

Future of Indonesia's Energy Independency: Review on Fuel Subsidies Reform of Joko Widodo's Government

Research Paper

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Indonesian government introduced fuel subsidies in the late 1950s to stimulate economic development. However, since the country ceased to be a net exporter of oil in 2004, increasing demand for oil products and political pressure to maintain subsidies has meant that government expenditure on subsidies has steadily escalated. Despite the various energy policy reforms implemented since 1998 to cut fuel subsidies and adapt to the evolution of the country's energy landscape, it is now clear that oil subsidies are no longer the stabilizers that once helped Indonesia to find its balance. Indonesia's dependence on subsidies is now weighing down the country's efforts to reach economic success.

Several efforts have been taken since a decade ago, to slowly cutting down fuel subsidies. However, every time the government tried to cut down fuel subsidies, public's response was always negative and often times create instability to domestic's affair. Because of this instability created by public's reaction, the government was forced to stabilize it right back by, ironically, putting back the subsidies. Only in 2013 that the former President Susilo Bambang Yudhoyono tried to compensate it with social assistance fund that goes to poorest society to ensure that relocation of fuel subsidy goes to the need ones. Even so, Indonesia's state-budget still suffers the burden of huge fuel subsidy allocation of around 18% of state budget in 2014 (Oxford, 2014).

In 2014, the new elected President Joko Widodo put the fuel subsidy reform as his top priority during his first days of administration. Soon after he was elected and before he took office, he announced that fuel subsidy would be cutting down gradually. The result is, as of January 2015, Indonesia's fuel subsidy has been cutting down entirely with very little exceptions for distribution cost throughout rural part of Indonesia. His priority from cutting off fuel subsidy is to channel the money to other productive sectors, mainly investment for infrastructure, economic, health, and education. As reform in any energy sector's policy would affect to energy consumption in a country, this paper would like to discuss the relation, or the possibilities, between the cutting off of subsidy, to the effort in boosting alternative energy other than fossil fuel in the country. Indonesia still need a lot of energy reserve to suffice its needs for electricity and transportation, therefore government's effort especially under President Joko Widodo's administration is important

to be observed—since in the long run, it will determine Indonesia's independency or readiness to fulfill its energy demand.

LIST OF ABBREVIATIONS

BOE	—	Barrel of oil equivalent
BOI	—	Bank of Indonesia (Indonesia's central bank)
BPPT	—	Badan Pengkajian dan Penerapan Teknologi (Agency for Technology Assessment and Application)
GWe	—	Gigawatt of electrical output
LPG	—	Liquefied Petroleum Gas
MW	—	Megawatt
MWe	—	Megawatt of electrical output
OPEC	—	Organization of the Petroleum Exporting Countries

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I. Introduction

Indonesian government has introduced fuel subsidies in the late 1950s to stimulate development. However, since Indonesia's withdrawal from OPEC in 2004, increasing demand for oil products and political pressure to maintain subsidies has caused the government expenditure on subsidies steadily escalated. It is now clear that oil subsidies is no longer the stabilizers that once helped Indonesia to find its balance. Indonesia's dependence on subsidies is now weighing down the country's efforts on achieving economic success. Several efforts have been taken by the previous administrations of Indonesia since early 2000s. However, political pressure and public protests caused such efforts to drawn back and fuel subsidies to be reinstated.

The recent presidential election brings new hope for Indonesia in many aspects. The new elected President of Indonesia, Joko Widodo (or Jokowi), has taken a bold step within his early months' administration—he cut down energy subsidies and subsequently scrapping off entire subsidies for fuel. This reform on fuel subsidies is desperately needed in order to give fiscal room to fund another bigger program to benefit the people. It was said that around 240 trillion rupiah (18 billion USD) might be redirected for vital infrastructure, health, and education.

