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Initiative

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Sustainable  
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développement  
durable

# RESEARCHREPORT

## *Indonesia's Fuel Subsidies: Action plan for reform*

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## About GSI

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## *Table of Contents*

1.0 Executive Summary.....	1
1.1 Current Status of Gasoline Subsidy Reform.....	1
1.2 Recommendations for Reforming Fuel Subsidies.....	2
1.2.1 Windows of Opportunity for Subsidy Reform.....	2
1.2.2 Building upon Previous Research and Preparation.....	4
1.2.3 Fuel Pricing Reform.....	4
1.2.4 Restricting Consumption of Premium .....	5
1.2.5 Communication .....	6
1.2.6 Complementary Policies and Support Measures.....	8
1.2.7 Developing Alternative Gas-Based Transport Fuels.....	9
2.0 Brief Background on Indonesia's Fuel Subsidies .....	12
3.0 Government Roles and Responsibilities .....	14
3.1 Ministries and Agencies .....	14
3.1.1 Ministry of Energy and Mineral Resources and Directorate General of Oil and Natural Gas.....	14
3.1.2 Coordinating Ministry for Economy .....	15
3.1.3 Ministry of Finance.....	15
3.1.4 National Energy Council (Dewan Energi Nasional) .....	15
3.1.5 Bappenas .....	16
3.1.6 BPH Migas .....	16
3.2 Parliament .....	16
3.2.1 Process for Developing the State Budget .....	16
3.2.2 Non-Budgetary Responsibilities.....	18
3.2.3 Party Positions Toward Fuel Subsidy Reform.....	18
4.0 Research Inputs for the Government's Reform Plans .....	20
4.1 Studies by an Independent Research Consortium.....	20
4.2 Study by the National Energy Council (DEN) .....	21



5.0 Challenges and Opportunities to Fossil-Fuel Subsidy Reform .....	22
5.1 Political Considerations: Stakeholder Positions on Fuel Subsidy Reform.....	22
5.1.1 Industry .....	22
5.1.2 Civil Society .....	25
5.1.3 Addressing the Political Challenges .....	29
5.2 Practical Considerations: Implementing Consumption Restrictions on Premium and Developing Alternative Fuels .....	30
5.2.1 Restricting Consumption of Premium .....	30
5.2.2 Deploying CNG and LGV as Alternative Transport Fuels.....	33
5.2.3 Pilot Projects.....	37
5.2.4 Implementation Challenges.....	37
5.3 Fuel Pricing Reform.....	40
5.3.1 The Government's Plan to Raise the Price of Subsidized Gasoline .....	40
5.3.2 Pricing Mechanisms.....	41
6.0 Conclusion .....	43
References .....	45



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## Abbreviations

APBN	Anggaran Pendapatan dan Belanja Negara (State Budget)
Bappenas	Badan Perencanaan Pembangunan Nasional
BLSM	Bantuan Langsung Sementara Masyarakat (Cash Transfer)
BLT	Bantuan Langsung Tunai (Cash Transfer)
CNG	Compressed natural gas
DEN	Dewan Energi Nasional (National Energy Council)
Ditjen Migas	Directorate of Oil and Natural Gas
DPR	Dewan Perwakilan Rakyat (House of Representatives)
FSRU	Floating Storage and Regasification Unit
Gaikindo	Association of Indonesian Automotive Industries
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (German International Cooperation Agency)
GSI	Global Subsidies Initiative
Hiswana Migas	National Oil and Gas Retailers Association
IESR	Institute of Essential Services Reform
IIEE	Indonesian Institute of Energy Economics
IISD	International Institute for Sustainable Development
ITB	Institute Technology Bandung
LGV	Liquid gas for vehicles
LPG	Liquid petroleum gasoline
MEMR	Ministry of Energy and Mineral Resources
MMSCFD	Million Standard Cubic Feet per Day
PLN	Perusahaan Listrik Negara (Indonesian State Utility)
RAPBN	Proposal of the State Budget
RFID	Radio Frequency Identification
UGM	University of Gajah
UI	University of Indonesia



## 1.0 Executive Summary

Indonesia spent IDR164.7 trillion (US\$18.1 billion) subsidizing fuel products in 2011, of which IDR76.5 trillion (US\$8.4 billion) was spent subsidizing gasoline.<sup>1</sup> The rising cost of subsidies is placing a huge burden on limited public resources and presents a fiscal liability, vulnerable to increases in the international price of oil. Fuel subsidies are also known to be regressive and a highly inefficient tool for reducing poverty and meeting the country's development needs (Global Subsidies Initiative [GSI] & Institute of Essential Services Reform [IESR], 2011).

