

# Lessons Learned from Indonesia's Attempts to Reform Fossil-Fuel Subsidies



Christopher Beaton  
Lucky Lontoh

October 2010

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## Introduction

The purpose of this study is to explore Indonesia's attempts to reform its fossil-fuel subsidies, in order to draw general lessons for governments that wish to pursue similar policies, be they in Indonesia or elsewhere. It outlines the brief history of fossil-fuel subsidies in Indonesia—including subsidies to petroleum products, fossil-fuel producers and the electricity sector (in which petroleum products are one of the main feedstocks)—and outlines the country's key objectives for reforming fossil-fuel subsidies.

The study then looks at two of the strategies that Indonesia has used to reduce fossil-fuel subsidies in the past:

- the implementation of the Bantuan Langsung Tunai (BLT) in 2005, an unconditional cash transfer program intended to mitigate the impact of fuel-price rises on poor households; and
- the 2007 Kerosene to Liquefied Petroleum Gas (LPG) Conversion Program, intended to encourage households to switch from kerosene-use to LPG-use, on the grounds that LPG is cheaper to subsidize, cleaner and more efficient.

The paper draws some lessons that can be learned from these experiences and concludes with recommendations for future policy-making.

## 1.0 The Use of Fossil-Fuel Subsidies in Indonesia

### 1.1 The Old and New Orders: 1956–1998

Since the early days of its independence, subsidies have been a common feature in Indonesia's economy. The first attempt to systematically stimulate economic development, the *Five Year Plan 1956–1960*, drawn up with the help of foreign experts under the rule of Indonesia's first president, Kusno Sosrodihardjo Sukarno, focused on how to stimulate the private sector with public sector spending, including projects in irrigation, power, industry, mining fields, auxiliary services and educational activities (Mackie, 1971/2007). The sudden nationalization of Dutch enterprises in 1957 continued and deepened the emphasis on government intervention, with many state-run enterprises being supported in the years to come with either direct subsidy payments or other less obvious forms of preferential treatment (Glassburner, 1971/2007). Towards the final years of Sukarno's regime, the process of determining how best to allocate state funds came to be more political than technical, with the country's *1960 Eight Year Over-all Development Plan* setting out expenditures far beyond previous estimates of the safe maximum, contributing to the country's serious problems with inflation (Mackie, 1971/2007). Subsidies, particularly on rice and fuel, were used as a way to protect people from the effects of inflation, which was reported by some studies to have reached as much as 500 per cent. In 1965, fuel subsidies alone absorbed 20 per cent of the state's total revenue (Budiman & Soesastro, 2005).

Indonesia's "New Order"—so described in contrast to the "Old Order" of Sukarno—emerged following a period of political turmoil and violent purges in 1965–1966, when temporary powers were granted to General Suharto, who eventually became president in 1968. The New Order was in part characterized by a strong embrace of liberal economic theory, led by a team of economists from the University of Indonesia, commonly referred to as the "Berkeley Mafia" because of their links with the University of California, Berkeley in the United States. Although fuel prices were quickly increased from IDR4 to IDR250 per litre, and only a few weeks later increased again to IDR1,000 per liter (Siahaan, 2005), the rise of the New Order did not herald an end to subsidization. Even after many price controls were removed in October 1966, the government continued to set prices for petroleum products, electric power, urban transport and drinking water, and it is reported that price increases did not match rises in costs (Glassburner, 1971/2007).

During the New Order's first five-year development plan, *REPELITA I* (1969–1974), subsidies were used primarily to support macroeconomic policies aimed at regaining social and political stability. The new Indonesian government moved swiftly to negotiate foreign aid and loans from institutions such as the International Monetary Fund (IMF), the World Bank, the International Bank for Reconstruction and Development (IBRD) and the Inter-Governmental Group on Indonesia

(IGGI) to support the massive administrative restructuring programs and the restoration of economic infrastructure (Crouch, 1974). It also made efforts to increase foreign capital inflow by offering investors a package of generous incentives in the Foreign Investment Act in 1967.

The New Order's efforts to restore economic stability were successful, and Indonesia enjoyed large profits and high growth in the years following the 1973–74 oil embargo and throughout the “Oil Boom” era of the early 1980s. During this period, the role of Indonesia's state oil company, Pertamina, was central to the management of the country's fossil-fuel resource wealth. Formed in 1968, through a merger of state oil mining company, PN Permina, with national oil and gas company, PN Permigan, as well as with PN Pertamina, which governed production contracts with foreign investors, petroleum exploration and production and midstream and downstream operations, Pertamina was formally positioned as the new state-owned oil and gas company in a 1971 law that obliged all oil companies in the country to operate with its cooperation (APS Review Downstream Trends, 2009; Pertamina EP, n.d.; IEA, 2008). This enabled Pertamina to play a dual-role as the regulator and the dominant market player in the oil and gas sector for the following three decades. It was notable as one of the first national oil companies in the world to use “production sharing contracts,” licensing agreements that allowed foreign companies to extract oil resources on the condition that the government of Indonesia would receive a set percentage of oil produced after the companies had recovered their costs. In Indonesia, this rate was among the highest in the world, in most cases set at 85 per cent of the oil produced (IEA, 2008).

Indonesia's oil wealth and the influx of foreign investment created a culture that came to be described by the acronym KKN, “korupsi, kolusi dan nepotisme”—corruption, collusion and nepotism. High-ranking military officers were put in vital political and economic positions. Even as early as 1968, the first Director of Pertamina was Major General Ibnu Sutowo and in the late 1980s it is reported that almost all new businesses in any sector needed support from one of Suharto's family members or their surrounding “cronies” (Hertzmark, 2007). By the year 2000, corruption in the approval process for oil production was estimated by the World Bank to have created excess costs in the order of US\$2 billion per year. Pertamina's own upstream activities were far from competitive, costing two to three times as much for oil and four times as much for gas as private companies operating under production-sharing contracts. The general population enjoyed a proportion of the oil wealth, too, through subsidized supplies of oil and gas (Hertzmark, 2007).

Despite Indonesia's strong economic growth, this culture of corruption and waste helps explain, at least in part, why the Indonesian economy and the Suharto regime were so severely affected during the 1997 Asian Financial Crisis. In order to stabilize the economy, Suharto signed up to a 50-point agreement with the IMF in order to qualify for an emergency loan, including the dismantling of state and private monopolies and the cutting of subsidies to basic commodities. Although this latter point was originally envisaged as a gradual phase-out during fiscal year 1998–1999, the government

announced large price increases for fuel and electricity at the beginning of May 1998, just before a meeting to decide the IMF's first loan disbursement (see Table 1). The price of kerosene was increased by 25 per cent, diesel fuel by 60 per cent and petrol by 71 per cent. Although only one among a complex range of factors, the subsidy cuts were the trigger for protests over the next weeks from thousands of students in the cities of Medan, Bandung and Yogyakarta, which devolved into general rioting. Serious acts of violence were committed, cars set on fire and hundreds of shops looted and destroyed, with much of the aggression directed towards the ethnic Chinese population. In a protest rally at Trisakti University in West Jakarta, four students were shot dead by snipers and others were injured (Eklöf, 1999; Anwar, 2005; Jakarta Globe, 2010c).

Under both international and domestic pressure, Suharto stepped down from office on May 21, 1998, effectively marking the end of the New Order. Subsidies, however, would not be so easily dislodged. In the 1998–99 fiscal year they are estimated to have reached almost one quarter of the government's budget (Hertzmark, 2007).

**Table 1 Gasoline, diesel and kerosene retail price changes in 1998 (IDR/liter)**

	1993–1997	May 5, 1998	May 16, 1998
<b>Premium-brand Gasoline</b>	700	1,200	1,000
<b>Solar-brand Diesel</b>	380	600	550
<b>Kerosene</b>	280	350	280

Source: PT Pertamina (Persero), n.d.

