In fiscal year 2013, the Indonesian Government allocated IDR 199.9 trillion (US$ 18.0 billion) of the government budget to petroleum product subsidies and IDR 100.0 trillion (US$ 9.0 billion) to electricity subsidies. This amounted to a total of IDR 299.8 trillion (US$ 27.0 billion) of government spending on energy subsidies, equal to around 2.5% of GDP and 25% of total government expenditure.

In 2014, the government has budgeted for a total of IDR 282.1 trillion (US$ 25.4 billion). In most years, actual expenditure is higher than budgeted.

In June 2013, the government increased the price of gasoline and diesel in order to avoid exceeding its budget deficit limit of 3 per cent of GDP. The price of gasoline rose from IDR 4,500 (US$ 0.41) per litre to IDR 6,500 (US$ 0.59) per litre, a 44 per cent increase; and diesel from IDR 4,500 (US$ 0.41) per litre to IDR 5,500 (US$ 0.50) per litre, a 22 per cent increase.

The June 2013 gasoline and diesel reforms were combined with an IDR 29.1 trillion (US$ 2.6 billion) package of compensation mechanisms targeted at low-income households, including a temporary cash transfer, a basic infrastructure program and expansions of the Poor Student Education Support (BSM) program, the Hopeful Family Program (PKH) conditional cash transfer and the subsidized rice program Raskin.

In the first week of January 2014, state petroleum company PT Pertamina attempted to raise the price of 12kg-cylinder LPG from IDR 5,850 (US$ 0.53) per kg to IDR 9,809 (US$ 0.88) per kg, a 68 per cent increase. The move was hotly contested and within 24 hours the price increase was rolled back to one quarter of its original size, resulting in a new price for 12kg-cylinder LPG of IDR 6,850 (US$ 0.62) per kg. PT Pertamina claims that the underpricing of 12kg-cylinder LPG has caused it losses of IDR 7.7 trillion (US$ 0.7 billion) in 2011-2012.

The government continued its Kerosene-to-LPG conversion program in 2013. The rate of conversion—and hence the reduction in kerosene subsidies—has slowed in recent years, as the program is extended into more remote provinces where fuel consumption is lower than in urban areas.

Parliamentary and presidential elections in 2014 mean that there is likely to be little appetite for further subsidy reforms in the first two thirds of 2014. However, the traditional drivers of reform are all in place—high international crude prices, a weak exchange rate for the Indonesian rupiah and increased government expenditure in other areas.
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Indonesia’s energy subsidies represent a significant fiscal burden to the Government of Indonesia. On average, payments related to consumer subsidies alone have amounted to around 3.1 per cent of annual GDP since fiscal year (FY) 2010—a cost that has led to intermittent macroeconomic instability and tends to ‘crowd out’ core developmental expenditure. Despite being widely perceived as a form of social assistance, many of Indonesia’s energy subsidies are regressive, benefiting higher income groups disproportionately, due to a lack of targeting on the poorest. At the same time, the pricing system encourages wasteful energy consumption, providing little incentive to improve energy efficiency or reduce domestic greenhouse gas emissions, and contributes to the deterioration of Indonesia’s trade balances. For these reasons, Indonesia’s fuel pricing policy merits attention.

This is the first edition of the Indonesia Energy Subsidy Review, a new biannual publication by the Global Subsidies Initiative (GSI) of the International Institute for Sustainable Development (IISD). Part One of each edition will outline economic and policy developments affecting Indonesia’s subsidized energy markets (Premium-brand gasoline, Solar-brand diesel, LPG, kerosene and electricity) and analyze the dynamics of each market.

Part Two will feature analysis by guest authors on issues related to energy pricing policy. In this edition, two articles examine the impact of fuel subsidy reforms on low-income households: the first, looking at the consequences of energy subsidy reform for small and medium-sized enterprises (SMEs); the second, looking at the relationship between fossil-fuel subsidies and the growth in coverage and complexity of Indonesia’s social welfare systems. This edition concludes with a commentary by Dr. Zamroni Salim of the Economic Research Centre of the Indonesian Institute of Sciences.
(a) Overview of current fuel subsidy expenditure, 2013

Energy subsidies (both for liquid fuels and electricity) continue to make up the largest single component of state expenditure in Indonesia, accounting for 2.5 percent of GDP in 2012. The total budgetary expenditure allocated to fuel subsidies for gasoline, diesel, kerosene and LPG amounted to IDR 199.9 trillion (US$ 18.0 billion) in 2013. The budget also allocated IDR 100.0 trillion (US$ 9.0 billion) for electricity subsidies and IDR 100.0 billion (US$ 0.01 billion) to subsidize the consumption of LGV (liquid gas for vehicles). Fuel subsidy allocation in 2013 comprised 17 percent of total planned state expenditure, with an additional 8 per cent dedicated to electricity subsidies.

Table 1: Economic Indicators in Indonesia Revised State Budget 2013

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Initial Stage Budget 2013</th>
<th>Revised State Budget 2013 (unaudited)</th>
<th>State Budget 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Macroeconomic Indicators</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation year-on-year</td>
<td>4.9%</td>
<td>6.3%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Growth</td>
<td>6.8%</td>
<td>7.2%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Government’s Bond Interests Rate (3 month)</td>
<td>5%</td>
<td>5%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Oil Production</td>
<td>0.9 mbd(^2)</td>
<td>0.84 mbd</td>
<td>0.87 mbd</td>
</tr>
<tr>
<td>Gas Production</td>
<td>1.36 mboed(^3)</td>
<td>1.24 mboed</td>
<td>1.24 mboed</td>
</tr>
<tr>
<td>Modelled Exchange Rate (IDR/US$)</td>
<td>9,300</td>
<td>9,600</td>
<td>10,500</td>
</tr>
<tr>
<td>Indonesia Crude Price (ICP)</td>
<td>US$100/bbl</td>
<td>US$108/bbl</td>
<td>(US$105/bbl)</td>
</tr>
<tr>
<td><strong>Fuel Subsidy Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuel Subsidy (amount, Premium, Solar, Kerosene, LPG 3kg combined)</td>
<td>IDR 193.8 trillion (US$ 17.4 billion)</td>
<td>IDR 199.9 trillion (US$ 18.0 billion)</td>
<td>IDR 210.7 trillion (US$ 19.0 billion)</td>
</tr>
<tr>
<td>Fuel Subsidy (volume; Premium, Solar, Kerosene combined)</td>
<td>46 mkl(^4)</td>
<td>48 mkl</td>
<td>48 mkl</td>
</tr>
<tr>
<td>Fuel Subsidy (volume; LPG 3kg)</td>
<td>3.86 million ton</td>
<td>4.39 million ton</td>
<td>4.78 million ton</td>
</tr>
<tr>
<td><strong>Electricity Subsidy Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electricity Subsidy</td>
<td>IDR 81.0 trillion (US$ 7.3 billion)</td>
<td>IDR 100.0 trillion (US$ 9.0 billion)</td>
<td>IDR 71.4 trillion (US$ 6.4 billion)</td>
</tr>
<tr>
<td><strong>Fiscal Balances</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Revenue</td>
<td>IDR 1,530 trillion (US$ 137.7 billion)</td>
<td>IDR 1,502 trillion (US$ 135.2 billion)</td>
<td>IDR 1,667 trillion (US$ 150.0 billion)</td>
</tr>
<tr>
<td>State Expenditure</td>
<td>IDR 1,683 trillion (US$ 151.5 billion)</td>
<td>IDR 1,726 trillion (US$ 179.8 billion)</td>
<td>IDR 1,843 trillion (US$ 167.7 billion)</td>
</tr>
<tr>
<td>Budget Deficit (amount)</td>
<td>IDR 153.3 trillion (US$ 13.8 billion)</td>
<td>IDR 224.2 trillion (US$ 20.2 billion)</td>
<td>IDR 175.3 trillion (US$15.8 billion)</td>
</tr>
<tr>
<td>Budget Deficit (Deficit to GDP ratio)</td>
<td>1.65%</td>
<td>2.38%</td>
<td>1.69%</td>
</tr>
</tbody>
</table>

Source: IIISD (2013a); Tempo (2013a); Kompas (2013a); Cabinet Secretariat (2012), Fiscal Note and State Budget 2014.
It is worth noting that, as a proportion of state spending, total budgeted energy subsidy expenditure for 2013 was close to 10 per cent higher than capital expenditure (see Table 2), a key driver of long-term economic growth. Indonesia currently faces serious infrastructure deficits. The diversion of government funds away from critical capital development projects is therefore a key developmental issue for Indonesia. Further, a high proportion of inflexible fixed expenditure items within the national budget (fuel subsidies, personnel expenditure, interest payments on debt etc.) reduces the discretionary spending power of the government, limiting its ability to invest where necessary as the need arises.