The government has made progress toward reform. It has significantly reduced kerosene subsidies with its kerosene-to-LPG conversion program. In January 2012, the government announced plans to reduce subsidies by restricting access to subsidized gasoline and developing gas-based alternative transport fuels, to be implemented by April 2012; and, as of March 2012, the government has announced a plan to raise the price of subsidized gasoline ("Premium") by IDR1,500 per litre, which is equivalent to one third of the current price.

This action plan is an output from a project<sup>2</sup> whose objective was to assist the Indonesian government to implement fossil-fuel subsidy reform and create a sustainable network to support it. The project mapped the positions of major stakeholder groups based on consultations and surveys conducted in 2011. It also provided new analysis of the practical challenges facing the government's specific implementation plans to reduce gasoline subsidies, as announced in January 2012. Finally, the action plan draws on both research and consultations to provide a set of recommended actions for progressing fuel subsidy reform.

While this action plan recommends that subsidies for fossil fuels (gasoline, diesel, liquid petroleum gasoline [LPG] and kerosene) should be included in a reform package, the government's current reform plans are focused on gasoline only. For that reason, the parts of this action plan that analyze the government's implementation plan are limited in focus to gasoline subsidies. In addition, the government is also developing separate plans to reduce electricity subsidies. Like fuel subsidies, electricity subsidies are a very inefficient and poorly targeted measure for supporting the poor, and reforming electricity subsidies involves complex issues, including the need to improve energy access for poor and rural households, which warrant careful consideration. Electricity subsidies are outside the scope of this project and thus no recommendations are included in this action plan.

## 1.1 Current Status of Gasoline Subsidy Reform

The government's current plans to reduce fuel subsidies are focused on the subsidized gasoline product "Premium," one of four main transport fuel products supplied in Indonesia. Premium is predominantly produced and supplied by Pertamina (Indonesia's national oil company). The prices of Premium and Solar (diesel) are subsidized and are changed only on an ad-hoc basis, at irregular intervals; whereas the prices of Pertamax and Pertamax Plus are updated regularly to reflect international oil prices (e.g., Pertamina updates its prices twice per month).

<sup>1</sup> US\$1 = IDR9,150 (March 2012 conversion rate)

<sup>2</sup> The project, Supporting Fuel Subsidy Reform in Indonesia, was a collaboration of the International Institute for Sustainable Development (IISD), the Indonesian Institute of Energy Economics (IIEE), David Braithwaite of Q Energy, and the Institute of Essential Services Reform (IESR); and funded by the United Kingdom's Prosperity Fund. Throughout the project (July 2011 to March 2012), the team convened many workshops, focus groups discussions, surveys and interviews with government officials, the research community, industry, public transport operators, civil society, parliamentarians and the media to discuss issues related to fuel subsidy reform.



FUEL PRODUCT	RON* NUMBER	PRICE PER LITRE**	LAST PRICE CHANGE	QUANTITY SOLD BY PERTAMINA (2011)
Pertamax Plus	RON 95	IDR8,750	2012	(unpublished)
Pertamax	RON 92	IDR8,350	2012	1.4 million kilolitres
Premium	RON 88	IDR4,500	2008	25.5 million kilolitres
Solar (diesel)	--	IDR4,500	2009	14.5 million kilolitres

\*RON = Research Octane Number

\*\* Prices as of February 2012

Sources: Media Indonesia (2012); Kompas (2012b)

In addition, ethanol blends of Premium ("Bio Premium") and Pertamax ("Bio Pertamax") are sold at some filling stations, but are not widely available. Both of the subsidized fuels, Premium and Solar, are low-grade fuels that do not allow vehicles to comply with the Euro 2 vehicle emissions standards<sup>3</sup> proposed by the government for adoption in 2007 (Asia Development Bank, n.d.). Most modern cars run on RON 92 or higher octane fuel, but subsidies for Premium are encouraging Indonesian motorists to use lower-grade fuels which, in addition to creating higher pollutants, can damage vehicle engines, particularly more modern engines.

On January 30, 2012, the government announced a plan to reduce the subsidy on Premium, effective April 2012. The reform plan includes two components: i) prohibiting consumption of Premium by private 4-wheel vehicles in Greater Jakarta and official vehicles in the Java and Bali regions, and ii) the deployment of alternative, gas-based transport fuels: Compressed Natural Gas (CNG) and Liquid Gas for Vehicles (LGV),<sup>4</sup> with a target of converting 46,000 vehicles to CNG and 250,000 vehicles to LGV in the Java-Bali area by the end of 2012. The government aims to develop new infrastructure to support both components, including 55 CNG and 108 LGV filling stations in the Java-Bali area in 2012. The government's plans are focused on the Java-Bali area initially and then will be rolled out nationwide at a later stage.