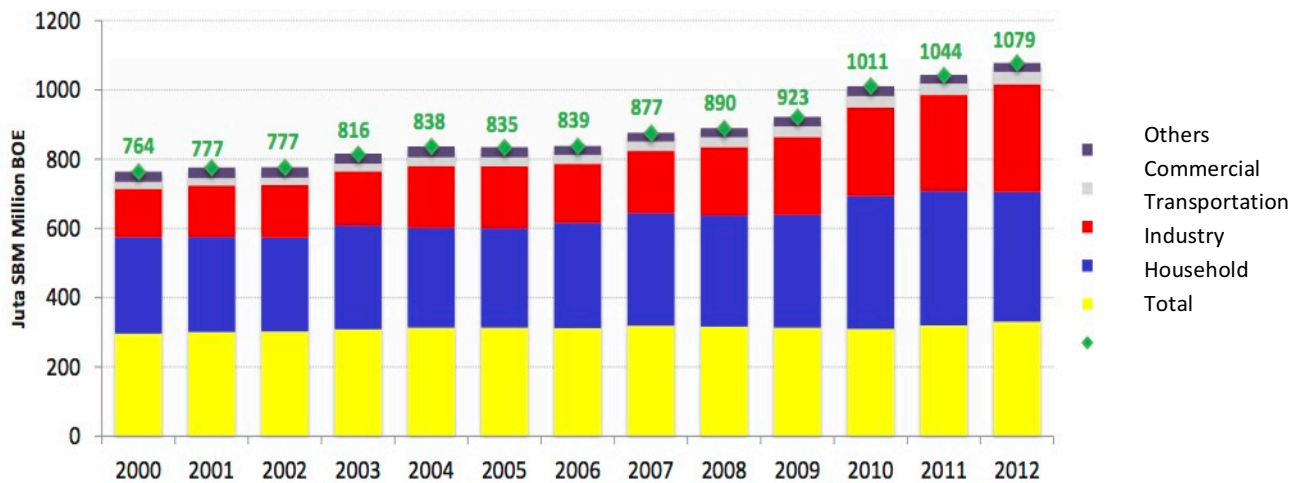
President Jokowi's subsidy reform is said to be the kick-start to cut down Indonesia's reliance on oil and other fossil fuels. Vital infrastructure that will be financed is including renewable energy sector to decrease the country's dependence on fossil fuel for transportation, as well as to support Indonesia's demand of electricity.

This paper will be discussing the past efforts of fuel subsidy reform, with introduction to Indonesia's energy condition and issues in general. Furthermore, we will enter into the discussion on the reform took by President Jokowi's administration, and how the reform benefits from the declining price of global oil price. Lastly, we will be discussing on how this fuel subsidy reform will finally trigger efforts of renewable energy development further, as this country seemed to have started but have not proven significant results. Investment and most importantly the government commitment in energy reform as a whole will surely contribute to Indonesia's energy sustainability and independency in the future.

I.1. Indonesia's Energy Consumption

Final energy consumption in the period of 2000-2012 increases from 764 million BOE to 1,079 million BOE or grow an average of 2.91% per year. This final energy consumption does not take into account of other petroleum products such as lubricant, asphalt, etc. used in industry sector. If we take a look at the final energy consumption share, as of 2012, the largest share of demand is industry sector (38.8%), followed by household (30.7%), transportation (28.8%), commercial (3.3%) and other sector (2.4%). During the period of 2000-2012, the transportation sector experienced the largest growth reached 6.92% per year, and then followed by commercial sector (4.58%), and industry sector (2.51%). This high rate growth in transportation sector was caused by the rapid growth of vehicles during the time span of 2000-2012, which reached 14.3% per year. On the other hand, households have the smallest growth during 2000-2012 because the households had shifted their usage of equipment and technologies to be more modern and efficient.

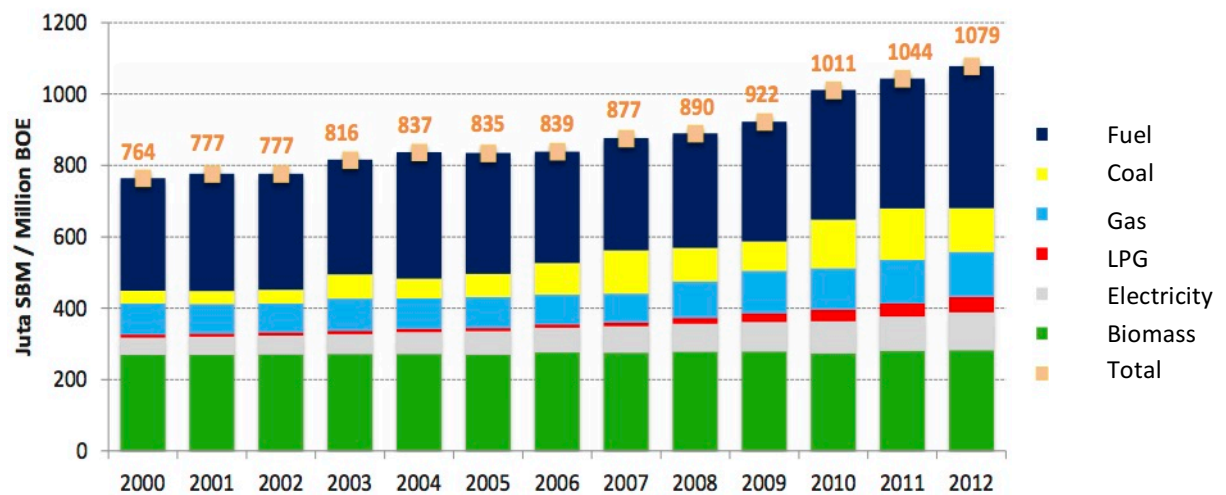
Figure 1: Final energy consumption by sector (in million BOE)



