.

Islamy (2002) explains that public policy is essentially a decision to choose the best values from the many existing values. The best value chosen is the value that is in accordance with the interests of the

community. Policy makers not only function to create a balance between different interests (muddling through or balancing interests), but they must also function as appraisers. Lindblom (Winarno, 2002) reveals that in order to understand who actually formulates policies, it must first be understood the nature of all the actors and participants or what roles they play, the authority or form of power they have and how they relate to and supervise each other in the process. policy making.

The energy conservation policy itself refers to the concept of conservation, which has an understanding as an effort to continue to use energy rationally but still maintain productivity and fulfill the requirements of corporate governance. The rational use of energy includes saving and energy efficiency. So a distinction must be made between energy saving and energy conservation. Energy savings can be done by only reducing the use of energy but the comfort and productivity will decrease. Meanwhile, energy conservation is the application of principles in energy management, not only reducing energy consumption but also implementing efficient operating patterns. installation of additional tools that improve system performance so that energy consumption is lower but does not reduce comfort and productivity. Meanwhile, energy management is very important to be integrated into the organizational structure of a company whose energy consumption is very large so that energy management can be implemented. The role of energy management in various operational functions is facilities management, logistics, energy purchasing, production, production planning and control, and maintenance. This Energy Management Program is enshrined in Government Regulation Number 70 of 2009 concerning Energy Conservation. Then energy saving is an obligation as mandated in the Energy Law Number 30 of 2007. Article 25 of the law states that the implementation of national energy conservation is the responsibility of the government, local government, and the community. Energy conservation covers all stages of energy management, starting from the energy supply side, energy exploitation, energy utilization, and energy resource conservation. In addition, an energy audit must be carried out based on a follow-up to the government program with the issuance of Government Regulation no. 70 of 2009, Article 12 concerning energy conservation. mandatory energy audits are carried out based on the follow-up to government programs with the issuance of Government Regulation no. 70 of 2009, Article 12 concerning energy conservation. mandatory energy audits are carried out based on the follow-up to government programs with the issuance of Government Regulation no. 70 of 2009, Article 12 concerning energy conservation.

Policy Formulation

Dunn (2000), policy formulation is the development and synthesis of alternative problem solving. Winarno (2002) states that each alternative competes to be chosen as a policy in order to solve problems. Tjokroamidjojo in Islamy (2003) mentions policy formulation as an alternative selection that is continuously carried out and never finished, where in understanding the policy formulation process we need to understand the parties involved in the policy formulation process. So policy formulation is a way to solve problems, with the process of formulating problem solving alternatives formed by various actors so that these alternatives compete to become policies that can solve problems. According to Tilar and Nugroho (2012), the official participants as agents of the government (bureaucracy), president (executive), legislature and judiciary. Then the unofficial actors, including interest groups, political parties, individual citizens are actors who influence policy formulation.

Policies must pay attention to and lead to the achievement of social goals and policies in the form of social welfare and social defense, including policies for enforcing the public service system, so that the resulting product is a policy that is consistent with government policy as a means of achieving justice in public services. However, Hogwood and Gunn (Wahab, 2012) explain the various possibilities for the policies that have been set to fail, which are caused by non-implementation and unsuccessful implementation. Non-implementation can be understood as a policy that fails in achievement of its objectives because it is not implemented by the relevant actors. Unseccessful implementation can be understood as a policy that has been implemented but fails to achieve the objectives of the public policy.

Energy Policy at Kodikmar

Fulfillment of energy is an absolute requirement for the success of education because without energy, education will not run. For this reason, reliable energy management is needed. From the existing fulfillment efforts based on needs according to their level, energy conservation efforts in the form of energy audits are needed to get the value of benefits from existing efforts. The intensity of energy use in Kodikmar is quite high, especially in operations, both in terms of accommodation and practical field training, this can be seen from the large number of energy needs based on the number of existing personnel, for example for accommodation to fulfill electrical energy intended for teaching and learning processes, lighting, ironing, office administration activities etc.