Then, in February 2012, the government announced an additional plan to consider raising the price of Premium as a short-term measure for reducing gasoline subsidies, while plans for implementing a restriction on the consumption of Premium and developing alternative fuels continue to progress. As of mid-March 2012, the government had announced that the price of Premium will increase by IDR1,500 per litre (one third of the current price) in April 2012. However, as this report was going to print, the government delayed its plans to raise prices on Premium in the midst of public protests.

## 1.2 Recommendations for Reforming Fuel Subsidies

### 1.2.1 Windows of Opportunity for Subsidy Reform

The government has strong fiscal incentives for reducing its subsidy expenditures in the short term: to maintain the fiscal deficit at under 3 per cent and to reduce the slow down in economic growth (Ministry of Finance, 2012). However, the government has a small window of opportunity to implement subsidy reforms prior to the 2014 elections. Inflation will be higher during the third quarter of 2012 due to Ramadan and the holiday season in July-August. Then, in the second half of 2013, if not earlier, the government will switch into campaign mode, at which time fewer policy decisions will be taken and the government will be highly concerned about the impact that any reforms will have on its popularity.

<sup>3</sup> There are five European standards for vehicle emissions, starting with Euro 1 as the lowest standard, up to Euro 5. For more information about these emissions standards and their adoption in Asian countries, see (Asia Development Bank, n.d.).

<sup>4</sup> LGV is a mixture of propane and butane, and is generally referred to as liquefied petroleum gas (LPG) in other countries.

