

**A CITIZENS' GUIDE  
TO ENERGY SUBSIDIES  
IN INDONESIA  
2012 UPDATE**



PRODUCED BY THE INTERNATIONAL INSTITUTE FOR SUSTAINABLE DEVELOPMENT'S  
GLOBAL SUBSIDIES INITIATIVE AND THE INSTITUTE FOR ESSENTIAL SERVICES REFORM [WWW.IISD.ORG](http://WWW.IISD.ORG)



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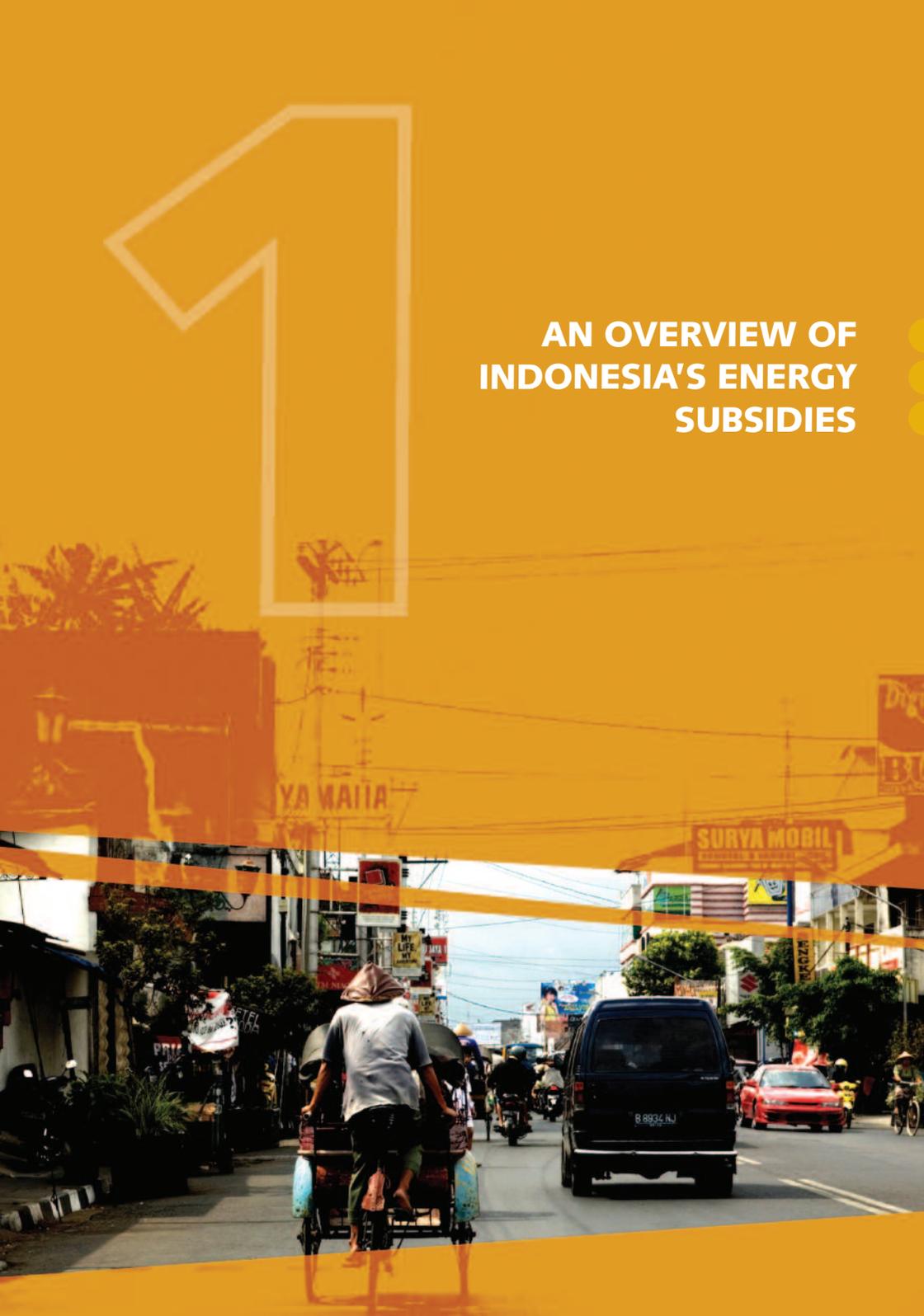
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# AN OVERVIEW OF INDONESIA'S ENERGY SUBSIDIES



## 1. An Overview of Indonesia's Energy Subsidies

The Government of Indonesia, like many countries around the world, has used subsidies for decades to promote a range of social and economic objectives. Among the priorities vying for support are poverty alleviation, infrastructure development, health and education. Given the competing demands, deciding where to allocate public financial resources is one of the government's most important and difficult tasks.

Citizens have a vital stake in these decisions, but unfortunately there is often little public debate about what should be subsidized, or information about the costs and who benefits. This is partly a problem of transparency: in many cases subsidies are hidden and difficult to track. But it is also because regular citizens are busy making livings and raising families, with little time to devote to monitoring their government's every activity.

Yet, if subsidies are to provide a genuine benefit, it is vital for the public to have effective oversight of government expenditure—a task that falls in large part to civil society groups and journalists, the intended audience of this guide.

The following pages gather the best available information on the costs and benefits of energy subsidies. Why focus on energy subsidies? First, subsidies for fuels and electricity receive huge amounts of public support in Indonesia. In fact, the government spends more on subsidies to fuel than it does on capital expenditure for public services (see Box 1). Second, these subsidies have major impacts on social equity, economic growth and environmental preservation: the three pillars of sustainable development.

The first part of this guide provides an overview of how various types of energy are subsidized in Indonesia. The second part looks at the implications of these subsidies for sustainable development. The third part discusses the process of reforming energy subsidies, drawing on Indonesia's earlier efforts, and lessons learned from other countries.

**Did you know that the government spends more on energy subsidies than it does on defence, education, health and social security combined?**

## BOX 1

The revised budget for 2012 allocated IDR202 trillion (US\$22 billion)<sup>1</sup> for fuel and electricity subsidies. This is higher than expenditures for defence, education, health and social security combined. The proposed budget for 2013 estimates the energy subsidy bill will soar to IDR275 trillion (\$30 billion)—that is 24 per cent of the central government's total planned expenditure.

**Table 1 » Central Government expenditures and subsidies (2005-2012)**  
(in trillion Rupiahs [IDR])

	2006	2007	2008	2009	2010	2011	2012	2013
	Audited	Audited	Audited	Audited	Audited	Audited	Revised Budget	Proposed Budget
Total Expenditures	440	505	693	629	697	884	1,070	1,139
All Subsidies	107	150	275	138	193	295	245	316
• Energy Subsidies	95	117	223	95	140	256	202	275
– Fuel Subsidies	64	84	139	45	82	165	137	194
– Electricity Subsidies	30	33	84	50	58	90	65	81
Capital Spending (Investment)	55	64	73	76	80	118	169	194
Selected Central Government Spending								
Defence	24	31	9	13	17	51	72	78
Education	45	51	55	85	91	98	104	109
Health	12	16	14	16	19	14	16	17
Social Protection	2	3	3	3	3	4	6	7

Source: Ministry of Finance (n.d.a; n.d.b; n.d.c)

## 1.1 What is an Energy Subsidy?

Commonly, energy subsidies are defined as “any government action that lowers the cost of energy production, raises the revenues of energy producers or lowers the price paid by energy consumers” (International Energy Agency [IEA], Organisation for Economic Co-operation and Development [OECD], Organization of the Petroleum Exporting Companies [OPEC] & World Bank, 2010). Energy subsidies come in two main categories: those designed to reduce the cost of consuming energy, called **consumer subsidies**, and those aimed at supporting domestic production, called **producer subsidies** (Burniaux et al., 2009, cited in Ellis, 2010).

In practice, energy subsidies come in different forms. The OECD/IEA & UNEP (2002) and UNEP (2008) identify the following typical mechanisms by which governments support the production and consumption of energy:

- Direct financial transfers: grants to consumers, grants to producers, low-interest or preferential loans and government loan guarantees.
- Preferential tax treatment: tax credits, tax rebates, exemptions on royalties, duties or tariffs, reduced tax rates, deferred tax liabilities and accelerated depreciation on energy-supply equipment.
- Trade restrictions: tariffs, tariff-rate import quotas and non-tariff trade barriers.
- Energy-related services provided directly by government at less than full cost: government-provided energy infrastructure, public research and development.
- Regulation of the energy sector: demand guarantees, mandated deployment rates, price controls, environmental regulations and market-access restrictions.

## 1.2 Why Subsidize Energy?

Policy-makers often justify energy subsidies with the argument that they contribute to economic growth, poverty reduction and security of supply (IEA, OECD, OPEC & World Bank, 2010). It is true that subsidies can be important in promoting social welfare and addressing market failures. However, there are also risks associated with subsidizing energy. Artificially low prices potentially discourage energy conservation, and fossil fuel subsidies are a disincentive to shifting to cleaner sources of energy. Moreover, the benefits of energy subsidies typically accrue to wealthier classes of

citizens, as they use more energy. These and other impacts of energy subsidies are discussed in more detail in the second section of this guide.

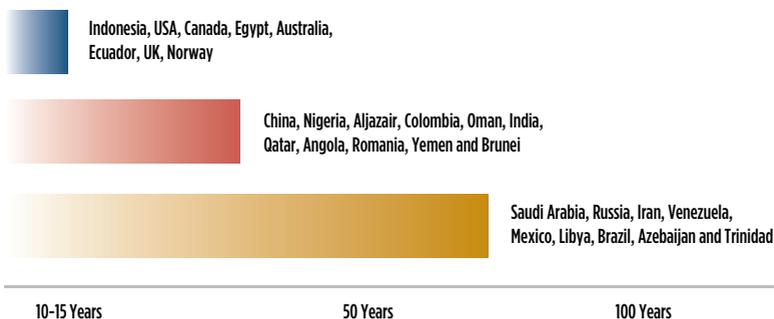
## 1.3 Indonesia's Energy Subsidies

### 1.3.1 Petroleum Products

Indonesia has been subsidizing the retail price of fuels since 1967 (Dillon, Laan & Setyaka Dillon, 2008). During the 1980s, when Indonesia's oil production was higher, fuel subsidies were more affordable, although they were broadly criticized for their distorting effect on the economy. When global oil prices soared in 2005, the government spent 24 per cent of total expenditure on subsidies and of that, 90 per cent was for fuel products (World Bank, 2007). To reduce its expenditure, the government raised the domestic prices of kerosene, gasoline and diesel twice in a six-month period in 2005. The first increase, in March, raised fuel prices by 29 per cent, and the second increase, in October, raised fuel prices by 114 per cent (World Bank, 2007).

Crude oil production in Indonesia has been in decline since 1998 due to the maturation of its largest oil fields. In 2004 Indonesia became a net oil importer and subsequently suspended its membership in OPEC. In 2011 the upstream oil and natural gas regulator, BP Migas, predicted that Indonesian potential and proven oil reserves would only last for 12 years, and natural gas reserves for 46 years (Buletin BP Migas, 2011).

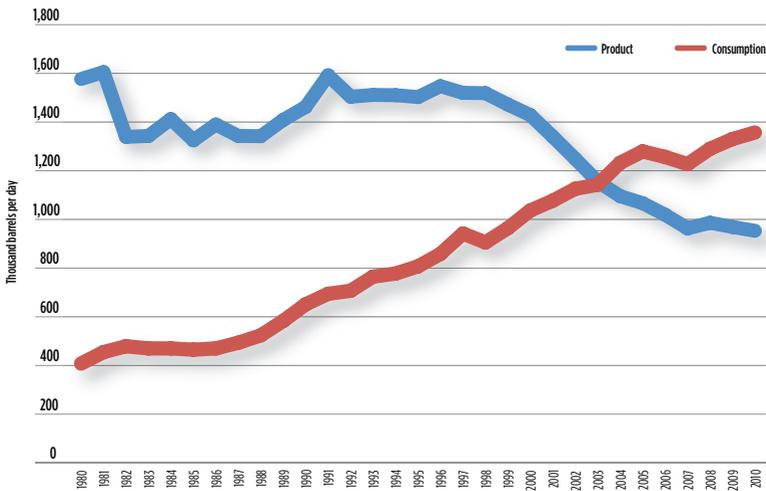
Figure 1 » Country comparison of oil reserves



Source: Harun (2011)

Meanwhile, Indonesia's oil consumption has been steadily growing (see Figure 1). The switch from being a net oil exporter to a net oil importer, and the widening gap between production and consumption levels, has meant that fuel subsidies have become much more of a burden on the state budget in recent years.

