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ABSTRACT

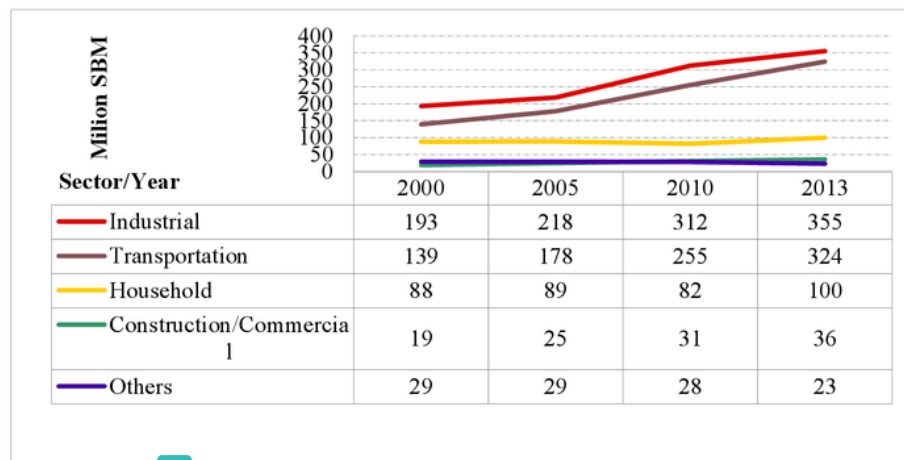
Energy constitutes a significant element which is needed by human beings. However, energy need can be threatened when its conservation is not implemented correctly. Energy conservation will provide certainty of sustainability and energy harmony as something which later on can be used by the present and future generations. Law is one of the instruments appointed to regulate conservation policy. At present, it is known energy conservation policy is governed in various legislative regulations. However, fundamental law which governs energy conservation is subject to the regime of Act Number 30 of 2007 on Energy (Energy Act). In the Act arrangement of energy conservation can be found in Article 25. The article is then regulated by Government Regulation Number 70 of 2009 on Energy Conservation (PP of Energy Conservation). However, energy conservation policy in PP of Energy Conservation legally cannot be executed because of many problems in it. This research wishes to assess how conservation energy in Indonesia at present and why the current policy needs a change. To answer the said issues, we perform doctrinal research type of research, the data used are secondary ones in the forms of legal documents, and the law approach study. The nature of this research is prescriptive, and the data analysis technique is deductive. The result of research shows that at present in Indonesia has various provisions of legislative regulations which regulates energy conservation. However, precisely the legal instrument is regulated in government regulation on PP Energy Conservation, which has problems concerning its implementation.

Keywords: energy conservation, conservation policy reform.

1. Introduction

Energy conservation constitutes a significant matter which becomes people's attention. It is because energy represents the basic needs of human beings. In this present condition, energy need cannot be avoided. In other words, people have a dependency aspect to energy in the day to day life. The dependency of Indonesian people to energy can be known from the energy consumption graphic which undergoes increases from year to year. For such purpose, it is interesting to observe the data presented by Pusdatin of Energy and Mineral Resources of the Republic of Indonesia in "Handbook of Energy & Economic Statistic of Indonesia 2014".

Graphic 1 Indonesia Energy Consumption
2000, 2005, 2010 and 2013¹



Source: Handbook of Energy & Economic Statistic of Indonesia 2014

¹ See in Exposure of Directorate General of New and Renewable Energy and Energy Conservation., *Exposure of New and Renewable Energy*, October 2015, Ministry of Energy and Mineral Resources. Also examine Centre for Data and Information Technology on Energy and Mineral Resources (Pusdatin ESDM), *Handbook of Energy & Economic Statistic of Indonesia 2014*, Ministry of Energy and Mineral Resources of the Republic of Indonesia. Jakarta. November 2014.

In the next report namely “Handbook of Energy and Economic Statistic of Indonesia 2015”, it is known there is energy consumption increase in 2014, for example for energy consumption of industry which is 433.58 Million BOE, then household sector is 369.89 Million BOE, commercial 38.11 Million BOE, Transportation 334.20 Million BOE, and other sectors is 96.84 Million BOE. A further amount of energy consumption is presented in the latest data, namely 2015 and 2016 in “Handbook of Energy & Economic Statistic of Indonesia 2016” and “Handbook of Energy & Economic Statistic of Indonesia 2017”.

Document of “Handbook of Energy & Economic Statistic of Indonesia 2016” shows the amount of energy consumption for the industry is 274.12 Million BOE, household 373.79 Million BOE, Commercial 38.19 Million BOE, Transportation 260.18 Million BOE, and other sectors 16.95 Million BOE. In the latest document released by Pudastin ESDM namely “Handbook of Energy & Economic Statistic of Indonesia 2017” it is known Indonesia energy consumption in industry sector is 259.12 Million BOE, household 378.05 Million BOE, Commercial 41.45 Million BOE, Transportation 303.27 Million BOE, and other sectors is 19.44 Million BOE.