**Table 2 Indonesia's development phases**

Period	Indonesia's Development Phases
1956–1965	The Sukarno regime. There is significant government intervention in markets, with Dutch enterprises being nationalized in 1957. Towards its final years, high levels of government spending that are politically determined contribute to serious problems with inflation.
1966–1973	The Suharto regime. A period of stabilization, rehabilitation, partial liberalization and economic recovery.
1974–1982	The "Oil Boom." Rapid economic growth takes place and levels of government intervention increase.
1983–1996	Post-Oil Boom. A period of deregulation, renewed liberalization (in reaction to falling oil prices) and rapid export-led growth. During this last phase, commentators (including academic economists) were increasingly concerned about the level of corruption that thrived at all levels of government bureaucracy: KKN (korupsi, kolusi dan nepotisme) practices, as they later became known.

Source: adapted from Thee (2002) in (Touwen, 2008).

## 1.2 Recent struggles with reform: 1998–2010

Following the fall of the Suharto regime, a number of efforts have been made to restructure the petroleum and electricity sectors and to reform energy subsidies in Indonesia.

### 1.2.1 Restructuring the Oil and Electricity Sectors

In 2001, the Oil and Gas Law No. 22/2001 changed Pertamina into PT Pertamina, a normal state-owned enterprise. This shifted the role of regulator to the Department of Energy and Mineral Resources by stipulating the creation of two new entities: BP Migas, a supervisory body for upstream oil and natural gas activities; and BPH Migas, a regulatory body for downstream oil and natural gas activities. The law also urged PT Pertamina to establish separate subsidiaries to manage the business of exploration, extraction and production (Pertamina EP, n.d.). The KKN-related diversion of oil wealth under this arrangement is thought to have considerably decreased (Hertzmark, 2007). The Governmental Regulation No. 31 of 2003 then changed the status of Pertamina to that of a limited liability company, PT Pertamina (Persero).

According to the International Energy Agency (IEA), as of 2008, Pertamina was in the process of creating subsidiaries to manage different parts of its upstream businesses. It is the second largest producer of oil and third largest producer of gas, representing 10 per cent of the country's total production, although with many more reserves than its competitors. The IEA also reports mixed messages about the extent to which Pertamina still receives preferential treatment in bidding for rights to new exploration (IEA, 2008). A recently published report by the Global Subsidies Initiative confirms that Pertamina benefits from some preferential treatment and that, more generally, fossil-fuel producers in Indonesia receive subsidies, although data is in many cases insufficient to estimate the fiscal value of this support (GSI, 2010a).

Efforts to reform the electricity sector have also been made but little progress has been achieved so far. Electricity Law 20/2002 laid out plans that included increasing competition in the sector and introducing electricity tariffs that recouped all costs. This was, however, annulled in 2004 by Indonesia's Constitutional Court, on the grounds that electricity is one of the country's public goods and services and as such must, according to Article 33 of the Indonesian Constitution, be managed exclusively by the government (GTZ (Projekt-Consult GmbH) & Dipl.-Ing Detlef Loy, 2007; NEDO, n.d.). In response to this setback, Government Regulation No. 3/2005 was passed, which included most of the 2002 law's reforms, with the exception of competitive electricity markets.

As of 2008, the IEA reports that state electric utility company PT Perusahaan Listrik Negara (PT PLN) continues to dominate the market and—despite a number of one-off adjustments—also continues to levy a complex tariff structure that fails to raise enough revenue to cover costs, with the government plugging the financial gap. The subsidy is estimated to have been US\$1.6 billion in

2005, and in May 2008 it was predicted to reach US\$6.4 billion due to rising international petroleum product prices. This is support that, in large part, promotes the use of fossil fuels, given that, as of 2007, the country's electricity generation capacity was made up 61.7 per cent of oil-fired generation, 13.9 per cent of coal-fired generation and 4.6 per cent of natural-gas-fired generation. Because PT PLN has been unable to raise enough revenue to cover its costs, investment in new, alternative generation has necessarily been limited (IEA, 2008). Plans going forward foresee an increase in gas- and coal-based electricity generation, for which several subsidies have been identified and others may exist (GSI, 2010a).

### 1.2.2 Fuel Subsidy Reforms: 2000–2008<sup>1</sup>

Between the years 2000 and 2003, the World Bank documents a number of increases made to government-set petroleum product prices (Bacon & Kojima, 2006).

- In October 2000, the price of gasoline was raised 15 per cent, diesel by 9 per cent and kerosene by 25 per cent. This was followed by violent demonstrations, but not reversed. Incidents included the burning of a gasoline station in Medan, students protesting in the South Sulawesi city of Makassar, the abduction of two local-government employees and a strike by public transport workers. The government pledged that budget savings would be used to help low-income households (U.S. Embassy in Jakarta, 2000).
- In April 2001, fuel prices for large industry, which represented about 23 per cent of the market, were increased to 50 per cent of the international market price (U.S. Embassy in Jakarta, 2002).
- In June 2001, prices for gasoline were raised by 26 per cent, diesel by 50 per cent and kerosene by 14 per cent, for households, local transport and electricity utility PLN (U.S. Embassy in Jakarta, 2002).
- In January 2002, a Presidential decree announced the intention to reduce fuel subsidies in phases, aiming to set prices for gasoline at 100 per cent of the international market price and 75 per cent for prices of automotive diesel oil, industrial diesel oil and fuel oil, within certain bounds, for both household and industrial users, based on the Mid Oil Platt Singapore basket of wholesale fuel prices. It proclaimed that kerosene prices for the industrial sector would be set at 75 per cent of the international market price, but would remain low—at

<sup>1</sup> Throughout this section, the prices that are reported are the wholesale prices for fuels set by the government, and do not necessarily reflect the average price to the consumer, which might vary according to the charges levied by agents and local distributors who transport and sell the fuels throughout Indonesia, including its remote regions. In 2001, for example, it has been reported that households in many parts of Indonesia were paying IDR2,500 per litre of kerosene, despite the official base price of IDR400–600. Investigating the extent to which prices fluctuated in this manner, and how often, is not within the means of this study, but readers should bear in mind that such price discrepancies could be another important feature of Indonesia's subsidy mechanism over and above levels of absolute spending: poor households in some regions may not have actually had affordable access to fuel, the stated objective of the subsidy, and significant portions of subsidy spending could have been captured by middlemen in the supply chain.

IDR600, 65 per cent below world prices—for households and small-scale businesses. Student demonstrations again took place in the city of Makassar, with smaller protests also taking place in Jakarta, Surabaya, Denpasar, Manado and Bandung (U.S. Embassy in Jakarta, 2002; President of the Government of Indonesia, 2002).

- Price increases in 2003 were hotly opposed. Analysts attributed this to a belief among protesters that various other recent government decisions had been in favour of powerful interest groups, as well as a general dissatisfaction with political corruption and inefficiency. Ultimately, price increases on diesel were trimmed back from the original 21.9 per cent to a price increase of 6.5 per cent (Bacon & Kojima, 2006).

Although these reforms did mark some progress, a trend towards increasing prices in the international market for petroleum products would frustrate any significant headway being made, ensuring that a price gap remained between the international market price and government-set prices.

The World Bank has also documented various efforts that were made to provide compensation to the poor during these reform attempts, including the subsidization of rice and spending on health, education and social welfare. However, spending on such initiatives was not high during these years—US\$300 million and US\$510 million having been committed in 2002 and 2003, respectively—and in 2003 many of the announced compensation programs did not materialize (Bacon & Kojima, 2006).

**Table 3 Gasoline, diesel and kerosene household retail price changes between 1998 and 2003 (IDR/litre)**

	May 16, 1998	Oct. 2000	June 2001	Jan. 2002	Dec. 2002 <sup>a</sup>	Jan. 2003	Mar. 2003
<b>Premium-brand Gasoline</b>	1000	1150	1450	1550	1750	1810	1810
<b>Solar-brand Diesel</b>	550	600	900	1150	1550	1890	1650
<b>Kerosene</b>	280	350	400	600 <sup>a</sup>	n.d.	n.d.	n.d.

a. Pertamina reports that prices fluctuated as intended, at 75 per cent of international market prices, from January to December 2002. Prices for this date are reported in order to show the price off which the hotly opposed 2003 price hikes took place.

b. As of June 2001, Pertamina only report the price of subsidized kerosene for industry and not for households. This January 2002 price increase was reported by the U.S. Embassy in Jakarta. At some point between this date and January 2005, the kerosene price was increased again to IDR 700 per litre.