Figure 2 » Indonesian oil production and consumption (1980–2010)



Source: Index Mundi (n.d.a); Index Mundi (n.d.b)

## Gasoline “Premium” and Diesel “Solar”

The Indonesian government subsidizes two of the four main transport fuels supplied in Indonesia. The prices of Premium and Solar are set below their actual market prices by the government and are changed only on an ad hoc basis, at irregular intervals. Premium and Solar are predominantly distributed by Pertamina (the national oil company), whereas the other high-performance fuels, Pertamax and Pertamax Plus (or their equivalent products), are supplied by Pertamina and multinational companies and the prices are updated regularly to reflect international oil prices (e.g., Pertamina normally updates its prices twice per month). The government no longer subsidizes petroleum for industrial consumption.

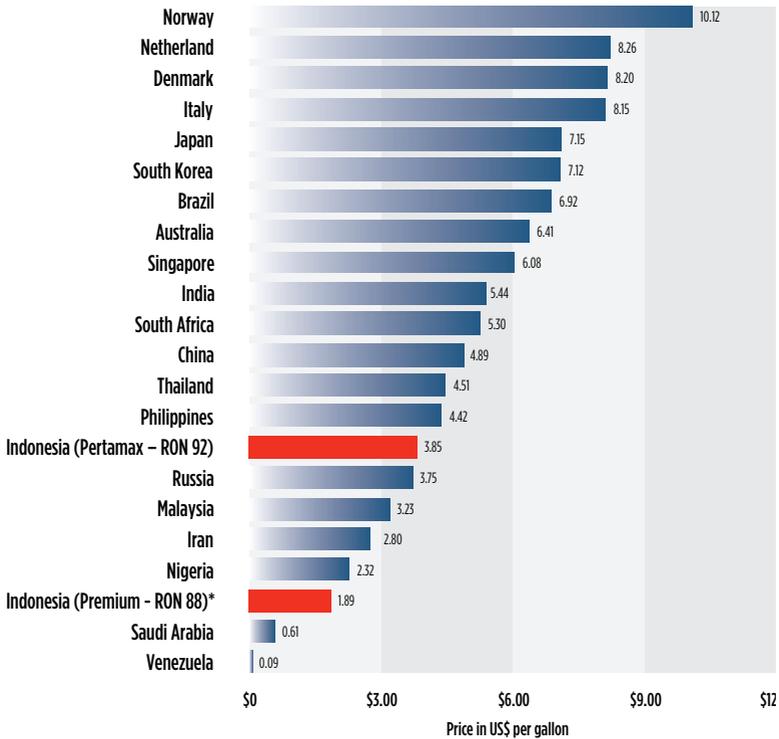
Table 2 » Prices for Indonesian fuel products

Fuel product	RON number	Price per litre	Last price change	Quantity sold by Pertamina (2011)
Pertamax Plus	RON 95	IDR 9,550	March 12	(unpublished)
Pertamax	RON 92	IDR 9,200	March 12	1.4 million kilolitres
Premium	RON 88	IDR 4,500	2009	25.5 million kilolitres
Solar (diesel)	–	IDR 4,500	2009	14.5 million kilolitres

Sources: Media Indonesia (2012); KOMPAS (2012a)

Fuel prices in Indonesia are among the lowest in the world. Those countries that do have cheaper fuel tend to be net oil exporting countries (see Figure 3). Among the member countries of the Association of South East Asian Nations (ASEAN), Indonesia has the cheapest subsidized fuel. Although Premium is a low-grade fuel (RON 88) it is, by far, the largest volume of gasoline consumed in Indonesia (see Table 2).

Figure 3 » Fuel price comparison between countries



\* Addition by author.  
Source: Bloomberg (2012)

## Kerosene

The Government of Indonesia regulates the price of kerosene, keeping the retail price below the market price. Kerosene is mainly used for household cooking and lighting. In 2006 the government allocated IDR31.5 trillion (\$3.5 billion) for kerosene subsidies, IDR36.5 trillion (\$4 billion) in 2007 and IDR38 trillion (\$3.8 billion) in 2008. In 2007 the government introduced a kerosene-to-liquefied petroleum gas (LPG) conversion program (see section below), which has reduced kerosene subsidies.

## Liquefied Petroleum Gas

Facing fiscal pressure from high kerosene subsidies, the Government of Indonesia introduced a kerosene-to-LPG conversion program to reduce the kerosene subsidy in 2007. The program provides a free start-up package consisting of a 3-kilogram LPG tank, a compact LPG stove and its accessories (regulator and hose). Originally, the plan was to roll the program out to 42 million households and small enterprises by 2012 in an effort to replace more than 6 million kilolitres of kerosene annually. The target has since been increased to 48 million start-up packages.

The Ministry of Energy and Mineral Resources (MEMR) estimated that the total cost for distributing 46 million start-up packages of 3-kilogram LPG tanks from 2007 to 2011 would amount to IDR14.11 trillion (\$1.56 billion). But it would save up to IDR35.34 trillion (\$3.9 billion) by reducing the kerosene subsidy (Evita Legowo, Director General of Oil and Gas, cited in Investor Daily Indonesia, 2011). The cost of start-up and distribution are covered by the annual state budget. In late 2010 the Ministry of Finance announced a Ministerial Decree that grants a value-added tax exemption for the provisioning and distribution of subsidized 3-kilogram LPG product.

In addition to the free start-up package, the government also subsidizes the price of LPG for 3-kilogram cylinders. In 2007 MEMR estimated that the production cost of one kilogram of LPG is IDR 6,700 (\$0.67). The subsidized price (before tax) for a 3-kilogram cylinder tank is IDR3,500 per kilogram (\$0.35), meaning each kilogram of LPG is subsidized by IDR3,200 (\$0.32) (MEMR, 2007).

**Table 3 » Progress of subsidized kerosene-to-LPG conversion program  
(in thousand kilolitres)**

	2007	2008	2009	2010	2011	2012 Revised
Kerosene	9,851.80	8,469.10	4,784.20	2,350.60	1,694.80	1,700.00
LPG	–	506,4	1,774.70	2,693.70	3,256.00	3,606.10

Source: Ministry of Finance (n.d.c)

Since the implementation of the conversion program, the volume of subsidized kerosene consumption has declined. Indonesia reduced the volume of subsidized kerosene to 1,695 thousand kilolitres in 2011 from 9,852 thousand kilolitres in 2007. The government has claimed that the accumulative conversion has saved a total of IDR45.3 trillion (\$5.2 billion) from 2007 until April 30, 2011 (MEMR, 2012).

### 1.3.2 Electricity

The Indonesian government sets the electricity tariff for all consumer types (i.e., industry, business, residential and public services). The amount of subsidy is determined annually by the government, based on the difference between the average cost of electricity production proposed by Perusahaan Listrik Negara (PLN), the state-owned electric company, and the average electricity tariff set by the government. The average cost of electricity production is based on an estimate of the composition of the energy inputs for generating electricity and the power plants, transmission, distribution and supply costs, and a margin for PLN.

**Table 4 » Electricity subsidies in Indonesia 2007–2012 (in trillion rupiah)**

	2007	2008	2009	2010	2011	2012 Revised
Electricity Subsidy	33.07	83.91	49.55	57.6	90.45	64.97

Source: Ministry of Finance (n.d.c)

Subsidies for electricity jumped from IDR9 trillion (\$0.9 billion) in 2005 to IDR31 trillion (\$3.4 billion) in 2006 due to increasing international crude oil prices and high diesel oil consumption in electricity generation. Electricity subsidies reached an all-time high of over IDR90 trillion (\$9 billion) in 2011.

### 1.3.3 Coal

The Indonesian government subsidizes coal in two ways: through guaranteed supplies to the state-owned electricity company and domestic industries, and through regulating the domestic price of coal.

A coal subsidy is provided by way of a Domestic Market Obligation (DMO) policy, which sets a guaranteed amount of coal sales to electricity generation and domestic industries. The formulation of the DMO is primarily driven by the quantities of coal required by nominated domestic consumers to satisfy their annual operating requirements.

The DMO is distributed proportionally to the coal companies through their work budget and program approval. The quota is recalculated and set annually, reflecting the change in demand and supply of coal. For instance, the coal DMO for 2010 was 70 million tons, and in 2011 it was 60.15 million tons (Kontan, 2012).

In addition to the DMO policy, the government also sets the Indonesian Coal Price Reference (ICPR). The price setting aims to secure domestic coal supply, act as a reference price for producers and domestic consumers, and maximize the state revenue from coal. ICPR makes coal prices relatively uniform. The procedure to set ICPR is determined by the Minister of Energy and Mineral Resources Decree No. 17/2010. The determination is based on a formula and several attributes that might lower the domestic price below other international coal market indexes, such as Global Coal and Barlow Jonker.<sup>2</sup>

The major consumer of coal in Indonesia is the state-owned electricity company, PLN. The company consumes more than 80 per cent of domestic coal supply or about 34.2 million tons in 2010. The remaining coal is consumed by domestic industries such as steel and cement.

### 1.3.4 Upstream Oil and Gas Subsidies

The government provides several subsidies for oil and gas exploration and production activities in the form of tax incentives, an investment credit allowance and the oil domestic market obligation. Braithwaite et al. (2010) calculated that, in 2008 alone, oil and gas producers received about \$245 million (IDR2.37 trillion) in investment credit and tax incentives. In addition, Pertamina's refineries benefit from buying crude oil supplied to them through the oil domestic market obligation system at heavily discounted prices. This subsidy to Pertamina was worth, \$1.55 billion (IDR15 trillion) in 2008, to make the total subsidy value to upstream oil and gas worth \$1.8 billion (IDR17 trillion) in 2008. Moreover, the study identified several other potential subsidies; however, the information required to clarify and estimate these subsidies is not readily available.



# 2

## ARE ENERGY SUBSIDIES GOOD FOR INDONESIANS?



## 2. Are Energy Subsidies Good for Indonesians?

The Indonesian government subsidizes fuel and electricity to help keep energy affordable, especially for low-income groups (Ministry of Finance, 2010). Energy subsidies are intended to increase household incomes in two ways. The direct effect is that, by paying less for fuel, households have more disposable income to spend on other things. The indirect effect is that the goods and services purchased by households might be cheaper as a result of subsidies that reduce energy input costs for producers, distributors and service providers.

### 2.1 Do Poor People Benefit?

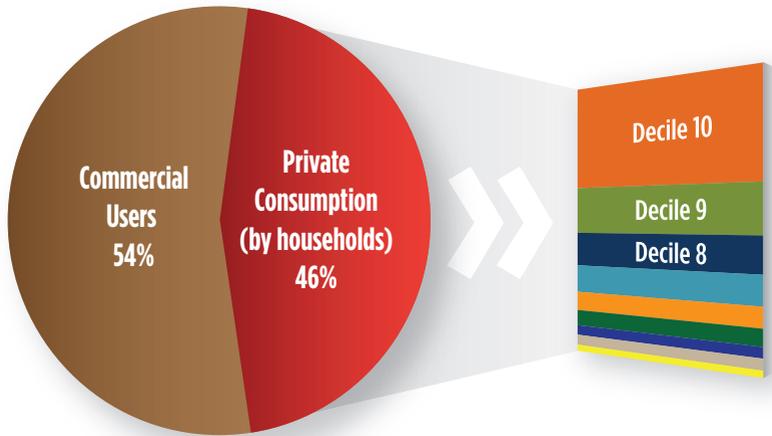
Several studies show that most of the benefits of fuel subsidies are harnessed by high-income groups. Because fuel subsidies are provided per litre, and do not vary depending on income, those who consume the most fuel receive the largest share of the subsidy. The largest consumers of energy are the wealthiest households and those in urban areas.