Therefore, fulfilment of the present and future energy need becomes an issue which must have an arrangement by law. The existence of law becomes essential with the adoption of the principle of the state based on the law in Article 1 paragraph (3) of the 1945 Constitution of the Republic of Indonesia, “The state of Indonesia is a state based on law”. The message written in the article becomes a sign that law should be supreme in organizing the nation and state life. The said article becomes the basis that energy conservation must be implemented on a mechanism legally regulated through legislative regulation. Energy Act and PP Energy Conservation constitute a concrete form of arrangement of energy conservation policy in Indonesia. However, in its implementation, such regulation is known to have various impediments which prevent the implementation of energy conservation. Based on this finding this

research has a title of “Conservation Policy Reform in Indonesia: Attempts to Trace Its Basic Reason of Change”.

2. Legal Frame of Energy Conservation Policy in Indonesia.

The legal frame of national energy conservation policy is related to what mentioned by Lawrence Friedman as a legal substance, --substance is what we call the actual rules or norms used by institutions, (or as the case may be) the real observable behavior patterns of actors within the system. What is called a legal substance in this context are various legislative regulations which regulate energy conservation policy matters in Indonesia. Energy conservation policy in Indonesia constitutionally is developed based on Article 33 of the 1945 Constitution. Article 33 paragraph (3) of the 1945 Constitution confirms that land, water and natural wealth contained in it shall be controlled by the state and used for maximum people's prosperity. Sri-Edi Swasono stated, “Article 33 of the 1945 Constitution is a “Giant”. Stipulation of Article 33 of the 1945 Constitution constitutes the manifestation of Indonesia Economy Nationalism, namely mentioning freedom determination to replace colonialism principle, namely “individualism principle” into national principle, namely “togetherness and familial principle” (mutualism and brotherhood or *ukhuwah*).²

The article becomes a strong foundation for the state to provide some matters in line with the essential right of controlling for the state which is explained by the Constitutional Court in its verdicts. Some judgments of the Constitutional Court related to Article 33 of the 1945 Constitution, among others, are:

- a. The verdict of the Constitutional Court No. 001-021-022/PUU-I/2003 on Examination of Act Number 20 of 2002 on Electricity;

² Satjipto Rahardjo. (2009). *A State based on Law which makes its People Happy* “*Negara Hukum yang Membahagiakan Rakyatnya*”. Yogyakarta: Genta Publishing, p. 84.

- b. The verdict of the Constitutional Court Number 002/PUU-I/2003 on Examination of Act Number 22 of 2001 concerning Oil and Natural Gas;
- c. The verdict of the Constitutional Court Number 058-059-060-063/PUU-II/2004 and 008/PUU-III/2005 on Examination of Act Number 7 of 2004 concerning Water Resources;
- d. The verdict of the Constitutional Court Number 20/PUU-V/2007 pm Examination of Act Number 22 of 2001 concerning Oil and Natural Gas,
- e. The verdict of the Constitutional Court Number 21-22/PUU-V/2007 on Examination of Act Number 25 of 2007 concerning Investment;
- f. The verdict of the Constitutional Court Number 36/PUU-X/2012 on Examination of Act Number 22 concerning Oil and Natural Gas;
- g. The verdict of the Constitutional Court Number 85/PUU-XI/2013 on Examination of Act Number 7 of 2004 concerning Water Resources.

The right to control of the state as stipulated in Article 33 paragraph (3) of the 1945 Constitution provides a mandate for the state to make policy (*beleid*) and management action (*bestuursdaad*), regulating (*regelendaad*), management (*beheersdaad*) and supervision (*toezichthoudendaad*) in energy conservation sector with the goal of maximum people's prosperity. Energy and Energy Conservation Act as a form of exercising the right to control of the state to create policy (*beleid*) and management action (*bestuurdaad*), regulating (*regelendaad*), management (*beheersdaad*) and supervision (*toezichthoudendaad*).

The provision about an energy conservation in Energy Act is only regulated in one article, namely Article 25. The article as a whole confirms the following things:

- a. National energy conservation becomes the responsibility of the government, regional government, businessman and community;
- b. National energy conservation includes all stages of energy management;
- c. Energy users and producers of energy saving equipment who perform facilities and/or incentive by the government and/or regional government;

- d. Energy resource users and energy users who do not perform energy conservation shall be given disincentive by the government and/or regional government;
- e. Further provisions on implementation of energy conservation and delivery of facility, incentive and disincentive shall be regulated by government regulation and/or regional regulation.

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The provisions in Energy Act are further regulated in PP Energy Conservation. There are various essential provisions in the PP Energy Conservation, among others, are: Responsibility of government, regional government, businessman and community in implementation of energy conservation in Indonesia; the Scope of implementation of energy conservation in all activities of energy management which includes supply, undertaking, utilization and conservation of energy resources, energy performance standard and energy efficiency grade label; Facility, incentive and disincentive, and Guidance and supervision of energy conservation implementation.