The electricity needs of Kodikmar have been largely met by PLN and situationally and urgently, the existing generators (PLTD) have fulfilled it. So far, Kodikmar has only been a joint user of the Puslatpasrat, while the calculation and recording of electricity consumption is carried out by PLN which is reported to Lanmar in stages to Kormar with a copy to Lantamal, in this case the Lantamal V Difaslan Surabaya after being

identified by Danpuslatpasrat as the person in charge of the knighthood of Ewa Pangalila. Reports of the results of measurements and recordings are carried out monthly by PLN and reported to the relevant agencies as described in stages up to the TNI Headquarters level together with other military agencies from 3 dimensions and TNI headquarters, Meanwhile, the payment of electricity bills is carried out by the Ministry of Defense (Kemhan) to PLN based on the existing recapitulation. Because as a user only, the existing restrictions for conservation so far have only been an appeal and no action or punishment has ever been taken if it exceeds the existing capacity, this is certainly not good in supporting government programs, namely making energy conservation efforts to save existing energy resources, of course. also save costs and budgets, especially in the Ministry of Defense.

The fulfillment of the needs of Ewa Pangalila's knighthood in this case Kodikmar is carried out by PDAM Surya Sembada, accommodated in 2 tons of water with a capacity of 418,447 m. In carrying out existing educational operations, Kodikmar obtains fuel energy from the top unit in the form of MT-88 of 12.8 tons/month, HSD 24.89 tons/month and 22.81 tons, so globally during the year Kodikmar spends MT-88 amounting to 153,675 tons, 298,770 tons of HSD and 273,800 tons of Dexlite. The use of this fuel is mainly to support existing basic activities such as practical training, routine staff operations and the kitchen for the cooking process, while other needs exist but are less significant. Leudian daily gas usage Kodikmar converts HSD with an index of 0, 4 liters/student becomes LPG for kitchen operations in this case cooking food and water to meet the food needs of ± 500-1000 students/day. In one week, Kodikmar's kitchen consumes 6 tubes filled with 50 kg and 2 tubes filled with 12 kg so that the total LPG used is 324 kg/week. According to the latest calculations and conditions, Kodikmar's total LPG consumption is ± 15,552 kg/year.

The results of field observations provide an overview of the success or failure of the implementation of energy conservation and management policies, depending on the ability to utilize the available resources. Humans are the most important resource in determining a successful implementation process. Certain stages of the entire implementation process are based on the presence of qualified human resources in accordance with the work required by politically determined policies, but when the competence and capabilities of these resources are nil, it is very difficult to expect, and beyond human resources, Other resources that need to be taken into account are financial resources and facilities and infrastructure resources. Because like it or not, when competent and capable human resources are available while the disbursement of funds through the budget is not available, then there is indeed a difficult problem to realize what the objectives of the public policy are intended to achieve. Likewise, infrastructure resources, when human resources are actively working and the disbursement of funds is going well but collided with infrastructure problems, this can also be the cause of the unsuccessful implementation of policies.

The intensity of energy use in Kodikmar is relatively very high, this can be seen from the area of education, buildings and educational materials which are also influenced by several factors including the use of technology, operations, number of personnel and the number of existing educational programs. In this case, what needs to be considered are the opportunities and constraints in the implementation of conservation strategies. Savings can also be made in terms of knowledge and behavior change where at Kodikmar for savings efforts are very lacking due to the awareness that has existed so far, besides that the existing personnel feel that the electricity supply is fulfilled by the upper unit without paying. Concern for conservation needs to be socialized continuously.

The level of understanding of population members in the Kodikmar Surabaya environment regarding the concept of energy conservation is mostly still understood by saving electricity and fuel, but there are still relatively few population members in the environment who understand energy conservation in the aspect of water and gas utilization. Understanding of energy which is identified with electrical energy is widely read and recognized through socialization to save electricity, and for the energy aspect of water, fuel and gas not much is known about this from the socialization and campaign processes. Ferreira (Ja‟far and Arifah, 2006), states that the issue of environmental conservation is the task of every individual, government and company or organization. As part of the social order, an organization (company) should report its environmental management in the annual report.

Furthermore, from this perspective, responses from several members of the population were also obtained about the efforts that Kodikmar could take which were summarized in the following categories:

a. There is a need for permanent policies or rules regarding the use of electricity, especially the use of personal items in the mess, control over the installation of electrical outlet networks in several locations for cellphone chargers, and socialization of the use and saving of electricity.
b. It is necessary to renovate space with a cooler building design to reduce the use of electronic devices that require electricity, and it is necessary to procure a green area to cool the environment
c. It is necessary to identify installations or rooms that are classified as wasteful of electricity compared to their usefulness
d. It is necessary to have a well that can be mixed with PDAM water to save on financing, and a reservoir for

treating MCK wastewater that can be processed for landscaping.