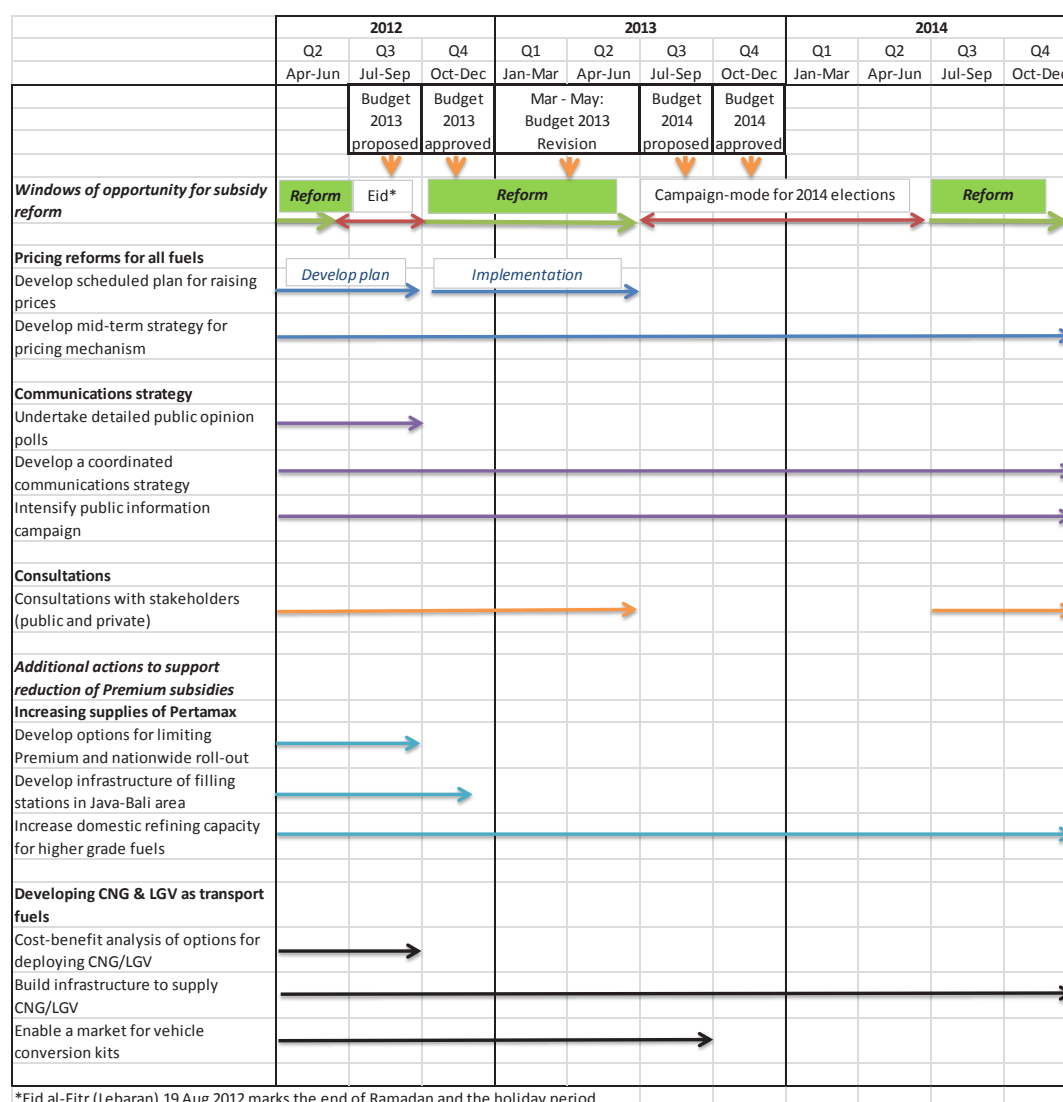




The government has announced it will implement subsidy reforms in April 2012 through an increase in gasoline prices. It should also be developing plans now, for the second window of opportunity between September 2012 and April 2013 (see Figure 1). There are also some actions that, if started earlier, can continue through the campaign period, such as the development of infrastructure, low-level policy research and preparations, and consistent messaging through information campaigns. If a strong government is elected in 2014, then the early period of its term presents a good opportunity for initiating new subsidy reform measures, while it enjoys post-election popularity.

However, with elections there are also risks that political parties will turn subsidy reform into a campaign issue. Opposition parties will take any opportunity to intensify its criticism of the government's actions, and the government could feel pressure to backtrack on its reform efforts by lowering prices to win popularity, especially if the international oil price drops.

**FIGURE 1: ACTION PLAN FOR GASOLINE SUBSIDY REFORM IN INDONESIA, 2012-2014**





## 1.2.2 Building upon Previous Research and Preparation

The section below recommends actions the government can take between now and 2014 to support the progress of fuel subsidy reform. These actions build upon the research and preparations that have already been undertaken by the government task forces established in 2011 and in 2012, University research teams and the National Energy Council. The roles and key findings of each are summarized in sections 3, 4 and 5 of this action plan.

## 1.2.3 Fuel Pricing Reform

The most effective way of reducing and phasing out subsidies is to reform pricing policies for fuel products. Getting fuel prices right sets the market signals to incentivize the changes in energy supply and demand that the government is trying to achieve. Reforming the pricing policies for Premium, Solar, CNG and LGV can incentivize:

- Oil refiners (particularly Pertamina), to invest in upgrading or developing new refineries to produce higher-grade gasoline;
- Consumers, to shift from lower-grade fuels to alternatives, such as higher-grade gasoline or gas-based fuels CNG and LGV; and
- Energy, suppliers to develop the resources and infrastructure needed to supply increased volumes of CNG and LGV.

In addition, fuel prices for LPG (for domestic or other uses) and kerosene should also be revised to reduce market distortions that encourage fuel diversion (e.g., diverting subsidized 3 kilogram LPG cylinders into larger cylinders for vehicles) or adulteration (e.g., using subsidized kerosene to adulterate diesel).

Pricing policies are also quicker and easier to implement than, for example, the government's program to develop alternative gas-based transport fuels. However, public reaction to price reforms can be more difficult to manage. To reduce public opposition, any negative impacts for poor and vulnerable groups from fuel price rises need to be effectively mitigated through social support schemes, and a clear and well coordinated public communications strategy needs to be deployed.

Action	Develop a scheduled plan for raising fuel prices
Description	<p>More analysis and the development of detailed options are required:</p> <ul style="list-style-type: none"><li>▪ To understand the cost structure of all transport fuels across their supply chains, for example CNG, for which there is currently no publicly available information (information is held by companies)</li><li>▪ To understand the options for revising fuel prices and impacts for each, including impacts on inflation and the economy, consumers (particularly the poor or vulnerable), suppliers, and fuel substitution and diversion practices</li><li>▪ To develop an implementation plan for sequencing the gradual change in pricing and rolling out support measures (compensation, transition measures, complementary transport policies, etc.).</li></ul>
Actors	Ministry of Energy and Mineral Resources (MEMR), Ministry of Finance, Coordinating Ministry of Economy, Ministry of Transport, BPH Migas, oil and gas companies, research institutes
Timing	The government should start preparations now to propose a better-developed reform plan when a second opportunity to raise prices materializes later in 2012.
Keys for success	<ul style="list-style-type: none"><li>▪ Preparation, based on detailed options and scenario analysis, and experience from other countries</li><li>▪ Compensation or increased social spending to support poor and vulnerable consumers' transition to higher fuel prices (more details below)</li><li>▪ Clear information campaigns to inform consumers of the pricing changes</li></ul>



Simply raising prices to a new fixed level will not be sufficient to eliminate subsidies. As international oil prices fluctuate, subsidies can re-emerge when prices peak, or the government can be pressured to lower prices when the international price drops. The ultimate goal of the government's reform plans should be market-based prices, with no intervention from the government.