Besides being regulated in the two instruments above, conservation can also be found in various legislative regulations, among others, are:

¹⁰ 2.1. Government Regulation Number 79 of 2014 on National Energy Policy (PP 79/2014)

This government regulation constitutes implementing regulation of Energy Act. The PP 79 of 2014 was created based on the mandate of provisions Article 11 clause (2) of Energy Act. This implementing regulation contains the norms of how to stipulate ³⁶ national energy policy which constitutes ¹⁹ energy management policy based on just, sustainability, and environmental mindset in order to achieve energy independence and national energy resilience. Article 3 of PP 29 of 2014 divides national energy policy into 2 (two) namely central policy and support policy. The primary policy includes energy supply for national need, energy development priority, ³ utilization of national energy resources, and national energy reserve. While the support policy provides energy conservation, energy resources conservation and energy diversification, environment and safety; energy price, ⁵ subsidy and incentive; infrastructure and access for the community into energy and energy industry; research, development and application of energy technology; and institutions and funding.

The provision of Article 3 of PP ³⁵ 29 of 2014 as mentioned above determines energy conservation as support policy of national energy policy. Support policy in the form of energy conservation is in line with Article 4 of PP 29 of 2014 which is implemented from 2014 until 2050. Further provisions on energy conservation and energy resource conservation can also be found in the Second Part on Support Policy in ³ Chapter III Direction of National Energy Policy.

²²
The Article 17 of PP 29 of 2014 regulates energy conservation shall be performed properly from upstream until downstream, covering energy resource

management and all ³ stages of exploration, production, transportation, distribution, and utilization of energy and energy resources. Management of energy resources is directed to secure that supply and use of energy resources continue to maintain and improve the quality of value and diversity of the said energy resources. Furthermore, on energy resource conservation, Article 17 clause (3) of PP 29 of 2014 mentions its implementation is carried out with a cross-sector approach, at least through an adjustment with the national spatial arrangement and environmental carrying capacity. To implement the said things, in providing the energy it is the priority to have greener energy resources. Clause (5) of Article 17 of PP determines energy producer and consumer are ³ obliged to perform energy conservation and efficiency of energy resource management to secure more reliable energy supply. The more important thing is the authority for the decision of guidance and decision of energy conservation policy specifically in the area of energy saving which becomes the authority of Government and/or Regional Government. Such guidance at least contains:

- a. The ³ obligation of standardization and labelling of all energy user's equipment;
- b. ³ The obligation of energy management including energy audit for energy user;
- c. The obligation of efficient electric generating technology use and energy conversion equipment;
- d. Socialization of energy saving culture;
- e. Creating a business climate for developing energy service business as investor and provider of energy which is efficient;
- f. Accelerating application and/or transfer to the mass transportation system, for urban as well as intercity transportation which is efficient;
- g. Accelerating application of electronic road pricing to decrease traffic jam caused by personal vehicles; and
- h. Determining fuel consumption target in transportation sector conducted through measurable and gradual to improve efficiency.

2.2. Regulation of Energy and Mineral Minister Number 13 of 2012 on Saving Electric Power (Permen ESDM 13/2012)

This government regulation regulates matters on saving electric power use which its scope includes State Building Structure; BUMD (Regional Government Owned Business Entity) Building Structure, BUMD, and BHMN (State Owned Legal Entity) conducted through: First, air condition system. Electric power use saving is conducted through an air condition system with the use of:

- a. For State Building Structure and Building Structure of BUMN, BUMD and BHMN, if using AC is conducted with:
 - 1) The use of saving energy AC (with inverter technology) with capacity according to the room size;
 - 2) The use of Hydrocarbon refrigerant type;
 - 3) Placement of AC compressor unit at the location with no direct sunlight;
 - 4) Switching off AC when the room is not in use;
 - 5) Installing room thermometer to monitor room temperature;
 - 6) Setting up the temperature and relative humidity according to Indonesia National Standard (SNI) namely:
 - a) Workroom with a temperature between 240 C to 270 C with relative humidity between 55% (fifty-five per cent) to 65% (sixty-five per cent);
 - b) Transit room (lobby, corridor) with temperatures between 270 C to 300 C with relative humidity between 50% (fifty per cent) to 70% (seventy per cent).
 - 7) Operating central AC:
 - a) 30 (thirty) minutes before work hour AC fan unit is switched on, one hour later the AC compressor unit is switched on;
 - b) 30 (thirty) minutes before work hour ends AC compressor unit is switched off, at the time work hour ends AC fan unit is switched off;

- 8) Making sure outside air does not enter into the air-conditioned room which causes cooling effect decreases;
- 9) Performing periodic maintenance according to the manufacturer's guidance;
- b. Using a certain type of glass which can decrease sunlight heat entering the room, but it does not lessen natural lighting;
- c. Lessening air temperature in or around building by planting trees and/or making a water pool;

Second is the lighting system. Saving electric power use through lighting system is conducted through:

- a. Using save energy lamp according to its design;
- b. Decreasing the use of accessory lamps;
- c. Using electronic ballast on TL lamps;
- d. Setting up maximum electric power in accordance with Indonesia National Standard (SNI) for:
 - 1) Receptionist space 13 Watt/m² with minimum lighting level of 300/UX;
 - 2) Workroom 12 Watt/m² with minimum lighting level of 350/UX;
 - 3) Meeting room, active filing room 12 Watt/m² with minimum lighting level of 300/UX;
 - 4) Filing storage room 6 Watt/m² with minimum lighting level of 150/UX;
 - 5) Emergency stairway space 4 Watt/m² with minimum lighting level of 150/UX;
 - 6) Parking space 4 Watt/m² with minimum lighting level of 100/UX;
- e. Using reflector lamp house with high reflecting effect;
- f. Setting up switch based on area group, so that it in accordance with room use;

- g. Using an automatic switch with timer and/or photocell for garden, corridor, and terrace lamps;
- h. Switching off room lamps in building structure if not in use;
- i. Using natural light (sunlight) during the day by opening window blinds adequately so that lighting level is enough for doing the work activity;
- j. Cleaning lamps and lamp house if dirty and dusty in order not blocking lamplight.