Source: PT Pertamina (Persero), n.d.; U.S. Embassy in Jakarta, 2000

**Table 4 The contribution of oil and gas to domestic revenues and fuel subsidies, 1992–2003**

Fiscal Year	Domestic revenues (IDR trillion)	Oil / gas revenues (IDR trillion)	Oil / gas as a per cent of total domestic revenues (IDR trillion)	Fuel subsidy (IDR trillion)	Subsidy as a per cent of total domestic revenues
1992/3	48.9	15.3	31.4	0.7	1.4
1993/4	56.1	12.5	22.3	1.3	2.3
1994/5	66.4	13.5	20.4	0.7	1.0
1995/6	71.6	16.1	00.0	-	-
1996/7	78.2	20.1	25.7	1.4	1.8
1997/8	108.2	35.4	32.7	9.8	9.1
1998/9	157.5	41.4	26.3	27.2	18.2
1999/0 <sup>a</sup>	187.8	58.5	31.2	35.8	17.8
2001	286.8	89.7	31.3	68.4	23.8
2002	301.9	74.2	24.6	30.3	10.0
2003 <sup>b</sup>	336.2	70.0	20.8	13.6	4.1

a. Beginning in 2000, the government of Indonesia changed the fiscal year from Apr–Mar to Jan–Dec.

b. Budgeted.

Source: Adapted from U.S. Embassy in Jakarta (n.d.), as cited in NEDO (n.d.)

In 2004, it was not politically feasible for further increases to fuel prices because of national elections, which resulted in the appointment of President Susilo Bambang Yudhoyono. Nonetheless, the Department of Energy and Mineral Resources did release its Energy and Mineral Resources Ministerial Decree No. 0002/2004 on the Policy for the Development of Renewable Energy and Energy Conservation (Green Energy Development). This outlined short- and long-term programs for the development of renewable energy and increased energy conservation, including programs on investments, incentives, standards and obligations to use renewable energy and research and development (R&D). The decree also officially declared the negative impact of fuel subsidies on energy efficiency, although only the Annex proposed that the continuation of fuel-subsidy cuts might be part of the short-term program (Ministry of Energy and Mineral Resources, 2004).

Indonesia also became a net oil importer for the first time in 2004, and the international market price of petroleum rose dramatically, resulting in total spending on gasoline, diesel and kerosene subsidies of US\$8 billion (see Table 7).

In 2005, concern over the increasing pressure that fuel subsidies were placing on the state budget led the government to increase fuel prices in March and then again in October by an average of 29 per cent and 114 per cent respectively (see Table 5), reducing the Indonesian state budget deficit by US\$4.5 billion in 2005 and US\$10 billion in 2006. A Presidential decree announced that the remaining fuel subsidies were to be phased out, but did not specify a timeframe for this to take place. In October, prices were also raised to international market levels for industry and it was announced that future fuel price changes would be made at the ministerial and not the Presidential level (World Bank, 2007).

Protests again took place in opposition to the reform: in March there were demonstrations in over 10 cities and a take-over of a radio station to publically denounce the move; in September, demonstrations were staged by bus drivers, vendors and factory workers (Roberts, 2005; Bloomberg, 2005). Nonetheless, in contrast with the previous fuel-price rises, particularly 1998 and 2003, the 2005 intervention was met with reduced opposition. A number of analysts credited this to the government's decision to compensate poor households for the increase in their living costs through a number of welfare programs, the most high-profile of which was a series of unconditional monthly payments targeted at poor households called the Bantuan Langsun Tunai (BLT) (for in-depth information about this program, see Section 3.1). Other programs included an IDR3.875 trillion program to improve access and quality of health services to the poor. Awareness about these measures was raised via an extensive public information campaign (Bacon & Kojima, 2006; World Bank, 2007).

**Table 5 Gasoline, diesel and kerosene household retail price changes in 2005 (IDR/litre)**

	Jan. 2005	Mar. 2005	Oct. 2005
<b>Premium-brand gasoline</b>	1,810	2,400	4,500
<b>Solar-brand diesel</b>	1,650	2,100	4,300
<b>Kerosene</b>	700	700	2,000

Source: PT Pertamina (Persero), n.d.; U.S. Embassy in Jakarta, 2005

In the next two years, efforts at reform were less radical. In 2006, Pertamina is reported to have announced plans to raise the price of liquified petroleum gas (LPG) for industrial use. In 2007, Indonesia's *National Action Plan for Addressing Climate Change* recognized that fossil-fuel subsidies encourage waste and inefficiency and damage the development of competitive alternative energy sources. It promoted subsidy cuts as one of a number of policies to achieve energy diversification, stating that the government needed to "encourage [...] economic growth based on low pollution energy growth by increasing the new energy and renewable energy utilization, with eradication of fossil fuel subsidy gradually in stages [*sic*]" (Indonesian State Ministry of the Environment, 2007). May 2007 also saw the introduction of a program to encourage rural households to use LPG instead of kerosene, on the basis that LPG would be cheaper to subsidize and better for households' health. Over the course of the succeeding years, it is reported to have significantly decreased spending on kerosene subsidies, although experiencing a number of early problems with implementation. (for in-depth information about this program, see Section 3.2).

The next major set of fuel-price increases took place in 2008, the year that international market prices finally peaked with a U.S. light sweet crude price of US\$147.27 a barrel (BBC News, 2008). The Indonesian budget had been drawn up assuming a price of US\$95 a barrel, causing subsidy spending to balloon from the US\$5 billion that had been planned to an estimated US\$17.6 billion (see Table 7) (Dillon, Laan, & Dillon, 2008). Fuel prices rose on average by 28.7 per cent and the

moves were once again accompanied by a cash transfer program to compensate poor households for increases to their living costs, this time at a cost of US\$1.52 billion (New York Times, 2008). The prices of premium-brand gasoline and solar-brand diesel were then reduced slightly in December as international prices began to fall, though remaining above their pre-hike levels (see Table 6).

In 2008, the Ministry of Energy and Mineral Resources also announced that, as of May, larger industrial electricity consumers would have to pay the full costs for their electricity.

**Table 6 Gasoline, diesel and kerosene household retail price changes in 2008 (IDR/litre)**

	October 2005	May 2008	1 Dec. 2008	15 Dec. 2008
<b>Premium-brand Gasoline</b>	4,500	6,000	5,500	5,000
<b>Solar-brand Diesel</b>	4,300	5,500	5,500	4,800
<b>Kerosene</b>	2,000	2,500	2,500	2,500

Source: PT Pertamina (Persero), n.d.

**Table 7 Gasoline, diesel and kerosene subsidies (1999–2009)**

Year	Volume of fuel <sup>1</sup> (billion litres)	Subsidies	
		(trillion IDR)	(billion US\$)
1999	n.a.	39.5	4.3
2000	n.a.	55.6	6.1
2001	48.7	61.8	6.8
2002	49.6	31.6	3.5
2003	50.5	31.7	3.5
2004	50.2	72.9	8
2005	49.5	39.8	4.4
2006	37.5	67	7.4
2007	38.6	87.6	9.6
2008 (estimate)	35.8	160 <sup>a</sup>	17.6
2009 (projection)	n.a.	57.6 <sup>b</sup>	6.3

a. Actual January to until October 2008 expenditure was IDR130 trillion. In estimating total subsidies for 2008, it was assumed that IDR10 trillion would be required for each of the remaining three months of that year (this assumption was based on reported monthly subsidies for September 2008 of IDR11 trillion).

b. Government forecast based on an average price of US\$80 per barrel of crude oil.