<b>Action</b>	<b>Develop a mid-term strategy to introduce an independent gasoline pricing mechanism</b>
<b>Description</b>	<p>With an ad hoc pricing system, the government must use political capital each time it raises gasoline prices. Automated pricing systems (for example, where prices are based on a formula linked to the international price) can help transition towards longer-term deregulation of the fuel retail market. And with an automated pricing mechanism, there is no need for government to expend political capital every time the prices need to be raised, because prices are adjusted by an independent and transparent system.</p> <p>There is a range of automated pricing mechanisms that can be adopted. More detailed analysis is needed to determine the appropriate mechanism for Indonesia.</p>
<b>Actors</b>	MEMR, Ministry of Finance, Coordinating Ministry of Economy, Parliament, BPH Migas
<b>Timing</b>	Mid-term strategy (within 2–5 years)
<b>Keys for success</b>	<ul style="list-style-type: none"><li>• Identification of a model for price adjustments that is not subject to political interference</li><li>• Initiate a national dialogue to develop public understanding of the benefits of a staged transition towards prices set by international oil markets rather than by government, and to develop a specific set of options for Indonesia</li></ul>

#### 1.2.4 Restricting Consumption of Premium

Reducing gasoline subsidies by implementing a restriction on the consumption of Premium will increase demand for the higher-quality, non-subsidized gasoline products Pertamina and Pertamina Plus.

<b>Action</b>	<b>Develop a range of detailed options for capping the volume of Premium and a nationwide roll-out plan</b>
<b>Description</b>	<p>A range of other options was considered prior to the government's 2012 announcements to cap the volume of Premium by forbidding sales to private 4-wheel vehicles and official vehicles in the Java-Bali area. These options included restricting access to Premium by region, by vehicle type (e.g., cars newer than a certain year), by consumer (e.g., public transport or private motorists) or a combination of these.</p> <p>More detailed analysis for each of these options—including how it should be designed, the impacts for consumers, and a nationwide implementation plan—should be prepared to enable informed decision-making.</p>
<b>Actors</b>	MEMR, Ministry of Finance, Coordinating Ministry of Economy, BPH Migas, Pertamina
<b>Timing</b>	Next 6 months
<b>Keys for success</b>	<ul style="list-style-type: none"><li>• Detailed analysis of the options for reducing the volume of Premium, including the impacts for consumers, and pre-requisites for national implementation. Analysis should include consultations with stakeholders.</li><li>• An informed decision on the best option for reducing the volume of Premium</li><li>• A clear implementation plan that outlines what preparations (infrastructure investments, etc.) are required and a feasible timeline, including a staged roll-out plan if necessary</li></ul>



Action	Develop the infrastructure capacity of filling stations to supply increased volumes of Pertamax
Description	<b>Switching from Premium to Pertamax:</b> Nationwide, approximately 2,000 filling stations do not have the capacity to supply increased quantities of Pertamax. Larger stations can, with some preparation, switch the use of storage tanks from Premium to other gasoline products. However, some smaller stations have only two storage tanks (one for gasoline and one for diesel), and will require new storage and distribution facilities to supply Pertamax. In the Java-Bali area, 687 filling stations are in the process of switching to Pertamax, but 295 filling stations still need new investments to develop the necessary facilities.
Actors	MEMR, BPH Migas, operational team led by Ministry of Industry, Pertamina, oil companies, filling station owners (particularly Pertamina's dealers), banks and potential investors.
Timing	The estimated time needed to prepare or build new storage tanks for Pertamax is one to three months per filling station.
Keys for success	<ul style="list-style-type: none"><li>Government funding and private investment. Although the government has announced that funding will be made available through soft loans for infrastructure investment, the owners/operators of Pertamina's filling stations need to be convinced of the financial return for their investment.</li><li>Other transport fuels retailers (besides Pertamina) are likely to build new filling stations to meet the increased demand for non-subsidized gasoline if either: i) the government demonstrates its commitment to implement the consumption restriction for Premium or ii) the price gap between Premium and Pertamax is reduced (for example, closer to IDR1,500 or less).</li></ul>