The third is support facilities. Economizing electric power use on support equipment as mentioned in clause (1) letter c conducted through:

- a. Operating elevator with stoppage on every 2 (two) floors;
- b. Using the speed controller and movement sensing device on the escalator;
- c. Switching off the computer when leaving workroom more than 30 (thirty) minutes;
- d. Switching off the printer when not in use and only switching on before printing;
- e. Using the photocopy machine with standby mode and low electric power consumption;
- f. Operating audio-video equipment according to need;
- g. Switching on the water heater and dispenser equipment several minutes before use and switching it off after use;
- h. Increasing electric power network capacity factor by installing a capacitor bank.

2.3. Regulation of Energy and Mineral Resource Minister Number 14 of 2012 on Energy Management (Permen ESDM 14/2012)

This Ministerial Regulation constitutes implementing regulation of provision Article 13 clause (5), Energy Conservation Article. In Permen 14 of 2012, energy management is an integrated activity to make maximum output through technical

action in a structured and economical method to minimize energy use including energy for the production process and minimize consumption of raw material and support material.

Article 2 of Permen ESDM 14/2012¹⁸ regulates on the authority of implementation Energy Management owned by the government and regional government at levels of the province as well as regency/city. At the central level, the authority of Minister includes organizing energy management implementation action on energy resource user and energy users which perform energy supply or energy utilization whose permits are decided by government or cooperation contract which its guidance is in the control of the government. The government, in this case, is Ministers who issue permits of energy supply or energy utilization that perform guidance/supervision towards cooperation contract in the area of natural resources.

In Article 2 paragraph (3) of Permen ESDM 14 of 2012, the authority of Governor² includes organizing energy management implementation action on energy resource user and energy user who perform energy supply or energy utilization whose permit is determined by Regent/Mayor.

In general, the provision of Article 3 *juncto* (in connection with) Article 4 of Permen ESDM 14/2012 regulate energy resource user and energy user who use energy resources and/or energy more or equal to 6,000-ton oil equivalent per year is required to perform energy management. Energy resource user and energy user who use energy resource and/or energy less than 6,000 (six thousand) ton oil equivalent per year should implement energy management and/or implement energy saving. Furthermore, Permen ESDM 14/2012 stipulates that energy management is carried out by:

- a. To appoint an energy manager.

Energy manager has a duty to make energy conservation planning. It covers, among others, setting up target and energy conservation program, making

energy conservation operating procedure as well as the implementation of the energy audit. The manager has to implement recommendation based on energy audit result and enhancement of awareness and motivation of saving energy to employees; and to conduct monitoring and evaluation which includes measurement, recording, report preparation and improvement action suggestion of energy conservation program implementation.

b. To make energy conservation program.

Conservation program includes; first, short term program, among others are operating procedure reparation, maintenance and installing simple control tools; second, middle and long-term programs include enhancement of equipment efficiency and fuel switching; and improvement of awareness and knowledge of energy conservation techniques for employees/operators continually. Conservation program at least contains the plan for execution, target and achievement, type and energy consumption, use of energy efficient equipment, steps for energy conservation; and quantity of products being produced or services rendered.

c. To implement a periodic energy audit and the recommendation based on the energy audit result.

Regulation determines that energy audit must be implemented periodically at least conducted on main energy use equipment at least 1 (one) time in 3 (three) years. Such an audit is performed by the internal auditor and/or accredited institution. The auditor is obliged to have competency certificated in accordance with legislative regulations. In case there is no internal energy auditor with competency certificate and/or institution which has been accredited, then energy audit should be conducted by a team set up by a general director whose duties and responsibilities are in the area of new energy, renewable energy and energy conservation.

In connection with energy audit recommendation, provisions of Article 10 of Permen ESDM 14/2012 mentions implementation of energy audit result

recommendation shall be conducted with conditions: recommendation without investment must be applied within less than 2 (two) years, and recommendation of intermediate investment and high investment recommendation must be applied within less than 5 (five) years.

- d. To report the implementation of energy management every year to the Minister, Governor, or regent/mayor in accordance with their authority.

Article 11 of Permen ESDM 14/2012 regulates that Annual Report of energy management implementation must be delivered to Minister c.q. General Director, Governor, and regent/mayor in accordance with their authority. The annual report of energy management implementation delivered to Governor and regent/mayor is attached to Director General. Energy management implementation report is provided in January until 31 March of the following year and must include information concerning energy management organization and energy manager being appointed, energy conservation program, implementation of periodic energy audit, and implementation of energy audit result recommendation.