Source: Indonesia Energy Outlook 2014, BPPT

If we look from the type of consumption, final consumption of energy in Indonesia is still dominated by petroleum fuel (avtur, avgas, gasoline, kerosene, diesel oil, and fuel oil). During 2000-2012 periods, total fuel consumption increased from 315 million BOE to 398 million BOE – an increase of 1.9% per year in average.

Figure 2: Final energy consumption by type (in million BOE)



Source: Indonesia Energy Outlook 2014, BPPT

Patterns change on fuel consumption are due to the high rate consumption of gasoline by private cars, the high rate consumption of avtur or avgas by aircraft, diversification energy in industry sector, and kerosene substitution program with LPG in household sector. Coal consumption increased from 36.1 million BOE to 123 million BOE in 2012, rose in an average 9.9% per year. The entire consumption of coal is used for energy demand in industry sector. Natural gas consumption increased from 87.2 million BOE in 2000 to 125.3 million BOE in 2012 – a rise of average 2.8% per year. However, limited infrastructure and distribution of natural gas limits the supply of this industry to satisfy its demand. In electricity consumption, from 2000 to 2012 it has grown in average of 6.2% per year. This number is lower than coal and LPG consumption as we can see from Figure 2, indicating the low level of electrification ratio of Indonesia, especially in comparison to other South East Asian countries.¹

I.2. Indonesia's Energy Resources Potential

Indonesia's energy resources discussion may be divided into two main parts, fossil energy resources and renewable energy resources. Since Indonesia still rely mainly on fossil energy, it seems impossible to get rid of fossil energy entirely from calculation when talking about energy resources potential.

¹ Indonesia has the electrification ratio of 75.8% in 2012, while Singapore, Malaysia, Philippines, and Vietnam have 100%, 99.4%, 89.7%, and 97.6% ratios respectively.

Fossil energy consists of coal, oil, and gas is the main energy resource in Indonesia. Most of the energy reserves, including mineable coal, are located in Sumatera and Kalimantan islands of Indonesia.

Table 1: Fossil energy potential in Indonesia (2011-2012)

Jenis Energi / Energy Type	Tahun / Year	Cadangan potensial / Potential Reserve	Cadangan Terbukti / Proven Reserve	Total
Minyak Bumi (Miliar Barel) / Oil (Billion Barrel)	2011	3.69	4.04	7.73
	2012	3.67	3.74	7.41
Gas Bumi (TSCF) / Gas (TSCF)	2011	48.18	104.71	152.89
	2012	47.35	103.35	150.70
		Sumber Daya / Resource	Cadangan / Reserve	
Batubara (Miliar Ton) / Coal (Billion Ton)	2011	120.33	28.01	
	2012	119.42	28.97	

Source: Indonesia Energy Outlook 2014, BPPT

Based on Table 1 above, it was calculated that the ratio of reserves to production of coal dropped from 79 years in 2011 to 75 years in 2012. As for oil, the reserve to production ratio is about 12 years in both 2011 and 2012. Natural gas experienced an increase of reserve to production ratio to become 33 years in 2012. Based on the calculation of reserve to production ratio of fossil energy, coal has the biggest potential with a lifetime of 75 years, while gas potential would be finished in the next 33 years. Oil is the smallest potential of fossil energy resources with potential last only until the next 12 years, if no new reserves are found.

Besides fossil energy, other energy potential in Indonesia is the renewable energy, such as hydropower, geothermal, wind, solar, ocean, and biomass. Its potential location is adequate but scattered in various parts of Indonesia. Based on the data from Ministry of Energy and Mineral Resources in 2013, Indonesian geothermal reserves amounted to 16,484 MW of about 28,617 MW potential. Up to September 2013, the installed capacity of geothermal power plant is 1,242 MW. As for biomass, its potential for electricity reached 49.8 GWe with installed generating capacity connected to the grid at 445 MWe. The potential of solar power in Indonesia is quite high with an intensity of 4.8 kWh/m²/day and with utilization of 12.1 MWe. For new wind power, the installed capacity generation is about 1.1 MWe of 9,290 MWe potential.