Action	Increase domestic refining capacity for higher-grade fuels
Description	Restricting the consumption of subsidized gasoline will increase demand for Pertamax, for which Pertamina has limited refining capacity (two out of six of Pertamina's refineries produce Pertamax). Pertamina has announced a plan to increase its refining capacity to partially meet the increase in demand by 2014, and fully by 2017. In the meantime, fuel imports will need to be increased.
Actors	MEMR, BPH Migas, operational team led by Ministry of Industry, local government, Pertamina, oil companies, banks and potential investors
Timing	Building new refineries or upgrading existing refineries will take between two and four years.
Keys for success	<ul style="list-style-type: none"><li>Private investment: Investors will need to be confident that the government's plans will be implemented and the government is committed to establishing market pricing for transport fuels within the next two to three years.</li><li>The development of new refineries will require access to land and permits.</li></ul>

### 1.2.5 Communication

In consultation with a broad range of stakeholders during this project, the government was widely criticized for a lack of outreach and consultation on subsidy reform, which many believe has led to an erosion of public support.

In previous years, when the government has raised subsidized gasoline prices, it has had a coordinated communications plan involving all relevant ministries. This included, for example, booklets developed by the Ministry of Information for all relevant officials outlining the government's key messages about the reform plans. However, government officials consulted during this project admitted that, in the run-up to the 2012 reform, there is a lack of coordination among key government ministries to convince the public of the need for gasoline subsidy reform, and inform them how that reform will be carried out.



<b>Action</b>	<b>Undertake detailed public opinion polls</b>
<b>Description</b>	A few public opinion polls, including surveys undertaken for this project, have shed some light on how Indonesians view current fuel policies and their positions on the government's reform strategy. These polls are modest in scope, however, and there much more detailed information on public opinion is needed. A better understanding of public opinion, encompassing a broad range of Indonesian society (i.e., different income groups, urban versus rural dwellers) will enable the government to make a much more convincing case for its reform plans.
<b>Actors</b>	Coordinating Ministry of Economy, Ministry of Information
<b>Timing</b>	Next two to six months
<b>Keys for success</b>	<ul style="list-style-type: none"><li>• Surveys that reach a broad spectrum of Indonesian society</li><li>• Focus group discussions that allow for in-depth understanding of public opinion</li></ul>

<b>Action</b>	<b>Develop a coordinated communication strategy among government agencies</b>
<b>Description</b>	To gain public confidence and support, it is important that the government makes a clear and convincing case for reform, coordinating the various arms of the government so that messages are consistent.
<b>Actors</b>	MEMR, Ministry of Finance, Coordinating Ministry of Economy, Ministry of Information, BPH Migas, Pertamina, Dewan Perwakilan Rakyat (DPR) (House of Representatives)
<b>Timing</b>	Starting immediately and to be continued throughout the government's reform efforts
<b>Keys for success</b>	<ul style="list-style-type: none"><li>• Leadership from the Ministry of Information on designing messages</li><li>• Agreement across different parts of government on the main elements of the reform strategy and rationale for reform</li><li>• Discipline among government spokespeople on delivering key messages</li></ul>

<b>Action</b>	<b>Intensify the public information campaign to explain the process and benefits of fuel subsidy reform</b>
<b>Description</b>	Fuel subsidy reform remains unpopular with much of the public. Resistance stems in part from a lack of confidence in the government's reform strategy and in the government's commitment to deliver services to alleviate reform impacts on the poor. Winning public support requires an ambitious outreach campaign that promotes the benefits that will flow from fuel subsidy reform for the Indonesian economy as a whole, and the poorer segments of society in particular.
<b>Actors</b>	MEMR, Ministry of Finance, Coordinating Ministry of Economy, Ministry of Information, BPH Migas, Pertamina, DPR
<b>Timing</b>	Starting immediately and to be continued throughout the government's reform efforts
<b>Keys for success</b>	<ul style="list-style-type: none"><li>• Clear and convincing descriptions of the reform process and associated benefits, including a holistic plan to provide better services to all those affected by the reform process</li><li>• Widespread dissemination, particularly on television, which has proven the most effective means of reaching the public</li><li>• Tailored information campaigns for influential and vulnerable groups</li></ul>



### 1.2.6 Complementary Policies and Support Measures

The government is currently developing proposals for redirecting the savings from the planned subsidy reduction towards compensation and other support measures. As of March 2012, the government proposal is to maintain the fiscal deficit within 3 per cent and to redirect expenditure to four key areas (Ministry of Finance, 2012):