2.4. Regulation of Minister of Energy and Mineral Resources Number 18 of 2014 on Labeling of Save Energy Sign for Self-ballast Capability (Permen ESDM 18/2014)

Article 2 Permen ESDM 18 of 2014 mentions obligatory applies to save energy sign label as described in Indonesia National Standard Number 04-6958-2003 concerning Use of Electric Power for Household needs and the like. Save energy sign label on Self Ballast lamp as mentioned in the attachment which constitutes an inseparable part of this Minister Regulation. Article 3 Permen ESDM 18 of 2014 mentions that domestic producers or importers can distribute Self-ballast lamp affixed with saving energy sign label. Self-ballast lamp importers shall be responsible for fulfilment of saving energy sign label affixing on self-ballast lamps distributed in Indonesia.

Provision of Article 4 Permen ESDM 18/2014 further regulates domestic producers or importers before affixing save energy sign label must obtain a permit of affixing energy saving sign label from Director General. To obtain the affixing permit, they must request the application to General Director by attaching the following requirements:

- a. SDoc, which includes
 - 1) Name and address of domestic producer or importer;
 - 2) Address of self-ballast lamp producer origin for importers who performs importation;
 - 3) Brand, type and model;
 - 4) Value of affrication and quantity of signs affixed;
 - 5) Date and signature of person in charge of;
 - 6) Statement of responsibility on correct information being given;
 - 7) Letter of appointment or cooperation contract from producer or principal of foreign self-ballast lamp;
- b. Photocopy of Indonesia National Standard Mark Product Usage 04-6504-2001 or its change;
- c. Photocopy of Test Result Report which contains test result on the sample of Self-ballast lamp product according to Indonesia National Standard issued by Conformity Evaluation Institution;
- d. Photocopy of Indonesia National Standard Quality Management System Certificate ISO 9001; 2008 or its change released by Quality Management System Certification Institute and has been accredited by National Accreditation Committee or other State Accreditation Body which has performed Mutual Recognition Agreement with National Accreditation Committee for Quality Management System certification area;
- e. Photograph of self-ballast lamp products; and
- f. Method of self-ballast lamp production code reading.

¹⁰
2.5. Regulation of Minister of Energy and Mineral Resources Number 07 of 2015 on Application of Minimum Energy Performance Standard and Adding Save Energy Sign Label for Air Conditioning Instrument (Permen ESDM 07/2015)

Permen ESDM 07 of 2015 stipulates domestic producers and importers must apply SKEM and Save Energy Sign Label by attaching SKEM mark and Save Energy Sign Label on Air Conditioning Instrument which will go to the market ²⁹ in the territory of the state of the Republic of Indonesia. Domestic producers and importers before affixing SKEM mark and save energy sign label are required to obtain the permit from General Director. Domestic producers and importers are responsible for fulfilment of provisions of affixing SKEM mark and save energy sign label on air conditioning instrument in circulation in Indonesia. To obtain a permit of affixing SKEM mark and save energy sign label they must hand in the request with attaching the following requirements:

- a. Save Energy Certificate;
- b. Tax Payer Registration Number;
- c. Photocopy of SNI IEC 60335-2-24-2009 sign use certificate or its change;
- d. Photocopy of SNI ISO 9001-2008 quality management system certificate or its change, or other equal quality management system;
- e. For importers must attach photocopy of ISO 9001-2008 certificate or other equal quality management system standard from product origin country producer in English or its translation in English language;
- f. Photo or drawing of Air Conditioning Instrument product; and
- g. Method of Air Conditioning Instrument code reading.

The importance of energy conservation in Indonesia in the normative term can be identified with so many regulations that contain conservation norms. This can be seen in the normative content substance in the above description. Besides provisions

in the said regulations, arrangement related to energy conservation can also be found in other sectors, for example in Act Number 30 of 2009 concerning Electricity Power, Act Number 21 of 2014 concerning Geothermal, Act Number 23 of 2014 concerning Regional Government, and et cetera.

3. Energy Conservation Policy Reform in Indonesia: Span of Its Change

In essence, energy conservation policy in Indonesia is arranged in PP Energy Conservation. Government Regulation Number 70 of 2009 on Energy Conservation as implementing regulation of energy conservation in Indonesia in its execution undergoes many obstacles so that as a consequence it disturbs the process of energy conservation. These various obstacles in policy theory become bases for reform of energy conservation policy. Ideally, policy reform must be based on the approach of problem-based. Peter deLeon and Danielle M. Vogenbeck mention various policy approaches, among others are an approach based on problems. They mention that:³

The policy sciences were consciously framed as being problem-oriented, quite explicitly addressing public policy issues and posing recommendations for their relief, while openly rejecting the study of a phenomenon for its own sake (Lasswell 1956); the societal or political question has always been pivotal in the policy sciences' approach. Likewise, policy problems are seen to occur in a specific context, a context that must be carefully considered in terms of the analysis, methodology, and subsequent recommendations. Thus, necessarily, the policy approach has not developed an overarching theoretic foundation.

Such an approach, in essence, confirms that a policy-making must be based on problem-solving. In this context, energy conservation is a problem confronted by the state at present, where based on assessment result it can be seen that energy depletes while energy need at present and in the future is increasing so that energy

³ Peter deLeon dan Danielle M. Vogenbeck, *The Policy Sciences at the Crossroads*, dalam *Handbook of Public Policy Analysis: The Politics, and Methods*, Public Administration and Public Policy/125, Edited by Frank Fischer et.al, CRC Press: Taylor & Francis Group, USA, 2007.

conservation indeed needs to be appropriately organized. The existing energy conservation at present cannot yet solve energy conservation problems so that to overcome such a problem requires policy direction change normatively in the said PP Energy Conservation.