Budimanta (2005) states that sustainable development is a perspective on activities carried out in a systematic and planned manner within the framework of improving the welfare, quality of life and the environment for mankind without reducing access and opportunities for future generations to enjoy and use them. Energy utilization in the Kodikmar Surabaya environment has not met the standards set by the Ministry of Energy and Mineral Resources, especially those contained in the Strategic Plan of the Ministry of Energy and Mineral Resources implemented in accordance with the Regulation of the Minister of Energy and Mineral Resources Number 13 of 2015 concerning the Strategic Plan of the Ministry of Energy and Mineral Resources for 2015-2019. The vision in the strategic plan, the first of which is, "to realize national security that is able to maintain territorial sovereignty,

The policy formulation for increasing the capability of the domestic defense industry has been produced. In 2012 the government has issued a law that regulates the independence of the defense industry, namely Law Number 16 of 2012 concerning the Defense Industry. In the Defense Law, a committee that formulates policies and supervision, which includes research and development, production, cooperation, and marketing, has been established, namely the Defense Industry Policy Committee (KKIP). The committee is chaired by the President and consists of eight ministers as well as the Commander of the Indonesian Armed Forces and the National Police Chief. For this reason, the administrative system in each sub-unit of the defense system must begin to make improvements, starting from the basic level, namely the management of educational and training institutions, to human resources and the use of technology.

Energy Conservation Policies and Constraints

Consideration of monitoring to conduct studies and reviews on the implementation of energy conservation in the Kodikmar environment, several steps are needed from existing strategies to increase efficiency such as the declaration of a smart eco school program, socialization of energy conservation and increasing awareness of the academic community towards conservation programs as a form of defense system. national. Considering these conditions, if energy conservation is projected in the Navy environment which can provide an overall picture of other state agencies, that energy conservation cannot be carried out optimally. The Minister of Energy and Mineral Resources (ESDM) said that the target for the new renewable energy mix in 2025 is 23 percent, natural gas is 22 percent, oil is 25 percent and coal is 30 percent. Temporary, in 2020 the new renewable energy mix was achieved by 11.20 percent, natural gas by 19.16 percent, oil by 31.60 percent, and coal by 38.04 percent (Tasrif, 2021). It can be said that strategic efforts and synergy between Ministries/Institutions DEN Members from the Government and DEN Members from Stakeholders need to be made to accelerate the achievement of energy mix targets by issuing conservation policies in all sectors.

According to Tasrif (2021), APK DEN provides views regarding the policies of each sectoral ministry and DEN member agency from the government and ideas to support the acceleration of achieving the new renewable energy mix target by 2025 and the delivery of work programs for members of the DEN 2021 in support of policy formulation efforts and DEN activities in 2021, namely increasing resilience towards Indonesia's energy independence and sovereignty, supervising cross-sectoral policies and implementing KEN, RUEN, RUED and energy conservation, determining and ensuring potential areas that are prone to energy crises and emergencies.

The factors that influence the successful implementation of energy conservation policies are disposition factors, environmental factors, communication factors, and bureaucratic structure factors. Meanwhile, the factors that influence the failure of implementing energy conservation policies are the energy price factor, the economic growth factor, and the population factor. The resource factor is neutral in the implementation of energy conservation policies. Factors that influence energy conservation policies at Kodikmar include disposition factors, environmental factors, communication factors, and bureaucratic structure factors. To implement energy conservation policies through energy management, two important factors are needed. First, The Professional Certification Institute for the Association of Energy Conservation Experts (LSP-HAKE) holds a competency certification for the energy conservation sector workforce. According to EBTKE, as of July 22, 2013 there were only 67 certified Industrial Energy Managers (ebtke.esdm.go.id). Second, investment for energy efficiency and conservation, according to the Ministry of Finance (2013), is still difficult to develop because it faces many obstacles such as weak government regulations, difficult fiscal incentives, and financing problems.

After paying attention to the trend of energy consumption in the Ewa Pangalia conservation area, especially in Kodikmar as described above, it can be seen that several problems in implementing energy conservation are faced. First, energy consumption is in accordance with the development of operational potential in Kodikmar and the increase in the quality of equipment in the health unit from year to year. Second, energy subsidies lead to wasteful energy consumption in Kodikmar, including electricity, water, gas and fuel. Third, the increase in fossil energy consumption causes an increase in greenhouse gas (GHG) emissions. Fourth, the growth in energy consumption is higher than the overall economic growth, so it can be seen that the occurrence of energy wastage.

