

EXECUTIVE SUMMARY

International Experiences with LPG Subsidy Reform: Options for Indonesia

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With diesel and gasoline reforms implemented in early 2015, the Government of Indonesia is now turning its focus toward liquefied petroleum gas (LPG) subsidies.

LPG subsidies in Indonesia today, as with other fossil fuel subsidies, are regressive in nature. Anyone can buy low-cost 3-kg LPG cylinders, so a larger share of benefits tends to be captured by higher-income households, who have more buying power. However, effectively designed and targeted LPG subsidies could significantly improve the performance of LPG subsidies, making them an effective policy tool for the promotion of clean cooking among low-income households.

This transition is similar to many other countries, where the close links between LPG subsidies and energy access have seen reform policies centre on better targeting of assistance, to ensure that low-income households can continue to access modern, clean forms of energy once LPG prices increase.

This report investigates international experience and best practice on how to reform LPG subsidies, with a focus on countries' efforts to ensure that energy access is not compromised by higher LPG prices.

How Do Indonesia's LPG Prices Compare With Other Countries?

While many countries subsidize LPG consumption, LPG retail prices in Indonesia are relatively lower compared to other countries, both regionally and internationally.

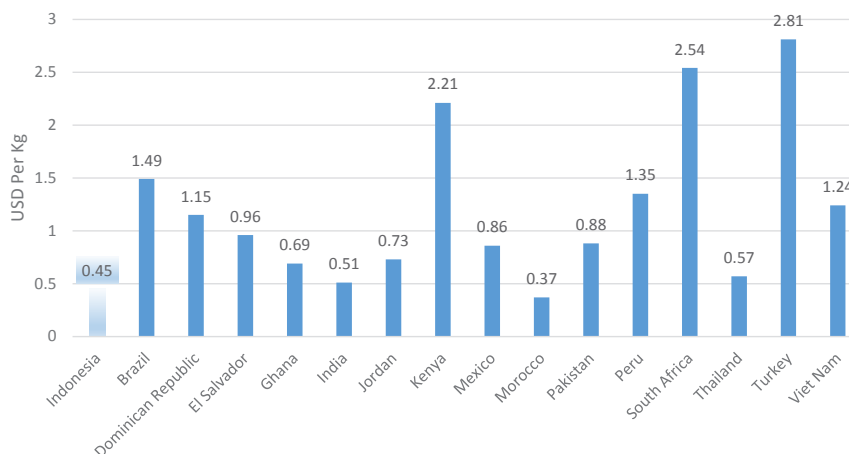


Figure 1. End-User Prices of LPG in July 2012
Source: Author diagram based on price data from Kojima (2013).

How Is LPG Priced Internationally?

LPG pricing policies across the world generally correlate to fuel pricing principles for other petroleum products, such as diesel and gasoline. These can roughly be divided into four main categories as illustrated below.

Table ES1. Overview of Different LPG Pricing Systems

	MECHANISM	ADVANTAGES	POTENTIAL CHALLENGES
Deregulated	Deregulation, with antitrust regulations.	Minimizes market distortions; no subsidies; price signals drive fuel efficiency; competition can drive down costs and prices.	Requires competitive downstream sector or may result in high consumer prices; oil price volatility is immediately transmitted.
Automatic Adjustment	Price adjustments linked to world prices made at regular pre-defined intervals, based on world prices averaged over a certain period or based on pre-defined triggers.	<ol style="list-style-type: none"> 1. Frequent adjustments track world prices well and limit scope for mounting subsidies. 2. Adjustments based on world prices averaged over 1 month or longer make prices more stable. 3. Adjustments based on a pre-defined trigger offer price stability within the price band. 4. Adjustments limited to stay within a pre-defined price band. 	<ol style="list-style-type: none"> 1. Frequent adjustments transmit world price volatility quickly to the domestic market. 2. Prices based on world averages may create mounting, interim subsidies if world and domestic prices move in opposite directions. 3. If the trigger is relatively large, significant price adjustments could be made in order to avoid subsidies. 4. Can lead to large subsidies unless price bands are frequently adjusted.
	Pre-determined price increases at regular intervals to bring domestic prices up to market levels.	<ol style="list-style-type: none"> 5. Predictable price increases, avoiding sudden spikes and collapses. 	<ol style="list-style-type: none"> 5. Requires political will to continue to raise prices, particularly if world prices are falling. Domestic price increases need to be larger than world price changes to close subsidy gap.
Stabilization Mechanisms	Fund saves revenue if domestic prices are higher than world levels; revenues are used to keep domestic prices low when world prices are high. Can be ongoing, or temporary with an initial transfer.	Prices are smoothed. In theory, self-financing. If temporary, can help deal with large price shocks while limiting the period of artificially low prices.	Seldom if ever self-financing because a period of under-recoveries can last a long time, creating serious cash flow problems. If temporary, can be pressured to continue indefinitely, potentially resulting in losses.
Ad Hoc	Ad hoc: No clear rules; prices may be frozen for months or years at a time for one or more fuels.	Stable prices between changes.	Adjustments tend to be large, delayed and unpredictable; can create costly subsidies; pricing highly politicized.