Indonesia’s Ministry of Finance estimates that actual total fuel subsidy expenditure in 2013 will once again exceed the amount allocated in the budget. Data released in January 2014 suggests actual 2013 expenditure was IDR 210.9 trillion (US$ 19.0 billion) (Antara, 2014) and, once a more comprehensive audit is completed, may potentially exceed IDR 250 trillion (US$ 22.5 billion) (Bisnis.com, 2014a). While targets for the total volume of subsidized fuel sold (48 million kiloliters) have largely been met, the depreciation of the rupiah—which has fallen from IDR 9,760 per US dollar on May 2013 to IDR 12,245 per US dollar on 20 December 2013—combined with higher international oil prices have driven significantly higher subsidy costs per unit of fuel sold (Detik.com, 2013; Bank of Indonesia).

Table 2: Budgeted Central Government Expenditure in 2013 (IDR billion, unaudited)

<table>
<thead>
<tr>
<th>Expenditure</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
<td>232,978.6</td>
</tr>
<tr>
<td>Goods</td>
<td>206,507.3</td>
</tr>
<tr>
<td>Capital</td>
<td>192,600.4</td>
</tr>
<tr>
<td>Debt</td>
<td>112,517.8</td>
</tr>
<tr>
<td>Fuel Subsidy</td>
<td>199,850.0</td>
</tr>
<tr>
<td>Electricity Subsidy</td>
<td>99,979.7</td>
</tr>
<tr>
<td>Non-Energy Subsidy</td>
<td>48,289.3</td>
</tr>
<tr>
<td>Grants</td>
<td>2,346.5</td>
</tr>
<tr>
<td>Social Assistance</td>
<td>82,487.9</td>
</tr>
<tr>
<td>Others</td>
<td>19,270.8</td>
</tr>
</tbody>
</table>

Source: Fiscal Note and State Budget 2014.
Table 3: Subsidized Fuel Consumption, 2013 (in million kiloliter)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline</td>
<td>29.2</td>
<td>14.4</td>
<td>30.8</td>
<td>32.5</td>
</tr>
<tr>
<td>Diesel</td>
<td>15.1</td>
<td>7.70</td>
<td>16.0</td>
<td>14.6</td>
</tr>
<tr>
<td>Kerosene</td>
<td>1.7</td>
<td>0.50</td>
<td>1.2</td>
<td>0.9</td>
</tr>
<tr>
<td>Total</td>
<td>46.0</td>
<td>22.6</td>
<td>48.0</td>
<td>48.0</td>
</tr>
</tbody>
</table>

Source: Kompas (2013a); JPNN (2014); Fiscal Note and State Budget 2013.

Note:
* Annual data does not include the carryover from previous year.
** Unaudited.
*** Data from Fiscal Note and State Budget 2013, unaudited.
**** Planned expenditure for 2014 budget.
BOX 1: The combination of recent weakness in the rupiah, high crude prices and continued strong petroleum product demand in Indonesia—the latter driven partly by subsidized fuel prices—has continued to significantly affect Indonesia’s balance of payments position. High international oil prices and the weak exchange rate is causing the cost of oil imports to increase significantly (see Figure 4). Demand for imported oil is relatively price-inelastic in the short-to-medium-term, meaning that rupiah depreciation is unlikely to cause a decline in domestic demand; rather, the amount spent on oil imports will likely rise commensurately. This will result in a deterioration of the trade balance that, left unchecked, will weaken Indonesia’s external macroeconomic position.

Between January and November 2013, Indonesia imported 14.7 billion tons of crude oil worth US$ 12.5 billion, a rise of 25 per cent from the same period in 2012. Import volumes of motor spirit products reached 13.4 billion tons (with a value of US$ 13.6 billion) in the same period in 2013, 5.2 per cent higher than in 2012. Jet fuel imports were 38.4 per cent higher between January and November 2013 compared to the same period in 2012 (BPS, n.a.a.).

In November 2013, Indonesia’s Minister of Finance, Chatib Basri, argued that addressing Indonesia’s current account deficit is his key economic policy priority. Measures to reduce oil and refined product imports, including energy subsidy reform and energy efficiency enhancement measures, are a necessary part of this policy program. Recent proposals towards fuel subsidy reform are being driven in large part by a desire to stabilize Indonesia’s trade and current account balances, as well as by concerns about public finances.

Figure 4: Indonesian current account balance, quarterly, 2009-13 (in million US$)

Source: Bank of Indonesia (n.d.b.)
(b) Indonesia’s efforts to address the energy subsidy burden, 2013.

During calendar year 2013, the Indonesian government put in place a number of programs and reforms to address the persistent fiscal burden that fuel subsidies place on the government. In January 2013, the government announced that fuel subsidies would no longer be provided for government and government-affiliated vehicles. It also proposed the implementation of an ambitious dual pricing system for gasoline and diesel, whereby certain private vehicles would not be eligible for access to subsidized fuel. However, this proposal was abandoned in April 2013 due to lack of confidence in the effectiveness of measures to accurately direct fuel distribution to the intended customers. Soon afterwards, Indonesia received an international credit-rating downgrade, and began a process of concerted budgetary consolidation, including significant expenditure-cuts in a number of government offices across the country.

In May 2013, in the midst of budgetary overruns, the government began a state budget revision with parliament in order to avoid exceeding its budget deficit limit of 3 per cent of GDP. This limit was set by the State Budget Act and it provided a strong rationale for political parties to agree on a reduction to the fuel subsidy. According to Herry Setyawan of the Supervisory Committee on Taxation of the Ministry of Finance, without adjustment, Indonesia’s budget deficit was likely to reach US$ 47.25 billion, or 3.38 per cent of GDP (Setyawan, 2013, p. 37). In June, the budget revision was passed and, following this, the government took the significant step of introducing higher prices for gasoline and diesel. These rose 44 per cent and 22 per cent respectively—the first price increases of this kind since 2008.

Indonesia’s June fuel price increases were met with significant opposition, both from key vested interests and from opposition political parties. The subsidy cuts were, however, combined with a significant expansion of Indonesia’s cash transfer system to compensate poor households for higher fuel prices. In total, a compensation package of around IDR 29.1 trillion (US$ 2.6 billion) was announced at the time of June’s price adjustment (IISD, 2013c; World Bank, 2013).

The largest component of this package, costing IDR 9.3 trillion (US$ 0.8 billion), is the Temporary Cash Transfer Program (BLSM). The BLSM, intended to help households cope with the short-term impacts of reform, was designed to provide 15.5 million poor households with IDR 150,000 (US$ 13.5) per month for four months.

This was combined with other programs targeting poverty alleviation in the medium- to long-term poverty. These included a basic infrastructure program, focused on villages with high poverty rates, at a cost of IDR 7.3 trillion (US$ 0.7 billion); an expansion of the existing Poor Student Education Support (BSM) program, increasing financial support for schooling from 8.7 million to 16.6 million school children, at a cost of IDR 7.5 trillion (US$ 0.7 billion); an expansion of the conditional cash transfer Hopeful Family Program (PKH), from 2.4 to 3.2 million households, at a cost of around IDR 0.7 trillion (US$ 0.1 billion); and an extension of the existing Rice for the Poor program (Raskin), providing subsidized rice to 15.5 million households, at a cost of around IDR 4.3 trillion (US$ 0.4 billion) (IISD, 2013c; World Bank, 2013).

The inflationary impact of the June 2013 fuel price increases peaked in the month of July, but eased in the subsequent months, matching the forecasts made by the government prior to these initial price changes (see Figure 5). Nevertheless, Indonesia will still experience significant inflation in 2014, with inflation in 2013 close to the annual target of 9.2 percent. Data from the Bank of Indonesia show year-on-year inflation at 8.32 percent in October 2013, with the likelihood of further generalized price-level rises towards the end of the year as a result of increased seasonal demand around the Christmas and end-of-year holidays (Bank of Indonesia, 2013).