As for hydropower potential, a recent study in 2011 by Nippon Koei (BPPT, 2014) stated that large scale hydropower potential in Indonesia is 26 GW, consists of 4 GW from

projects that are already in operation, 6 GW from the project being planned and structured, and new potential of 16 GW. In regard to the mini or micro hydropower, Indonesia has the potential of 500 MWe. Based on the data from Indonesia Nuclear Energy Agency, total reserve of uranium in Indonesia is amounted up to 59,200 tons – equivalent to 6.5 GWe, while total reserve of thorium was recorded at 1,500 tons – equivalent to 1,850 MWe for 30 years operation.

Other resources of renewable energy that are not widely known, but already being developed in other parts of the world, are ocean waves, tidal energy, ocean currents, ocean thermal energy, and ocean salinity. Indonesia is an archipelagic country, with water as its territory more dominant than land. This is a big potential of renewable energy resources for Indonesia if in the future they can develop renewable energy derived from ocean.

I.3. Current Energy Issues

Energy sector in Indonesia is currently facing tough challenges in both global and national scopes. Some actual problems are:

- Population growth of an average 1.31% per year, reached 241 million in 2012;
- Continuous decline of oil production while demand for energy is growing continuously, which led the increase in import of crude oil and petroleum products shown by the increase of deficit at oil account in second quarter of 2014;
- Limited utilization of natural gas, despite the huge potential in the country, due to the inadequate infrastructure as well as the long-term contract of large gas export;
- Small utilization of renewable energy potential due to the high cost of investment, bureaucracy, incentives or subsidies, the high final selling price of renewable energy compared to fossil energy, lack of knowledge in adapting the clean energy facilities, and the scattered location of renewable energy resources; and
- Export of coal exceeds domestic consumption that in the long run will deplete the coal resource potential in Indonesia, leading to energy supply problem for future generations.

Other than problems mentioned above, Indonesia is now facing serious problem in transportation sector and electricity issues. In transportation sector, the growth of road infrastructure is not proportionate with the growth of vehicles that reached an average of

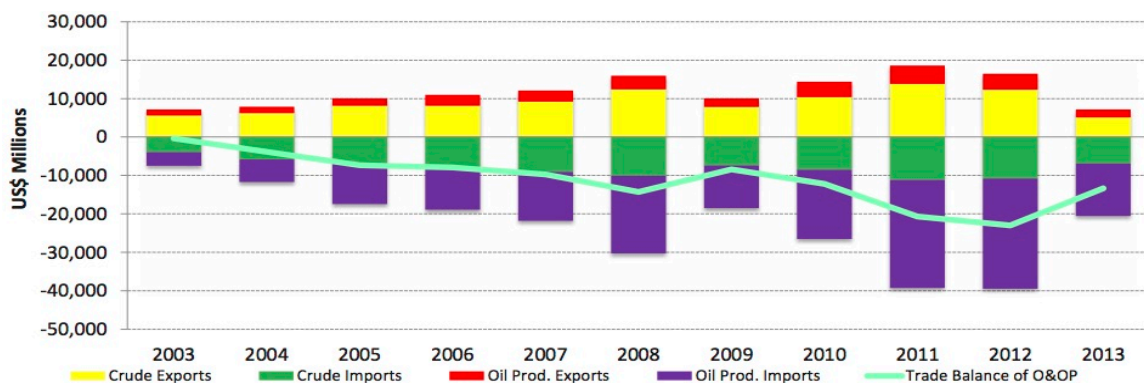
14.3% per year with only 3.1% growth of road per year. It causes traffic jam especially in big cities, resulting to the loss of time and money, increase in vehicle operating costs, energy waste, severe air pollution, not to mention the immaterial loss of stress level of its people. Main cause of the rapid growth of motor vehicles and fuel consumption is the subsidized rates price of gasoline and diesel oil set by the government.

In electricity sector, problems occur in the management of national electricity system, such as high cost of electricity production compared to the sale price, supply uncertainty – especially for natural gas, as oil-fired power is still the main source of energy, and the archipelagic nature of Indonesia that complicates the transmission and distribution of electricity. Electricity supply is also facing difficulties especially from the growth of demand that is higher than its supply, also the construction of power plant's problems – absence of basic standard in licensing process and the financing, as well as land acquisition difficulties.