Source: Adapted from Kojima, 2013; 2011.

Best Practice When Reforming LPG Subsidies

International literature and analysis of case studies of fossil fuel subsidy reform, including LPG, indicate that subsidy reform should follow three main principles; improving and depoliticizing pricing mechanisms to gradually move toward market pricing; making sure that the impacts of reform, particularly on vulnerable groups, are well understood and can be managed with targeted policies; and building support for reform through consultations and communications.

1. Getting Prices Right

Ideally, LPG should be sold at market prices. Most countries, however, can't just get there overnight. In the interim, they're likely to transition toward market prices through gradual price increases that take place through a pricing formula. Even once the pricing formula has brought prices up to market levels, it may need to remain the dominant pricing system until political decision makers agree that market pricing is viable, and adequate investments are made to stimulate a competitive and well-enforced market.



In addition, in many countries LPG may be the best option for households to access clean cooking fuel. In order to ensure that higher-priced LPG doesn't harm low-income households, it may necessary to set up a pricing regime that allows low-income households to continue purchasing LPG with subsidies, either built into the cost of LPG that they purchase or reimbursed to them after buying LPG.

2. Targeting LPG Subsidies to Low-Income Consumers

International experience also recognizes that LPG subsidy reforms need to be accompanied by measures to protect poor and vulnerable households from negative impacts. This is primarily a challenge around targeting subsidy recipients. Many countries have relevant experience in this regard, holding important lessons for Indonesia when designing LPG reform.