**Figure 5: Inflation, monthly, 2013**

Source: Fiscal Note and State Budget Proposal Fiscal Year 2014
Indonesia’s 2014 State Budget, finalized in late-October 2013, allocates IDR 282.1 trillion (US$ 25.4 billion) for fuel and electricity subsidies in 2014, which continue to be the largest single component of total government expenditure. The 2014 energy subsidy allocation is approximately IDR 10.8 trillion (US$ 1.0 billion) higher than what was allocated in the 2013 revised budget. In fact, the government initially planned a reduction in total energy subsidies for 2014 (Revised State Budget 2013), but weakness in the rupiah and higher international crude prices in the second half of 2013 reduced anticipated savings from subsidy expenditure.

Table 4: Planned Budget for Indonesian Fuel Subsidy in 2014 (in IDR trillion)

<table>
<thead>
<tr>
<th>Description</th>
<th>Initial State Budget 2013</th>
<th>Revised State Budget 2013 (unaudited)</th>
<th>State Budget 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel Subsidy</td>
<td>193.8</td>
<td>199.9</td>
<td>194.9</td>
</tr>
<tr>
<td>- Gasoline (Premium and biofuel equivalent)</td>
<td>87.2</td>
<td>83.5</td>
<td>68.8</td>
</tr>
<tr>
<td>- Kerosene</td>
<td>8.0</td>
<td>6.7</td>
<td>6.1</td>
</tr>
<tr>
<td>- Diesel (Solar and biofuel equivalent)</td>
<td>51.2</td>
<td>59.7</td>
<td>56.3</td>
</tr>
<tr>
<td>- LPG 3kg cylinders</td>
<td>26.5</td>
<td>31.5</td>
<td>36.8</td>
</tr>
<tr>
<td>- Liquefied Gas for Vehicles (LGV)</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>- Value-Added Tax</td>
<td>17.3</td>
<td>18.1</td>
<td>16.8</td>
</tr>
<tr>
<td>- FS carryover to the next Fiscal Year</td>
<td>-</td>
<td>-22.6</td>
<td>-</td>
</tr>
<tr>
<td>- FS carryover from 2010</td>
<td>-</td>
<td>0.0</td>
<td>-</td>
</tr>
<tr>
<td>- FS carryover from 2011</td>
<td>3.5</td>
<td>0.4</td>
<td>-</td>
</tr>
<tr>
<td>- Estimated FS carryover from 2012</td>
<td>-</td>
<td>18.9</td>
<td>-</td>
</tr>
<tr>
<td>- Estimated FS carryover from 2013</td>
<td>-</td>
<td>-</td>
<td>10.0</td>
</tr>
</tbody>
</table>

Source: Fiscal Note and State Budget Proposal Fiscal 2013; Fiscal Note and State Budget Proposal Fiscal 2014

Indonesia’s total fuel subsidy in 2014 will continue to cover gasoline, diesel, kerosene, LPG, and LGV (liquid gas for vehicles). The combined total volume of subsidized liquid petroleum products (gasoline, automotive diesel, and kerosene) in 2014 is set at 48 million kiloliters, which is similar to the quota contained in the 2013 revised budget. The government initially proposed a quota of 50.44 million kiloliters for these four products, but deliberations between the government and parliament resulted in a lowering of the quota (Kompas, 2013b). The 2014 subsidy for LPG—provided to households and small businesses—will be IDR 36.77 trillion (US$ 3.3 billion).

These quotas are likely to be difficult targets for the government to meet. Indeed, failure to meet subsidy quotas set out in yearly budgets is becoming a repetitive feature of Indonesia’s fiscal landscape, partly due to parliament’s insistence during budget negotiations on reducing the quota levels initially proposed by government. In 2013, the government’s initial quota proposal of 48 million kiloliters of subsidized fuels was cut to 46 million kiloliters after parliamentary negotiations, while in 2014 the government’s subsidy-estimate range of 49-50.5 million kiloliters was ultimately reduced to 48 million kiloliters (Antara, 2012; Beritasatu, 2013; JPNN, 2013).

Targets will be especially hard to meet given that several new policies designed to control fuel consumption will likely take considerable time to develop and implement. These include the Radio Frequency Identification Device system (RFID), which identifies those eligible for subsidies through a tag on their vehicle, and a cashless fuel transaction system. Consumption may also be increased by other policies, such as the recent industry initiative for a domestically-produced low-cost “green car”.

Nonetheless, in its policy plans supporting the 2014 budget, the government has committed itself to ambitious changes in energy pricing. It intends to work towards sweeping new subsidy targeting measures (so-called ‘closed distribution systems’) that build on the cash transfer mechanisms that were rolled out following June’s price rises, as well as a potential ‘flat-rate subsidy’ that establishes a subsidy payment for individual fuels which remains constant over time despite fluctuations in international crude prices and the value of the rupiah.

It is highly questionable, however, whether there will be sufficient political will in 2014 to increase fuel prices or to shrink subsidy eligibility in the first two-thirds of the year, given that parliamentary and presidential elections are due to take place on 9 April and 9 July respectively, with a second round of presidential voting potentially required in September. Indeed, depending on the policy approach and ideology of the new government, the 2014 elections might even reduce the likelihood of subsidy reform initiatives in the years to come.
Nonetheless, Jakarta’s highly popular Governor, Joko Widodo, who was announced as the presidential candidate for the Indonesian Democratic Party of Struggle (PDI-P), and is widely polled as the leading contender for the presidency (Cochrane, 2014), has previously been a strong critic of the government’s energy subsidy policy. In late 2013, he indicated that he would like to see the revenues that are spent on current subsidies in Jakarta diverted to public transport (Tempo, 2013b). Although he has confirmed no formal stance on the fuel subsidy since his announced candidacy, this suggests that it is at least possible that a Widodo-led government might adopt a reformist stance towards energy subsidies following victory in the upcoming elections, at least on a limited basis in major cities.

It is also clear that a lack of reform will continue to pose serious problems for Indonesia if the factors that have traditionally been core drivers of subsidy reform—high international crude prices, low exchange rates and ensuing pressure on the budget—continue unabated. In addition, new pressure on the budget is likely to stem from the government’s launch of its costly new national social security system, the Sistem Jaminan Sosial Nasional (SJSN) (World Bank, 2012), starting in January 2014 with the unveiling of the universal health coverage component, the Jaminan Kesehatan Nasional (JKN). Regardless of the specific political ideology of the new government, therefore, it is possible that new reforms will take place towards the end of 2014, under the growing pressure of budgetary constraints and in the period of strong popular legitimacy conferred by an electoral victory.

(d) Current dynamics in subsidized fuel markets

Gasoline (Premium-branded)—In January 2013, the Ministry of Energy and Natural Resources prohibited the use of subsidized gasoline for government-owned public transport and other government vehicles and sea-going vessels. For the Java and Bali area, the regulation was effective on the day it was announced, with a rolling country-wide implementation to follow.

In early April 2013, a plan to apply a dual-pricing system for gasoline and diesel was floated. While the government instructed PT Pertamina, the state-owned subsidized fuel retailer, to make preparations to put this pricing system in place, the program was abruptly cancelled in April (IISD, 2013d). The program was to allow for the purchase of subsidized fuel by only a limited number of targeted customers, especially motorcycle users, while car owners were expected to pay market rates for transport fuels. The exact mechanisms for achieving the dual-pricing system were not known. The government also had plans to apply the RFID mechanism to gasoline purchases, but progress on the implementation of this system through early 2014 was limited (IISD, 2013b).

In June 2013, following lengthy negotiations with Indonesian members of parliament regarding the revision of the state budget, the Democrat-led government intervened to increase the price of gasoline by 44 per cent from IDR 4,500 (US$ 0.41) per litre to IDR 6,500 (US$ 0.59) per litre, the first price rise of this kind since 2009 (see IISD, 2013c).

Final figures for the consumption of subsidized gasoline in 2013 are expected to show a rise from 27.3 million kiloliters in 2012 to 30.8 million kiloliters, while the value of total gasoline subsidies is estimated to increase 38 per cent, from IDR 59.7 trillion (US$ 5.4 billion) to IDR 83.5 trillion (US$ 7.5 billion) over the same period (Fiscal Note and State Budget 2014, p. 4-103). This significant year-on-year increase in the value of subsidies accruing to gasoline consumption is the result of the continued growth in domestic transport fuel demand due to strong private car and motor vehicles sales, as well as the weakened value of the rupiah in the second half of 2013.

Note:
* Unaudited.
** Data from Fiscal Note and State Budget 2013, unaudited.
*** Planned expenditure for 2014 budget.