The World Bank (2011) used data from the 2009 Indonesian National Household Socioeconomic Survey to show that households and private uses may account for around a third of subsidized fuel consumption. The remainder appears to be used commercially for transport, such as by buses and businesses (Figure 4). The study also found that the top half of households by wealth consumed 84 per cent of the subsidized gasoline, with the richest decile alone accounting for almost 40 per cent. In contrast, the poorest decile accounted for less than 1 per cent of subsidized gasoline use. Further detailed examination of household survey data suggested that about two thirds of the poor and near-poor households (defined as the bottom 5 deciles) do not consume gasoline whatsoever.

**90 per cent of Indonesia's fuel subsidies benefit the richest 50 per cent of households.**



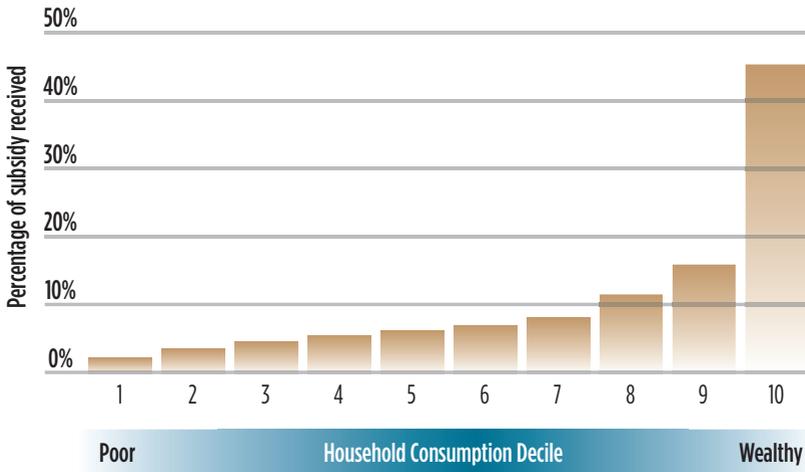
Figure 4 » Share of subsidized gasoline consumption attributed to commercial and private consumers



Source: World Bank (2011, p. 27)

Similar results have been found by other researchers. Agustina, Arze del Granado, Bulman, Fengler and Ikhsan (2008), for example, found that more than 90 per cent of Indonesia's fuel subsidies benefit the richest 50 per cent of households (Figure 5). The Indonesian government is aware of these effects. The Coordinating Ministry of Economic Affairs advised in May 2008 that the wealthiest 40 per cent of families receive 70 per cent of the subsidies, while the bottom 40 per cent benefit from only 15 per cent of the subsidies (Mourougane, 2010).

Figure 5 » The distribution of fuel subsidies across Indonesian households



Source: Agustina et al., 2008

In terms of regional distribution, in 2009 the Java-Bali region, the most developed part of Indonesia, was allocated **20.83** million kiloliters or **55.6** per cent of the overall quota of subsidized fuel.<sup>3</sup> The Sumatra region was allocated **26** per cent; the area of Kalimantan, Sulawesi, Maluku and Papua was allocated **13.3** percent, and the East Nusa Tenggara (NTT) and West Nusa Tenggara (NTB) region was allocated 0.02 per cent.

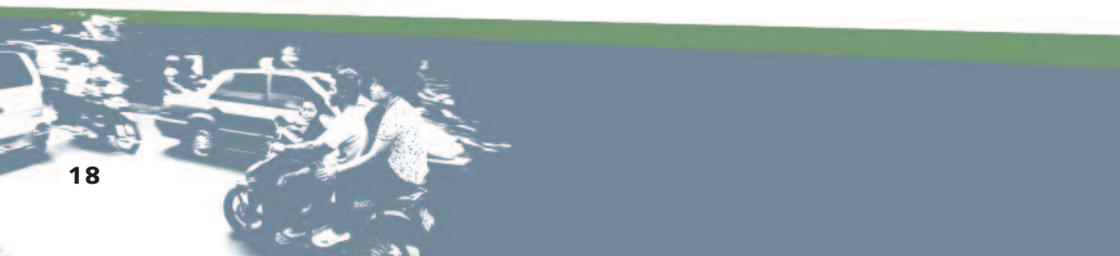
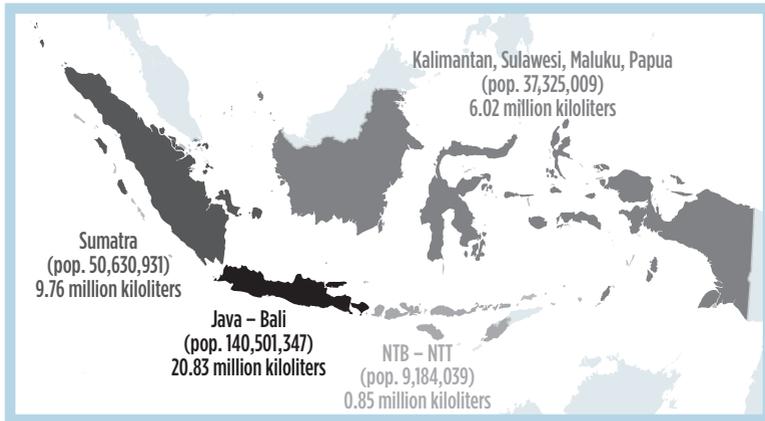


Figure 6 » Regional allocation of subsidized fuels



Source: BPH Migas (2009)

## 2.2 Are Energy Subsidies Good for Economic Development?

Fuel subsidies affect the economy in several ways. A readily observable effect is the cost on the government budget, but there are more subtle and equally important impacts on the economy. By artificially lowering the price of certain types of energy, subsidies encourage overconsumption and inefficient use of those resources. Lower prices also alter investment decisions by discouraging energy diversification and reducing the incentive for energy suppliers to build new infrastructure. The key economic impacts of fuel subsidies are discussed below.<sup>4</sup>

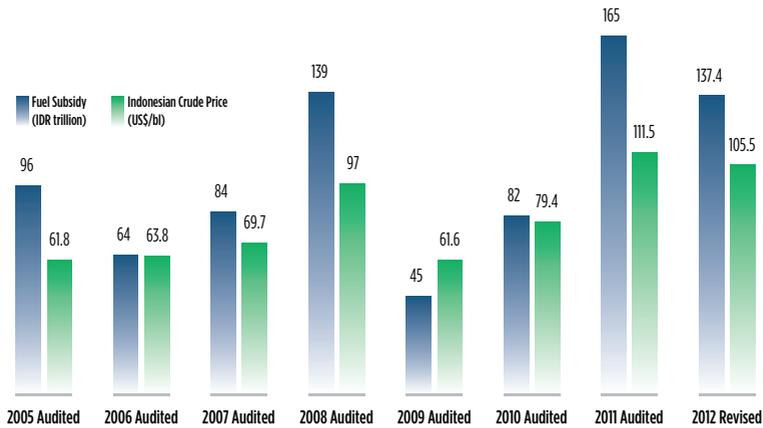
### 2.2.1 Increased Energy Imports

Overconsumption of subsidized energy leads to an increased demand for imported fuel and a reduction in the amount of domestically produced energy available for exports. Subsidies can thus result in a deterioration of the balance of payments and increase the country's dependence on energy imports (Mourougane, 2010).

A large disparity between subsidized and non-subsidized fuel encourages consumers to switch from Pertamina's non-subsidized "Pertamax" fuel (RON 92) to subsidized "Premium" fuel (RON 88). In the first quarter of 2011, the government reported that sales of subsidized fuel (Premium) surpassed the quota by an average of 7 per cent, while Pertamax sales dropped approximately 11 per cent (Jakarta Post, 2011a; Jakarta Post, 2011c; Kontan, 2011). The Indonesian Downstream Oil and Gas Regulatory Agency predicts that the quota of 38.5 million kilolitres of Premium for 2011 will be exceeded by up to 3.5 million kilolitres (Jakarta Post, 2011b). Pertamina's refineries are only capable of producing 10.58 million kilolitres of Premium brand fuel annually, and therefore the remaining amount of fuel must be imported to meet domestic demand (Detik Finance, 2011).

## 2.2.2 Fuel Price Volatility and Government Financing

Figure 7 » Fuel subsidies and Indonesian crude price



Source: Ministry of Finance (n.d.a; n.d.c)

Note: The blue line for LKPP refers to the actual payment/spending, while for APBN and APBN-P the blue line refers to the subsidy budget.

Large subsidies on imported oil make Indonesia's fiscal position highly vulnerable to changes in global energy prices. When international oil prices rise dramatically, like they did in 2008 and again in 2012, the government is forced to either drastically increase prices—which can be politically difficult and cause a sudden rise in inflation—or make corresponding increases to its subsidy budget, which can be crippling for the economy.

If the government chooses to maintain subsidies at times of high oil prices, it must borrow the additional funds or cut expenditures to other programs. The volatile oil market and uncertainty about the government's financing needs increase the cost of government borrowing, adding to future debt repayments (World Bank, 2011). Cutting spending on infrastructure, health or education will also have long-term negative impacts on development and economic competitiveness.

Managing the fiscal impacts of oil-price volatility is a major challenge for the government today. In early 2012, crude prices stayed above \$100/barrel. Yet the 2012 state budget assumed that crude prices would be \$90/barrel. The government now faces a higher subsidy bill than it budgeted for in 2012.

### 2.2.3 Investment

For energy providers such as petroleum refining facilities or electricity generators, regulated prices reduce the incentive to invest in new capital, due to lower expected returns. This is true in Indonesia, where subsidies have led to deterioration in the financial situation of state-owned energy companies and under-investment in infrastructure (Mourougane, 2010). In 2009 the revenue from the sale of electricity by the state-owned power company, PLN, was only around half of the cost of supply (on average IDR650 per kWh and IDR1,300 per kWh, respectively). Compensation received from the federal government was insufficient to fill this gap. As a result, PLN has been unable to fund new investment, expand electrification in rural areas and sometimes even to conduct standard maintenance (Mourougane, 2010). The result has been a lack of development of its generating capacity and frequent blackouts.

**Large subsidies on imported oil make Indonesia's fiscal position highly vulnerable to changes in global energy prices.**

### 2.2.4 Competition

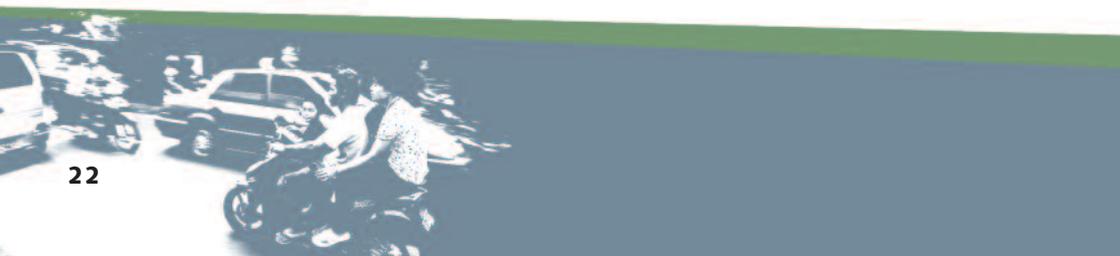
Artificially low prices for fossil fuels make it harder for alternative energy sources to compete commercially. These alternative sources could ultimately become more economically and environmentally attractive, but are disadvantaged by the subsidies provided to their competitors. Subsidies can thus “lock in” existing technologies to the exclusion of other, more promising ones.