Source: Dillon, Laan & Dillon, 2008

### 1.2.3 Recent Developments: 2009–2010

In January 2009, after steep drops in international market prices for crude oil, Indonesian media reported that a strategic energy policy was supposed to have been implemented, which would have involved floating domestic fuel prices on international market quotations, anchored on fixed-price bands capping gasoline prices at a maximum of IDR6,000 per liter and automotive diesel oil at IDR5,500. However, following a series of announcements that budgetary allocations to fuel subsidies would be increased due to higher-than-expected oil prices, the *Jakarta Post* reported the effective abandonment of the policy to float fuel prices on the international market (Jakarta Post, 2010). In September and November 2009, the Group of Twenty (G-20) and the Asia-Pacific Economic Cooperation (APEC), both of which count Indonesia as a member, committed to phase out and rationalize inefficient fossil-fuel subsidies that lead to wasteful consumption.

In Fiscal Note and State Budget Plan 2010, the government referred to a “redesigning of subsidy policy” (*Redesign Kebijakan Subsidi*): plans for the existing fuel-price subsidy to be changed into a targeted subsidy, on the grounds that it has proven to be vulnerable to international oil price fluctuations, and that a targeted subsidy could be designed to be more accountable, precise and predictable, contributing more stability to the state budget (Government of Indonesia, 2010).

Between January and May 2010, a number of articles reported further increases in the annual subsidy budget—said to be due to concerns about Indonesia’s economic recovery from the international financial crisis—and that the Ministry of Energy and Mineral Resources have stated that a smart-card system will be developed to restrict the sale of subsidized gasoline, introducing a daily limit on its consumption and banning its use in private transport vehicles (GSI, 2010b; GSI, 2010c; GSI, 2010d).

In March 2010, Reuters reported that the Minister of Energy and Mineral Resources had announced that the country may seek to eliminate its electricity and fuel subsidies entirely by 2014–2015 (Reuters, 2010). In April 2010, Evita Legowo, Director General of Oil and Gas at the Indonesian Ministry of Energy and Mineral Resources announced plans to cut subsidies by 40 per cent by 2014 and the creation of a new plan, to be implemented by 2011, that would only allow public transport vehicles manufactured before 2000 to use subsidized fuel (Jakarta Globe, 2010).

In May 2010, Vice President Boediono announced that the energy policy would be carried out within a new paradigm: for a long time, Indonesia has seen oil and gas predominantly as government income, when it should be used as a resource to develop the domestic economy. He stated that the key goal would be to increase domestic production, and, speaking of the gas industry specifically, that this could be achieved with incentives, regulations and the eradication of any practical obstacles holding up the industry (Kompas.com, 2010a).

At the time of publication of this study, the latest retail prices to have been announced were Premium-brand gasoline at IDR4,500 per litre, Solar-brand diesel at IDR4,500 per litre and kerosene at IDR2,500 per litre (Ministry of Energy and Mineral Resources, 2010a).

### **Box 1 What determines the size of Indonesia's fuel subsidy?**

At the current time, four fossil-fuel products are the focus of price subsidies in Indonesia: Premium-brand gasoline, Solar-brand diesel, kerosene and liquified natural gas (LNG). The size of the subsidy each year is determined by the difference between the government-set prices for each of these fuels and an international benchmark price.

Due to rapid changes in the political and legal systems of the country, Indonesia has experimented with giving a number of institutions the responsibility of setting the fuel price. Currently, this role is played by the Ministry of Energy and Mineral Resources, in communication with the Ministry of Finance, although the exact formula and considerations taken into account in price setting are not known. Price updates are often communicated by the ministry in its press releases. The international benchmark is usually the Mids Oil Platt Singapore (MOPS) price, although the government has also been reported to have used Argus, RIM Intelligent Co. (Japan) and the Asian Petroleum Price Index (APPI). (Ministry of Energy and Mineral Resources, 2010; PME-Indonesia.com, 2008)

The cost of the subsidy is announced annually by the government in the Annual State Fiscal Plan, whose plan should be approved by the parliament. It is based on a calculation by downstream oil and natural gas regulatory body BPH Migas, which estimates the quantity of fuels to be subsidized and the international market price for the coming year (Ministry of Energy and Mineral Resources, 2010b). During the year, however, it is common for the Indonesian state budget to be revised and budget-adjustment is discussed as a matter of course in the middle of the fiscal year. The frequency of changes to the amount allocated to fuel subsidies will depend on the stability of international crude prices, the IDR/USD exchange rate and the subsidy policy itself. In early 2010, for example, the amount budgeted for the fuel subsidy was increased due to a strengthening IDR/USD exchange rate and an international crude price that was higher than anticipated, US\$80 as opposed to US\$65 barrel.

The subsidy is paid to Pertamina, the sole distributor of subsidized fuel products in the country. Pertamina receives the payment at the end of every three months, reimbursing it for the below-market products it has sold during this time. The size of the payment is based on monthly reports that the company must submit to the Ministry of Finance, containing the volume of subsidized fuel that has been sold, the value of this fuel and the international benchmark price. The process is audited once a year by the Audit Board of the Republic of Indonesia (Badan Pemeriksa Keuangan or BPK). If Pertamina believes that an insufficient amount has been allocated to subsidize the volume of fuel that will be consumed, it can propose an adjustment to parliament (Ministry of Finance, Government of Indonesia, 2009; Nugroho, n.d.).

In the case that the Indonesian parliament refuses such a request, it appears that the company must either restrict the sale of subsidized fuel, leading to shortages, or continue selling fuels at their below-market rate

and somehow absorb the financial loss this would entail. Shortages linked to the subsidy mechanism have been reported for at least the last ten years (Kompas.com, 2010; Tumiwa, 2008; BBC News, 2005), tending to occur most often on the islands outside Java, away from centers of economic and political importance, and to hit poorest communities the hardest, who may ultimately end up paying high prices for black-market fuel. It is less clear what the consequence would be if Pertamina bore the financial burden, although the company recently reported it had lost IDR 456 billion (US\$ 0.05 billion) in the first three months of 2010. (Wahyu N. D., 2010) Problems have also emerged with this mechanism due to Pertamina making errors in its claims or being accused of involvement in corrupt activities. According to press reports, BPK audits have made claim corrections that total IDR 18.3 trillion (around US\$ 2 billion) between the period 2001-2008 and there have been allegations of Pertamina employees profiteering from fuel-smuggling (Wahyu N. D., 2010; Firzani, Prihatnala, & Birdieni, 2010; Hidayat, Sulistyowati, & Fasabeni, 2005).

### 1.3 Summary

Governments of Indonesia have struggled for a long time to reform the country's subsidies to national petroleum producer, Pertamina; to the heavily petroleum-product-dependent electricity sector; and to the consumption of petroleum products, such as gasoline, diesel and kerosene. Although they have succeeded in driving through a number of reforms, many of these have been effectively thwarted by steadily increasing international fuel prices.

In the future, the government of Indonesia seems to intend to remove its heavy intervention in retail prices for petroleum products, but it may refocus intervention into encouraging energy exploration, production, infrastructure maintenance and capacity improvement, as well as the development of alternative energy industries. This strategy need not necessarily rely on subsidies. Continuing with the liberalization of its upstream market could make a significant contribution to these goals, as inviting more players to invest in upstream activities can be an effective way to reduce the financial burden of oil exploration and exploitation, as well as optimizing the value of the resource. Beginning to liberalize the downstream end of the fossil-fuel supply chain might also help consumers cope with the removal of price subsidies. Increased competition is likely to result in efficiency gains, which, if passed on to consumers, can lower costs and so help mitigate the impact of price increases.

Regarding its price reforms, however, Director General of Oil and Gas Evita Legowo has stated that the government will continue to monitor the impacts of fuel subsidy cuts, public opinion and the implementation of alternative energy policies, noting that “relaxation” or “adjustment” options—essentially, watering down or putting off scheduled reforms—are available if the general population cannot adapt quickly enough to the new policies, or if price rises threaten general welfare and political stability (Legowo, 2009).

## 2.0 The Rationale for Reform

Indonesia's objectives in reforming fossil-fuel subsidies are not clearly laid-out in any one source. During various reform attempts and in different public announcements and publications, many reasons have been given for reform, or the emphasis and relative importance of stated objectives has been shifted according to the circumstances at hand. To a large extent, the government has been fairly pragmatic in how it addresses the issue. Given the close linkages among subsidies, political popularity and people's welfare, the vagueness of policies and objectives can be considered a strategy that gives an administration as much flexibility as possible.