Diesel (Solar-branded)—As in gasoline markets, subsidized diesel consumption by public service vehicles and vessels was prohibited in early January 2013, except for emergency services and maritime vessels serving remote areas. Following the government’s failure to implement the proposed dual pricing system for diesel and gasoline, diesel prices were raised from IDR 4,500 (US$ 0.41) per litre to IDR 5,500 (US$ 0.50) per litre, or 22 per cent, half of the increase experienced in gasoline prices.

Final figures for the consumption of subsidized diesel in 2013 are expected to show a rise from 14.8 million kiloliters in 2012 to 16 million kiloliters, while the value of total diesel subsidies is predicted to rise by IDR 32.3 trillion (US$ 2.9 billion) to IDR 59.65 trillion (US$ 5.4 billion)—a year-on-year increase of 81 per cent (Fiscal Note and State Budget 2014, p. 4-103). The growth in diesel-fueled vehicle sales, mostly in heavy transport, has been lower than that for vehicles using gasoline. However a rapidly depreciating rupiah in the second half of 2013 put significant upward pressure on diesel subsidy costs, in the same way it did for gasoline.

Kerosene and LPG – Indonesia’s subsidized LPG price was revised twice in the first week of January 2014. PT Pertamina announced the new price for 12kg-cylinder LPG, which is widely used for daily household activities, on 1 January 2014. The price increase was from IDR 5,850 (US$ 0.53) per kg to IDR 9,809 (US$ 0.88) per kg, a 67 per cent increase. This was the first change in prices since 2009, when the 12kg-cylinder LPG was set at IDR 5,850 (US$ 0.53) per kg. PT Pertamina announced that it had suffered losses of IDR 21.8 trillion (US$ 2.0 billion) from 2008-2013 in the distribution of 12kg-cylinder LPG (The Jakarta Post, 2014), and would continue to make a loss of IDR 2,100 (US$ 0.19) per kg under the new price (Kompas, 2014). PT Pertamina’s position was supported by the assessment of the National Audit Board (Badan Pemeriksa Keuangan [BPK]), which quantified Pertamina’s losses in 2011 and 2012 at around IDR 7.7 trillion (US$ 0.69 billion) in 2011 and 2012 and said this resulted largely from the distribution of subsidized 12kg-cylinder LPG (Liputan6, 2014; The Jakarta Post, 2014).

On 5 January 2014, following considerable public opposition to Pertamina’s decision in the days following the price increase, Indonesian President Susilo Bambang Yudhoyono intervened in the debate, instructing PT Pertamina and associated ministers to review the initial decision within 24 hours. The next day, PT Pertamina scaled the price increase back to a quarter of the original increase, setting 12kg-LPG’s retail price at IDR 6,850 (US$ 0.62) per kg and citing the public reaction to higher prices as its reason.

At the same time, in response to the reduction in prices, PT Pertamina revised its profit growth projections for 2014 downwards, from 13.17 per cent to 5.65 per cent. According to Hanung Budaya, PT Pertamina’s Director of Marketing and Trade, 59 per cent of LPG marketed by Pertamina is imported, while Indonesia’s consumption of LPG in 2013 reached 5.6 million tons, of which 4.4 million tons were subsidized (Kompas, 2014).

Subsidy policy in kerosene and LPG markets is closely linked as a result of Indonesia’s large LPG-for-kerosene Conversion Program, which aims to substitute the use of subsidized kerosene with the subsidized 3kg-cylinder LPG in poor rural households. While the Indonesian government has expected a rapid fall in kerosene usage in the last several years, the difficulties in implementing the Conversion Program in several provinces has slowed the anticipated decline of subsidy costs associated with kerosene. In 2013, the government continued to expand the
reach of the conversion program to unconverted areas in Indonesia, especially in the five remote provinces of West Sumatra, Bangka Belitung, Central Kalimantan, Southeast Sulawesi and Central Sulawesi. All five had failed to meet conversion goals, despite the program originally being scheduled to conclude in 2011.

Kerosene consumption in 2012 and 2013 has been stable at around 12 million kiloliters per annum, with the value of the subsidy on kerosene decreasing slightly from IDR 7.88 trillion (US$ 0.71 billion) to IDR 6.65 trillion (US$ 0.6 billion) between 2012 and 2013 (Fiscal Note and State Budget 2014). The quota for subsidized kerosene in 2013 was revised in June 2013, from 1.7 million kiloliters to 1.2 million kiloliters. LPG consumption, encouraged by the continuation and expansion of the conversion program, is expected to have risen from 3.6 million kilograms in 2012 to 4.39 million kilograms in 2013—an increase of 22 per cent—while subsidy costs are expected to have risen by 8 per cent over the same period.

Figure 8: LPG Consumption vs LPG Subsidy Expenditure, annual, 2012-13

Note:
* Unaudited.
** Data from Fiscal Note and State Budget 2013, unaudited.
*** Planned expenditure for 2014 budget.

Figure 9: Kerosene Consumption vs Kerosene Subsidy Expenditure, annual, 2012-13

Note:
* Unaudited.
** Data from Fiscal Note and State Budget 2013, unaudited.
*** Planned expenditure for 2014 budget.
Electricity – According to the 2014 State Budget, a substantial reduction in total energy subsidies is expected to come from reduced electricity subsidies in the next year, which in 2013 were budgeted at IDR 100.0 trillion (US$ 9.0 billion).

Electricity subsidies in Indonesia are conferred by the different rates per kilowatt hour charged to different customer classes: the public service (class S), households (class R), businesses (class B), industry (class I) and government and street lighting (class P), each of which is subdivided again into groupings of small, medium, and large power connections. In 2013, electricity tariffs were increased for all types of customer class on all but the two lowest sizes of power connection (the 450VA and 900VA classes). The increases were levied every three months up to a total capped increase of 15 percent year-on-year, with the last of these increases occurring in October 2013. At the time of writing, the household class with a large power connection (R3), the business class with a medium power connection (B2), and the upper half of the government class with a small power connection (P1 above 2,200VA) had already reached or exceeded the point that state power company PT PLN (Perusahaan Listrik Negara) had targeted as being the market price, around IDR 1,350 (US$ 0.12) per kWh (PLN, Tempo, 2012). Table 5 shows an example of the status of electricity tariffs in the household sector in 2013.

Table 5: Electricity Tariffs for Household Group, quarterly, 2013 (in Rupiah/kWh)

<table>
<thead>
<tr>
<th>Tariff Class</th>
<th>1 Jan - 31 Mar</th>
<th>1 Apr - 30 Jun</th>
<th>1 Jul - 30 Sep</th>
<th>1 Oct - 31 Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1 - 450VA 0 - 30kWh</td>
<td>160</td>
<td>160</td>
<td>160</td>
<td>160</td>
</tr>
<tr>
<td>R1 - 450VA 30kWh-60kWh</td>
<td>360</td>
<td>360</td>
<td>360</td>
<td>360</td>
</tr>
<tr>
<td>R1 - 450VA &gt;60kWh</td>
<td>495</td>
<td>495</td>
<td>495</td>
<td>495</td>
</tr>
<tr>
<td>R1 – 900VA 20kWh-60kWh</td>
<td>445</td>
<td>445</td>
<td>445</td>
<td>445</td>
</tr>
<tr>
<td>R1 – 900VA above 60kW/H</td>
<td>495</td>
<td>495</td>
<td>495</td>
<td>495</td>
</tr>
<tr>
<td>R1 - 1,300VA</td>
<td>833</td>
<td>879</td>
<td>928</td>
<td>979</td>
</tr>
<tr>
<td>R1 – 2,200VA</td>
<td>843</td>
<td>893</td>
<td>947</td>
<td>1,004</td>
</tr>
<tr>
<td>R2 - 3,500VA-5,500VA</td>
<td>948</td>
<td>1,009</td>
<td>1,075</td>
<td>1,145</td>
</tr>
<tr>
<td>R3 &gt;6,600VA 0-55 hours</td>
<td>980</td>
<td>1,225</td>
<td>1,290</td>
<td>1,352</td>
</tr>
<tr>
<td>R3 &gt;6,600VA &gt;55 hours</td>
<td>1,380</td>
<td>1,380</td>
<td>1,380</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: The first set of shaded rows are tariff classes whose rates have been maintained in 2013. The second set of shaded rows are tariff classes in which the rates were gradually increased every three months in 2013. The final row is a tariff class that is already at PLN's stated market rate.