### 2.2.5 Corruption and Smuggling

The price disparity created between subsidized and non-subsidized products can create a strong incentive for illegal practices such as fuel smuggling and diversion to unintended recipients. The production side of fossil fuels is a highly lucrative business and subject to government oversight that can be vulnerable to bribery. Six areas of particular vulnerability have been identified: underpayment of royalties, awarding licenses for oil and gas extraction, irregularities in state-owned enterprises, distribution of profits in production-sharing arrangements and the exploitation of loopholes in new subsidy schemes (Charles, 2010). In the case of LPG in Indonesia, the price difference between a subsidized 3-kilogram LPG tank and a non-subsidized 12-kilogram LPG tank encourages the illegal transfer of the content of 3-kilogram tanks into 12-kilogram tanks. Without the proper refilling process, this is extremely dangerous and has caused explosions that have injured and killed hundreds of people (KOMPAS, 2010; KOMPAS, 2011a).

Growing retail price disparity has increased fuel smuggling and illegal selling of subsidized fuel. The Downstream Oil and Gas Implementing Agency (BPH Migas) reported that between 10 and 15 per cent of the subsidized fuel distributed by the government was illegally sold to industries, particularly at gas stations close to industrial and mining areas (Fadillah & Samboh, 2011). This increase in illegal selling and smuggling of fuel has led to an increase in the demand of subsidized fuel.

Controlling illegal activities incurs large administrative costs to prevent, monitor and deal with abuse. Such costs add to the subsidy budget that is shared by all taxpayers.



## 2.3 What about the Environment?

Energy subsidies encourage excessive consumption and reduce incentives for energy efficiency. The logical consequences of high fossil fuel consumption are greater greenhouse gas emissions, local air pollution and resource depletion. Based on data from the IEA, phasing out consumption subsidies for fossil fuels between 2011 and 2020 would cut global carbon dioxide (CO<sub>2</sub>) emissions by 5.8 per cent, compared with a “business as usual” scenario (IEA, 2010). The OECD estimates that emissions reductions could be as high as 10 per cent by 2050 if the same subsidies for fossil fuel consumption are removed by 2020 (IEA, OECD, OPEC & World Bank 2010). Eliminating fossil fuel subsidies provides a way for countries like Indonesia to make a major contribution to greenhouse gas reduction without introducing carbon taxes or an emissions trading system. Yusuf, Komarulzaman, Hermawan, Hartono and Sjahrir (2010) found that removing fuel and electricity subsidies would reduce national CO<sub>2</sub> emissions by 6.66 per cent by 2020 (5.79 per cent from removal of fuel subsidies; 0.92 per cent from removal of electricity subsidies).

Subsidies also undermine the incentive to invest in existing cleaner energy sources and technologies by artificially reducing the consumer price for fossil fuel products. In the same way, fuel subsidies discourage innovation in the production and deployment of cleaner types of energy, such as LPG and renewables, even though Indonesia’s endowment in these energy resources is substantial.

**The logical consequences of high fossil fuel consumption are greater greenhouse gas emissions, local air pollution and resource depletion.**

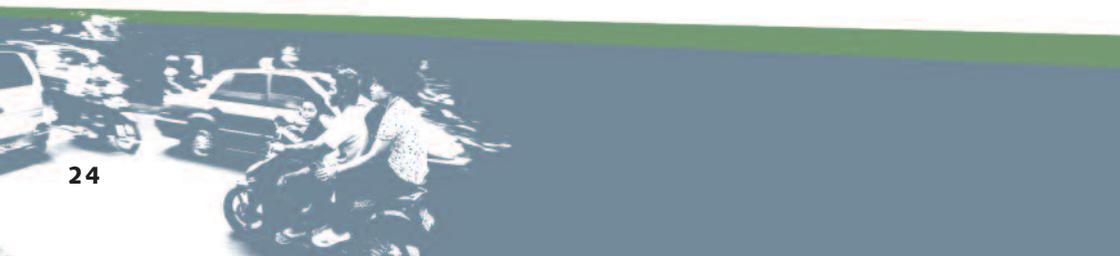
## 2.4 What Plans has the Indonesian Government Announced to Reform Energy Subsidies?

The government has repeatedly publicized plans to reduce fuel subsidies but has delayed implementation. Most recently the government considered raising the price of subsidized gasoline by IDR1,500 per litre (\$ 0.16) and prohibiting private four-wheel vehicles and government vehicles from using subsidized gasoline (Braithwaite et al., 2012). But a strong public backlash in March 2012 led the government to abandon the plan to raise fuel prices. Government vehicles, however, have been restricted from using subsidized gasoline. This came into effect in May 2012 for government vehicles in Jakarta, and extended to the Java-Bali region in August 2012.

It is likely that fuel subsidies will rise in 2013 along with increased consumption. On August 16, 2012, the President of Indonesia, Susilo Bambang Yudhoyono, proposed to parliament that the state allocate IDR274.75 trillion (\$ 30 billion) in subsidies for fossil fuels and electricity in the 2013 fiscal year—a IDR72 trillion (\$ 7.8 billion) increase over the amount allocated for the 2012 fiscal year (Sutianto, 2012).

The government of Indonesia has been trying to reduce subsidies for electricity by increasing tariffs. In July 2010 the government increased the electricity tariff by 18 per cent on average for most PLN consumers, excluding 33.6 million small residential consumers with a 450 and 900 Volt-Amper (VA) connection. Despite the tariff increase, in 2010, electricity subsidies still exceeded the target by IDR2.5 trillion, totalling IDR57.6 trillion (US\$6.4 billion).<sup>5</sup>

In May 2011 the government announced a plan to increase the base price of the electricity tariff by between 10 to 15 per cent in 2012, with expected savings of IDR15 trillion (\$1.65 billion) for the state budget (Samboh, 2011b).



For the 2013 fiscal year, the government and the parliament have agreed to gradually increase the electricity tariff by up to 15 per cent by the end of 2013. The increase will not apply to small households and businesses that use between 450 and 900 VA. The introduction of higher tariffs is expected to reduce electricity subsidies by IDR13.92 (Pramudatama, 2012).

The government has also announced a change to the distribution model for subsidized 3-kilogram LPG canisters from the current open system to a closed system by 2014. The government intends to introduce a control card, limiting subsidized 3-kilogram LPG cylinders for poor families and small businesses. The distribution of the control card will be based on data provided by local governments and the government's pilot projects in several regions, which were trialled in 2009 and 2010 (Republika, 2010). The kerosene-to-LPG conversion program is due to end in 2012 and without limiting the LPG subsidy, the government could face increasing costs on completion of the program.

## 2.5 Who Would be the Winners and Losers if Energy Subsidies Were Removed?

As noted above, the benefits of fuel subsidies accrue mainly to high-income groups and their cost falls on the whole taxpaying population. As a result, fuel subsidies are a regressive policy, with poor households paying relatively more and receiving fewer benefits than wealthier ones. The removal of subsidies would therefore have long-term economic benefits for the economy as a whole, including the poor.

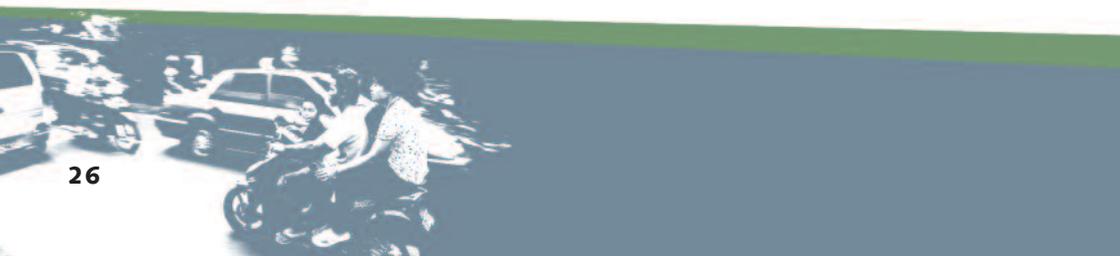
Nonetheless, removal of subsidies would have some short-term negative impacts on some groups. Economic modelling by Clements, Jung and Gupta (2007) found that those most impacted by the reduction of subsidies in Indonesia would be high-income groups in urban and rural environments, as they consume the most petroleum products. These groups would most likely reduce their overall consumption in the short term in order to manage higher fuel prices. Wikarya (2012) argues that there will be an overall drop in purchasing power in Indonesia due to the inflationary impacts of the price increase. The poor would be the most vulnerable, particularly those living with or below the minimum regional salary. To reduce the social and economic impacts of the reform, Wikarya (2012) suggests that the reform should be introduced gradually and supported by the development of alternative energy technologies.

# 2

## SECTION TWO | ARE ENERGY SUBSIDIES GOOD FOR INDONESIANS?

In general, rural and lower-income groups consume a larger portion of agricultural goods, whose price is less sensitive to changes in fuel price. However, the urban poor were also found to be vulnerable to fuel price increases (Clements, Jung & Gupta, 2007). This is probably because, compared with the rural poor, they are more likely to rely on utilities (such as electricity) and their employment is capital-intensive (i.e., it relies on energy-intensive machinery).

In the longer term, a higher petroleum price is unlikely to have harmful effects on the poor because it would be compensated by the economy-wide benefits of subsidy reduction: improved fiscal sustainability, increased social spending by the government, more efficient allocation of resources and increased investment (Clements, Jung & Gupta, 2007).



3

**WHAT DO WE KNOW  
ABOUT THE REFORM OF  
ENERGY SUBSIDIES?**



## 3. What Do We Know about the Reform of Energy Subsidies?

A suite of policies have been used by countries around the world, including Indonesia, to ease the transition away from fuel subsidies. The best chance for successful reform (which can be defined as the long-term elimination of subsidies with minimal negative impacts on the poor and society at large) requires a comprehensive strategy drawing on a range of transitional support policies (Laan, Beaton & Presta, 2010). Research into the nature of the subsidy, how its costs and benefits are distributed and identification of those most likely to be impacted by its removal will help design the reform strategy.

### 3.1 Pricing Mechanisms and Tax Structures

A gradual phase-out of subsidies can give recipients time to adjust to an increase in energy prices. The German Agency for International Cooperation (Gesellschaft für Internationale Zusammenarbeit [GIZ]) recommends that governments avoid price jumps of over 10 per cent per adjustment when instituting reform; instead, they should implement small increments on a regular (e.g., monthly) basis, over a clear time frame (GIZ, 2011). However, there can be opportune moments to deregulate quickly. Falling oil prices in the second half of 2008 provided an opportunity for several governments to undertake price-subsidy reforms, including China, Ethiopia and Vietnam (Kojima, 2009).

It may also be a gradual process for governments to develop new pricing mechanisms and energy taxation systems, as they transition from regulated prices with ad hoc adjustments to automatic pricing mechanisms and finally full pass-through of world prices and adequate levels of national taxation. This allows governments to extricate themselves from energy pricing in a controlled manner.

Tables 5 and 6 summarize recent international experiences with pricing mechanisms and how tax adjustment has been used to partially manage price volatility in some countries.