The urgency of revision of Government Regulation Number 70 of 2009 on Energy Conservation is based on the following justification considerations:

3.1 Improvement of energy conservation policy contained in Government Regulation Number 70 of 2009 on Energy Conservation which in this case undergo implementation problem.

Implementation problem constitutes the main issue that causes PP 70 of 2009 on Energy cannot optimally support energy conservation implementation in Indonesia. This is due to the problem of the norm (regulation) cannot be implemented in PP 70 of 2009 and the issue of legal absence/vacuum in PP Energy Conservation, in other words, PP 70 of 2009 has not yet contained sufficient regulation, even because PP 70 of 2009 is not suitable with the empirical facts to exist in the society. The followings are the norms in PP 70 of 2009 which undergo problems, among others:

a. Provision of Article 12 paragraph (2) PP 70 of 2009

Article 12 PP 70 of 2009 regulates conservation in energy use. This article instructs energy source users and energy users must use energy efficiently and effectively. Such obligation is directed to "Energy source user and energy user which use energy source and/or energy bigger or equal to 6,000 (six thousand) ton oil equivalent per year, they are obliged to perform energy conservation through energy management".

The obligation of conservation implementation for energy source user and energy user bigger than or equal to 6,000 (six thousand) ton oil equivalent per year cannot be implemented in general. It is because types of energy user and energy source user are varied which include areas of transportation, industry,

household, public, the commercial which its allocation/use are different. For example, the building a structure which on average energy use 2,000 (two thousand) ton oil equivalent per year, while the sector which can use energy higher or equal to 6,000 (six thousand) ton oil equivalent per year is only sectors of industry, power generating and oil and natural gas refinery.

The quantity of 6,000 (six thousand) ton oil equivalent per year is considered an obstacle for energy conservation activity because, firstly, energy conservation policy is discriminative because it only directed for users of energy source and specific energy users with equal or higher than quantity of 6,000 (six thousand) ton oil equivalent per year. Secondly, awareness to implement energy conservation does not develop significantly and entirely to all energy source users and energy users. This is indeed against the zest to enhance knowledge and motivation in conducting energy conservation.

Theoretically, legal awareness constitutes an essential element useful to make reform into the legal habit of society. In the theory of legal system, legal awareness becomes one of the essences of legal sub-system called legal culture. Benny Simon Tabalujan mentions an element of this legal culture is in the form of legal awareness and legal habit. The legal habit of not conducting energy conservation action, later on, can be changed and evaluated through improvement of society legal awareness that the law has instructed to all energy source users and energy users to perform energy conservation.

b. Provisions of Article 4 – Article 6 PP 70 of 2009

²² Government Regulation Number 70 of 2009 concerning Energy Conservation has determined government and regional government responsibility in organizing energy conservation. Article 4 of PP 70 of 2009 regulates government responsibility. The government is responsible nationwide to:

- 1) Formulate and determine policy, strategy, and program of energy conservation;
- 2) Develop quality human resource in the area of energy conservation;
- 3) Conduct socialization as a whole and comprehensively for technology use which applies energy conservation;
- 4) Assess, compose and determine policy, and allocate fund in the framework of energy conservation program implementation;
- 5) Provide facility and/or incentive in the frame of energy conservation program implementation;
- 6) Perform technical guidance of energy conservation to businesspeople, energy source users, and energy users;
- 7) Perform program and activity of energy conservation which has been determined; and
- 8) Perform monitoring/supervision of implementing energy conservation program.

Furthermore, the provision of Article 5 becomes the basis of provincial government authority and Article 6 becomes the authority of regency/city government. The provincial government is responsible in accordance with its authority in the related provincial area to:

- 1) Formulate and determine policy, strategy, and program of energy conservation;
- 2) Develop quality human resource in the area of energy conservation;
- 3) Conduct socialization as a whole and comprehensively for technology use which applies energy conservation;
- 4) Allocate fund in the framework of energy conservation program implementation;
- 5) Provide facility and/or incentive in the frame of energy conservation program implementation;

- 6) Perform technical guidance of energy conservation to businesspeople, energy source users, and energy users;
- 7) Perform program and activity of energy conservation; and
- 8) Perform monitoring/supervision of implementing energy conservation program.

Further, the authority of regency/city government is regulated in Article 6. Local regency/city government is responsible in accordance with its authority in the said regency/city area to:

- 1) Formulate and determine policy, strategy, and program of energy conservation;
- 2) Develop quality human resource in the area of energy conservation;
- 3) Conduct socialization as a whole and comprehensively for technology use which applies energy conservation;
- 4) Allocate fund in the frame of energy conservation program implementation;
- 5) Provide facility and/or incentive in the framework of energy conservation program implementation;
- 6) Perform technical guidance of energy conservation to businesspeople, energy source users, and energy users;
- 7) Perform program and activity of energy conservation; and
- 8) Perform monitoring/supervision of implementation energy conservation program.