Source: Minister of Energy and Natural Resources Regulation No. 30/2012.

Going forward, the Government has pledged to continue efforts to reduce both electricity production costs and the use of refined oil products in electricity generation. It plans to do this by securing greater supplies of gas, coal and other alternative energy sources for power generators, improving the performance of PT PLN, and further evaluating subsidy and pricing systems for retail electricity. Plans are also in place to continue to increase electricity tariffs during 2014 in order to further reduce electricity-related subsidy payments.

The Government has articulated several specific policy changes, including ambitions to alter the design and nature of the electricity-pricing schedule in the short term, and the way it manages electricity tariffs for small connections (450VA and 900VA). On 22 January 2014, the government acquired parliament’s approval to apply a tariff adjustment on industry classes with medium and large connections, I3 and I4 (Antara, 2014). In 2014, the tariff for the I3 class will go up by 38.9 per cent and the tariff for the I4 class by 64.7 per cent. The increase will be phased in every two months, starting in May 2014 (Tribunnews, 2014).

(e) Political issues

In 2014, Indonesia’s government is expected to be cautious about pushing a strong agenda of energy pricing reform. President Yudhoyono’s Democrat Party comprises just over one quarter of parliamentary seats and needs to consolidate a coalition to secure the majority that would be required to pass further reforms. The general election in 2014 is also likely to create a difficult political situation as competing parties seize political gains by polemizing energy reform issues. As recorded by Braithwaite, et al. (2012, p. 19), political alignment on energy reform initiative
issues in Indonesia has proven to be fragile. Only two political parties in the country have shown a consistent voting pattern over energy reform initiatives. The government also demonstrated a defensive stance on the non-subsidized LPG price-adjustment issue in January 2014 when it moderated PT Pertamina’s LPG price increase to a lower level (Jakarta Globe, 2014).

Nonetheless, the need to push forward the energy reform agenda, especially energy price rationalization, is well-recognized by many political actors in Indonesia. The increasingly costly energy subsidy—combined with the hard facts of declining oil production, limited refining capacity, the need to extend electrification and increasing energy consumption—will pose a great challenge for any winner of Indonesia’s general election.

Indonesia may also begin to face challenges at the regional level, as ASEAN member-countries enter the implementation phase of the ASEAN economic community in 2015 (ASEAN, n.d.). Indonesia needs to accommodate the new regional economic architecture as it strives to meet its commitment to build a single market and production base, and develop cross-country energy infrastructures, in particular the ASEAN Power Grid and Trans-ASEAN Gas Pipeline, to support regional economic growth (ADB, n.d.). Indonesia’s energy prices are among the lowest in Southeast Asia (Detik.com, 2013).

(f) Recommendations, 2014

As previously indicated, the political context in 2014 is likely to prevent any significant changes to energy pricing policy in the first two-thirds of the year. However, the core drivers for reform – high international crude prices, a weak exchange rate and increased government expenditure elsewhere – mean that energy subsidy reforms may nonetheless be possible by the end of the year or in early 2015. In particular, it is likely that energy subsidy reform and the development of social security measures in Indonesia will remain closely intertwined. This means that the general focus of government action in 2014 should be preparatory: ensuring that the “pieces are in place” to allow for quick, effective and socially progressive reforms when needed.

Based on the above analysis, the following recommendations are made for each fuel type.

**Premium-brand gasoline and Solar-brand diesel**

- Develop detailed strategies for the reduction of subsidy expenditure, either by reducing subsidies on an *ad hoc* basis or gradually tightening the targeting of the subsidy.
- Design and prepare the implementation an automatic pricing mechanism that would:
  - Allow some pass-through of international oil price fluctuations, thereby reducing fiscal uncertainty about the total cost of subsidies; and
  - Include a path for the gradual reduction of subsidies.
- Continue to improve social assistance measures when implementing price rises. This should include:
  - Explicit linkage of energy subsidy reform to the development of new social safety net policy;
  - Recognition of the need for short- and long-term assistance measures to mitigate the initial impact of price shocks and volatility, as well as of longer-term cost-of-living pressures;
  - Enhanced targeting of assistance to reduce leakage and exclusion as part of the process of the broader development of social safety nets in Indonesia; and
  - Enhanced monitoring and evaluation of the effectiveness of assistance measures in fulfilling their purpose in mitigating the impact of higher energy prices on households and SMEs.
- Review reform impacts that are not currently cushioned by any mitigation measures (for example, on SMEs), and the impact of price volatility on households and businesses under a new automatic pricing mechanism.

**Kerosene and LPG**

- Continue the implementation of the LPG-for-Kerosene Conversion Program.
- Adopt the same strategies for LPG price increases as for other fuels: gradual subsidy reductions combined with targeted mitigation measures to ensure a neutral or, preferably, a progressive outcome for near-poor and poor households.
- Improve the consistency of communications regarding subsidy reform. The recent public outcry and controversy over LPG pricing suggests there is scope for enhanced, more strategic communication and awareness-raising regarding energy subsidies and the process of subsidy reform.
- Secure LPG supply for the domestic market, in order to ensure the market is able to meet the growth in demand induced by government policy to promote LPG use.

**Electricity**

- Continue the implementation of gradual price reforms until electricity pricing fully recovers the ongoing costs of maintaining and improving Indonesia’s electricity system.
• Develop a comprehensive strategy to improve performance of so-called electricity lifeline rates (rates granted to lower-income households).

• Expand the electrification rate with targeted measures to facilitate the growth of economic capacity outside the major centres of economic activity.

• Maintain the expansion of electricity production and provide a business-friendly climate for new investment in the electricity sector.

Notes

1 All IDR/US$ conversions in this review have used a rate of 0.00009, unless otherwise stated.

2 Million barrels per day

3 Million barrels of oil per day equivalent

4 Million kilolitres

5 Included in this motor spirit category: motor spirit, of RON 97 and above; motor spirit, of RON 90 and above but below RON 97 leaded; and other motor spirit unleaded.
Small and Medium-Sized Enterprises (SMEs): A Key Group to Consider for the Welfare Impacts of Fossil-Fuel Subsidy Reform
Dr. Tulus Tambunan, Center for Industry, SME and Business Competition Studies, USAKTI

Introduction

Small and medium-sized enterprises (SMEs) make up a large proportion of businesses in Indonesia and create a significant proportion of total employment. They have also been instrumental in reducing poverty. How are they affected by fossil-fuel subsidy reform, and what does this mean for government plans?

SMEs in Indonesia: Some Background

As in many developing countries, SMEs in Indonesia are very numerous, amounting to some 56.5 million in 2012 (UKM, 2013). They generate a significant amount of employment for low-income households and can help diversify economic output. Many SMEs are based in rural areas, so they also play an important role in stimulating rural economic development.

They look very different, however, to SMEs in more developed economies. About 99 per cent of SMEs in Indonesia are tiny, so-called micro enterprises, with the following characteristics:

- They are unregistered and operate in the informal sector.
- They do not adopt modern systems of organization, management and accounting.
- They use mainly low-educated paid workers as well as unpaid family members.

Because of these characteristics, most of the enterprises have low productivity, produce comparatively inferior goods and have difficulties accessing necessary inputs, including capital, high-quality labour, technology and information. They also lack access to domestic and export markets.

How Important Are Energy Prices to SMEs?

Energy prices are only one of the many constraints hampering Indonesian SMEs (especially small and micro-enterprises, or SEs).

It is generally known that, on average, SMEs, particularly SEs, are much less energy-intensive compared to large enterprises (LEs). SME energy intensity can be as low as around 10 per cent of the total cost of production, according to the United States Agency for International Development ([USAID], 2008). However, the importance of energy varies by group of industry, and depends on the nature of the production process and energy efficiency of individual firms, among other factors.

It is difficult to pinpoint which Indonesian SMEs are most affected by energy subsidy reforms because good data are not available. The BPS, Indonesia’s Central Agency for Statistics, has only disaggregated data on SEs in the manufacturing industry and even this data is fairly limited. It shows how many SEs identify energy as their main constraint. The top five groups are tobacco-processing; those who manufacture reproductions of publishing and recording media; machinery and tools; food; and paper and its products. BPS data also shows that the majority of SEs who identify energy as their main constraint
are located outside Java and Sumatra, the five provinces where energy costs are the biggest issue being West Kalimantan, Kepulauan Riau, West Nusa Tenggara, Gorontalo and Banten. But the data do not distinguish between the problems of energy price and supply. They also do not indicate which specific energy sources (e.g., electricity, liquefied petroleum gas [LPG], kerosene) cause the most significant problems for different types of SME.