**A suite of policies have been used by countries around the world, including Indonesia, to ease the transition away from fuel subsidies.**



Table 5 » International experience with pricing mechanisms

China	Jordan	South Africa	Turkey
National Development and Reform Commission (NDRC), the administrator, considers price adjustments when three benchmark crudes move more than 4 per cent within 22 working days. NDRC includes political, social and economic considerations. International crude prices rose 70 per cent between January 2009 and October 2011, while fuel rose 50 per cent.	Prices for petroleum products rose between 33 per cent and 76 per cent from 2005 to February 2008 (when most had reached international parity). Prices are set to a formula based on the international (Brent) crude. Administration is by a committee with representatives from three ministries and the state refinery company.	Government sets prices for all grades of petrol, diesel and illuminating paraffin using a pricing mechanism that is applied automatically and independently, free from government intervention for political, economic or social reasons.	An automated pricing mechanism was introduced in 1998 and allowed refineries to make a profit. In 2005 prices were fully liberalized across the sector and state refining and oil distribution companies were privatized. Distribution margins rose 60 per cent in the 20 months after liberalization.
<b>Lesson(s)</b> Governments often retain political influence over automatic pricing regulation.	Subsidies for transport fuels were eliminated progressively over a three-year period.	Automated mechanism widely considered to have functioned well over the years.	Price liberalization is the best option to eliminate subsidies, but it requires oversight to be fully effective.
Sources Government of China (2008); Aizhu (2011)	Baig, Mati, Coady & Ntamungiro (2007); Arze del Granado, Coady & Gillingham (2010); Ragab (2010)	Department of Energy (n.d.); Baig et al. (2007)	Oguz (2006); Baig et al. (2007)

Table 6 » International experience of using fuel taxation to manage price volatility

Brazil	Chile	China
The government stabilizes prices through influencing the federal oil company (Petrobras) and through regular adjustments to taxes. The government reduced taxes to offset an increased price for Petrobras on November 1, 2011. Fuel taxes are generally set at the state level and are important to their revenue.	The government manages price volatility of the deregulated system to final consumers by a variable tax (the SIPCO) paid by consumers. This remains revenue-neutral over the medium term. The tax rate is calculated by comparing the two-week average to the five-month average.	In 2008 China took the opportunity to significantly increase taxes at a time of falling international crude prices, simultaneously increasing the consumption tax for oil products and abolishing several fees and charges for road use. In 2011 there was a move from volume-based to value-based taxation.
<b>Lesson(s)</b> Government can adjust taxes as part of pricing policy. Which branches of government revenues accrue to is important.	Variable taxation can be used to smooth prices. Averaging prices over a five-month period has been a sustainable methodology.	Declining world prices offer an opportunity for reform. A review of taxation more widely can be incorporated at the same time.
Sources MercoPress (2011); Fick (2011); Rapoza (2011); de Sainte Croix (2011); Villela & Barreix (2003)	OECD (2011)	Government of China (2008); Business Monitor International (2009)

## 3.2 Mitigating Economic and Social Impacts

Reducing energy subsidies would free up government funds for other purposes. By allocating these funds to programs that more efficiently target social welfare and businesses, the government can use less money to more effectively help those who are most in need.

Internationally, many reform efforts have focused on how to compensate social groups and businesses, as well as how to mitigate potential inflationary impacts of subsidy reform (see Tables 7 and 8).



Table 7 » International experience with economic and social compensation measures

Ghana	Iran	Jordan	Malaysia
When fuel prices were raised in Ghana in 2005, the government provided a range of compensation schemes. These included eliminating fees for state-run primary and secondary schools, increasing the number of public-transport buses, putting a price ceiling on public-transport fares, channelling extra funds into a health-care scheme for poor areas, raising the daily minimum wage, starting rural electrification programs and purchasing essential equipment for workers.	Government concerns about the impacts of fuel price increases on businesses led to the systematic analysis of 12,000 enterprises. The government planned to grant compensation measures to selected sectors including: direct financial assistance and reduced fuel prices for a limited time; soft loans for energy-saving technology adoption; lines of credit; reduced government fees and taxes; and export awards. However some of these measures were not implemented.	A compensation package worth 7 per cent of GDP was introduced over 2005–2008. Measures included: bonuses to low-income government employees; cash transfers to non-government employees and pensioners; increased food subsidies and the retention of electricity subsidies; projects to combat unemployment and poverty. Subsidy removal was preceded by an extensive media campaign.	The government increased the fixed price of fuel in 2008 in response to record world prices. Cash grants were provided to fishers and vessel owners to compensate in part for the fuel price increase. Rebates were also given to private vehicle owners and favoured smaller vehicles.
<b>Lesson(s)</b> A comprehensive package of policies based on existing capacity can be put together to mitigate economic and social impacts.	Potential impacts on business and agriculture are often significant government concerns. Specific mitigation measures can be designed and implemented.	State enterprises and employment offer channels for compensation. Media and communications campaigns increase the chances of implementation and sustainability of reform.	Government can choose to compensate those it decides are important for equity or political reasons.
Sources Coady et al. (2006), Ghana Web (2005) and International Monetary Fund (2006), all as quoted in Laan, Beaton & Presta (2010)	Guillaume, Zyteck, & Farzin (2011); Hassanzadeh (2012)	Arze del Granado, Coady, & Gillingham (2010); World Bank (2010)	Kojima (2011)

Table 8 » International experience with policies to mitigate inflationary impacts

China	Iran	Thailand
<p>China's 2008 price increases were timed when oil prices were falling. In 2010 government held back prices of bus, rail and airline services. It did not pass through the full international fuel price increases in 2010 and 2011. Major losses to government-owned refineries resulted, and some independent refineries reduced production, leading to scarcity and hoarding.</p>	<p>Iran increased its energy prices several-fold at the end of 2010. The government was very concerned about inflation and used a variety of economic and market measures including: appreciating the Rial; stockpiling consumer goods and distributing public staples; and timing reform for the low inflation period (November–December).</p>	<p>The government introduced free transport on non-air conditioned buses and third class trains as part of measures to help poor households. These fare decreases helped dampen impacts.</p>
<p><b>Lesson(s)</b></p> <p>Governments can control inflation by intervening on final prices of goods and services, but suppliers can face losses and/or supply can be reduced.</p> <p>Sources Government of China (2008); China Daily (2010); Invest in China (2010); Reuters (2011); Bloomberg (2011)</p>	<p>Though it may not be enough to contain inflationary impacts, governments have a wide range of measures available to mitigate inflationary pressure.</p> <p>Guillaume, Zytek &amp; Farzin (2011); Nasserri (2012); Bozorgmehr (2012)</p>	<p>Governments can make very specific interventions to minimize inflationary impacts.</p> <p>Fernquest (2011)</p>



In 2005 and 2008 the Indonesian government used the Cash Transfer Assistance program (*Bantuan Langsung Tunai* [BLT]) to reduce opposition to fuel price increases and help poor families cope with higher energy costs. The program provided two payments of IDR300,000 (\$30) directly to poor families (Widjaja, 2009).

In a review of these policies, Beaton and Lontoh (2010) considered that they were reasonably successful in assisting poor households and reducing opposition to fuel price increases. According to various reviews of the 2005 BLT program, mistargeting is thought to have been relatively low and the majority of households did actually receive the funds they had been promised (Hastuti et al., 2006).

However, there were problems. Some cash transfers were misappropriated and some deserving recipients did not receive payments, which resulted in social unrest (Cameron & Shah, 2011). Those missing out on payments vented their frustration on the local administrators of the scheme, leading in some cases to violence and the resignation of village officials. Any future implementation of the BLT would need to take into account lessons learned from previous experience, such as the need for better targeting, stronger oversight and greater support for village officials.

The best options for transitional support measures will be country-specific, depending on the administrative capacity of the country and coverage of public services. Targeted cash transfers require that the poor can be identified and a cash delivery mechanism established. Table 9 compares key elements of Indonesia's BLT program with cash transfer programs in other countries.

Table 9 » Lessons from international experience with cash transfer programs

Design Element	Indonesia	Iran	Mexico
Identification and targeting	<ul style="list-style-type: none"> <li>• A proxy means test was developed to identify the beneficiaries.</li> <li>• Improvements were made after the first payment was made.</li> <li>• Cases of mistargeting were reported in the program.</li> <li>• Type I and type II errors have been reported.</li> </ul>	<ul style="list-style-type: none"> <li>• The transfer was universal so no targeting was needed.</li> <li>• Initially, it was planned that data on household-level incomes would be collected, but later, the exercise was considered infeasible.</li> </ul>	<ul style="list-style-type: none"> <li>• The program was initially rolled out only in poor municipalities and the coverage was gradually expanded.</li> <li>• Socioeconomic census data and a proxy means test were used to identify beneficiaries.</li> </ul>
Size and frequency of transfer	<ul style="list-style-type: none"> <li>• The cost of the program was \$2.3 billion (excluding the organizational and administrative cost), around 25 per cent of the amount saved from subsidy reduction.</li> <li>• The rationale for the quantum of payments is not readily apparent from the English language literature on Indonesia's transfer schemes.</li> </ul>	<ul style="list-style-type: none"> <li>• The Reform Act stipulated that at least 50 per cent of the savings from removal of subsidy be used to compensate households for the price increase.</li> <li>• The president chose to pay \$37 per month (this is double the amount approved by the parliament).</li> </ul>	<ul style="list-style-type: none"> <li>• The amount of transfer varies depending on the status of the recipient households.</li> <li>• The transfer is made every two months.</li> <li>• An energy component was added in the scheme in 2007, and the amount was \$4.60, which is 18.4 per cent of the energy expenditure of the beneficiaries of Oportunidades.</li> </ul>

Continued

Table 9 » Lessons from international experience with cash transfer programs (continued)

Design Element	Indonesia	Iran	Mexico
Delivery mechanisms	<ul style="list-style-type: none"> <li>• An energy compensation card was issued to the identified beneficiaries.</li> <li>• Payments were made in two instalments (in October 2005 and January 2006). For the 2008 program, seven months' worth of payments were delivered in two instalments (for June–August and for September–December).</li> <li>• The disbursement was either directly or through community leaders.</li> <li>• Post offices were used for delivering the transfers.</li> </ul>	<ul style="list-style-type: none"> <li>• Transfers made directly into specially created bank accounts.</li> <li>• The amount was transferred in advance but was kept frozen until the date of price increase.</li> <li>• Banking infrastructure was expanded and upgraded to facilitate the transfer.</li> </ul>	<ul style="list-style-type: none"> <li>• Transfers were initially made in cash through dedicated distribution centres. This has changed since 2003, as the program is shifting towards debit cards.</li> <li>• Transfers are made to the female heads of the households.</li> </ul>
Monitoring and evaluation	<ul style="list-style-type: none"> <li>• Rapid appraisal of the program in 2005 and 2008.</li> <li>• Cases of illegal diversion of funds towards non-eligible beneficiaries were reported.</li> <li>• Absence of a dedicated complaint registration unit for the program.</li> </ul>	<ul style="list-style-type: none"> <li>• No formal model has been introduced but there seems to be a proactive response from the government in addressing the problems as they arise.</li> </ul>	<ul style="list-style-type: none"> <li>• Presence of an independent impact evaluation protocol in the Oportunidades program.</li> <li>• Rapid assessments have been carried out at key stages.</li> </ul>
Sources	ASEAN (n.d.); Bacon & Kojima (2006); Cameron & Shah (2011); Hastuti, et al. (2006); Satriana (n.d.); Widjaja (2009); Ministry of Social Affairs (2008).	Guillaume, Zytek & Farzin (2011); Bozorgmehr (2012)	Angelucci & Attanasio (2006); Government of Mexico (2010); Niño-Zarazúa (2010); Visa (n.d.); World Bank (2010)

The BLT was accompanied by short-term measures referred to as the Fuel Subsidy Reduction Compensation Program (*Program Kompensasi Pengurangan Subsidi Bahan Bakar Minyak* [PKPS-BBM]). These programs provided targeted support for affected groups by increasing social spending in the areas of education, health and rural infrastructure (Beaton & Lontoh, 2010). See Table 10 for a summary of the programs used to support fuel subsidy reforms in 2003, 2005 and 2008.

**Table 10 » Complementary programs related to the subsidy cuts in Indonesia**

	2003	2005	2008
Sectors / Program titles	<ol style="list-style-type: none"> <li>1. Food (rice for the poor)</li> <li>2. Healthcare</li> <li>3. Social</li> <li>4. Education</li> <li>5. Religion</li> <li>6. Transportation</li> <li>7. Water</li> <li>8. Small Business</li> <li>9. Coastal community empowerment</li> <li>10. Unemployment</li> <li>11. Contraception</li> </ol>	<ol style="list-style-type: none"> <li>1. Education</li> <li>2. Healthcare</li> <li>3. Village infrastructure</li> <li>4. Unconditional cash transfer (BLT + BKM)</li> </ol>	<ol style="list-style-type: none"> <li>1. Food (rice for the poor)</li> <li>2. Unconditional cash transfer (BLT)</li> <li>3. Small businesses interests rate support</li> <li>4. Educational support for the children of lower rank civil servants and military men</li> </ol>
Program fund*	\$519 million	\$1.87 billion	\$1.99 billion**

Source: Tempo (2003); Financial and Development Monitoring Agency (n.d.); MEMR (2008).