The use of energy in the Kodikmar environment cannot be separated from systems and hierarchies in the

military structure, so efforts to conserve energy must also take tactical and procedural steps, so that the potential for energy wastage is difficult to avoid when all components of the task in the Kodikmar environment utilize existing energy sources. free without consideration of savings by the entire population in the Kodikmar environment.

In this regard, energy efficiency and carbon emission reduction are not short-term efforts, but commitment and sustainability are required in their use. For this reason, the Ministry of Energy and Mineral Resources has adjusted the implementation of Government Regulation No. PP No. 70 of 2009 concerning Energy Conservation. There are two approaches taken by the Government, especially in the Indonesian Navy.

a. First, the implementation of energy management for energy users and users of energy sources in the Ksatrian Ewa Pangalia environment (Kodikmar is in it).
b. Second, the application of efficient technology through the establishment of energy performance standards on energy-using equipment, especially in the environment which is the operational responsibility of Kodikmar.

These two approaches are the main factors in supporting the achievement of efficiency targets nationally and at the same time contributing significantly to emission reductions. Departing from various problems in the field of energy consumption, the author sees that the implementation of energy conservation policies should be implemented as soon as possible. There is a tendency of energy conservation policies in the Kodikmar environment, it can be seen that several problems in implementing energy conservation policies are faced.

a. First, the energy conservation policy through energy management is a new policy that came into effect in 2009.
b. Second, since the policy came into effect, energy intensity has increased. Third, Indonesia has obstacles such as a shortage of energy conservation experts, and a lack of investment in energy conservation.

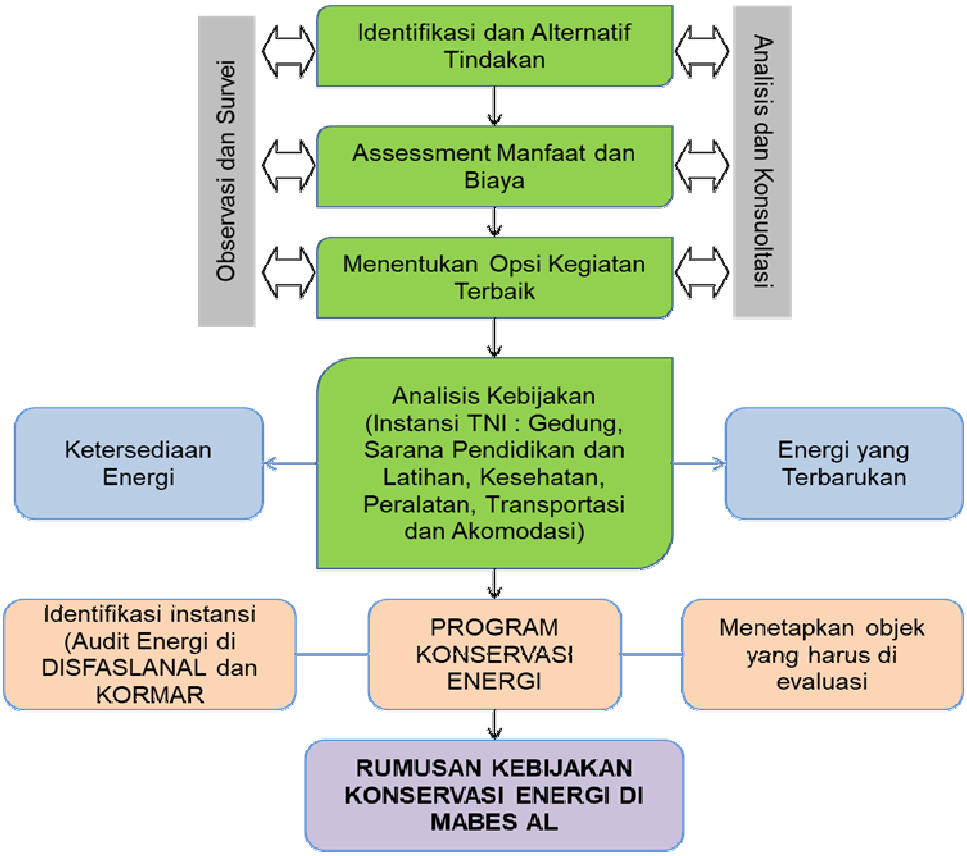
The success of implementing energy conservation policies will be determined by many variables or factors, and each of these variables is related to one another. However, in this study, the author assumes that each of these variables without being related to each other directly affects the implementation of energy conservation policies. In an effort to fulfill national energy needs, the role or activity of energy diversification becomes very important. Energy diversification is directed at diversifying the use of energy, both renewable and non-renewable,