II. Recent Energy Policies

Some part of energy use in Indonesia is still subsidized, and its realization in 2013 reached 199 trillion rupiah (16 billion USD), rose by 5.2 trillion rupiah (400 million USD) from its fuel subsidy budget. The condition of 2014 budget year was not far from the 2013's. Central Bank of Indonesia's statistics shows that in the second quarter of 2014 the deficit in oil and gas trade balance rose to 3.2 billion USD, increased by 2.1 billion USD from the same period a year earlier. Meanwhile, in non-oil and gas trade balance, Indonesia posted a surplus of 2.7 billion USD in the second quarter, higher than the previous year by 1.5 billion USD.

Figure 3: Oil and oil products trade deficit



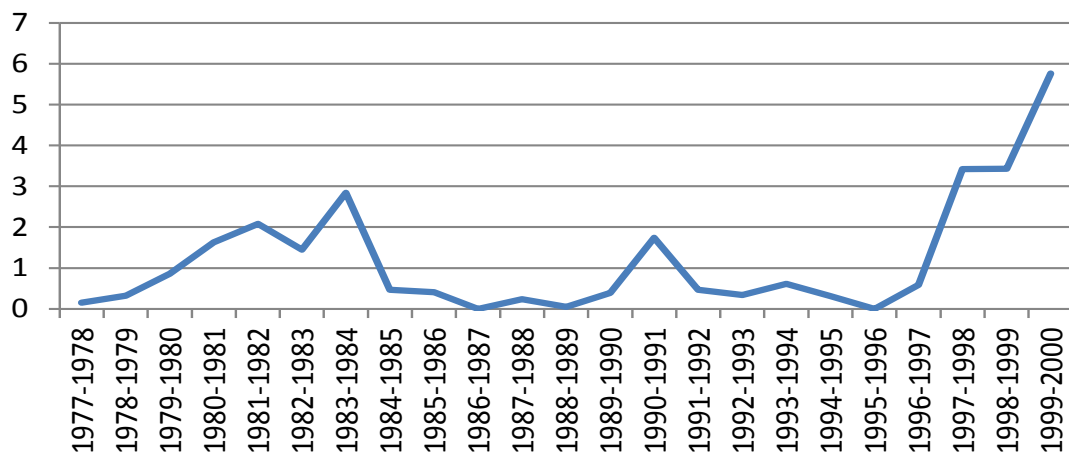
Source: Indonesia Energy Outlook 2014, BPPT

Energy subsidies increased continuously from over the few years. Somehow, it is interesting to see that the spending on energy subsidies are always larger than the allocated budget. It can be estimated that by the end of 2014 the total energy subsidies will rise to more than 300 million rupiah, which will further burden the state budget. This condition has been the main consideration on the reduction of fuel subsidy to achieve a less restrictive fiscal space for the funds allocation on more useful development program.

II.1. Fuel Subsidy

Indonesia has subsidized fuel shortly after the nationalization of Dutch enterprises in 1957. Under President Soekarno regime, the country began subsidizing oil products used in the transportation, industrial, and power generation sectors in a bid to stimulate and protect citizens from inflation (Oxford, 2014). In 1960s, fuel subsidies accounted for about 20 per cent of the state budget (Global Subsidies Initiatives, 2014). There was once an adjustment during the New Order era (1966-1998), but the reforms were temporary. Such adjustment was needed following the Asian Financial Crisis in 1998, and the administration then need to comply with IMF requirement in exchange for 43 billion USD rescue package. The government need to cutting down fuel subsidies to reduce government expenditure and improve the country's fiscal deficit (IEA, 2014). However, such effort did not smoothly rescued Indonesia, and instead since mid-1990s, the fuel subsidies have significantly increased.

Figure 4: Indonesia's fuel subsidies during New Order government
(in billion USD)



Source: Global Subsidies Initiatives Research Report, 2012

II.2. Efforts for Fuel Subsidy Reform

Up until 2012, there are three major efforts in fuel subsidies reform in Indonesia, which were undertaken in 2003, 2005, and 2008. The first one followed the launch of National Energy Policy of 2003-2020 (*Kebijakan Energi Nasional 2003-2020*), when the government under President Megawati Soekarnoputri raised fuel and electricity prices. However, these reforms were met with widespread protests and ended as government eventually reinstated the subsidies.