Authority of government and regional government as mentioned in Articles 4-6 of PP 70 of 2009 cannot be operational, in other words, the operationalization of the said norms is difficult to apply or implement. This is because the authority of Government and regional government is not based on the approach of location, user, use and impact, and efficiency in accordance with Act Number 23 of 2014 on Regional Government.

c. Provision of Articles 17 to 27 PP 70 of 2009

Articles 17 until 27 can be found in Chapter V which regulates facility, incentive and disincentive. Of such normative provisions arrangement of incentive and disincentive needs assessment. Provision of incentive in PP 70/2009 is governed in Articles 20 and 21. Article 20 clause (1) of PP 70/2009 confirms incentive given to energy users can be in the forms of:

- 1) Taxation facility for saving energy equipment;
- 2) Deduction, dispensation, and exemption of regional tax for saving energy equipment;
- 3) Import duty facility to save energy equipment;¹²
- 4) Low-interest rate fund for the investment of energy conservation in accordance with legislative regulation; and/or
- 5) An energy audit in partnership model financed by the Government.

Paragraph (2) of the Article mentions incentive given to save energy equipment producers are in the forms of:

- 1) Taxation facility for components/spare part and raw material used to produce the saving energy equipment;¹²
- 2) Deduction, dispensation, and exemption of regional tax for saving energy component/spare parts and raw material used to produce the saving energy equipment;¹²
- 3) Import duty facility for components/spare parts and raw materials used to produce the saving energy equipment; and/or
- 4) Low-interest rate fund for investment in the frame of producing save energy equipment in accordance with legislative regulation.

The article 20 paragraph (3) – (7) of PP 70/2009 further determines Energy user can submit incentive Request in case evaluation result on energy conservation implementation report shows achievement of energy conservation implementation.

Such an incentive request can be provided by domestic save energy equipment producer in case success criteria verification shows achievement in energy conservation implementation. Taxation facility is given in accordance with provisions of legislative regulations in the taxation area. Giving deduction, dispensation and exemption of regional tax is conducted according to provisions of legislative regulation in customs administration.

Article 21 of PP 70 of 2009 mentions Incentive in the form of energy audit in partnership model besides being given to energy users, can also be given to energy users who consume less than 6,000 (six thousand) ton oil equivalent per year who are successful in the implementation of energy conservation. The provisions of the incentive mentioned above cannot be implemented. This is related to the absence of delegation to Finance Minister to specifically arrange the incentive in taxation and customs in the area of energy conservation.

Besides being non-applicative of incentive norms, the arrangement of a disincentive in Articles 22-27 of PP 70/2009 clearly cannot differentiate and separate firmly between disincentive and sanction. Article 22 of PP 70/2009 regulates energy source users and energy users who do not implement energy conservation through energy management can be imposed disincentive by Minister, Governor, or regent/mayor according to each authority. Disincentive can be in the forms of:

1) Written warning;

A written warning is given maximum 3 (three) times within each duration of 1 (one) month. In the case energy source user and energy user which have been given warning 3 (three) times do not perform energy conservation, Minister, Governor, or regent/mayor in accordance with their authority announce the concerned names of energy source user and energy user in mass media.

2) The announcement in mass media;

3) Fine; and

In Article 25, in case 1 (one) month after the names of energy source user and energy user have been announced in mass media, but they do not perform energy conservation, they shall be imposed with fine. The amount of fine shall be transferred to state/regional treasury ¹⁰ in accordance with the provisions of legislative regulations.

4) Deduction of energy supply

In the case 1 (one) month after being fined the energy source user and energy user do not pay such fine, ¹³ Minister, governor, or regent/mayor according to their authority shall decide energy supply deduction, this shall obtain approval of Minister. Deduction of energy supply does not remove the obligation to pay fine by energy source user and energy user, in the forms of written warning, announcement in mass media, and fine as the forms of sanction.

The provisions as mentioned on disincentive show there is mismatch/incongruity between disincentive and the substance clarified as a disincentive. It is as if disincentive is referred to as administrative sanction. The disincentive is different from the administrative sanction imposition regime. Disincentive can be in the forms of High tax imposition; Obligation of giving compensation; Special Requirement in licensing; Obligation of giving reward; Giving certain status; Penalty; and Limitation of facility and infrastructure.

d. Provision of Article 18 of PP 70 of 2009

Article 18 of PP 70 of 2009 mentions “Government and/or regional government give incentive to a. energy user who use energy higher or the same as 6,000 (six thousand) ton oil equivalent per year, and domestic producers of saving energy equipment which is successfully implementing energy conservation in a certain period. Giving incentive (fiscal and financial) to those who have been successful in the implementation of energy conservation and energy consumption

higher or the same as 6,000 (six thousand) ton oil equivalent per year is not regulated.