Policy Formulation

The government issued Government Regulation (PP) Number 70 of 2009 concerning Energy Conservation. This PP was prepared to implement the provisions of Article 25 paragraph (5) of Law Number 30 of 2007 concerning Energy (Yuniarti, Sunyoto, and Mustholiq, 2011). This is intended to regulate how to use energy efficiently, rationally and wisely, so that current and future energy needs can be fulfilled and create an energy-efficient culture.

Based on PP No. 79/2014 concerning KEN, what is meant by energy security is a condition of ensuring the availability of energy and public access to energy at affordable prices in the long term while taking into account the protection of the environment. Energy security conditions can be assessed based on energy security indicators calculated using certain formulas and parameters. For this reason, energy conservation efforts in every TNI agency, especially within the Navy Headquarters as a whole cannot be separated from the role of the government, one of which is in policy making. The following is a description and assessment of policies related to energy development in the Navy Headquarters by taking the example of Ksatrian Ewa Pangalila (Kodikmar Surabaya). With regard to the analysis collected from all interview data documented in the check list, it can be seen that the energy savings in the Ksatrian Ewa Pangalila (Kodikmar Surabaya) environment generally come from recommendations for energy saving steps that are no cost and low cost (management). This is due, among other things, because the competence of human resources in TNI agencies is still weak, in addition to the relatively low financial capacity (APBN) and budgeting in each TNI dimension set by the Ministry of Defense is still prioritizing the procurement and modernization of Alutsista until 2024. Then from the aspect of energy consumption in Ksatrian Ewa Pangalila (Kodikmar) as the data presented in the previous chapter is known to be relatively in the quite wasteful category, however, these criteria cannot be said to be in accordance with the standards set as energy consumption in the industrial sector because in Ksatrian Ewa Pangalila energy (electricity, PDAM , gases,

The systematics of strategic policy formulation proposed as a model are as follows:



The policy formulation process uses a variety of in-country mechanisms to consult with stakeholders. Due to the democratic nature of policy making, consultation of several stakeholders is required in the policy formulation process (Berlan, 2014). On the one hand, the submission of proposals in the form of formulas to determine policies up to the level of the Ministry of Defense will not escape the role of actors, both official actors (state actors) and informal actors (non-state actors) can influence the formulation of energy conservation policies. and each actor has their own interests in policy making.

The success of the implementation of a policy, according to Grindle, is influenced by two major variables, namely the policy content variable and the implementation environment variable. The policy content variable includes, namely the extent to which the interests of the target group are contained in the content of the policy. Types of benefits received by the target group. The extent to which the desired change of a policy. Is the location of a program is correct. Whether a policy has mentioned the implementer in detail. Is a program supported by adequate resources. Meanwhile, the policy environment variables include, namely how much power, interests, and strategies are owned by the actors involved in policy implementation. Characteristics of institutions and regimes in power. The level of compliance and responsiveness of the target group. Then policies that concern the interests of many different people will be more difficult to implement than those that concern the interests of a few. Therefore, the high and low intensity of involvement of various parties (politicians, businessmen, communities, target groups, and the bureaucracy) in policy implementation will affect the effectiveness of policy implementation. The four factors above must be implemented simultaneously because they have a close relationship with one another. and bureaucracy) in policy implementation will affect the effectiveness of policy implementation. The four factors above must be implemented simultaneously because they have a close relationship with one another. and bureaucracy) in policy implementation will affect the effectiveness of policy implementation. The four factors above must be implemented simultaneously because they have a close relationship with one another.

All stages of the public policy-making process can apply a dynamic system to overcome the difficulties of environmental factors that are close to the public policy-making process (Ghaffarzadegan, et al., 2011). Dynamic systems can assess the implications of a policy and can be used to guide policy design (Groff, 2013). Likewise, in formulating energy conservation policies as a pillar of national energy management, it is currently not getting adequate attention.