Such information is crucial, however, if the impact of fossil-fuel subsidy reforms is to be properly examined. Energy use will vary significantly by type of enterprise: for example, handicrafts will have high transportation costs but use virtually no electricity; other activities, such as food processing, will make extensive use of kerosene. It can be assumed that reforms to gasoline and diesel prices, such as those implemented in June 2013, will only affect certain groups of SMEs, for example traditional industries like food and beverages, or those making products from wood, bamboo and rattan, and leather products. In these industries, the key type of energy used by SMEs is kerosene, followed by Solar-brand diesel and gasoline. Reliable data are required to accurately predict the impacts of reforms and to ensure SMEs are prepared.

What We Know From Experience: How Have SMEs Coped with the Latest Increases in Energy Prices?

Even if energy takes up a very small percentage of the production costs of SMEs, an increase in energy costs can still seriously affect them. Vulnerability to energy price increases is to some extent determined by a business’s ability to cope with change: can they pass the extra costs on to their consumers, or must they absorb losses themselves?

At the time of writing, no detailed studies had yet been published about the impact of the June 2013 price reforms for gasoline and diesel on SMEs. However, anecdotal reports from various newspapers indicate that the impact seems to be significant. For instance, the Republika newspaper has stated that many SMEs in the West Java city of Sukabumi may have to close down because of the fuel subsidy policy (Republika Online, 2013). Citing complaints that the rising costs of production have made it difficult to expand, Antara News (2013b) has stated that the price changes have been felt by many SMEs in East Java, and have even threatened some businesses with bankruptcy. In the East Java city of Malang, at least 10,000 local SMEs are facing bankruptcy due to the sharp rise in operating costs (especially transportation costs) that followed the fuel price change (Antara News, 2013b).

According to Kompas newspaper, the BPS and the State Ministry for Cooperatives and SMEs have estimated that the impact of the fuel price reform has generated financial problems for many SMEs in Indonesia (Purwanto, 2013). According to the government study, although the resulting increase in production costs is not as bad as when fuel prices were increased in 2005, it has still created significant problems (Antaranews.com, 2013a, 2013b).

Some studies of the 2005 energy price reforms on SMEs have come to different conclusions. For instance, a case study in North Sumatra in 2007 shows that the business performance of local SMEs was not significantly affected by the increase in fuel price in 2005 (Rizal, 2007). However, other findings—such as those from a survey conducted by the Ministry for Cooperatives and SMEs in 2006 (cited in Sinaga, 2013)—show that product costs and business incomes were affected considerably. This survey covered 37,950 SMEs in over 33 provinces that use kerosene, solar oil and gasoline in a range of businesses, including food processing, rice milling, fishery, food stalls, batik (Indonesian traditional cloth), industries producing simple building materials like tiles and brick, and city transportation. It found that production costs increased by an average of 28.1 per cent—in micro enterprises, by 34 per cent; in small enterprises, by 24.6 per cent; and in medium enterprises, by 29.6 per cent—and that net income dropped by 18.37 per cent. With respect to coping strategies, the survey found that about 76.8 per cent of the total number of SMEs surveyed had increased their selling price; 45.4 per cent had reduced the size or quantity of their products; 63.6 per cent had reduced quality of their products; 39.7 per cent had reduced their profit margins; 39.7 per cent had increased production cost efficiency; and 6.11 per cent had pursued “other” strategies in addition to the above.

Generally, experience shows that the effect of the increase in the price of fuel on SMEs takes place through direct and indirect channels. Direct impacts increase the total operational costs of SMEs because they must pay more for energy. The degree of the increase will vary by industry group, according to the amount and type of energy they consume. Indirect impacts, on the other hand, occur through the knock-on effects that energy price rises have on other aspects of an SME’s business—for example, increasing the costs of other inputs, the cost of credit or reducing consumers’ real income, thereby reducing demand. Indirect effects on SMEs are generally expected to be more significant than direct effects.
Conclusions and Policy Recommendations

In general, SMEs are less energy-intensive than large enterprises (LEs), but they are also more vulnerable. This means that while the direct financial impacts of energy price increases may not be as serious as those experienced by LEs, the capacity of SMEs to cope with any negative impacts is likely to be much lower, and even small negative effects can be much more severe.

SMEs are extraordinarily diverse, and current knowledge is too poor to accurately predict in detail how energy pricing will affect different SME sectors or groups of industry. For the time being, anecdotal evidence suggests that historical reforms to gasoline subsidies have most seriously affected SMEs in food-processing, rice milling, fishery, food stalls, building materials (such as tiles and bricks) and city transportation. It is also clear that challenges are most prevalent in the eastern part of Indonesia, where energy prices are high due to long-distance transportation of fuel and a lack of local infrastructure, including roads from harbours to centres of local economic activity.

It is the indirect impacts of energy price increases that are likely to have the most serious effects on SMEs, especially through the costs of transportation, raw materials and capital. All SMEs, no matter what their size, are dependent on land transportation, which has always been the main focus of fossil-fuel subsidy reform in Indonesia. Furthermore, energy price rises have a broader dampening effect on consumer behaviour, and Indonesian SMEs, especially SEs, are heavily dependent on low-income households as their main buyers.

Government interventions to assist SMEs cope with the impact of fuel subsidy reform might include steps to:

1. Increase access to bank finance for business-viable SMEs, especially those that are seen to have the potential to contribute to GDP and future exports.

2. Reallocate a proportion of subsidy savings to the development of infrastructure and public transportation facilities, especially in rural areas where the majority of SMEs are located. Funds could be reallocated more generally to help implement Indonesia’s existing policy in support of SMEs, which includes human resource development, entrepreneurship development and financing.

3. Support SMEs to improve their energy efficiency and gain better access alternative energies.

SMEs should also be encouraged to take preparatory actions, of which at least the following two should be considered:

1. Appropriate measures to adapt to higher energy prices by increasing energy efficiency.

2. Exploration of long-term solutions to rising energy costs.

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Energy Subsidies and Social Welfare Programs

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Over the past decade, the Indonesian government has several times increased the price of fuel. At every increase, it has also targeted the poorer segments of the population with a range of compensation programs to help them cope with the adverse effects. Can energy subsidies be reduced without harming the poor? And can these subsidies play a larger role in the improvement of Indonesia's social welfare policies?

Social Welfare in Indonesia

Indonesia's effort to reduce poverty is an international success story. Currently, 28 million Indonesians, or 11 per cent of the population, are poor (BPS, 2013), compared to 19 per cent of the population in 2001.

Nonetheless, despite a steady decline in the number of the poor, many people live close to the poverty line and poverty is very dynamic. At any given year, many people can escape poverty, yet at the same time a significant number of other people fall into poverty. In 2009, for example, 53 per cent of 2008's poor population escaped poverty, becoming near-poor or even non-poor; but 22 percent of 2008’s near-poor population and 5 percent of the non-poor population fell into poverty (Suryahadi et al., 2012).

Indonesia’s 2009-2014 medium-term development plan set a target to bring down the poverty rate to 8-10 per cent by 2014, meaning a reduction of 2-3 points from the poverty rate of 11-12 per cent in 2013 (Government of Indonesia, 2009). The strategy to achieve this target arranges Indonesia’s poverty reduction programs into three clusters, based on the major group targeted by each one (TNP2K, 2011):

1. **Cluster 1:** Programs targeting households. This cluster consists of several social assistance programs: subsidized rice (Raskin); a conditional cash transfer program (PKH or Program Keluarga Harapan); educational assistance for poor school children (BSM or Bantuan Siswa Miskin); and subsidized health care (Jamkesmas).

2. **Cluster 2:** Programs targeting communities. Consists of several community-driven development programs under the umbrella of PNPM (Program Nasional Pemberdayaan Masyarakat).

3. **Cluster 3:** Programs targeting micro, small and medium-sized enterprises (MSME). The government is offering a guarantee scheme for bank credit called Kredit Usaha Rakyat (KUR).

How do Fossil-Fuel Subsidies Fit In?