Nonetheless, a fairly clear rationale for reform, summarized here, can be pieced together from the wide number of laws, policies, and presidential and ministerial decrees that have emerged over the past ten years.

- **Relieving budgetary pressure:** The extremely large amounts of money that Indonesia spends on subsidies—estimated by the World Bank to have ranged from 10 to 28 per cent of the national budget between 2001 and 2008 (GSI, 2009)—comes at a high opportunity cost, preventing investments in service infrastructure, health, education and other important areas of public spending. Budgetary pressure was the primary goal identified by the law to reform prices in 2002, has been referred to as the cause for the major fuel price rises in 2005 and 2008, and is commonly cited as a significant issue by government officials and the national press (Dillon, Laan, & Dillon, 2008; World Bank, 2007; President of the Government of Indonesia, 2002).

In 2008, the government released a document called *The Government's Explanation on its Policy on Fuel-Subsidy Cuts and Other Accompanying Policies*, which officially stated that fuel subsidies had to be cut because the significant amount of the state budget they were taking up had reduced the government's ability to finance improvements in people's welfare, such as in the areas of education, health, the National Program on People's Empowerment (Program Nasional Pemberdayaan Masyarakat [PNPM]), People's Entrepreneurship Credit (Kredit Usaha Rakyat [KUR]) and the provision of infrastructure (Coordinating Ministry for Economic Affairs, 2008).

Budgetary concerns have also been important because, although the oil and gas sector remains the most dominant factor in the state budget, having contributed 31.6 per cent of national revenue in 2008, declining oil production has led to stagnation of revenues, and investment has been low since the East Asian crisis. Gas has, to some extent, been able to fill the gap, but for various reasons is ultimately less lucrative (Legowo, 2009; Bulman,

Fengler, & Ikhsan, 2008). As the engine that has fuelled the affordability of fuel subsidies begins to wind down, the unsustainability of fuel subsidies has become more apparent.

In Indonesia, budgetary pressure has been the most influential factor in driving through actual reforms to subsidy policy.

- **Improving the efficiency of social welfare policies:** Fuel subsidies in Indonesia have traditionally been defended as an important way to provide assistance to nation's large population of low-income households but in *The Government's Explanation of its Policy on Fuel-Subsidy Cuts and Other Accompanying Policies* it was also admitted that indiscriminate fuel subsidies have been a poor way to target welfare transfers, with the wealthiest 40 per cent of households capturing 70 per cent of the subsidies (Coordinating Ministry for Economic Affairs, 2008). Research conducted in 2005 by the World Bank, showed a similar breakdown: the richest 40 per cent of households received 60 per cent of the subsidy spending (World Bank, 2009). In some cases, there are reports that kerosene was being sold to poor households outside of Java, Indonesia's main island, for over six times the official subsidized price, with the difference being pocketed by middlemen. Other reports suggest that unofficial rationing of kerosene may have taken place, to much the same effect. This high inefficiency of fuel subsidies as a form of social welfare means that even if spending was to be partially redirected, such as into cash transfer programs, or health and education services, there could still be substantial room for fiscal savings, especially given the volatility of subsidy spending due to fluctuations in international market oil prices.
- **Energy security:** Secure access to affordable energy supplies is important to Indonesia's continuing development. Even if the government were able to afford subsidies indefinitely, the country's natural resources are finite, having become a net oil importer in 2004, so it is in Indonesia's long-term interest to diversify its energy supplies, at the same time as minimizing energy demand through the promotion of energy efficiency and conservation. Fuel subsidies act against all three of these goals, as below-market prices make investments in alternative energy less profitable and encourage inefficient, wasteful use of energy.

In its 2004 *Policy on Renewable Energy Development and Energy Conservation*, the government officially declared that fuel subsidies had negative impacts on energy efficiency and proposed including fuel-subsidy cuts as part of the short-term program to support renewable energy development and energy conservation (Ministry of Energy and Mineral Resources, 2004). The stated purpose of Indonesia's Presidential Decree No.5/2006 and the accompanying *Blueprint of National Energy Management 2005–2025*, which outlines targets for the development of Indonesia's energy sector, is also to maintain energy security. In its 2007 review of Indonesia's public spending, the World Bank also noted that high government spending on

subsidies was preventing more effective public investment as regards energy needs. It recommended that electricity consumption subsidies could be better spent on extending new connections to households currently off the grid (World Bank, 2007).

- **Mitigating climate change:** The 2007 *National Action Plan for Addressing Climate Change* mentions subsidy cuts as one of a number of policies to promote energy diversification, on the basis that it would increase the relative competitiveness of alternative energy sources. The plan states that in order to achieve energy diversification, the government needs to “encourage the economic growth based on low pollution energy growth by increasing the new energy and renewable energy utilization, with eradication of fossil fuel subsidy gradually in stages [*sic*]” (Indonesian State Ministry of the Environment, 2007). Although there is some credibility to this stated objective, it seems clear that Indonesia’s ultimate concern is more on economic development than the reduction of CO<sub>2</sub> emissions and that this is therefore a relatively weak motivation behind subsidy reform: although the *Blueprint of National Energy Management 2005–2025* has planned for geothermal power, biofuels and other renewable energy technologies to increase such that each represents 5 per cent of the national energy mix, it also foresees the use of coal increasing from 15.7 per cent to 33 per cent and gas from 23 per cent to 30 per cent by 2025 (IEA, 2008).

### 3.0 Effectiveness of Strategies to Support Reform

As reviewed in the first section of this report, the Indonesian government has attempted to reform its fossil-fuel subsidies a number of times throughout the past ten years, pursuing various strategies to lessen the country's reliance on fossil fuels. This section looks in more detail at two strategies in particular, asking: to what extent have they succeeded in helping to achieve the government's objectives?

#### 3.1 Unconditional Cash Transfer – Bantuan Langsung Tunai (BLT)

Before the second of the two fuel price increases that took place in 2005, the Indonesian government launched an unconditional cash transfer program, known variously as the Cash Transfer Assistance program (Bantuan Langsung Tunai [BLT]), Direct Cash Transfer program (Subsidi Langsung Tunai [SLT]) and BBM Compensation program (Hastuti, et al., 2006). The program's aim was to prevent opposition to the price increase by countering the adverse economic and social impacts that might be expected from an increase in the living costs of low-income households. The transfer operated by distributing two payments of IDR300,000 (around US\$30) directly to poor families. The first payment was made in October 2005 and the second in January 2006, designed to provide IDR100,000 (around US\$10) per month over a period of six months (Widjaja, 2009). The overall program coordinator was the Ministry of Social Affairs.

Preparation and implementation of the BLT was conducted in the following five steps:<sup>2</sup>

##### 1. Verification of poor households and issuing identity cards for eligible subjects

Poor families were identified by a 2005 poverty census called Population's Social-Economic Data Collection 2005 (Pendataan Sosial Ekonomi Penduduk 2005 or 'PSEP05'), conducted by the government institution Statistics Indonesia (Badan Pusat Statistik [BPS]).

Eligibility was determined in two stages. First, enumerators interviewed the head of the neighbourhood, street or hamlet being assessed, and asked them to prepare a list of poor families or households, defined as families or households who had difficulty meeting their "essential needs," namely food, health and education. Following this, enumerators conducted a verification exercise "in the field," interviewing neighbours and other community figures, and directly observing the families and households in question. This second step was intended to verify how well local area heads had identified poor families and households, allowing for enumerators to remove unsuitable candidates

<sup>2</sup> These are adapted from the steps outlined by the Ministry of Social Affairs in its meeting, BLT Implementation Preparation. (Ministry of Social Affairs, 2005)

and add others who might have been omitted. Eligibility was determined according to 14 poverty indicators, which included the number of household members, construction materials and facilities of the house, consumption habits, level of education and assets (SMERU, 2006). This data was then used to perform an expenditure proxy means test to estimate which households had an expenditure equal to or less than IDR175,000 per month (roughly US\$17.5). In 2005, 15.5 million households qualified as eligible, representing 28 per cent of the population (Widjaja, 2009).