1. Implementation of a cash transfer (termed BLSM, based on the previous program, the Bantuan Langsung Tunai [BLT]): 18.5 million households to receive IDR150,000 (US\$16.50) each over 9 months; total expenditure: IDR25.6 trillion
2. Public transport subsidies; total expenditure: IDR5 trillion
3. Increase expenditure on productive activities such as infrastructure development (increasing electricity access), food security and disaster mitigation; total expenditure: IDR30 trillion
4. Increased expenditure on education so that it remains 20 per cent of the State budget (including support for poor students); total expenditure: IDR6 trillion

It is important that government communicate these plans to the public, to increase awareness about the benefits of subsidy reform and what the public can expect to receive in return. The government should consider consulting affected groups on the priorities for redirecting subsidy expenditure to effectively respond to the needs of poor and vulnerable groups and to increase support and buy-in for the reform plans.

<b>Action</b>	<b>Consult stakeholders to set priorities for redirecting subsidy expenditure towards social services or other programs</b>
<b>Description</b>	<p>Throughout the project consultations, many civil society groups expressed concern that the BLT cash transfer was not an effective tool for reducing poverty, nor was it the preferred compensation mechanism of most survey respondents. Stakeholders raised a number of alternative options for prioritizing government spending, including social welfare and poverty reduction programs (education and health were the favoured priorities), general infrastructure, agriculture, energy diversification, environmental protection and disaster management.</p> <p>There is also concern about the government's current plans, specifically that the cash transfer for poor households will not be implemented until three months after the fuel price increase, leaving poor consumers with no support to transition to higher gasoline prices and effectively undermining the very purpose the cash transfer is meant to serve.</p>
<b>Actors</b>	Bappenas, social impact analysis team led by Ministry of Political, Legal and Security Affairs, MEMR, Coordinating Ministry of Economy, DPR
<b>Timing</b>	Consultations should start immediately and take place throughout the development of the subsidy reform plan.
<b>Keys for success</b>	<ul style="list-style-type: none"><li>• Engaging with a broad set of stakeholders, and particularly those that are currently resistant to reform, in order to tailor complementary policies to groups that will be especially impacted by higher fuel prices</li><li>• Ensuring that complementary policies are introduced quickly and effectively enough to help offset the impacts of higher fuel prices on vulnerable consumers</li></ul>



The views of companies toward the withdrawal of fuel subsidies tend to be polarized, depending on which industry sector they are operating in. This project undertook initial consultations with a range of companies, including: oil refiners, importers and suppliers, oil consumers (e.g., hauliers, mining companies), competing energy industries (CNG, LNG and biofuels suppliers) and car manufacturers.

<b>Action</b>	<b>Develop a better understanding of, and mitigate the impacts on, companies across the supply chain</b>
<b>Description</b>	The government should identify businesses that will be adversely affected by fuel price reform and develop, in consultation with the private sector, transition plans to minimize the impact of subsidy reform.
<b>Actors</b>	MEMR, Coordinating Ministry of Economy, BPH Migas, DPR, industry associations and companies
<b>Timing</b>	Consultations should start immediately and take place throughout the development of the subsidy reform plan.
<b>Keys for success</b>	<ul style="list-style-type: none"><li>Engaging with a range of actors in the private sector to gain a better understanding of the impacts that different reform options will have on industries and companies</li><li>Preparation of adequate transition or mitigation plans that respond to genuine concerns raised by companies, particularly those that will be most affected by the reforms</li></ul>

### 1.2.7 Developing Alternative Gas-Based Transport Fuels

In addition to the recommendations to revise fuel pricing policies, the action plan also outlines challenges and recommendations for the government's plan to develop alternative, gas-based transport fuels CNG and LGV in the Java-Bali region. The government has ambitious plans to develop the necessary infrastructure to convert 46,000 vehicles to CNG and 250,000 vehicles to LGV by the end of 2012. However, there is not yet any detailed plan on how the program could be rolled out nationwide, or what the time frame for full implementation might be.