To date, the government of Indonesia has used energy subsidies as a core policy instrument for stabilizing prices and protecting the general welfare of the population. To some extent, subsidized energy prices have acted as a form of social welfare. Low prices of gasoline and diesel fuel bring down transportation costs should, in principle, help stabilize low prices of goods transported from rural to urban areas, or between cities. For lower- and middle-income households, subsidized fuel should also lower the cost of civilian transport services. Similarly, low-cost energy for lighting and cooking should, in principle, reduce their cost.

However, over the years energy subsidies have become less effective and efficient. Transport costs have increased because of bad roads and inefficient public transport; many areas in Indonesia report energy prices that are far above their official subsidized levels, or have suffered fuel shortages due to companies being unable to recover the cost of supply to remote areas. And as Indonesia has grown wealthier, a larger and larger share of benefits has been captured by the growing middle- and high-income population. At the same time, increasing global fuel prices and dwindling petroleum reserves have increased the fiscal cost of subsidies for the government. As a result, energy subsidies consume around one fifth to one quarter of government expenditure, a sum larger than expenditure on defence, education, health and social security combined (Tumiwa et al., 2012). This has more than just a financial implication. High and increasing energy subsidies mean less and less government expenditure on social welfare and infrastructure.

In short, energy subsidies—even though having some positive effect on general welfare—do not support low-income households very efficiently and, as they become increasingly expensive, can effectively "crowd out" government spending on alternative policies.
Building a Social Safety Net: A Transition from General Subsidies to Targeted Poverty Alleviation

Social assistance programs targeting households are a relatively new development in Indonesia. During the New Order, the government primarily made use of universal subsidies to stabilize the prices of fuel and other commodities, with some rudimentary targeting at particular geographic areas or employment sectors. The government first introduced more sophisticated social assistance programs following the Asian financial crisis in late 1997, with a package of programs known as the Social Safety Net (Jaring Pengaman Sosial, or JPS). The JPS included programs on job creation (various labour-intensive programs, block grants and small-scale revolving credit), a food security program, a subsidy for basic health services and an education assistance program designed for children of poor families.

In the years following the crisis, the government developed and introduced a number of ongoing targeted welfare programs. Until recently, these programs were scattered, not comprehensive and used different targeting databases to identify recipients. But gradually the government has strengthened and improved the programs, and built a better database for targeting.

Over the past decade, fossil-fuel subsidy reforms have been interlinked with the development of these new social programs. In each major instance when fuel prices were increased—2005, 2008 and 2013—social protection measures were either introduced or expanded at the moment that fuel subsidies were reduced, to help households cope with the impact on their welfare.

Indonesia’s experiences show strong two-way linkage between energy subsidies and social welfare policy reforms. From one side, energy subsidy reform—reducing subsidies and increasing domestic prices—has created the need to deliver compensation programs. From the other, a successful social welfare system can strongly justify further energy subsidy reform. Looking at the relative sophistication of the welfare measures used to accompany subsidy reforms in 2005, 2008 and 2013—and taking into account the increasingly muted public opposition to reforms—it is clear that the government has continued to learn and improve upon its experiences, and that confidence in implementing this kind of dual energy-and-welfare policy reform has grown.

What Programs Have Been Used to Compensate for Fuel Subsidy Removal?

Four social assistance programs that are part of the Cluster 1 programs targeting households have been used in the past decade to help cushion the impact of fuel subsidy reforms. These are ‘regular’ programs, meaning they are delivered on an ongoing, permanent basis.

• **Raskin—Subsidized Rice Program:** Raskin (Beras Miskin or “rice for the poor”) is a social assistance scheme that was part of the initial 1998 social safety net programs. Today, Raskin targets some 15 million households (the poorest 25 per cent of the population) by delivering subsidized rice to ‘distribution points’ (usually at the village level) each month. Eligible villagers can purchase up to 15 kilograms of rice each at 20-30 per cent of the market price. As with energy subsidies, food subsidy programs like Raskin rarely perform as intended. Many studies have documented problems such as beneficiaries being denied their full allotment of rice, non-poor households purchasing the rice, delayed distribution, corruption and fraud.

• **Jamkesmas—Health Insurance:** Like Raskin, Jamkesmas (Jaminan Kesehatan Masyarakat, the public health insurance system) originated in the 1998 social safety net era. Today, Jamkesmas targets 76.4 million Indonesians, about 30 percent of the population, providing beneficiaries with free health care services at Puskesmas and Class III public hospitals. As a scheme to mitigate the impacts of fuel subsidy reform, Jamkesmas does not help households cope with a higher cost of living in the short-term, but it does have the potential to significantly improve their wellbeing in the medium- to long-term. A major challenge facing its continued expansion and effectiveness is that health facilities are simply not available or are inadequate for the performance of many health services.

• **BSM—Assistance for Poor Students:** BSM (Bantuan Siswa Miskin, literally “assistance for poor students”) is a cash assistance program for school children from poor households who are enrolled in elementary school, junior secondary school and high school, intended to cover non-tuition school-related expenses, mainly the cost of transport. It provides a cash transfer of from IDR 360,000 (US$ 36) to IDR 1,000,000 (US$ 100) per student per year, depending on the school level. In the second half of 2013, following an increase in fuel prices, the BSM was expanded even further to target all students from households in the bottom 25 percentile, a number equivalent to 15.4 million children (Rahayu, 2013). As a scheme to help households cope with the withdrawal of fuel subsidies, the BSM
This article summarizes the author's fuller treatment of the same subject in Fossil-Fuel Subsidy Reform and Small and Medium-Sized Enterprises (SMEs): The impacts and possible responses, available at http://www.iisd.org/gsi/sites/default/files/ffs_indonesia_briefing_SMEs.pdf


For an overview, see Daley and Fane (2003).

For a more detailed discussion on past social assistance programs, see Perdana and Maxwell (2012).

See also World Bank (2012) for a detailed discussion of these programs.

According to the current program design, Raskin is to be delivered monthly. However, in practice, many villages receive Raskin only once every two to three months, sometimes even less often, due to logistical constraints. In 2013, as part of the compensation offered for the fuel price increase that year, it was decided that Raskin was to be distributed 15 times a year through 2014.

Notes

reduces households' education-related expenditure and contributes to long-term poverty reduction by promoting greater school attendance. At the same time, however, it only benefits households with children of school age, and thus does not extend to all households affected by energy price increases.

• **PKH—the conditional cash transfer:** In 2007, the government launched Program Keluarga Harapan (PKH, or The Hopeful Family Program). PKH targets households at the bottom 7-10 percent (considered as ‘very poor’) including at least one of the following: a pregnant mother; children under the age of 6; elementary school children (aged 7-12); or junior secondary school children (aged 12-15). PKH households need to ensure that pregnant mothers visit a health care centre at least four times during their pregnancy; that children under six visit a health clinic to measure their weight and height as well as to receive vitamins and scheduled immunization; and that school-aged children are enrolled in schools and maintain a minimum 85 per cent attendance each month. The program covers 2.4 million households, and will expand to cover 3.2 million households in 2014. Households will receive up to IDR 2,800,000 per year (US$ 280), depending on how many family members are enrolled in the PKH, and if they fully comply with all conditions for eligibility. As with Jamkesmas and the BSM, the PKH can offer short- and long-term benefits to households affected by fuel subsidy reforms, but this will not include all households affected by energy price changes. The biggest challenge to its expansion is disparity in supply-side availability. In remote areas, mainly in the Eastern part of the country, poor households may live in an area without adequate access to transport and where the closest health facility is more than 50 km away.

**Concluding thoughts**

Indonesia needs to continue reforming its energy policy while still in the midst of improving and expanding its welfare policies. Energy subsidies have consumed a significant portion of the national government’s budget. Fuel price increases have created some room for the government to spend on other things, from infrastructure to social welfare programs. But the yawning gap between economic and domestic fuel prices continues to distort the signal of scarcity and lead to overconsumption. And, as a non-targeted instrument, energy subsidies continue to benefit the poor less than the rich, who consume more fuel.

There is still much work to do. The government needs to set out a comprehensive plan for energy sector reform aiming to reduce dependency on fossil fuels. Subsidy cuts should be just one part of the larger energy sector reforms, the purpose of which should be to narrow the gap between domestic and international fuel prices, and to make prices more efficiently reflect scarcity. The extra budget resources derived from fuel subsidy cuts could be reallocated to three broad areas: infrastructure development, public transport facilities and further improvement of social welfare programs. The main social welfare programs in need of greater government funding concern health, nutrition and education. But despite the challenges it faces, Indonesia’s government does not need to “reinvent the wheel”. It has already developed many instruments that can serve as the building blocks of a more effective and efficient future welfare system.
Making energy policy work for economic growth: time for a bold change in direction
Zamroni Salim, PhD, the Economic Research Centre of the Indonesian Institute of Sciences

Indonesia’s economy has performed relatively well in the past five years, enjoying steady growth of around 6%. That is an impressive figure when seen in the context of a still-struggling world economy and is something to be thankful for. Nevertheless, is this this rate of growth sufficient or not? Taking into account Indonesia’s existing macroeconomic situation (i.e. an inflation rate that is under control, a low unemployment rate and a sufficiently favourable exchange rate), our growth could still be accelerated and made more sustainable.