Once pronounced eligible, families were issued an Energy Compensation Card (Kartu Kompensasi BBM-KKB), which was required in order to collect payments.

This initial identification phase was followed by verification towards the end of 2005, after which 600,000 cards were withdrawn and an additional 4.3 million households were pronounced eligible, resulting in a total number of recipient households for the second BLT payment equal to 19.2 million, around 35 per cent of the total population (Bacon & Kojima, 2006).

## **2. Assessing public complaints**

According to the government's coordination plan, local authorities were given the responsibility to handle complaints, which were to be reported to the BLT's Monitoring and Evaluation Team (Tim Monitoring dan Evaluasi [Tim Monev]), and, subsequently passed on to the Minister of Social Welfare. The so-called Integrated Controlling Team (Tim Pengendali Terpadu) was made available to provide advice to the local authorities about how to address the complaints. The team consisted of 16 institutions, headed by the Coordinating Minister for Political, Justice and Security Affairs, and various economic- and social-policy-related ministers, as well as law enforcers, the national statistics agency, the national audit and the heads of local authorities (Ministry of Social Affairs, 2005).

According to a rapid appraisal of the BLT conducted in November and December 2005 by the SMERU Research Institute, after the first payment had been made, only some districts and cities actually created posts for complaints, and only at the district or city level (Hastuti, et al., 2006).

## **3. Awareness-raising**

According to research conducted by the World Bank, the cash transfer was accompanied by a public information campaign that included newspapers, TV talk shows, village notice boards, and the distribution of pamphlets and brochures, as well as information on the back of the Energy Compensation Card itself (Bacon & Kojima, 2006). Surveys distributed by 56 Indonesian universities reported that the initial source of information about the BLT for most respondents was local civil servants and policemen (39 per cent), followed by television (22 per cent), "society and religious leaders" (12 per cent), social gatherings (7 per cent) and newspapers (3 per cent) (Widjaja, 2009).

The rapid appraisal conducted in November and December 2005 concluded that “socialization” (the process by which a policy and its mechanics are communicated to its administrators and recipients) was poorly implemented. No institutions at a local level actually had a clear responsibility for awareness-raising; the Ministry for Communication and Information (Menkominfo) only reached out via print, electronic media and SMS services, to which access is limited; and brochures explaining how poor households would be identified arrived late and in limited numbers. Information and training programs, however, were reported to have taken place for local communities and officials *after* the first disbursement of funds was made, though this was largely because of the complaints and disturbances that it had incited (Hastuti, et al., 2006).

#### **4. Securing the distribution of the BLT**

As many Indonesians are not well-registered and do not have a bank account, the BLT was distributed directly from officers at local post offices (Presidential Instruction, 2005), although in some exceptional circumstances, such as when money had to be transferred to very old or sick people, the funds were delivered by local administrators (Kompas.com, 2009). It was also possible for distribution centres to be located in other public buildings, such as village halls or sub-district offices.

According to a 2006 National Social and Economic Survey of 566 villages, protests occurred in 34.6 per cent of villages due to unrest over claims that people had not received the promised amount, or from non-eligible households who felt that they deserved the compensation payment too. Incidents involving injuries took place in 14.9 per cent of villages, with three reported deaths, thought to have been elderly people suffering from exhaustion while queuing (Widjaja, 2009). The rapid appraisal of the BLT program also highlighted the problem that post offices in Indonesia do not cover all areas of the country equally well, such that some recipients, who lived far away from the closest service, had to spend between IDR6,000–15,000 on transport. It also found that most recipients chose to collect their payment on the first day that it become available, resulting in extremely crowded post office facilities, leading to physical and psychological discomfort for recipients, damage to property and increased likelihood of error among post office officials (Hastuti, et al., 2006).

Security was coordinated by the Minister of Politics, Law and Security, with support from the army and the police.

#### **5. Enforcement and monitoring**

The Ministry of Social Affairs focused its enforcement efforts on preventing and punishing data fraud in the production of KKB cards and the theft of BLT payments (Ministry of Social Affairs, 2005). The Ministry also conducted an evaluation of the program after the first payment was made.

## Box 2 Measures accompanying the BLT

The BLT was accompanied by a number of other short-term interventions intended to help poor households cope with the rise in fuel prices, referred to as a package called the Program Kompensasi Pengurangan Subsidi Bahan Bakar Minyak (Fuel Subsidy Reduction Compensation Program, or PKPS-BBM). Although this report does not attempt to summarize the specifics of their operation, or their strengths and weaknesses, they are described here in brief to help readers understand the context in which the BLT took place.

- **Health Insurance for the Poor program** (Asuransi Kesehatan Masyarakat Miskin or Askeskin): This program distributed cards entitling recipients to free health care at local public health clinics, free outpatient visits at hospitals and free inpatient services if they were being treated in the least important class of hospital ward. Cards were received by 16 million households at a cost of IDR2.9 trillion (around US\$230 million), using the same registry of poor households as the BLT (ASEAN, n.d.). According to the World Bank, a rapid assessment published in 2006 concluded that the demand-side intervention was an efficient way to increase uptake of health services by the poor, but that a range of other costs—such as transport and maintenance—were still an issue for some low-income families. It also noted that targeting could have been stronger, as it was difficult to exclude the non-poor from accessing the free health services (World Bank, 2007).
- **School Operational Assistance program** (Bantuan Operasional Sekolah [BOS]): this program provided a grant of IDR25,000 to public and private primary schools and IDR35,000 to junior high schools on the basis that they reduce their school fees by the value of the grant, in some cases eliminating fees entirely. The program cost IDR12 trillion in 2006 (around US\$1.2 billion). Schools were also allowed to use the grant to fund the differentiation of fees, charging more for better-off students and less for low-income students (ASEAN, n.d.). According to a rapid appraisal of the program by the SMERU Research Institute in 2006, the program succeeded in reducing the costs of education, although it could have been better targeted at helping poor students specifically (Suharyo, et al., 2006).
- **Rural Infrastructure Support Project** (Infrastruktur Perdesaan [IP]): Organized by the Directorate General of Human Settlements (DGHS) of the Ministry of Public Works (MPW), this project was designed to fund the rehabilitation and improvement of rural infrastructure in about 1,840 low-income and often remote villages in East Java, Nusa Tenggara East, Southeast Sulawesi, and South Sulawesi provinces, at a total cost of US\$60.82 million, largely supported by a loan of US\$50 million from the Asian Development Bank (ADB). According to the ADB, the project resulted in the repair and development of around 4,000 kilometers of road, 351 bridges, 23 boat stands, 365 irrigation systems, a 128-kilometer irrigation channel, 179 water hydrants, 512 drinking water reservoirs, 550 shallow wells and 342 communal sanitation facilities, with most of the work being conducted by local communities themselves. The majority of the projects were completed in 2006, with the rest being completed in 2007 (ADB, 2008; ADB, 2009; ADB, n.d.).

## The BLT in 2008

The BLT was also employed following the 2008 hike in fuel prices, when world oil prices were nearing their peak. At this time, the government introduced a number of complementary initiatives to compensate for the increasing fuel price such as subsidies for rice; education for the children of the lowest rank of civil servants, police and soldiers; and low interest rate loans for small-enterprises (Coordinating Ministry for Economic Affairs, 2008).

In 2009, the BLT emerged as one of the most popular issues of the presidential campaign.

**Table 8 Compensation program for fuel subsidy cuts in 2008**

Programs	Budget (IDR trillion)	Budget (US\$ million)*	Implementation
Direct Cash Aid (BLT)	14.1	1,549.45	Jun-Dec
Food Security and Rice for the Poor	4.2	461.53	Jun-Dec
Loan Interests Subsidy for Small Enterprises	1.0	109.89	Jun-Dec

\* USD 1 = IDR9,100 (Annual Exchange Rate Estimation in State Budget FY 2008)

Source: Ministry of Energy and Mineral Resources, 2008

## Outcomes and effectiveness

The extent to which the BLT was a success or failure can be measured against a number of criteria:<sup>3</sup> on the most basic level, whether or not it eased the implementation of fossil-fuel subsidy reform; and beyond that, whether or not it lived up to its promise of truly compensating low-income households for the increase in their living costs. It can also be examined against the Indonesian government's more general objectives identified in the previous section of this report: reducing the fiscal deficit, improving the efficiency of social welfare policies, improving energy security and mitigating climate change.