President Susilo Bambang Yudhoyono (took office in 2004-2014) has been more successful at reforming fuel subsidies. Such effort was a part of broader effort to improve energy conservation and diversification. In 2006, President Yudhoyono issued Presidential Decree No. 5 of 2006, which committed the government to reaching the “fuel market price in a gradual manner”. The decree was also established the Blueprint for National Energy Management 2006-2025, which further emphasized the government’s commitment to fuel subsidy reform. In line to the said blueprint, Yudhoyono’s administration reformed energy subsidies in 2005 and 2008. Two rationales were used to justify such reforms; first, is that a significant increase in the global price of oil had forced it to reduce subsidies; and second, that rising cost for fuel subsidies were undermining the government’s ability to fund vital public services, such as health, education, and infrastructure development.

Despite these reform efforts, fuel subsidies remain high in Indonesia, as rising global oil prices and increased demand for oil products has offset progress on subsidy reform.

III. New Elected President Joko Widodo’s Policy on Fuel Subsidies

New elected president of Indonesia, Joko Widodo or Jokowi, had planning on reducing fuel subsidies over the next few years since he was running for presidency. This plan got criticized a lot by the opposing candidate at that time, since it was deemed not benefitting the people and simply will not be easily implemented—recalling back in 1998 when protests over fuel price increases contributed to the downfall of President Soeharto. However, Jokowi was bold with this plan.

Right after he took office in October, he started to raise fuel price in November by 30% of the current fuel price at that time. Approaching the day of increase of fuel price on November 18, 2014, there was an increase in the currency's exchange rate to US Dollar, as well as Great Britain's Pound Sterling, Europe's Euro, Japanese Yen, and Chinese Yuan. This was a positive signal considering that it was a sensitive decision and many people expecting another negative reaction like it was in the past. At the same time, increase of fuel price in November caused the increase of life cost both directly and indirectly. BOI predicted that annual inflation in 2014 would reach 7.9%, which is still at the acceptable range—being 7.7%-8.1%, with the increase of fuel price contributed as addition to annual inflation of 2.6% to 3%. Recent data from Statistics Bureau Agency is that the actual annual inflation in 2014 resulted from the increase of fuel price in November 2014 reached 8.36%, which was 0.26% higher than the upper limit predicted by BOI. In order to moderating this inflation, on November 18, BOI increase its benchmark interest rate from 7.5% to become 7.75% and increased lending facility of 0.5% to become 8% (New York Times, 2014). Such anticipating policies were not shown during the previous fuel price increase back in July 2013

Following the first reform in November 2014, at the end of December 2014, President Jokowi announced another fuel subsidy reform in continuation with his plan, and in adjustment to the global oil price. He announced that the subsidy for fuel will be eliminated entirely, and impose a fixed subsidy to diesel fuel—this resulted to a decrease in domestic fuel price as the global fuel price is also declining. The decrease in oil prices this time was also affecting the exchange rate and stock market. Even though the exchange rate was stagnant, such decrease of fuel prices has been seen as a positive change. This time, the impact on inflation due to the change of fuel price was considered to be moderate compared to the increase of fuel price back in November 2014 (Global Subsidies Initiatives, 2014).

III.1. Public Reaction to Fuel Subsidy Reform

Any changes to domestic fuel price have always been popular policies in Indonesia. Fuel price increase back in November 2014 and its decrease in January 2015 were not exception. One critic towards the government on these policies was the price stickiness effect on price, whereas the decrease of fuel price in January 2015 was not followed by the decrease of other prices. This price stickiness was because the government did not

have other policy to control market price anymore, since it has been surrendered entirely to the market mechanism (Establishment Post, 2015).

On the other hand, increase on fuel price is seen as one of policy that has disturbing effect, like what happened to public response on price increase in November 2014. Following the announcement, before the new price was effectively imposed, people were immediately rushing to buy fuel at gas stations throughout the country. This caused long queue for hundreds of meters in several places. It caused mild tension at several gas stations since armed police guarded those places (Republika, 2014). The panic-buying phenomenon was ended once the new price announced.

Prior to the day of announcement, many protest and actions were happened throughout Indonesia. Most of the times, these protest ended with anarchist behavior. Most of the protesters were university students claimed to be speaking up on behalf of the people. Sometimes those protest lead to discomfort felt by ordinary people, who sometimes fight back once the protesters turned to be anarchists. These behavior cause instability and insecurity by the people, especially when armed police or army steps in.