\*The exchange rates are US\$ 1 = IDR8,537 (2003), US\$1 = IDR9,705 (2005), US\$1 = IDR9,691 (2008).

\*\*The total program fund does not include funds for educational support programs.

Organizing and effectively implementing compensation measures can be complicated. Key factors to effectiveness are: good targeting (identifying the groups and individuals for inclusion), strong oversight and good support from administrative bodies and local communities. Compensation measures can also be vulnerable to inefficiencies and corruption, so transparency and accountability mechanisms are essential.

## 3.3 Developing a Strategy to Enable Reform

The way in which subsidies are eliminated can also ease the transition to market prices and build public support. Good practice suggests that governance, communications and monitoring of the impacts of implementation are all important elements of an implementation strategy.

### 3.3.1 Governance

Good governance is fundamental to energy subsidy reform. Without good governance, claims that subsidy spending will be redirected in a fair and equitable way will lack credibility. Proponents of subsidy reform should support any efforts to improve energy sector governance and governance more generally. At the same time, improving governance can be a slow process, taking years or even decades. Due to the waste and inefficiencies associated with subsidies, it may not be practical to wait until governance issues are addressed before embarking on subsidy reform. International experience shows that some short-term steps can be taken for governments to improve their credibility and reduce opportunities for corruption.

Consultation with stakeholders and the public appears to be a key element of an effective reform strategy. If stakeholders participate in the decision-making process from the beginning, concerns about the implementation of subsidy reform can be addressed early on. Consultation also serves to raise awareness about the need for reform.

Careful sequencing of reform and compensation can significantly improve the credibility of reform plans. When Iran reformed its fuel subsidies in 2010, it provided compensation payments to around 80 per cent of the population. These were transferred to bank accounts over a month before the reform took place. Citizens could see the funds registered in their accounts but access was frozen until the day of the reform itself (Guillaume, Zytek & Farzin, 2011). By organizing and providing compensation before the price increases took place, the Iranian government provided tangible evidence that it would follow through on its promise to mitigate the impacts of reform.

Finally, transparency is a key mechanism to improve credibility and reduce opportunities for corruption. The more information that is made available about the implementation of subsidy mechanisms and compensation mechanisms, the greater public scrutiny that can be applied to ensure they are functioning as intended.

### 3.3.2 Communication

Information campaigns are an important element of any successful subsidy reform strategy. For example, in 2005 the Indonesian government implemented a public relations campaign alongside cash transfers and social spending as a means for building support for reform. In contrast with previous attempts to increase fuel prices, the 2005 reforms met with no substantial opposition (Beaton & Lontoh, 2010).

Public understanding and acceptance of changing fuel prices can be encouraged by regularly publishing information, such as price surveys, comparisons of domestic and international prices, historical and current prices, and the composition of each key petroleum product (such as import prices, refining and distribution costs and taxes) (Kojima, 2009). In addition, governments should encourage competition in the retail sector by requiring filling stations to post prices on display boards.

Public awareness campaigns help citizens to understand why reform is necessary and how their money can be redirected to other services, or returned to them in the form of lower taxes.

In 2012 the Indonesian government set up an interdepartmental team called the National Team on Fuel Efficiency and Utilization Control (*Tim Nasional Penghematan Pengendalian Penggunaan BBM*). Its mandate is to strategically manage and monitor the implementation of fuel subsidy reform, including managing the dissemination of public information. The team is coordinated by the Coordinating Ministry of Economic Affairs. A sub-team is responsible for influencing public perceptions of fuel subsidy reform. The government has used a variety of mediums to achieve that aim, including banners at gas stations, and notices in newspapers, radio and television programs. A central message has been that fuel subsidies should only be received by the poor. The government campaign has also included information about compensation programs that will accompany fuel-subsidy reform.

### 3.3.3 Monitoring and Adjustment

Monitoring and adjusting reform on an ongoing basis are necessary to assess whether measures have been effective, and to check whether there have been unintended negative consequences and adapt policies over time (Laan, Beaton & Presta, 2010). Temporary assistance policies also require careful monitoring in order to ensure that the assistance is reaching the target groups and that support does not continue for so long that it becomes entrenched.



Market-based pricing overseen by independent bodies that regulate competition and transparency regarding fuel prices allow governments to demonstrate to citizens that fuel prices are dictated by international forces, not the government (Laan, Beaton & Presta, 2010).

### 3.4 Conclusion

Indonesia's energy subsidies were put in place to make energy more affordable, particularly for poor people. However, overwhelming evidence suggests that most of the subsidies—likely to be worth over IDR137 trillion (\$15 billion) for fuel and IDR65 trillion (\$7 billion) for electricity in 2012—go to the well-off. In addition, the subsidies interfere with energy supplies and economic development by reducing investment in energy infrastructure (both current and emerging technologies), wasting government resources and undermining Indonesia's international competitiveness.

The Indonesian government is well aware of these problems and has made repeated attempts to remove the subsidies. It is also aware of the various policies that can be used to help the transition away from energy subsidies, having implemented several of them. So what has gone wrong and what hope is there for lasting reform?

The government has had some success in raising energy prices through the use of transitional policies such as cash transfers, social spending, information campaigns and increased transparency. However, the subsidy reductions were subsequently eroded by increases in international oil prices.

A more comprehensive reform strategy might meet with greater success: research to identify the winners and losers of reform, an information campaign to build public support, a carefully designed and targeted package of assistance measures that is implemented impeccably, the gradual phase-out of subsidies over a fixed time frame, and governance structures to oversee a liberalized energy market.

Even after successful reform, subsidies will remain a politically popular measure during times of high oil prices. And politicians find it hard to resist policies that deliver easy votes. The Indonesian government will need to establish a plan for how it will help vulnerable households without reinstating subsidies, through measures such as cash handouts to eligible households. The Indonesian public would take some time to adjust to a liberalized energy market but it would benefit from a stronger economy and more help for the poor, which would lead to a higher standard of living for everyone.

## 4. Endnotes

<sup>1</sup> All dollar amounts are in U.S. currency. Unless otherwise stated, the following historical exchange rates, taking the annual average, have been used ([www.oanda.com](http://www.oanda.com)):

2005: IDR 1 = US\$0.00010; US\$1 = IDR9,627.81074

2006: IDR 1 = US\$0.00011; US\$1 = IDR9,117.55864

2007: IDR 1 = US\$0.00011; US\$1 = IDR9,213.27757

2008: IDR 1 = US\$0.00010; US\$1 = IDR10,514.17362

2009: IDR 1 = US\$0.00010; US\$1 = IDR9,552.43458

2010: IDR 1 = US\$0.00011; US\$1 = IDR8,916.28347

2011: IDR 1 = US\$0.00011; US\$1 = IDR8,717.94

2012: IDR 1 = US\$0.00011; US\$1 = IDR9,233.72 (as at September 20, 2012)

<sup>2</sup> The Indonesia coal price formula refers to two Indonesia Coal Indexes, ICI and Platts, and two Australian Indexes: NEX and Global Coal (GC). The four price indexes averaged at the same calorific value to obtain a Reference Coal Price. The Reference Coal Price will be used as the reference price for each coal mine.

<sup>3</sup> Includes Premium, Bio-Premium, Solar, Bio-Soar and kerosene (excludes LPG)

<sup>4</sup> This section draws on an OECD paper by Mourougane (2010).

<sup>5</sup> MEMR estimated that the electricity subsidy spending in 2010 topped IDR62.8 billion, about 5.2 trillion more than the projection of Ministry of Finance. However, the actual subsidy will only be known after the audit of Supreme Audit Agency (BPK) has completed its analysis on the government expenditure (Alfian & Fadillah, 2011).

## 5. References

- Agustina, C., Arze del Granado, J., Bulman, T., Fengler, W. & Ikhsan, M. (2008) *Black hole or black gold? The impact of oil and gas prices on Indonesia's public finances*. World Bank Policy Research Working Paper, No. 4718. Washington. D.C.: World Bank.
- Aizhu, C. (2011, October 8). China to cut fuel prices by 3 pct from record highs. *Reuters*. Retrieved from [www.iisd.org/gsi/sites/default/files/ffs\\_india\\_guide\\_rev.pdf](http://www.iisd.org/gsi/sites/default/files/ffs_india_guide_rev.pdf)
- Angelucci, M. & Attanasio, O. (2006). *Evaluating the urban component of Oportunidades: Which methods for which parameters?* Berkeley: University of California.
- Arze del Granado, J., Coody, D. & Gillingham, R. (2010). *The unequal benefits of fuel subsidies: A review of evidence from developing countries*. Washington D.C.: International Monetary Fund.
- ASEAN. (n.d.). *Country report of the ASEAN Assessment on the Social Impact of the Global Financial Crisis: Indonesia*. Retrieved from [www.aseansec.org/publications/ARCR/Indonesia.pdf](http://www.aseansec.org/publications/ARCR/Indonesia.pdf)
- Bacon, R. & Kojima, M. (2006). *Coping with higher oil prices*. Washington D.C.: World Bank.
- Baig, T., Mati, A., Coody, D. & Ntamatungiro, J. (2007). *Domestic petroleum product prices and subsidies: Recent developments and reform strategies*. Washington D.C.: International Monetary Fund.
- Beaton, C. & Lontoh, L. (2010). *Lessons learned from Indonesia's attempts to reform fossil-fuel subsidies*. Geneva: Global Subsidies Initiative of the International Institute for Sustainable Development.
- Bloomberg. (2011, April 19). Sinopec Group halts fuel exports to ensure domestic supply. *Business Week*. Retrieved from <http://bx.businessweek.com/market-economy/sinopec-group-halts-fuel-exports-to-ensure-domestic-supply/11252424706970622678-1a2fa86b8f79f24381fc5f986e91cba7>
- Bloomberg. (2012, August 14). *Highest & cheapest gas prices by country*. Retrieved from [www.bloomberg.com/slideshow/2012-08-13/highest-cheapest-gas-prices-by-country.html#slide1](http://www.bloomberg.com/slideshow/2012-08-13/highest-cheapest-gas-prices-by-country.html#slide1)
- Bozorgmehr, N. (2012, April 25). Subsidy dispute add to Iran's woes. *Financial Times*. Retrieved from [www.ft.com/intl/cms/s/0/a6ac4438-8ebe-11e1-ac13-00144feab49a.html#axzz23g0U4gW6](http://www.ft.com/intl/cms/s/0/a6ac4438-8ebe-11e1-ac13-00144feab49a.html#axzz23g0U4gW6)
- BPH Migas. 2009. Kuota Volume Jenis BBM Tertentu Per Propinsi Tahun 2009 (Berdasarkan Keputusan Menteri ESDM 2711/2009). Retrieved from [www.bphmigas.go.id/index.php?option=com\\_content&view=article&id=171-kuota-volume-jenis-bbm-tertentu-per-propinsi-tahun-2009-berdasarkan-keputusan-menteri-esdm-27112009-&catid=63:kuota-bbm&Itemid=116](http://www.bphmigas.go.id/index.php?option=com_content&view=article&id=171-kuota-volume-jenis-bbm-tertentu-per-propinsi-tahun-2009-berdasarkan-keputusan-menteri-esdm-27112009-&catid=63:kuota-bbm&Itemid=116)