On the one hand, the issue of energy conservation relating to national resilience efforts, according to the DEN report that the approach to Indonesia's 2019 energy security model is viewed from the scope of four aspects, namely the aspect of availability, accessibility, affordability and public acceptance. (acceptability). The

assessment of the importance and relevance of these four aspects to energy security uses a twenty-indicator approach. Determination and weighting of the twenty indicators using the Analytical Hierarchy Process (AHP) method based on the relationship between their effects on four aspects of national energy security through the assessment of DEN Members for the period 2009 – 2014 (Siswanto, 2019). Several studies estimate that Indonesia's potential for energy use efficiency is around 20-30 percent. The transportation sector is an energy user sector that has the potential to improve its efficiency, while other sectors such as industry, offices, households and the provision of electricity are also very open to improving the efficiency of energy use. Many techniques can be used to conserve energy, one of which is in the defense sector, or the TNI as a whole. Kodikmar as part of a military education institution under the responsibility of the Navy Headquarters should formulate and at the same time stipulate various more detailed rules regarding how energy conservation should be carried out by the Ministry of Defense, which is technically implemented by the Navy Headquarters. The energy manager, in this case FASLAN LANTAMAL V, has an important role in planning for efficient energy use in his work unit and implementing the plan in organizational units such as SATMA and KODIKMAR, including conducting energy conservation exercises for employees or civil staff and members of the Marines. Energy managers need to attend energy conservation training as well as competition exams which are held periodically by the TNI Headquarters or Headquarters and the Ministry of Energy and Mineral Resources.

Involvement of Actors in the Policy Formulation process

A good policy formulation must be able to predict the impact or implications when a policy is implemented. The inherent political nature of the policy formulation process shows how governments seek to protect their interests and the interests of their own constituencies rather than present challenges to achieving public policy alignment. A strong network of actors, including non-state actors can use a variety of strategies to influence the policy formulation process (Bertscher, London and Orgill, 2018).

Policy formulation is a stage in the policy cycle (Sabatier and Jenkins-Smith, in Taufik, 2017; Bertscher, London and Orgill, 2018). The study of policy formulation concentrates on the nature (formulation) of public problems. The formulation of public problems is a big foundation in formulating public policies so that the directions are correct, appropriate and appropriate (Bintari, 2016). Investigations at this stage can explore who is involved in policy formulation, how policies are accepted, agreed upon, and how actors communicate (Buse et al, 2012; Bertscher, London and Orgill, 2018).

The meaning of actor in relation to public policy is always related to the actors and determinants of a policy that interact and interrelate in every stage of the public policy process. Anderson (Arnold, 2014); and Henriksen, (2013), say that the bargaining stage can occur in three forms, namely negotiation, take and give and compromise. Bargaining is rooted in if there are two or more actors or groups of actors, each of which has a certain authority and position but can make adjustments that can be built up in policy discussions (Henriksen, 2013). Negotiation is the initial stage to form opinions from the actors.

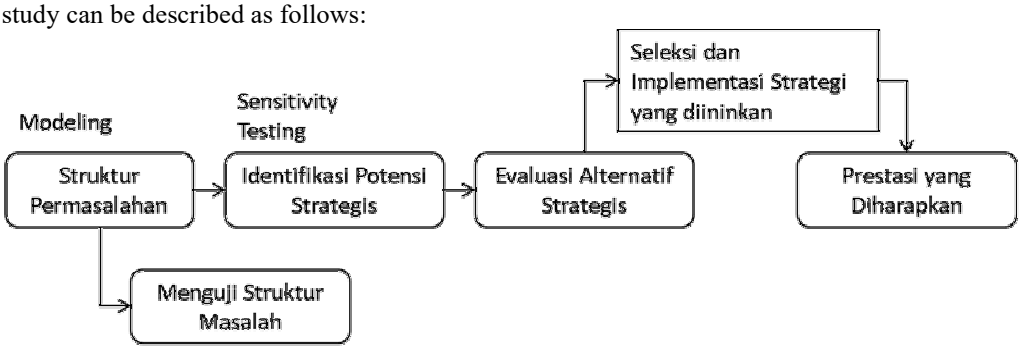
Roberts et al. (2004:78) provides a view to observe the behavior of actors who may seek to influence the policy formulation process through political strategies. Through the framework of political strategy, Roberts et al. (2004:78) describes four typologies used by actors to influence the policy formulation process. This framework is used to identify and investigate stakeholder behavior so that the purpose of the action is seen. Position strategy involves bargaining with other actors involved in the policy process to change their position. This 'position' refers to a person's support or opposition to the policy of interest. Power strategies seek to change both tangible and intangible power within an actor. Player strategy seeks to mobilize unmobilized actors, who can help, and demobilize actors who are a threat. Finally, the perception strategy that seeks to change the way of thinking and the way other actors map out problems and solutions.

