

INDONESIA ENERGY SUBSIDY NEWS BRIEFING

A review of developments in Indonesian energy subsidy policy and energy markets

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As part of its work on energy policy and sustainable development in Indonesia, the Global Subsidies Initiative (GSI) of the International Institute for Sustainable Development (IISD) publishes a regular briefing on issues related to energy subsidies. For more information, contact Lucky Lontoh at lucky.lontoh@iisd.org and Phil Gass at pgass@iisd.org.

Energy Subsidies and State Budget Revision 2017 and State Budget 2018

The government of Indonesia (GoI) regularly revises the state budget around the middle of the fiscal year (usually in May to July) in order to calibrate its fiscal position with the latest macroeconomic indicators. In a session with Parliament on July 13, 2017, the GoI submitted a proposal for an IDR 24.2 trillion increase of its energy subsidy (Government of Indonesia, 2017b). This increase would raise the energy subsidy allocation from IDR 77.3 trillion to IDR 101.5 trillion (Gliemourinsie, 2017). After the budget talk, the parliament approved a total IDR 94.52 trillion of energy subsidy, which is a combination of fuel and electricity subsidies (Government of Indonesia, 2017b).

The proposal to increase the energy subsidy allocation was based on several factors. First, the GoI anticipates an increase in crude oil prices and a slight decline of the rupiah's exchange rate against the U.S. dollar. The initial State Budget 2017 was set based on a crude oil price of USD 45 per barrel, and an exchange rate of IDR 13,300 per USD, while in the revision those assumptions were adjusted to USD 48 per barrel and IDR 13,400 per USD. Second, the GoI decided not to change the domestic subsidized fuel price until the end of 2017.

Indonesia's energy subsidy budget item is made from subsidies to three main energy components: liquefied petroleum gas (LPG), electricity and liquid fuel (gasoline, diesel and kerosene). The main energy subsidy increase in the state budget revision comes from the suspension of LPG subsidy reform in January 2017. The LPG subsidy allocation increases from IDR 22 trillion to IDR 40 trillion. Another increase comes from the suspension of the tariff adjustment on the biggest subsidized electricity consumer group, the 450 VA group. The proposed electricity subsidy allocation increases from IDR 44.98 trillion to IDR 51.99 trillion. Conversely, the proposed liquid fuel subsidy shows a slight decrease from IDR 10.3 trillion to IDR 10.2 trillion.

The GoI has proposed similar energy subsidies for fiscal year 2018, indicating a cautious stance on the launch of further reforms, especially the impending LPG and electricity subsidy reform plans described below.



Table 1. Key economic and energy statistics and projections in Indonesia 2016-2018

	2016 Audited	2017 Original	2017 Revised	2018
Growth (% YOY)	5.0	5.1	5.2	5.4
Inflation (% YOY)	3.02	4.00	4.30	3.50
Exchange Rate (IDR/USD)	13,307	13,300	13,400	13,400
Interest Rate (%)	5.66	5.30	5.20	5.20
Indonesia Crude Price (USD/bbl)	40.2	45.0	48.0	48.0
Crude Production (tbbl/day)	829	815	815	800
Natural Gas Production (tboe/day)	1,180	1,150	1,150	1,200
Energy Subsidy i(trillion IDR)	106.78	77.31	103.11*	94.52
Fuel	18.74	10.33	10.21	9.30
LPG	24.94	22.00	40.91	37.56
Electricity	63.10	44.98	51.99	47.66

* Proposed value. The final negotiated and approved ones may be different.

Note: YOY = year on year, IDR = Indonesian rupiah, USD = US dollar, bbl = barrel, tbbl = thousand barrels, tboe = thousand barrels of oil equivalent.

Source: GoI, 2015, 2016, 2017a, 2017c

Indonesia's consistency in managing its macroeconomic posture within its budget deficit boundary and its efforts to reform inefficient subsidies have been key considerations in obtaining a long-awaited investment grade status from Standard & Poor's in May 2017. Indonesia is now rated investment grade by the top three credit rating agencies—S&P, Fitch and Moody's (Bloomberg, 2017).

Table 2. Indonesia's current investment grade by major rating agencies

Rating Agency	Date of Rating Issuance	Rating	Outlook
Standard & Poor's	May 19, 2017	BBB-	Stable
	June 1, 2016	BB+	Positive
Moody's	February 8, 2017	Baa3	Positive
	January 28, 2016	Baa3	Stable
Fitch	July 20, 2017	BBB-	Positive
	December 21, 2016	BBB-	Positive
Japan Credit Rating Agency	March 7, 2017	BBB-	Positive
	February 1, 2016	BBB-	Stable
Rating and Investment Information Inc.	April 5, 2017	BBB-	Positive
	April 4, 2016	BBB-	Stable

Source: GoI, 2017c

LPG Subsidy: Building Up to Major Reform

The GoI has promoted LPG consumption, especially in the household sector for cooking, lighting and small business purposes, to replace consumption of highly subsidized kerosene. The effort started in 2007 and has induced an increasing share of LPG consumption in Indonesia’s final energy mix, from 1.7 per cent in 2006 to 8 per cent in 2015 (Ministry of Energy and Mineral Resources, 2016). In fiscal terms, this trend has translated into a heightening LPG subsidy burden for Indonesia, rising from IDR 3.89 trillion in 2008 (GoI, 2010) to IDR 24.94 trillion in 2016 (GoI, 2017c). In 2017, the GoI expects it to reach around 40.91 trillion due to import cost pressure and a weakening rupiah.