- Braithwaite, D., Soelaiman, S., Wiroyudo, G., Trimurdadi, H., Soeleman, S., Utomo, S.P. & Rakhmanto, P.A. (2010). *Fossil fuels – At what cost? Government support for upstream oil and gas activities in Indonesia*. Geneva: Global Subsidy Initiative of the International Institute for Sustainable Development.
- Braithwaite, D., et.al. (2012). *Indonesia's fuel subsidies: Action plan for reform*. Geneva: Global Subsidy Initiative of the International Institute for Sustainable Development.
- Buletin BP Migas. (2011, August). *Gas Bumi, dan Masa Depan Energi Indonesia*. [Natural gas and the future of Indonesian energy]. Buletin BP Migas No. 73. Retrieved from [www.bpmigas.go.id/wp-content/uploads/2011/08/Buletin-73.pdf](http://www.bpmigas.go.id/wp-content/uploads/2011/08/Buletin-73.pdf)
- Business Monitor International. (2009, May). Beijing reneges on fuel price deregulation. Retrieved from [www.oilandgasinsight.com/file/77449/beijing-reneges-on-fuel-price-deregulation.html](http://www.oilandgasinsight.com/file/77449/beijing-reneges-on-fuel-price-deregulation.html)
- Cameron, L. & Shah, M. (2011). *Mistargeting of cash transfers, social capital destruction, and crime in Indonesia*. Melbourne: Monash University. Retrieved from [http://users.monash.edu.au/~clisa/papers/BLT\\_JPubE.pdf](http://users.monash.edu.au/~clisa/papers/BLT_JPubE.pdf)
- Charles, C. (2010, December). *Corruption and fraud in agricultural and energy subsidies: Identifying the key issues*. Policy Brief. Geneva: Global Subsidies Initiative of the International Institute for Sustainable Development.
- China Daily. (2010, December 22). China raises gasoline, diesel prices amid inflation pressure. *China Daily*. Retrieved from [www.chinadaily.com.cn/bizchina/2010-12/22/content\\_11739172.htm](http://www.chinadaily.com.cn/bizchina/2010-12/22/content_11739172.htm)
- Clements, B., Jung, H-S. & Gupta, S. (2007, June). Real and distributive effects of petroleum price liberalization: The case of Indonesia. *The Developing Economies*, 45(2), 220–237.
- Department of Energy. (n.d.). *Petroleum sources: Fuel price structure*. Retrieved from [www.energy.gov.za/files](http://www.energy.gov.za/files)
- de Sainte Croix, S. (2011, October 29). Brazil cuts fuel tax as prices rise: Daily. *Rio Times Online*. Retrieved from <http://riotimesonline.com/brazil-news/rio-business/brazil-cuts-fuel-tax-at-pump-as-prices-rise-daily/#>
- Detik Finance (2011, March 7). Pertamina terpaksa impor 10 juta kilolitre premium. Retrieved from [www.detikfinance.com/read/2011/03/07/130419/1585947/1034/pertamina-terpaksa-impor-10-juta-kilolitre-premium](http://www.detikfinance.com/read/2011/03/07/130419/1585947/1034/pertamina-terpaksa-impor-10-juta-kilolitre-premium)
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. (2011). *Fuel price reform in Bolivia*. Retrieved from [www.gtz.de/de/dokumente/giz2011-fuel-price-reform-bolivia-december-2010.pdf](http://www.gtz.de/de/dokumente/giz2011-fuel-price-reform-bolivia-december-2010.pdf)

- Dillon, H.S., T. Laan, & H. Setyaka Dillon (2008), *Biofuels: At what cost? Government support for ethanol and biodiesel in Indonesia*. Geneva: Global Subsidies Initiative of the International Institute for Sustainable Development.
- Ellis, J. (2009). *Untold billions: Fossil fuel subsidies, their impact, and path to reform*. Geneva: Global Subsidies Initiative of the International Institute for Sustainable Development.
- Fernquest, J. (2011, October 31). Free water, free electricity, free buses, free trains, cheaper cooking gas, and cheaper gasohol and diesel... and more votes for PPP in the next election? *Bangkok Post*. Retrieved from [www.readbangkokpost.com/easybusinessnews/government/free\\_water\\_free\\_electricity\\_fr.php](http://www.readbangkokpost.com/easybusinessnews/government/free_water_free_electricity_fr.php)
- Fick, J. (2011, October 28). Brazil's Petrobras raises prices, but won't pinch consumers. *Wall Street Journal*. Retrieved from <http://online.wsj.com/article/BF-CO-20111028-718418.html>
- Gesellschaft für Internationale Zusammenarbeit. (2011). *Fuel price reform in Bolivia*. Retrieved from [www.giz.de/Themen/en/dokumente/giz2011-fuel-price-reform-bolivia-december-2010.pdf](http://www.giz.de/Themen/en/dokumente/giz2011-fuel-price-reform-bolivia-december-2010.pdf)
- Government of China. (2008, December 19). *State Council notice on the implementation of oil price and tax reform*. Retrieved from [www.gov.cn: www.gov.cn/zwgk/2008-12/19/content\\_1182128.htm](http://www.gov.cn: www.gov.cn/zwgk/2008-12/19/content_1182128.htm)
- Government of Mexico. (2010). *Requisitos para acceder al programa Oportunidades*. Retrieved from [www.oportunidades.gob.mx/Portal/wb/Web/requisitos\\_para\\_acceder\\_al\\_programa](http://www.oportunidades.gob.mx/Portal/wb/Web/requisitos_para_acceder_al_programa)
- Guillaume, D., Zyttek, R. & Farzin, M. (2011, July). *Iran: The chronicles of the subsidy reform*. Retrieved from [www.imf.org/external/pubs/ft/wp/2011/wp11167.pdf](http://www.imf.org/external/pubs/ft/wp/2011/wp11167.pdf)
- Fadillah, R.D. & Samboh, E. (2011, June 1). 15 percent of subsidized fuel sold to industries. *Jakarta Post*. Retrieved from [www.thejakartapost.com/news/2011/05/31/15-percent-subsidized-fuel-sold-industries.html](http://www.thejakartapost.com/news/2011/05/31/15-percent-subsidized-fuel-sold-industries.html)
- Harun, M. (2011, October 4). *Peran Pertamina dalam Pemenuhan Bahan Bakar Minyak Dalam Negeri. [The role of PERTAMINA in supplying domestic fuel]*. Presentation in Media Workshop Antara – International Institute for Sustainable Development – Global Subsidies Initiative.
- Hassanzadeh, Elham. (2012, September). *Recent developments in Iran's energy subsidies reform*. Policy Brief. Geneva: Global Subsidies Initiative of the International Institute for Sustainable Development.
- Hastuti, Toyamah, N., Usman, S., Sulaksono, B., Budiayati, S., Widyanti, W. D. et al. (2006). *A rapid appraisal of the implementation of the 2005 Direct Cash Transfer Program in Indonesia: A case study in five Kabupaten/Kota*. SMERU Research Institute. Retrieved from [www.smeru.or.id/report/research/blt/slt\\_eng.pdf](http://www.smeru.or.id/report/research/blt/slt_eng.pdf)
- Index Mundi. (n.d.a). Indonesia crude oil production by year. Retrieved from [www.indexmundi.com/energy.aspx?country=id&product=oil&graph=production](http://www.indexmundi.com/energy.aspx?country=id&product=oil&graph=production).

- Index Mundi. (n.d.b). Indonesia crude oil consumption by year. Retrieved from [www.indexmundi.com/energy.aspx?country=id&product=oil&graph=consumption](http://www.indexmundi.com/energy.aspx?country=id&product=oil&graph=consumption)
- International Energy Agency. (2010). *World Energy Outlook 2010*. Paris: OECD.
- International Energy Agency, Organisation for Economic Co-operation and Development, Organization of Petroleum Exporting Companies & World Bank. (2010, June 26–27). *Analysis of the scope of energy subsidies and suggestions for the G-20 initiative*. Joint report for the prepared for submission to the G-20 Summit Meeting, Toronto, Canada.
- Invest in China. (2010, April 14). NDRC responsible official answered questions on the oil price adjustment. Retrieved from [http://info.e-to-china.com/investment\\_guide/77126.html](http://info.e-to-china.com/investment_guide/77126.html)
- Investor Daily Indonesia (2011, January 27). Penghematan dari Konversi Elpiji Ditargetkan Rp 35,34 Triliun. Retrieved from [www.investor.co.id/energy/penghematan-dari-konversi-elpiji-ditargetkan-rp-3534-triliun/4275](http://www.investor.co.id/energy/penghematan-dari-konversi-elpiji-ditargetkan-rp-3534-triliun/4275)
- Jakarta Post. (2011a, March 22). Pertamina sales down as consumers migrate to Premium: Govt. Retrieved from [www.thejakartapost.com/news/2011/03/22/pertamax-sales-down-consumers-migrate-premium-govt.html](http://www.thejakartapost.com/news/2011/03/22/pertamax-sales-down-consumers-migrate-premium-govt.html);
- Jakarta Post (2011b, May 4). Premium consumption in April exceeds quota. Retrieved from [www.thejakartapost.com/news/2011/05/04/premium-consumption-april-exceeds-quota.html](http://www.thejakartapost.com/news/2011/05/04/premium-consumption-april-exceeds-quota.html)
- Jakarta Post (2011c, May 14). Non-subsidized fuel sales drop 37,65%. Retrieved from [www.thejakartapost.com/news/2011/05/14/non-subsidized-fuel-sales-drop-3765.html](http://www.thejakartapost.com/news/2011/05/14/non-subsidized-fuel-sales-drop-3765.html)
- Kojima, M. (2009, July). *Government response to oil price volatility: Experience of 49 developing countries*. Extractive Industries for Development Series #10. Washington, D.C.: World Bank.
- Kojima, M. (2011). *The role of liquefied petroleum gas in reducing energy poverty*. Retrieved from <http://siteresources.worldbank.org/intoGmc/resources/IPGreportWeb-masamil.pdf>
- KOMPAS. (2010, September 22). Elpiji Oplosan 12 KG Beredar. Retrieved from [www1.kompas.com/read/xml/2010/09/22/12212676/elpiji.12.kg.oplosan.beredar](http://www1.kompas.com/read/xml/2010/09/22/12212676/elpiji.12.kg.oplosan.beredar)
- KOMPAS. (2011a, February 16). Ribuan Tabung Elpiji Oplosan Diamankan. Retrieved from <http://megapolitan.kompas.com/read/2011/02/16/21061145/Ribuan.Tabung.Elpiji.Oplosan.Diamankan>.
- KOMPAS. (2012a, March 15). Jero: Kenaikan TDL Mungkin Ditunda [Jero: The electricity tariff increase might be postponed]. Retrieved from <http://bisniskeuangan.kompas.com/read/2012/03/15/02152841/Jero.Kenaikan.TDL.Mungkin.Ditunda>