As regards the first of these criteria, the BLT can be tentatively pronounced a success. Although it was part of a suite of measures intended to compensate low-income households for fossil-fuel product price increases (see Box 2 above), the BLT was by far the highest-profile and most ambitious. By engaging around a third of Indonesia's population with a direct, tangible form of compensation, the populace was made well aware of the government's effort to cushion low-income households from the impacts of subsidy reform. Moreover, surveys of attitudes conducted by the rapid appraisal show that, on average, BLT recipients reported high levels of satisfaction with the essentials of the scheme—the accuracy of targeting and the distribution, and the frequency and quantity of payments (Hastuti, et al., 2006). In comparison with the price rises of 1998, which

<sup>3</sup> The analysis in this section focuses on the effectiveness of the 2005 BLT, given the relative scarcity of information about the effectiveness of the 2008 BLT.

resulted in riots, violent deaths and the stepping down of a president, there seems strong grounds to suppose that the BLT played an important role in driving through price reforms with little opposition, especially given that it even became a political asset in recent national elections, with various commentaries citing it as a key issue—though not uncontroversial—for the winning incumbent Susilo Bambang Yudhoyono (Straits Times, 2009; Jakarta Post, 2009)

Of course, it should be recognized that this success is not necessarily without costs on a range of other fronts. To some extent, the BLT can be considered to have redirected opposition elsewhere: rather than protesting against the government, some unrest and violence took place within communities themselves. The rapid appraisal of the program reported that almost all village officials said they had been negatively affected by the program, having experienced blame from non-qualifying families who felt they should have received BLT payments, as they had played an important role in the targeting process. In several communities, this made it difficult to collect the community tithe and the levy for paying village officials' wages (Hastuti, et al., 2006). Following the second implementation of the BLT in 2008, a number of town chiefs decided to resign from their posts in Purbalingga and Banyumas in East Java, due to such experiences (Antara News, 2009). It is not clear how these side effects should be weighed against the benefits of the program, nor if it would be feasible to prevent them by revising the targeting mechanism. Similarly, the fact that the BLT contributed to President Yudhoyono's popularity is not entirely problem-free. If the distribution of cash payments comes to be perceived as a tool that can increase support for a party or a leader, it could lead to poor democratic or economic governance. The decision to add a third payment schedule on March 25, 2009 to the 2008 BLT program, for example, was ostensibly intended to help alleviate the impact of the financial crisis, but a number of commentators also noted that it took place 15 days before legislative elections and three months before national elections (Jakarta Post, 2009; Mietzner, 2009; E.U. Embassy of Indonesia, 2009; S. Rajaratnam School of International Studies, 2009; Jakarta Globe, 2010).

Assessing the BLT against the second criterion—whether or not it truly compensated low-income households for the increase in their living costs—is more difficult to answer conclusively. The issue can be broken into two parts. First, it can be asked whether or not poor households actually received the money; and second, if received, whether or not the money actually compensated households for the rise in their living costs.

According to various reviews of the 2005 BLT program, mistargeting is thought to have been relatively low and the majority of households given a KKB card did actually receive the funds they had been promised. According to the rapid appraisal, observations and questionnaires conducted in fieldwork showed that targeting was fairly accurate, although a quantitative analysis was more critical, suggesting that 74.6 per cent of poor households in the lowest-income quintile and 45 per cent of households in the second-lowest-income quintile received KKB cards (Hastuti, et al., 2006).

According to the Association of Southeast Asian Nations (ASEAN), an evaluation conducted by the Ministry of Social Affairs concluded that 8 per cent of recipients had been wrongly identified as poor households and that 22 per cent of poor or near-poor households had been wrongly excluded (ASEAN, n.d.). A survey disseminated by Indonesian universities after the conclusion of the BLT found that 94.17 per cent of recipients had received the promised October payment and 89.62 per cent had received the January payment (Widjaja, 2009).

Any cash transfer program involves some margin of error, so, given the short period of time in which the 2005 BLT was prepared, these results have been considered relatively successful. This is not to deny, however, that many aspects of targeting and distribution could have been improved. For example, the rapid appraisal highlighted that it was not clear if the unit of analysis was poor households or poor families, leading to inconsistencies and potentially omissions in the identification of recipients; that in some areas, a quota seemed to have been employed to restrict the number of poor families who were identified; and some of the poverty survey variables, such as the type of floor in a household, were not sufficiently sensitive to record the full range of responses. Similarly, there were a number of problems with the delivery and production of the Energy Compensation Card, as well as the issues mentioned previously regarding post office access, overcrowding and the unclear complaints mechanisms (Hastuti, et al., 2006).

It is less easy to judge whether the money received was adequate compensation for the rise in households' living costs. In March 2006, Statistics Indonesia announced that the number of people below the poverty line was 17.75 per cent, and in March 2007 announced that it was 16.58 per cent, which compared favourably with earlier independent estimates that the fuel-price hike would increase the 2005 poverty rate from 16.66 per cent to 22.05 per cent, if it were not mitigated by the cash transfer program (Widjaja, 2009). A modelling exercise conducted in 2008, however, came to different conclusions, arguing that only rural poverty rates would have been offset by the payments, given the higher reliance of urban households on kerosene. It estimated that, assuming a 75 per cent rate of targeting effectiveness, rural poverty rates would fall by 1.61 per cent and urban poverty rates would increase by 1.41 per cent (Yusuf, 2008). It is also important to note the inherent likelihood for poverty rates to fall immediately following the program, given that the BLT directly increases a household's potential for monthly consumption. It was for this reason that, although cash transfer recipients were generally very satisfied with the frequency and quantity of payments, it was village leaders and officials who were more critical of the BLT, on the basis that it "provided fish rather than a fish-hook" (Hastuti, et al., 2006). At the end of the program, living costs would still be higher than before (subject to fluctuations in the international oil price) but households would no longer receive any aid.

To some extent, this begs the question, "what could realistically be expected from the BLT?" The program was not created with the ambition of providing an exit strategy from poverty, but rather to cushion the population from an economic shock. Moreover, by helping to free up funds from fossil-

fuel subsidies, which have been shown to largely benefit the better-off, the BLT also made it possible to reinvest funds into a wide number of pro-development projects, including long-term poverty-alleviation programs. On this basis, it seems that the BLT and similar cash transfer programs certainly have the potential to help low-income households cope with increases in their living costs, but as part of a wider strategy to combat poverty.

Interestingly, one of the most controversial aspects of the BLT among Indonesians was the belief that an unconditional cash transfer would result in money being spent on things that do not contribute towards a family's well-being (such as alcohol, cigarettes or gambling) and that the program would make people lazy and harm their work ethic. According to the rapid appraisal of the BLT, this was not the case, with 90 per cent of recipients reporting that the purchase of rice dominated their use of the transfer, with the next biggest share of expenditure reported to be on kerosene, then private-debt service, health and then education, although a number of recipients said that the payments were especially welcome in helping to afford Eid al-Fitr, the holiday that marks the end of Ramadan (Hastuti, et al., 2006). An analysis of the number of hours worked by recipients and non-recipients before and after the BLT showed no statistically significant differences (Widjaja, 2009). More generally, it is also true that, as previously stated, the purpose of the BLT is not to end poverty or to incite behavioural changes, but to cushion an economic shock, and that such objectives might be better achieved with other social welfare policies.