Actors or actors in the policy-making process are divided into two groups, namely the official actors and the unofficial actors. Official actors are government agents (bureaucracy), executive, legislative and judicial. Meanwhile, those included in the group of unofficial actors include; interest groups, political parties, and individual citizens (Anderson, 1979; Lindblom, 1980; Lester and Stewart, 2000; Winarno, 2008). The role of the legislature in policy formulation can be seen from the mechanism of opinion polls, investigations and contacts made with administrative officials and interest groups (Winarno, 2008). The judiciary's role is to determine whether the actions taken by the executive and legislative bodies are in accordance with the constitution or not. The judiciary has the right to cancel or invalidate regulations or policies deemed to be contrary to the state constitution. Interest groups are one of the actors in the informal group of actors in policy formulation. Gabriel Almond suggests that there are two important elements in the process of making and implementing policies, namely interest groups and political parties.

Conservation Model

The formulation in the industrial grouping scheme as well as the obligations regulated in the Energy Conservation Law. From some of the problems presented, the energy conservation model proposed in this

research study can be described as follows:



The policy formulation model as shown in Figure 6.5 is more dynamic, meaning that the formulation will change continuously over time and behavior patterns will depend on how well information and actions influence each other, in the way in which consequences will arise in a particular system. Therefore, knowledge has a very important role to analyze all incoming information to conclude whether policy formulation can have delaying consequences due to information that policy makers continue to receive. Dynamic systems techniques are achievable tools for creating acceptable behavior patterns as they should be. On the other hand, a closed chain of cause and effect in which information about the outcome of an action is fed back to produce further action. This feedback loop is a central element of control engineering theory and dynamic systems.

The policy formulation model is basically a series of activities to identify various possibilities that can be introduced into policy formulation. This model provides a means of assessing the possible causes of deviations, and thus provides early warning of the need for further action. As an illustration, the above model is a vehicle for analyzing whether our understanding of the system is reflected in the equations of the dynamic model. In fact, it continues to produce behaviors (analysis, planning, control) that are consistent with the observed problem, and if not, how can our understanding of structure be made more consistent with reality. Dynamic activities will produce various possible analyzes from various sources, information, methods,

Research Implication

Energy conservation has not yet been implemented, especially in military agencies (TNI AL) in its sub-units in the analysis and discussion of the proposed research. It is influenced by several energy conservation policies, namely disposition factors, environmental factors, communication factors, and bureaucratic structure factors in the Navy. . Under these conditions, policy choices will be based on compromises and negotiations between actors with an interest in policy making. After one of the policy alternatives is decided to be taken as a way to solve policy problems, the final stage in policy formation is to determine the chosen policy so that it has binding legal force.

It should be realized that energy conservation is not about how the government can make these limited energy resources available for a long period of time, but how the government and the whole community can manage the demand for these limited energy resources and enable these resources to be managed sustainably. . In this case, theoretically, the resilience of a country is very dependent on existing and available energy resources, as well as renewable energy, because in the future the people must be able to become the drivers of economic growth supported by water, food and energy security.

For this reason, new innovations are needed that become breakthroughs in the development of EBT in the surrounding area. Through the role of the TNI as a pioneer in developing the potential of NRE in the 3T region, it can be increased optimally.

There are three pillars on which various countries determine their energy policies.

a. The first pillar is energy security, which is related to how we maintain energy supply.
b. The second pillar is energy equity, which is related to how energy can improve the welfare of society, and how people can access modern, clean and sustainable energy.
c. The third pillar is environmental sustainability where energy development must pay attention to the environment for the sake of stable economic conditions.

The three pillars practically have to be implemented optimally, which means that a hierarchical disposition is needed to determine policies within the TNI Headquarters through its three dimensions, and each TNI metric immediately implements energy conservation policies in each of its units.