- Kontan (2011, May 4). Harga Pertamina naik, Konsumsi Premium selalu diatas kuota sejak Januari. Retrieved from <http://lifestyle.kontan.co.id/v2/read/1304503502/66554/Harga-Pertamax-naik-konsumsi-premium-selalu-di-atas-kuota-sejak-Januari>
- Kontan (2012, February 20). Realisasi DMO batubara melebihi target [Coal DMO realization exceeded target]. Retrieved from <http://industri.kontan.co.id/news/realisasi-dmo-batubara-melebihi-target>
- Laan, T., Beaton, C. & Presta, B. (2010). *Strategies for reforming fossil-fuel subsidies: Practical lessons from Ghana, France and Senegal*. Geneva: Global Subsidies Initiative of the International Institute for Sustainable Development. Retrieved from [www.globalsubsidies.org/files/assets/strategies\\_ffs.pdf](http://www.globalsubsidies.org/files/assets/strategies_ffs.pdf)
- Media Indonesia. (2012, February 15). Pertamina Patok Penjualan BBM 57,05 Juta Kilolitre [Pertamina targets 57.05 kilolitres of fuel sales]. Retrieved from [www.mediaindonesia.com/read/2012/02/15/298555/4/2/Pertamina-Patok-Penjualan-BBM-5705-Juta-Kilolitre](http://www.mediaindonesia.com/read/2012/02/15/298555/4/2/Pertamina-Patok-Penjualan-BBM-5705-Juta-Kilolitre)
- MercoPress. (2011, September 28). Brazil adapts to weaker Real: Cuts fuel tax to prop Petrobras and contain inflation. *MercoPress South Atlantic News Agency*. Retrieved from <http://en.mercopress.com/2011/09/28/brazil-adapts-to-weaker-real-cuts-fuel-tax-to-prop-petrobras-and-contain-inflation>
- Ministry of Energy and Mineral Resources. (2008, May 23). Penjelasan Pemerintah Tentang Pengurangan Subsidi BBM dan Kebijakan Lain Yang Menyertainya [The government explanation on the reduction of fuel subsidy and other policies that accompany it]. Retrieved from [www.esdm.go.id/siaran-pers/55-siaran-pers/1754-penjelasan-pemerintah-tentang-pengurangan-subsidi-bbm-dan-kebijakan-lain-yang-menyertainya.html](http://www.esdm.go.id/siaran-pers/55-siaran-pers/1754-penjelasan-pemerintah-tentang-pengurangan-subsidi-bbm-dan-kebijakan-lain-yang-menyertainya.html)
- Ministry of Energy and Mineral Resource. (2012a, April 17). Pemerintah Rencanakan Konversi Minyak Tanah ke LPG 3 Kg Di Lima Provinsi [The government plans the conversion from kerosene to LPG 3kg in five provinces]. Retrieved from [www.esdm.go.id/berita/migas/40-migas/5645-pemerintah-rencanakan-konversi-minyak-tanah-ke-lpg-3-kg-di-lima-provinsi.html?tmpl=component&print=1&page=](http://www.esdm.go.id/berita/migas/40-migas/5645-pemerintah-rencanakan-konversi-minyak-tanah-ke-lpg-3-kg-di-lima-provinsi.html?tmpl=component&print=1&page=)
- Ministry of Finance. (n.d.a). *Budget Statistics 2006–2012*. Jakarta: Government of Indonesia.
- Ministry of Finance. (n.d.b). *Nota Keuangan dan Rancangan Anggaran Pendapatan dan Belanja Negara Tahun Anggaran Perubahan Tahun Anggaran 2012*. [Fiscal Note and the Proposal of Revised State Revenue and Expenditure Fiscal Year 2012]. Jakarta: Government of Indonesia.
- Ministry of Finance. (n.d.c). *Nota Keuangan dan Rancangan Anggaran Pendapatan dan Belanja Negara Tahun Anggaran 2013* [Fiscal Note & the Proposal of Revised State Revenue and Expenditure Fiscal Year 2013]. Jakarta: Government of Indonesia.

Ministry of Finance (2010). *Nota Keuangan dan RAPBN 2011 [Financial Memorandum and State Budget Plan 2011]*. Retrieved from [www.anggaran.depkeu.go.id/web-content-list.asp?ContentId=806](http://www.anggaran.depkeu.go.id/web-content-list.asp?ContentId=806)

Ministry of Social Affairs. (2008). Petunjuk Teknis Penyaluran BLT, Bantuan Langsung Tuna untuk Rumah Tangga Sasaran dalam rangka Program Kompensasi Pengurangan Subsidi Bahan Bakar Minyak (PKPS-BBM) [Technical guidance on BLT (Direct Cash Transfer for Targeted Households) disbursement in regards to Fuel Subsidy Reduction Compensation Program]. Jakarta: Government of Indonesia.

Mourougane, A. (2010). *Phasing out energy subsidies in Indonesia*. OECD Economics Department Working Paper No. 808. Paris: OECD.

Nasseri, L. (2012, April 8). Iran inflation rate at 21.5% in year ending march 19, bank says. *Business Week*. Retrieved from [www.businessweek.com/news/2012-04-08/iran-inflation-rate-at-21-dot-5-percent-in-year-ending-march-19-bank-says](http://www.businessweek.com/news/2012-04-08/iran-inflation-rate-at-21-dot-5-percent-in-year-ending-march-19-bank-says)

Niño-Zarazúa, M. (2010). *Mexico's Progresá-Oportunidades and the emergence of social assistance in Latin America*. Working Paper 142. Manchester: Brooks World Poverty Institute.

Organisation for Economic Co-operation and Development /International Energy Agency and United Nations Environment Programme (2002). *Reforming energy subsidies*. Retrieved from <http://www.unep.fr/energy/information/publications/other/pdf/En-SubsidiesReform.pdf>

Organisation for Economic Co-operation and Development. (2011). *Inventory of estimated budgetary support and tax expenditures for fossil fuels*. Paris: OECD.

Oguz, E. (2006, December). *Liberalization of the downstream oil industry in Turkey (Masters Thesis)*. Retrieved from [www.belgeler.com/blg/12ia/the-liberalization-of-downstream-oil-industry-in-turkey-turkiye-de-rafineri-ve-akaryakit-](http://www.belgeler.com/blg/12ia/the-liberalization-of-downstream-oil-industry-in-turkey-turkiye-de-rafineri-ve-akaryakit-)

Pramudatama, R. (2012, September 18). Fuel quota, power hikes get OK. *Jakarta Post*. Retrieved from [www.thejakartapost.com/news/2012/09/18/fuel-quota-power-hikes-get-ok.html](http://www.thejakartapost.com/news/2012/09/18/fuel-quota-power-hikes-get-ok.html)

Ragab, A. (2010). *Fossil fuel prices in the Arab world and the fear of reform*. Eschborn, Germany: Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH.

Rapoza, K. (2011, May 12). Brazil govt intervenes on \$6.82 per gallon gasoline prices. *Forbes*. Retrieved from [www.forbes.com/sites/kenrapoza/2011/05/12/brazil-govt-intervenes-on-6-82-per-gallon-gasoline-prices](http://www.forbes.com/sites/kenrapoza/2011/05/12/brazil-govt-intervenes-on-6-82-per-gallon-gasoline-prices)

Republika (2010, December 14). 2014, Distribusi LPG 3 kg system tertutup se-Indonesian. Retrieved from [www.republika.co.id/berita/breaking-news/ekonomi/10/12/15/152324-2014-distribusi-lpg-3-kg-sistem-tertutup-se-indonesia](http://www.republika.co.id/berita/breaking-news/ekonomi/10/12/15/152324-2014-distribusi-lpg-3-kg-sistem-tertutup-se-indonesia)

- Reuters. (2011, May 3). China oil giants ask for oil use tax cut. *Reuters*.
- Samboh, E. (2011, May 15). Price may increase 15 percent next year. Retrieved from [www.thejakartapost.com/news/2011/05/14/price-may-increase-15-percent-next-year.html](http://www.thejakartapost.com/news/2011/05/14/price-may-increase-15-percent-next-year.html)
- Satriana, S. (n.d.). *Impact assessment of the 2008 unconditional cash transfer programme (BLT) in Indonesia*. The Netherlands: Maastricht Graduate School of Governance.
- Sutianto, F. D. (2012, August 16). Subsidi BBM & Listrik di 2013 Capai Rp 274,743 Triliun. *Detik Finance*. Retrieved from <http://finance.detik.com/read/2012/08/16/213929/1993741/1034/subsidi-bbm-listrik-di-2013-capai-rp-274743-triliun>
- United Nations Environment Programme. (2008). *Reforming energy subsidies*. Retrieved from [www.unep.org/pdf/pressreleases/reforming\\_energy\\_subsidies.pdf](http://www.unep.org/pdf/pressreleases/reforming_energy_subsidies.pdf)
- Villela, L. & Barreix, A. (2003). *Taxation in the MERCOSUR and coordination possibilities*. Washington, D.C.: Inter-American Development Bank.
- Visa. (n.d.). *Bansefi Visa debit and prepaid cards create "Oportunidades" for Mexico's financially underserved*. Retrieved from [http://currencyofprogress.visa.com/wp-content/uploads/2011/12/Empowering\\_People\\_Mexico\\_Case\\_Study\\_English\\_FINAL.pdf](http://currencyofprogress.visa.com/wp-content/uploads/2011/12/Empowering_People_Mexico_Case_Study_English_FINAL.pdf)
- Widjaja, M. (2009). *An economic and social review on Indonesian Direct Cash Transfer Program to Poor Families, Year 2005*. Department of Economics, University of Indonesia. Retrieved from [http://umdcipe.org/conferences/policy\\_exchanges/conf\\_papers/Papers/widjaja.pdf](http://umdcipe.org/conferences/policy_exchanges/conf_papers/Papers/widjaja.pdf)
- World Bank. (2007). *Spending for development: Making the most of Indonesia's new opportunities*. Indonesia Public Expenditure Review 2007. Washington, D.C.: World Bank.
- Wikarya, U. (2012, March 15). Kajian Kebijakan BBM Bersubsidi [Analysis of the Fuel Subsidy Policy]. Retrieved from [www.iisd.org/gsi/sites/default/files/Uka%20Wikarya%20University%20of%20Indonesia.pdf](http://www.iisd.org/gsi/sites/default/files/Uka%20Wikarya%20University%20of%20Indonesia.pdf)
- World Bank. (2010). *Conditional cash transfers: Reducing present and future poverty*. Washington, D.C.: World Bank.
- World Bank. (2011, March). *Indonesia Economic Quarterly: 2008 again?* Retrieved from <http://issuu.com/worldbank.indonesia/docs/ieq-mar2011-english>
- Yusuf, A.A., Komaruzaman, A., Hermawan, W., Hartono, D. & Sjahrir, K.R. (2010). *Scenarios for climate change mitigation from the energy sector in Indonesia: Role of fiscal instruments*. Working Paper No. 201005. Bandung: Department of Economics, Padjadjaran University.

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## The International Institute for Sustainable Development's Global Subsidies Initiative

The International Institute for Sustainable Development (IISD) launched the Global Subsidies Initiative (GSI) in December 2005 to put a spotlight on subsidies – transfers of public money to private interests – and how they undermine efforts to put the world economy on a path toward sustainable development.

Subsidies are powerful instruments. They can play a legitimate role in securing public goods that would otherwise remain beyond reach. But they can also be easily subverted. The interests of lobbyists and the electoral ambitions of officeholders can hijack public policy. Therefore, the GSI starts from the premise that full transparency and public accountability for the stated aims of public expenditure must be the cornerstones of any subsidy program.

But the case for scrutiny goes further. Even when subsidies are legitimate instruments of public policy, their efficacy – their fitness for purpose – must still be demonstrated. All too often, the unintended and unforeseen consequences of poorly designed subsidies overwhelm the benefits claimed for these programs. Meanwhile, the citizens who foot the bills remain in the dark.

When subsidies are the principal cause of the perpetuation of a fundamentally unfair trading system, and lie at the root of serious environmental degradation, the questions have to be asked: Is this how taxpayers want their money spent? And should they, through their taxes, support such counterproductive outcomes? Eliminating harmful subsidies would free up scarce funds to support more worthy causes. The GSI's challenge to those who advocate creating or maintaining particular subsidies is that they should be able to demonstrate that the subsidies are environmentally, socially and economically sustainable – and that they do not undermine the development chances of some of the poorest producers in the world.

To encourage this, the GSI, in cooperation with a growing international network of research and media partners, seeks to lay bare just what good or harm public subsidies are doing; to encourage public debate and awareness

of the options that are available; and to help provide policy-makers with the tools they need to secure sustainable outcomes for our societies and our planet.

[www.globalsubsidies.org](http://www.globalsubsidies.org)

The GSI is an initiative of the International Institute for Sustainable Development (IISD). Established in 1990, the IISD is a Canadian-based not-for-profit organization with a diverse team of more than 150 people located in more than 30 countries. The GSI is headquartered in Geneva, Switzerland and works with partners located around the world. Its principal funders have included the governments of Denmark, the Netherlands, New Zealand, Norway, Sweden and the United Kingdom. The William and Flora Hewlett Foundation have also contributed to funding GSI research and communications activities.

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## Institute for Essential Services Reform (IESR)

IESR is a non-governmental organization that promotes the just and equitable use of natural resources for human development. IESR is designed as a think-tank for civil society in promoting alternative public policy approaches and measures to further the public interest and strengthen good governance in areas of energy, electricity, climate change and extractive industries. IESR works to ensure that the use of limited non-renewable energy sources are for a greater public benefit, and respect the environment and social justice. IESR combines analysis and research, with active intervention in policy and regulatory areas, public campaigns and capacity building for civil society organizations.

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