As regards Indonesia's more general objectives—reducing the fiscal deficit, improving the efficiency of social welfare policies, improving energy security and mitigating climate change—it can be concluded that the BLT was consistent with the government's overarching goals. The reduction in fossil-fuel subsidies was projected to have saved US\$4.5 billion in 2005, with the October adjustment alone saving US\$10 billion in 2006. According to estimates by ASEAN, the BLT program cost around a quarter of 2006 savings at IDR23 trillion (around US\$2.3 billion), although this figure does not include organizational and administrative costs of targeting and distribution (ASEAN, n.d.). The social welfare aspect of the BLT has already been discussed, though it should be noted that implementing the program may have yielded important lessons and represented an investment in capacity for the Indonesian government's future social welfare policies. In 2007, for example, a separate conditional cash-transfer system was organized, intended to alleviate poverty in the long-term through requirements on school- and health-related activities, the Hopeful Family Program (Program Keluarga Harapan [PKH]). Like the BLT, the PKH also determined household's economic status with proxy means testing and used post offices in order to distribute funds (Hutagalung, Arif, & Suharyo, 2009; ASEAN, n.d.). And in 2008, the second employment of the BLT used the same register of recipients and distribution processes that had been established in 2005, needing only a verification process to determine recipients who had died, moved addresses or become ineligible for aid (Satriana, n.d.). Finally, the BLT would have had little impact on the government's goals regarding energy security and climate change, other than through its facilitation of fossil-fuel subsidy reform.

### 3.2 Conversion Program from Kerosene to LPG

On May 8, 2007, the government launched an attempt to reduce kerosene consumption by encouraging households and small businesses to instead consume LPG, with a goal of converting “as many as 20 million families” from using 5.2 million kiloliters of kerosene to 3.5 million tons of LPG by 2010. Kerosene is widely used in households and, following the successful attempt to reduce subsidies on transportation fuels, is the most heavily subsidized petroleum product in Indonesia. By contrast, LPG receives smaller subsidies and provides the same amount of cooking energy at lower levels of cost, pollution and CO<sub>2</sub> emissions. If successfully implemented nationwide, it has been estimated that the plan would free up spending on kerosene subsidies worth IDR30 trillion per year (US\$3.3 billion), at a cost of IDR20 trillion (US\$2.2 billion) for “infrastructure development,” although the ongoing costs of the program on a yearly basis were not made clear (Satriya, 2007; Ministry of Energy and Mineral Resources, 2007; Ministry of Energy and Mineral Resources, 2009).

The program began by freely distributing a “starter pack,” consisting of a stove and a compact-built 3-kg gas cylinder, to the public as an incentive to switch fuels (Ministry of Energy and Mineral Resources, 2007). Previously, 12-kg gas cylinders were the most common volume sold to Indonesian households but they were not subsidized. Once this step was complete, the distribution of kerosene was dramatically limited in the targeted areas. The disappearance of low-price kerosene in the market forced traditional consumers to use LPG. The government of Indonesia also established a communications program, using national media publications to educate the public on using LPG technology safely (Antara News, 2007).

#### Outcomes and effectiveness

In its first years of operation, the program ran into a number of problems, due to scarce LPG supply and poor distribution. Safety was also an issue because many people did not know how to use LPG equipment and some gas cylinders were of poor quality. Due to “infrastructure constraints,” namely logistics concerning distribution and transportation, as well as the production of the 3 kg gas cylinders (Agustian, 2008), Pertamina, the LPG distributor, could only supply 15 million households and industries in Java, Bali and South Sumatra by December 2008, out of the 20 million that had been originally targeted by the government. The fuel was also being sold by only 25 per cent of the targeted number of LPG Stations (53 stations out of 200) (Kompas.com, 2008; Rachmi, 2008). In March 2009, the government claimed the program was supporting 19 million households and had saved IDR5.68 trillion (US\$600 million) in unspent subsidies on kerosene. The program aimed to supply LPG to an additional 23 million more by the end of 2009. (PT. Pertamina (Persero)), 2009).

According to Pertamina, as of February 2010, 44 million households had been distributed starter packs, representing a total withdrawal of 8.5 million kilolitres of kerosene in favour of 2.8 million tonnes of LPG.<sup>4</sup> As of December 2009, this represented an annual decrease in kerosene consumption of 5.04 million kilolitres a year, a reduction of roughly two thirds from previous levels of consumption. It reported that 202 filling stations are in operation, and that the capacity of LPG storage and transport infrastructure has increased. The gross saving is estimated to have been US\$2.58 billion and the total cost to have been US\$1.12 billion, with a net saving of US\$1.47 billion. The program claims it will “absorb” 38,206 labourers, although it is not clear in what capacity the program has created employment, nor what quality of jobs have been created. Cooking costs are also said to have decreased for households by US\$2.92 per month, on the basis of Pertamina claims that 0.4 kilograms of LPG can substitute one litre of kerosene, at a price of US\$0.46 per kilogram of LPG and \$0.27 per litre of kerosene. A further 9.3 million households are intended to receive packs by the end of 2010 (PT. Pertamina (Persero), 2010).

As of May 2010, the program had only been applied to Indonesia’s western provinces, due to the complexity of distributing LPG conversion packs to eastern Indonesia, although Pertamina representatives have stated the organization’s willingness to distribute LPG to these areas (Jakarta Post, 2010).

The program is difficult to evaluate because the majority of the data available about it is either reported from Pertamina or as information from news articles. Nonetheless, assuming Pertamina’s statistics are accurate, it would appear that the program’s objective of reducing the kerosene subsidy has been effective, at the same time as contributing towards the government’s more general goal of developing more effective social welfare support via fuel cost reductions and job creation. It is less clear if the transition has helped promote the government’s climate change objectives, as, on a short term basis, LPG is certainly a cleaner-burning fuel than kerosene, but on a long-term basis the change represents a shift to simply another subsidized fossil energy source.

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<sup>4</sup> These claims should be viewed with some caution, however, given that middle-of-the-road estimates of LPG and kerosene stove efficiencies would suggest a more realistic ratio that one kilogram of LPG can substitute two litres of kerosene. It is possible that households have reduced their consumption of cooking fuels due to the program, or that the numbers reflect the amount of kerosene that was previously being diverted to non-intended purposes.

## **4.0 Lessons Learned**

### **4.1 Targeted Cash Transfers Can Reduce Opposition to Subsidy Reform and Assist the Poor**

The Government of Indonesia's unconditional cash transfer program was a successful strategy in overcoming social and political opposition to fuel-subsidy reform. Experience with the BLT in 2005 suggests that such cash transfer programs need good preparation, deployment and monitoring mechanisms in order to effectively assist the poor in the short term, and cannot substitute for a larger, long-term strategy to combat poverty. Doubts among civil society over the way recipients have used the funds—buying items seen as unhealthy or luxury products, such as cigarettes or mobile phones—raises the possibility that conditional requirements for poor households to qualify for disbursement might also be used, but this would require significant research to establish appropriate requirements and the cost-effectiveness of a program.

### **4.2 Fuel Diversification**

According to Pertamina, the Kerosene to LPG Conversion Program has successfully converted traditional kerosene consumers to the use of LPG in several targeted areas. Despite various weaknesses in implementation, available data suggests that this program has performed well, successfully achieving the government's key goal of relieving budgetary pressure due to fuel subsidies.

## Conclusions

**Educating the general population about the benefits of fossil-fuel subsidy reform and establishing support policies for reform efforts will continue to be an important part of Indonesia's strategy to rationalize its fossil-fuel subsidies.** Reviewing the history of Indonesia's struggle with fossil-fuel subsidies suggests that one of the principal barriers to reform is still a lack of understanding among the general population about subsidies: their negative effects, their inefficiency as a policy to support low-income households and the potential for well-designed reform to promote the welfare of those in the greatest need.

**Unconditional cash transfer programs and fuel-switching programs can be effective policies to support fossil-fuel subsidy reform.** Both of these policies appear to have achieved the Indonesian government's broad goals, although analysis shows that there are significant hurdles to be overcome with regard to preparation, implementation and subsequent monitoring and adaptation.

**Strengthening the demographic database used to develop the Direct Cash Transfer program could help Indonesia organize such schemes in the future and contribute more generally towards effective social welfare policy-making.** Experience with the 2005 BLT suggests that investments could be made to improve targeting and reduce conflicts that arise in policy implementation due to the targeting process.

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