Conclusion

Energy conservation policies within the Kodikmar environment as an effort to support national energy security have not yet been carried out, which means that there has been no decision or order regarding immediate energy conservation. It has been described that energy resources in the Kodikmar area, or in the Ksatrian Ewa Pangalia

area are still a relatively large and consumptive need, the financing of which must be borne by the state. The use of electrical energy in the Kodikmar environment outside of education and training is still relatively high, as well as water, gas, and fuel to support training and education operations as well as for medical equipment and other purposes.

Regulations in the energy sector have also been issued by the Government through Government Regulation no. 79 of 2014 concerning National Energy Policy and Presidential Regulation no. 22 of 2017 concerning the General National Energy Plan (RUEN), but the Presidential Regulation is limited or not cross-sectoral, and the defense and security sector (TNI) is not included in the section. In addition, internally, there is no policy within the TNI regarding conservation, so it requires a regulation on energy conservation as the formation of energy-saving behavior or culture. At the entity scale, policies regarding the use of energy consumption (Electricity, Gas, Water and Fuel) in the Ksatrian Ewa Pangalia environment, especially Kodikmar require standard regulations, in the form of policies from TNI Headquarters and/or from Navy Headquarters which will later be applied to all Navy installations, especially Education and training installations. For this reason, TNI Headquarters and Navy Headquarters need to issue policies as the legal basis for Conservation at Kodikmar as well as military hierarchical procedures, and bureaucratic procedures which have been the main obstacle. In addition, communication and disposition from the Faslantamal Service are also needed to carry out an energy audit, the results of which are recommended to the Navy Headquarters, so that Headquarters can apply to TNI Headquarters and the Ministry of Defense. The role of actors other than internal TNI is the DPR,

The planning for the formulation of energy conservation policies that are seen as supporting national security and resilience includes three important pillars that form the basis of the Indonesian Navy headquarters in formulating its energy policies. The first pillar is energy security, which is related to how we maintain energy supply. The second pillar is energy equity which is related to how energy can support people's welfare, and how people can access modern, clean and sustainable energy. Finally, the third pillar is environmental sustainability where energy development must pay attention to the environment for the sake of stable economic conditions.

Policy formulations that are deemed effective in accordance with the hierarchical procedures and systems in the TNI use dynamic policy formulations. A system dynamic model is a system that attempts to explain the behavior of various actions in some systems. Besides being said to be a closed system, a dynamic system is also a feedback system. There are two kinds of feedback, namely positive feedback and negative feedback. Negative feedback is a process to achieve goals (goal seeking). This feedback tends to be a counterweight to any disturbance and always brings the system in a stable state. While positive feedback occurs when changes in system components will cause changes in other components that will strengthen the initial process. Positive feedback is a process that is growing and developing to assess some additional factors that are indicated to occur. The simulation model that has been introduced in this study illustrates that policy formulation needs to adopt a dynamic system to avoid unqualified policies. The more complex the things that are expected to influence the analysis, the more likely the resulting policy can represent the objectives based on the problems identified. Meanwhile, in a dynamic model of policy behavior in the structure that is analyzed at any time can change and allow feedback schemes to provide information flow to design more complex policy formulations. The simulation model that has been introduced in this study illustrates that policy formulation needs to adopt a dynamic system to avoid unqualified policies. The more complex the things that are expected to influence the analysis, the more likely the resulting policy can represent the objectives based on the problems identified. Meanwhile, in a dynamic model of policy behavior in the structure that is analyzed at any time can change and allow feedback schemes to provide information flow to design more complex policy formulations. The simulation model that has been introduced in this study illustrates that policy formulation needs to adopt a dynamic system to avoid unqualified policies. The more complex the things that are expected to influence the analysis, the more likely the resulting policy can represent the objectives based on the problems identified. Meanwhile, in a dynamic model of policy behavior in the structure that is analyzed at any time can change and allow feedback schemes to provide information flow to design more complex policy formulations. then it is possible that the resulting policy can represent the objectives based on the problems identified. Meanwhile, in a dynamic model of policy behavior in the structure that is analyzed at any time can change and allow feedback schemes to provide information flow to design more complex policy formulations. then it is possible that the resulting policy can represent the objectives based on the problems identified. Meanwhile, in a dynamic model of policy behavior in the structure that is analyzed at any time can change and allow feedback schemes to provide information flow to design more complex policy formulations.

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