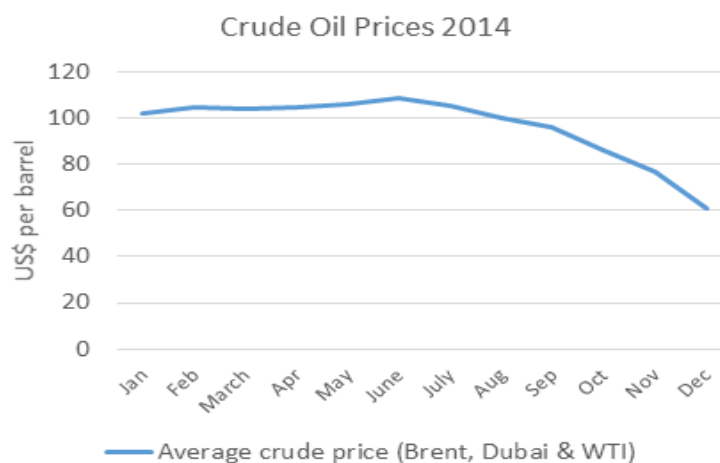
From transportation sector, public transportation workers, especially drivers, protested about the increased on fuel price. They tried to negotiate to delay the effective imposing of new price to public transportation vehicles since it will affect the transportation fare as well. Aside from transportation workers who got affected directly, protests also came from labor unions. They demanded for cancellation of price increase plan and increase on their minimum wage, which they have been fought over for sometime.

However, public reaction towards the increase of fuel price was not entirely negative. Indonesian Consumers Organization (*Yayasan Lembaga Konsumen Indonesia*) for example, supported the plan to cut off fuel subsidy. Their only note was the government had to prepare a detailed scheme for budget relocation, and to make sure that the transportation facilities will be taken care. Two notable university student organizations from top notable universities were also taking stand to support this fuel subsidy cut off.

III.2. Impact Analyses on Fuel Subsidy Reform

Indonesia has successfully scrapped off fuel subsidy entirely by January 2015, at the same time as the declining price of global oil prices since July 2014. During the time of first fuel subsidy decrease in November 2014, the domestic fuel price increased, since the international oil price was still above the domestic fuel price—with subsidy.

Figure 5: Global crude oil prices 2014



Source: Chart by Global Subsidies Initiatives, 2015 (data from World Bank, 2015)

The scrapping off of fuel subsidy was intended so that the budget initially for subsidy may be allocated from consumptive sectors to other productive sectors, especially infrastructure, health, and education.

Now, Indonesia has three classifications to its fuel products, being Specified Fuel, Fuel for Special Assignment, and General Fuel. Specified Fuel is a category for fuel products that are still receiving subsidies, such as kerosene and diesel fuel—in the future diesel fuel will get a fixed subsidy, and kerosene will get a fixed price. Fuel for Special Assignment is fuel to suffice rural and small areas of Indonesia. The fuel here is without subsidy, the same as General Fuel, but the government will still bear the cost of distribution to such rural areas so that the fuel price there will bear the same as the ones in big cities.

III.3. Future of Renewable Energy and Indonesia's Energy Independency

At APEC Forum in Beijing last November 2014, President Jokowi mentioned that the main cause driven fuel subsidy relocation is to relocate the budget from consumptive

sector to productive sectors (GSI, 2015). However, to relocate the national budget is not an easy task. The fund could not be relocated instantly after scrapping off the fuel price. It should be scrutinized by observing changes in Amendment to National Budget posts that should be finished by mid 2015.

Nevertheless, President Jokowi's government has shown some indication how the saving of fuel subsidy would be used. In several statements, the government mentioned that the scrapping off of fuel subsidy enables government to increase its contribution to State-Owned Enterprises (SOEs). A report said that the government is planning to inject the fund in the amount of 48 trillion Rupiah (3.8 billion USD) to various SOEs, especially those who engage in construction and transportation sectors. One of the SOEs targeted is PT PLN (SOE in electricity), and expected to finish their electricity plant worth of 120,000 MW out of 350,000 MW within five years.

Other sector predicted to be part of the 200 trillion Rupiah (16 billion USD) relocation fund from scrapping off fuel subsidies are fund for poor people, energy, and environment, where government's budget will be directed for infrastructure development in the future. Indonesian government just recently announced that they will boost 'green investment' to support effort of acceleration to reach renewable energy utilization by 25% in 2025 (Tempo, 2015). As stated by the Minister of Energy and Mineral Resources of Indonesia, investment in energy sector will prioritizing to the development of renewable energy, which currently still 7% from the total energy utilization in Indonesia. The government said that they would raise the budget for investment in renewable energy development and include such initiation in the Amendment of State Budget 2015. Various incentives, both fiscal and non-fiscal, will be implemented as well to boost such investment. The Minister also stated that up until recently, there are a lot of investors wanting to invest in green energy because the potential is still huge. He said that the identified hydro energy potential is reaching 75 GW, solar energy potential is 112 GW, biofuels of 32 GW, wind energy of 0.95 GW, biomass of 32 GW, geothermal of 28.8 GW, and ocean power of 60 GW.