Table ES2. Targeting efforts by other countries

El Salvador	<p>El Salvador replaced a price subsidy with an income transfer that identified beneficiaries based on electricity consumption. The subsidy was initially delivered via a barcode on electricity bills, but was later replaced with a new payment system that paid subsidies directly to LPG vendors when beneficiaries purchased LPG at the same time as providing ID and entering a personal identification number in a special, program-specific mobile phone. The phones were distributed to LPG vendors, who were also given special training in their use. The use of mobile phone technology allows information about all transactions to be collected in real time in a central database, improving the program's enforceability. In 2015, the government reported that the new program provided benefits to around 74 per cent of households.</p>
India	<p>The Indian government has introduced a variety of caps on the volume of subsidized LPG that registered households are allowed to purchase. Caps were initially set at a reasonable limit for a low-income household's annual consumption, though they have since increased to levels that would meet most household needs at all income levels.</p> <p>The Direct Benefits Transfer for LPG (DBTL) is a new mechanism for subsidizing LPG. Rather than subsidizing the costs of LPG at the point of purchase, the system requires consumers to purchase LPG at market prices. Households with a registered LPG connection are then subsequently compensated by a payment into their bank accounts equivalent to the value of the previous subsidy. The motivation for the DBTL was to cut down on corruption and leakages: by linking payments to individual bank accounts, it could cut down on consumption by businesses (who are ineligible) and falsely registered beneficiaries. The system does not restrict access based on any eligibility criteria other than having a bank account, which is required to receive payment.</p> <p>The "Give it Up!" Campaign is a central-government-led program to encourage wealthier households to voluntarily stop purchasing subsidized LPG. The campaign has a website (www.givitup.in) with strong backing from the Prime Minister and testimonial videos from individuals who have given up subsidized LPG. The campaign aims to influence 10 million households and lists individuals who have opted out of the LPG subsidy on a "scroll of honour."</p>
Mexico	<p>In Mexico, LPG prices have been gradually increased without any targeted social welfare mechanisms to mitigate impacts on the vulnerable. This likely reflects the fact that Mexico has—over the course of the past 18 years—developed a comprehensive social safety net system, including its large-scale Oportunidades cash transfer program, which has a specific component intended to help households meet their energy needs.</p>
Peru	<p>To improve energy access, the Peruvian government in 2012 created the Fondo de Inclusión Social Energético (FISE). Under the FISE scheme, recipient households receive a monthly voucher worth 16 soles (roughly USD 5.70) providing financial support for the first LPG refill every month. The voucher is provided to recipients via a numeric code on their electricity bill that can be redeemed via their own mobile phones. Subsidy recipients can redeem their subsidy allowance for up to two months, and the LPG must be purchased through an "authorized LPG agent"—a distribution network that has expanded since the inception of the program. The FISE eligibility criteria include average monthly electricity consumption, household income, house construction etc. In 2014, the number of FISE recipients was estimated at more than 3.5 million people (almost 710,000 households), and its rollout has been accompanied by a comprehensive communications campaign targeting intended beneficiaries.</p>
Thailand	<p>In 2012, the government announced a policy to provide subsidized LPG only to low-income households and small businesses. Households are eligible for benefits if they have a power connection of no more than 5 amperes and they consume less than 90 kWh of electricity on average per month. Consumption is limited to 18 kg every three months. Beneficiaries must connect their phone to the system by sending an SMS message providing a code allocated to them upon registration and a six-digit code identifying the vendor from which they will purchase LPG. If the details are correct, they receive a reply providing them with a six-digit code. Upon purchasing LPG, beneficiaries must text the same number, including a code for the brand of gas they are purchasing and a code for the size of LPG cylinder. They receive in return messages confirming the size of cylinder, the sum of the subsidy they are receiving and the remaining amount of subsidized LPG they may purchase. Subsidized LPG can only be bought from participating stores. The system has not been successful, with only 400,000 beneficiaries registered out of an estimated eligible population of eight million eligible buyers. This has been attributed to problems in surveying beneficiaries, fears among businesses that inclusion will be linked to taxation and perceptions that the registration and purchase system is too burdensome and inflexible.</p>



3. Raising Awareness and Building Support

Finally, in many countries, communication has played an integral part in determining the successes or failures of reform.

The role of communication is often seen as twofold, including both a more internal, consultative side and an external, communicative side. The consultative part is often focusing on gathering input from stakeholders in order for the government to properly understand key concerns and in turn address them properly. On the external side, a proper communications strategy is important to enable the government to build support for reform by explaining the reasons behind and the benefits to be gained for the population. Here, India's "Give It Up!" campaign is notable for its efforts to establish at a high-profile level the ethical principle that better-off individuals should not be consuming subsidized LPG. This sort of public-facing activity could be sequenced to take place in anticipation of subsequent targeting of LPG subsidies. In addition, a well-designed communications strategy around LPG reform should aim to inform people about mitigation measures that the government intends to put in place instead of subsidies, including information about targeting, entitlements and processes for receiving the subsidy. This will in turn support the government in its efforts to reduce risks of exclusion as reform is implemented.

The relationship between communication and the specific design and delivery of LPG subsidy reform is an intimate one. Analysis of public opinion surveys on LPG price increases in El Salvador found that there were three key significant variables that were correlated with support for policy change: a high level of awareness; existing support for the ruling political party; and whether the new, targeted subsidy system had been delivered effectively. The first of these variables—being well-informed—was only helpful at the moment the policy change was implemented. The second was significant throughout. The third—the perception that the new, alternative system had been delivered effectively—was increasingly significant in explaining the major shift in public opinion from 70 per cent disapproval in January 2011 to 68 per cent approval a year later. This implies that one of the most important tools for building support is a well-prepared, well-tested policy that demonstrably delivers upon its promises.