Budget Deficit and Current Account

Economic health in the real and banking sectors is a prerequisite for high and sustainable economic growth. The real sector is where different fiscal, monetary and banking policies intersect. Alongside broad macroeconomic policy, the real sector also needs a clear sectoral policy. An energy policy capable of supporting the real sector productively is a key part of achieving sustainable economic growth. In Indonesia, this does not only concern the fuel subsidy and its cost, but also how to allocate energy resources most effectively for the needs of domestic industry and consumers.

Indonesia is no longer a net exporter of oil. Today, it has become a net importer. Nevertheless, it is still trapped in a cycle wherein oil dominates the economy across various dimensions. This is evident from the role that oil plays (i.e. the price of Indonesian crude, oil and gas production) as the main determinant in the formulation of the state budget. Energy policy has direct impacts on Indonesia’s macro-economy, including aspects such as inflation, wage rates, employment, the trade balance and the state budget. Inflation in particular is significantly affected by fuel subsidy reform: increased fuel prices will lead to a general price increase in a relatively short time.

Budgetary funds are allocated to fuel subsidies every year based on the volume of fuel that the government estimates people will consume. But the budget always misses the target. In practice, the amount consumed is always higher than the predicted volume. In 2013, for example, the volume of fuel subsidy and biofuel was initially set at 46.01 million kiloliters, while the volume of 3kg-cylinder liquid petroleum gas (LPG) was 3.86 million metric tonnes. The volume for fuel and biofuels was then revised to 48 million kiloliters, while the volume for 3kg cylinder LPG was revised to 4.39 million metric tonnes (Fiscal Note and State Budget Proposal 2014, pp. 4-103).

Budget allocation data also reveals that subsidies today are focused on consumption and that this trend has only become more pronounced with time. Consumption subsidies (largely for fuel and electricity) made up 77.8 per cent of the total subsidy allocation in 2007, and by 2013 this amount had increased to 86.1 per cent. Subsidies focused on more productive activities (such as for fertilizer, seeds, credit programs, etc.) amounted to only 22.2 per cent of the total allocation in 2007 (Key State Budget Statistics 2005-2010, p.12), and by 2013 this had decreased to 13.9 per cent (Fiscal Note and State Budget Proposal 2013, p.11). The question is: how do the state’s finances cope with these badly designed subsidies?

Over the past five years, there has been trend of increasingly large budget deficits, from IDR 4.1 trillion (0.08 per cent of GDP) in 2008 to a dramatic 224.2 trillion (2.38 per cent of GDP) in 2013 (Fiscal Note and State Budget Proposal 2014, p.2). It is predicted that the deficit will reach as much as 154.2 trillion in 2014, or 1.49 per cent of GDP (Fiscal Note and State Budget Proposal 2014, p.2). The fuel subsidy...
is frequently considered to be the source of the state’s budget deficit. It is clear that Indonesia’s budget deficit can only be reduced by either increasing Indonesia’s income or by reducing some of its inefficient budgetary expenditure.

In addition to budget deficits, the national economy in the past two years has been continually shadowed by a current account deficit of 3 per cent of GDP on average. In Q4 2013, the current account deficit was approximately US$ 4 billion (1.98 per cent of GDP) (Bank of Indonesia, 2014). The size of this deficit is caused mainly by the high level of oil and gas imports that reached US$ 45.27 billion in 2013. In 2014, the current account deficit is predicted to reach 2.5 per cent of GDP (Ministry of Finance, 2014). Among the main causes are the high level of imports, especially fuel, and a fall in demand of some of Indonesia’s priority export commodities.

In fact, the fuel subsidy would cause no problem if it were distributed effectively to the rightful beneficiaries: the poor. If the fuel subsidy were to go only to the poor, then over-consumption, along with its implications, could be avoided. As for budget and current-account deficits, they could be reduced or overcome if the government were serious about implementing an energy policy that is concerned not only with fuel over-consumption, but also with the development and deployment of alternative energy.

Problems in Energy Management in Indonesia

How is energy policy in Indonesia implemented? The government usually employs energy policy to control energy demand, rather than energy supply. For example, it seeks to limit fuel consumption by rich people, and distributes fuel coupons to the poor. This kind of policy will face growing difficulties, however, given that consumers both rich and poor have grown accustomed to subsidized energy. In the past, such changes—especially subsidy reform—have sparked a variety of angry responses, including protests and riots.

Another fact of some concern is that subsidies in Indonesia are mostly provided for consumption, not production-oriented activities. Unlike developed countries that tend to provide subsidies and other aids to the production side (such as farmers and the agricultural sector), Indonesia’s subsidies provide consumption-oriented support, such as the fuel subsidies, social welfare programs like Rice for the Poor (Raskin), cash transfers and so on.

In the field of petroleum exploration and exploitation, Pertamina, our state-owned company, has become a secondary player in its own country, both for oil and gas. At the upstream level, Pertamina cannot expand production due to a number of factors, including often-inaccurate exploration data and insufficient investment and regulatory support. At the downstream level, a lack of development in energy infrastructure has led to a situation where oil-product output is likely to remain stagnant or even decline from year to year, increasing Indonesia’s reliance on imports.

So far, the government has focused on increasing crude oil and gas exports and importing refined oil and gas products. Meanwhile, the production of electricity is often hampered by the difficulties in supplying coal and gas to power plants. Even with the Domestic Market Obligation (DMO) policy in accordance with Law No.22/2001, which obliges oil and gas companies to devote 25% of their production to domestic consumption needs, that quota itself is way below what is needed to afford energy demand. In this respect, Indonesia has not adequately prioritized the development of new and renewable energy (NRE).

New and Renewable Energy (NRE)

Nevertheless, Indonesia has many opportunities to meet at least some of its energy needs with new and renewable energy technologies.

Indeed, there is already a strong legislative foundation of energy policy in this area, in the form of a number of provisions for expanding the use of renewable energy, including derivative regulations and an energy policy roadmap for energy diversification, including the use of renewables. Now, we also have a roadmap for our future energy mix: Vision 25/25. Indonesia’s energy policy is summarized in Act No.30/2007 on Energy, and other regulations on electricity and geothermal, including Presidential Regulation No.5/2006 and other derivative regulations. The aforementioned Presidential Regulation states that Indonesia targets a 17% share of new and renewable energy in its primary energy mix by 2025, made up of a mix of biofuels, biomass, nuclear, hydro, solar, wind, geothermal, and liquid coal.

Indonesia also has abundant alternative energy resources that can be developed, such as solar, biomass, hydropower, geothermal, biodiesel, and bioethanol.
But much more could be done to turn Indonesia’s ambitions and potential into reality. The target set forth in Presidential Decree No.5/2006, and then later in Vision 25/25, actually shows Indonesia still relying heavily on unrenewable fossil fuels in its energy policy. And no concrete steps have taken by the national or local government to ensure that the targets will be reached, despite the mandate in the Energy Law. Government incentives to business actors and consumers are far from sufficient. The two forms of support for the industry mentioned in the Energy Law — funding for research and development and the obligation to use domestic human and technological resources where available — have still not been enough for the industry to achieve its economic potential.

Final thoughts

Energy policy in Indonesia is still not on-track, and many reforms remain stuck at the discussion stage. Energy policy should be directed toward reallocating and restructuring the fuel subsidy to productive sectors so that budget deficits can be avoided and the current account returns to surplus. In addition, energy policy should be directed to create new and renewable energy at an economic scale, to fulfil the need for domestic energy at affordable prices. Real support, including various production incentives, must be created for the new and renewable energy industry sector. The continued absence of political will and concrete government support in handling Indonesia’s energy issues will lead to growing deficits in state budget and current account alike. On the other hand, if energy policy is implemented properly, Indonesia could achieve a much higher level of sustainable economic growth.
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outcomes for our societies and our planet.