From investment side, the Head of Indonesian Investment Coordinating Board stated that several incentives have already implemented to boost investment climate, such as tax holiday, tax allowance, as well as import duties for electricity component, in addition to

the perfected One-Stop Service of investment permit. One of the recent update in renewable energy investment is an investment commitment worth 4.01 billion USD through a forum held in coordination with Scottish Development International in Glasgow, United Kingdom (Republika, 2015). Investment's focus will be on solar energy sector over 10 MW and offshore tidal energy.

Indonesia has been purchasing electricity due to the increase of electricity demand—which in the other hand is a good sign of development, but the supply generated is only sufficient to fulfill 87.43% of demand (CEIC, 2014). If the above mechanisms of improving development of renewable energy to substitute fossil fuel go well, Indonesia will be able to fulfill its energy demand, especially electricity, which has been weighing down the country for several years.

III.4. Comparison with Malaysia

In addition to the discussion above, we can see the similar case is happening in Indonesia's neighboring country, Malaysia. In December, Malaysia abolishes the fuel subsidy due to the declining of global oil price (Bloomberg, 2014). Fuel subsidy issue has been burdening Malaysia for some time as well, with contribution up to 10% of government's operating expenditure (IISD, 2014). As Malaysia is still a net exporter of oil, the declining of global oil price will not benefit them as much as it benefits Indonesia. Researchers calculated that the net effect of a sustained fall in crude oil prices on the economy would likely be a bigger drag than the fuel subsidy savings, given the contribution of oil and gas sector revenue contribution to Malaysia's GDP ratio was 6.6% versus the fuel subsidy to GDP ratio of 2.3% in 2013 (The Star, 2014).

IV. Policy Recommendation

After a comprehensive discussion and assessment to the issue above, there are still a lot of things that Jokowi's government should prepare and address. Policy recommendations the writer wishes to initiate the government are the following:

- The government, through its respective bodies and ministries, has to conduct strict supervision to the spending of budget relocation so that the plan of channeling fuel subsidy budget to other sector may actually be attained. This is in relation to the

- government restructuring that are happening now in major ministries and government agencies to eliminate corruption and in-transparency of public officials in Indonesia;
- We note that there is a price stickiness happening from the first decrease of fuel subsidy, that made the fuel price increase in November 2014 and did not going down even though the global fuel price is declining nowadays. Due to this phenomenon, the government needs to work in fast pace to improve public infrastructure and social prosperity, so that if one day the global fuel price increasing, the public will not face that much burden—which in the past public protests and force pushed the government to re-imposed fuel subsidy back;
 - Government through its relevant agencies should overcome the obstacles that hinder investors to invest, especially for crucial sectors such as energy and infrastructure. Most investors currently experiencing land acquisition problem that are happening in many part of Indonesia. The government must immediately address and escort the land acquisition issue so that it will smoothen investment activities and development of infrastructure.

V. Conclusion

This paper has discussing from the beginning, the overall condition of Indonesia's energy consumption and energy issues that the country is facing for the past 10 years. Fuel subsidies, which were intended to guard Indonesia's people, became a weigh down for the country to develop. President Jokowi, and his predecessors, have tried to overcome such burden in the state budget derived from fuel subsidies. As good faith as it is, cutting off fuel subsidies has not been a favorable policy of the people, since it almost always raised the fuel price—until recently. President Jokowi has the good timing when the global oil price is declining, so his recent policy to entirely scrapping off fuel subsidy resulted to a decrease in domestic fuel price. Many speculation was thrown out on how President Jokowi would relocate the fuel subsidy budget to other productive sector. Through recent indication and signals, such budget will be allocated—among other sector as well, to build and continue to develop several energy infrastructure projects, especially renewable energy, which has been delayed for some time. This brings hope on the future of Indonesia's energy sustainability, since they cannot rely on fossil fuels forever, in fact the prediction on fossil fuel reserves in the country will not be sufficient for a long time. The country must build and secure new alternative energy sources to guarantee their energy

independency in the future. However, the process up to this day is still facing several obstacles and it is government's responsibility to overcome, along with private sectors support, me and guard the sustainability of their scrapping off fuel subsidy policy.

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