Indonesia has not adjusted its subsidized LPG price of IDR 12,750 per 3-kg cylinder, or IDR 4,250 per kilogram, since 2007. In addition to the resultant increasing LPG subsidy value in the State Budget, the fiscal situation is worsened by the GoI’s considerable delay in payment to PT Pertamina, the state oil and gas company and the provider of subsidized LPG. Elisa Manik, CEO of PT Pertamina, claimed in June 2016 that the accumulation of unpaid obligations for subsidized fuel had reached IDR 35 trillion, of which IDR 16 trillion came from the LPG subsidy (Katadata, 2017a).



Figure 1. Saudi Aramco Propane (CLRP_9N)¹ prices, September 2016–August 2017

Source: ino.com, 2017

Following the increasing price trend in the first half of 2017, amending Indonesia’s plan to reform its LPG subsidy system emerged as an urgent task. The GoI had planned to reduce its LPG subsidy since last year and expected to implement it in January 2017. However, after receiving the recommendation to amend the plan in January 2017, President Joko Widodo sent this initial plan back to the cross-ministerial technical team to be improved. This is the primary cause of the difference between the initial subsidy allocation in State Budget 2017 and the proposed subsidy allocation in Revised State Budget 2017.

Two high-level guidelines were given to the technical team that designed the new subsidy scheme. First, the president instructed the team to utilize smart card technology, integrated with Indonesia’s banking system, to distribute the LPG subsidy. Second, discussion between the Ministry of Energy and Mineral Resources and parliament’s Budget Commission resulted in an agreement that the new LPG subsidy system should be anchored

¹ Indonesia’s regulations stipulate that the government use the propane and butane contract price issued by Saudi Aramco (Saudi Aramco CP) as the reference price index to calculate its domestic LPG retail price. Figure 1 uses Saudi Aramco future quotes, not actual Saudi Aramco contract prices, to illustrate historical price fluctuations.



to the Unified Poverty Database to improve its targeting, replicating an equivalent experiment in reducing Indonesia's electricity subsidy.

Several pilot tests for the new LPG subsidy scheme have been conducted by the Ministry of Energy, and they will continue throughout 2017. The GoI expects to introduce the new system in 2018.

Electricity Subsidy

Indonesia reached a positive milestone in 2013 by introducing a gradual tariff adjustment mechanism that was to raise the electricity tariff by around 30 per cent three times, until it met its market value. At this point, a monthly price adjustment mechanism would be put into place to keep the unsubsidized tariff at a level that would match PT PLN's production costs. However, this plan was not carried out in its entirety.

At the end of 2016, the GoI planned to restructure the tariff in the bottom two household consumer classes, 450 VA and 900 VA. However, in 2017, the GoI halted implementation of the plan for the 450 VA class and implemented the gradual phase-in of tariff adjustments only for the 900 VA class (GoI, 2017a), which reached its final stage of tariff adjustment in mid-2017.

In 2017 the GoI applied two tariff rates to the 900 VA class: a subsidized rate of IDR 605/kWh for poor households and what it has called a non-subsidized rate of IDR 1,352/kWh² for non-poor households, which is supposed to be adjusted on a monthly basis. The tariff for the 450 VA class will remain at a subsidized rate of IDR 415/kWh (Jawa Pos, 2017). These steps, in addition to external factors such as the crude oil price and exchange rate, caused a slight electricity subsidy increase in Revised State Budget 2017.

The split in 900 VA class rates was made possible due to the availability of a new household income database that was adopted by PT PLN to classify its electricity subsidy recipients. This dynamic subsidy recipient list is based on Indonesia's unified poverty database, and can be updated by census, survey and self-reported consumer data. The initial consumer verification process for the 900 VA class excluded 23.08 million electricity consumers from the subsidy (Listrik.org, 2017).

Fuel Subsidy: One Price Policy

Indonesia's BBM Satu Harga, or One Price Policy, was declared by President Widodo in October 2016 and officially launched on January 1, 2017, based on Minister of Energy and Mineral Resources Regulation No. 36/2016. The regulation was followed by Director General Oil and Gas Decree No. 09.K/10/DJM.O/2017, which served as the project roadmap. The regulation lists 148 districts in Indonesia as the target locations of the project. It deals with subsidies for gasoline, automotive diesel and kerosene.