3.2. In respond to various society need in relation with Energy Conservation

There are many new legal needs which are not yet being accommodated by PP Energy Conservation, among others:

- a. The arrangement of energy conservation technology;
- b. The arrangement of green building, green bank, green investment, green industry;
- c. Additional Norms on saving energy system (for example ³² **Presidential Instruction 13/2011 on Saving Energy and Water**);
- d. Treatment of Energy Conservation in each sector: transportation, industry, households, commercial, public sector and others;
- e. The arrangement of certain energy management standard such as ISO 50001;
- f. The Arrangement of Energy Service Company (ESCO);
- g. The Arrangement on training and education, and research and development;
- h. The Arrangement of the organization in the form of BLU – public serve body (Energy Conservation Trust Fund);
- i. The Arrangement of promotion and socialization of efficient energy behavior;
- j. The arrangement of energy consumption mapping;
- k. and other matters.

These arrangements are needed so that it can provide legal certainty for various executions of energy conservation business which have been running as well as new content substance created as an effort to the effectiveness of energy conservation implementation.

3.2. Urgency of PP 70/2009 Revision for Several Goals

Besides implementation problem, the urgency of PP 70 of 2009 revision also is based on several goals namely to support energy resilience, to support Indonesia

commitment to climate change, to open new employment opportunity, to improve productivity and competitiveness, and to decrease energy cost burden for the poor urban and rural community.

The scope and direction of arrangement of PP energy conservation revision are solving the implementation problem and interpretation problem in PP energy conservation, including also to fulfil society legal need which continuously grows in the field of energy conservation. The direction of the arrangement includes:

- a. The obligation of conservation implementation for energy source user and energy user who use energy source and/or energy, its quantity (equivalent to ton oil per year) shall be determined based on Regulation of ESDM Minister. This is to provide flexibility for the stipulation of use of energy source and/or energy, its quantity (equivalent to ton oil per year) for each sector which has different energy use quantity.
- b. The arrangement of giving incentive to business actors who wish to conduct energy efficiency investment and not yet show the success of energy conservation. Forms of incentive can be provided, namely:
 - 1) Taxation facility for saving energy equipment;
 - 2) Giving reduction, dispensation, and exemption of regional tax for saving energy equipment;
 - 3) Facility of customs duty for saving energy equipment; or
 - 4) Low-interest fund for an investment of energy conservation in accordance with provisions of existing legislative regulations;
- c. Government and regional government authority are based on approaches of location, user, benefit and impact, and efficiency according to Act Number 23 of 2014 on Regional Government.
- d. The arrangement on administrative sanction in the form of written warning, giving the recommendation of freezing and revocation of the license to

licensing authority body, and administrative fine for business actors who implement energy conservation.

- e. The arrangement on giving a disincentive to business actors who do not perform the activity of energy conservation, in the form of imposition of high tax; obligation of giving compensation; special requirement in licensing; obligation of giving reward; giving certain status; or limitation of facility and infrastructure. The arrangement on the content substance of energy conservation management which includes the activity of energy supply, energy undertaking, energy utilization, and energy resource conservation in each sector of energy source user and/or energy user. A further arrangement on incentive is found in Regulation of Finance Minister. The arrangement of authority for implementation of energy conservation in the Government is not cross-sector according to each government affairs in the areas of public works and people housing, industry, finance, transportation, (living) environment.

Besides arrangement of energy conservation in the future should consider various legal needs in the society, including the institution of energy conservation representative body; ESCO, and green building, green bank, green investment, and green industry.

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4. Conclusion

Based on the result of research as described above the conclusions which can be put forward, among others are:

- a. Energy conservation policy in Indonesia at present is regulated in Energy Act, Government Regulations on Energy Conservation, PP 79/2014, Permen ESDM 13/2012, Permen ESDM 14/2012, Permen ESDM 18/2014, Permen ESDM 07/2015, and in various other legislative regulations. The general arrangement on energy conservation has the primary source in Energy Act and PP Energy Conservation.

b. There happen implementation problem and the need for filling in legal necessity at present in PP Energy Conservation as implementation effort of better energy conservation. For such purpose, it requires revision of PP Energy Conservation. The implementation problems and fulfilment of the present legal need; among others are:

- 1) The obligation of conservation implementation for energy source user and energy user higher than or equal to 6,000 (six thousand) ton oil equivalent per year cannot be implemented.
- 2) Giving Incentive (fiscal and financial) to those who wish to perform investment of energy efficiency activity and not yet show success on energy conservation not yet being regulated.
- 3) Government and regional government authority are not based on approaches of location, user, benefit and impact, and efficiency in accordance with Act Number 23 of 2014 concerning Regional Government.
- 4) There is no arrangement on administrative sanction.
- 5) Substance content of Energy Conservation management which includes activity, energy supply, energy undertaking, energy utilization, and conservation of energy source are not yet clear so that its substance content needs addition/enrichment.
- 6) Provisions of incentive cannot be implemented because there is no delegation of arrangement into Finance Minister Regulation level.
- 7) Arrangement of authority for energy conservation implementation in Government is not cross-sector, whereas energy conservation lies on cross-sector, such as Ministry of Public Works and People Housing, Ministry of Industry, Ministry of Finance, Ministry of Transportation so that besides the general norms, it is necessary to have to implement regulation at Ministry/related Institution levels.

- 8) Energy conservation management activity through utilization only focuses on energy management.
- 9) The arrangement of energy conservation has not yet accommodated various legal needs in society, and institutions/entities.
- 10) Energy conservation representative body, ESCO, and arrangement for green building, green bank, green investment, green industry.

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