Through the One Price Policy, the GoI is staging a campaign to provide fuel access for the country's remote and underdeveloped areas, with a unique condition: that the fuel will come with a similar price to those in more developed regions. Minister of Energy and Mineral Resources Ignasius Jonan explained that his ministry is aiming to establish access to fuel in at least 54 remote and border locations by the end of 2017. As of June 2017, 23 locations had been reached. In extending fuel supply to these areas, the GoI will encourage the construction of smaller-scale gas stations with capacities from 40 to 80 kilolitres per day for the fuel agent class, from 100 to 300 kiloliters per day for the mini gas station class (TribunNews, 2017). The program has been hailed as a manifestation of equality and justice by the GoI, since without it fuel prices in Indonesia's remote areas can reach double and triple the price in regions with more developed energy infrastructures.

According to the regulation, the fuel distributors in this project are entitled to higher profit margins from the fuel supplier. The sole fuel supplier in this project is currently PT Pertamina, while the distributor role is open to cooperatives, small businesses and national private companies. Even though the policy has been progressively implemented, it is still unclear in Revised State Budget 2017 how the GoI and PT Pertamina can deal with

² When the tariff adjustment was initially planned in 2015, the non-subsidized electricity tariff at that time was IDR 1,352/kWh. That number was used as the goal in 2017 reform, where the gradual tariff adjustment was meant to reach IDR 1,352/kWh. The actual non-subsidized tariff itself has already gone up to IDR 1,467.28/kWh as of September 2017.



higher profit margins for distributors and higher logistic costs while staying within the standard subsidized fuel price (Katadata, 2017c). PT Pertamina has stated that it covers the distribution cost to the targeted remote areas with its own money. In June 2017, it claimed that it had lost IDR 5 trillion by implementing this project since October 2016 (Jakarta Post, 2016, 2017). Indonesia's downstream oil and gas regulator, Badan Pengatur Hilir Minyak dan Gas Bumi (BPH Migas), has a supervisory role in this project to ensure its smooth implementation.

Coal Subsidy: Capacity Payment

Indonesia plans to procure as much as 24 GW of additional power generation from standard and mine-mouth coal-fired power plants between 2017 and 2026 (ESDM, 2017). Under the Ministry of Energy and Mineral Resources Regulation No. 49/2017, the financing terms for independent power producer power plants of both types are defined by Power Purchase Agreements (PPAs) for fixed terms of 25–30 years after the Commercial Operation Date (COD). PT PLN pays for each kilowatt of available produced capacity at a fixed tariff for the period defined in the PPA.

This “capacity payment” contributes to findings from the Oxford Institute for Energy Studies, which indicate that Indonesia's current power policy will provide a secure coal supply for the domestic market for a considerable length of time, which compensates coal producers for the pressure from ailing coal export prices in the international market (Oxford Institute for Energy Studies, 2017). The Institute for Energy Economics and Financial Analysis (2017) estimates that, in aggregate, PT PLN will deliver a capacity payment of USD 76 billion over the period of a modelled 25-year PPA to secure the planned additional 24 GW of capacity.

Institute for Energy Economics and Financial Analysis (2017) calculates that since half of the planned additional generation capacity is to be developed for Java-Bali grid, this grid's estimated reserve margin will reach 55 per cent in 2019, resulting in an obligation for PT PLN to pay USD 16.2 billion for idle capacity from 2017 to 2026. The expenditure predicted for this idle capacity could be used to develop a better approach toward Indonesia's energy mix instead. In the long run, the capacity payment mechanism for coal might reduce private sector investments into renewable energy in Indonesia, despite the fact that renewable energy avoids thermal power plants' risk of stranded assets (Katadata, 2017b).

Additional Reading:

- **GSI Report: *Financial Supports for Coal and Renewables in Indonesia***. This report provides an estimate of subsidies to coal and renewables in Indonesia. It also considers the cost of externalities in order to make a comparison of the true costs associated with electricity generation from coal and renewable energy respectively.
- **GSI Event Summary: *The True Cost of Coal and Renewables in Indonesia***. IISD's Global Subsidies Initiative (GSI) analyzed the costs of coal compared to renewable energy and found that coal use actually brings with it additional costs that are not traditionally taken into account. The findings were recently published in a report launched in Jakarta with the collaboration of the Coordinating Ministry for Economic Affairs and the support of the Danish Embassy and the Swedish Embassy in Jakarta.
- **GSI Commentary: *How Indonesia Might Turn its Back on a Future of Cheaper Renewable Electricity***. Short-term gain can lead to long-term pain. This might be the case with Indonesia's recent decision to bet on coal as its preferred source to supply reliable and affordable electricity. Indonesia's decision comes at a time when the rest of the world is moving in the opposite direction: countries are increasingly switching from coal to renewables and encouraging competition between power generators to obtain the best prices.
- **GSI Commentary: *Health Organizations, Help Indonesia Kick the Coal Habit***. Non-governmental organizations and medical associations should start using their voices now to provide leadership to their constituencies about the health, environmental and social impacts of Indonesia's enormous planned growth in coal power. The best way to prevent coal-related air pollution is not to build new coal power plants because, as China's experience shows, it is hard to reduce their effects once built. There is a window of opportunity that Indonesians concerned with health and the environment should seize while they can.



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