<b>Action</b>	<b>Cost-benefit analysis of options for extending the program beyond current plans for Java-Bali</b>
<b>Description</b>	The government needs to undertake a cost-benefit analysis of current CNG and LGV plans and possible options for extension. The analysis should assess the full cost of rolling out the program further in Java-Bali and in other regions, how it could be financed and what the non-subsidized price for final consumers would be. The analysis should also include an assessment of the regions in which it would be economical to extend the program (e.g., high users in densely populated areas) and any environmental benefits or impacts. This research would enable the government to then compare the costs of developing CNG and LGV transport fuels with alternatives, otherwise there is the possibility of substituting subsidized gasoline with another subsidized fuel. The analysis should also consider whether diversion of CNG and LGV to other uses, or existing use of natural gas and LPG to use in transport vehicles, might occur because of price differences.
<b>Actors</b>	MEMR, Dewan Energi Nasional (DEN) (National Energy Council), BPH Migas, operational team led by Ministry of Industry, Pertamina, research institutes
<b>Timing</b>	Next 6 months.
<b>Keys for success</b>	<ul style="list-style-type: none"><li>Well researched and informed planning for post-2012 expansion</li></ul>



Action	Build filling stations, and the necessary supporting infrastructure, to supply increased volumes of CNG and LGV
Description	<b>Developing new facilities for CNG and LGV:</b> The government needs to develop 55 CNG and 108 LGV filling stations in Java-Bali in 2012 to meet its targets. Currently, there are only eight CNG and ten LGV stations in Jakarta, and one CNG station in Surabaya. New distribution and transport infrastructure will be needed to supply the new CNG filling stations.
Actors	MEMR, BPH Migas, operational team led by Ministry of Industry, local government, Pertamina, Pertagas, oil companies, banks and potential investors.
Timing	The development of CNG and LGV infrastructure could take up to three years.
Keys for success	<ul style="list-style-type: none"><li>Government funding and private investment. Private investors need to be confident that the government is committed to implementing the new alternative fuels program and ensuring adequate supplies of CNG and LGV to the dealers.</li><li>The development of new infrastructure will require access to land and permits.</li></ul>

Action	Enable a market for vehicle conversion kits
Description	<p>Vehicles will need conversion kits in order to switch to gas-based fuels (CNG and LGV).</p> <p><b>Conversion kits need to be built to the requirements</b> of i) the Indonesian National Standard for pressurized natural gas conversion equipment on vehicles (for CNG converter kits) and ii) the Directorate General of Land Transport standard for LGV converter kits.</p> <p><b>Garages, conversion kits and technicians all need to be certified</b>, requiring a significant investment of human resources and time. In addition, technicians, filling station operators and drivers need information and training on safety precautions for handling gas-based fuels.</p>
Actors	Directorate General of Land Transportation, MEMR, BPH Migas, Dirgantara Indonesia, car manufacturers, garages, technical colleges
Timing	Car manufacturers have indicated that they can produce cars to run on CNG or LGV by 2014. Until then, conversion kits and associated certification schemes will be needed starting in 2012.
Keys for success	<ul style="list-style-type: none"><li>Companies that can supply converter kits to specification: The government has asked Dirgantara Indonesia (an aerospace company with an automotive manufacturing arm) to produce converter kits.</li><li>Converter kits can and should be imported from foreign producers to improve market competition.</li><li>Human resources will provide certification and training. A team of certifiers will need to be established to provide certification services (including routine inspections and monitoring) for garages, converter kits and technicians. An estimated 120,000 employees in Java and Bali will need training on the safe handling of CNG and LGV.</li><li>Cost recovery and affordability of converter kits: Kits cost between IDR10 million and IDR13 million (US\$1,095 to \$1,420) per unit. Market-based fuel prices would enable motorists to recover their conversion costs through consumption of cheaper, more efficient fuels. The government should revise its pricing policies (as per Action 1). An alternative would be for the government to provide one-off subsidies for converter kits through soft loans.</li><li>Car owners can get assurances from car manufacturers that the warranty for the vehicle will remain valid, provided conversion is carried out according to the government's specification.</li></ul>





The government is under significant fiscal pressure to reduce its mounting fuel subsidy bill. Having concentrated on the biggest component—gasoline subsidies—as the focus of its reforms, it has struggled to prepare a well developed and comprehensive plan for gradually reducing subsidies. In the first three months of 2012 alone, the government has announced two separate plans to reduce subsidies by April 2012. There are also gaps in the compensation measures proposed (e.g., cash transfers not being implemented until three months after the price increase). The result is increasing public dissatisfaction with the government's reform plans, and resulted in public demonstrations at the end of March 2012.

The government should be planning more strategically to revise its pricing policies for all fuels. This will align the market signals to support the government's objectives of reducing consumption of Premium and increasing supply and demand for alternative transport fuels, including higher-grade gasoline and gas-based fuels. If the government started preparations now, it would enable them to present a well developed plan to DPR to reform subsidies during 2012.

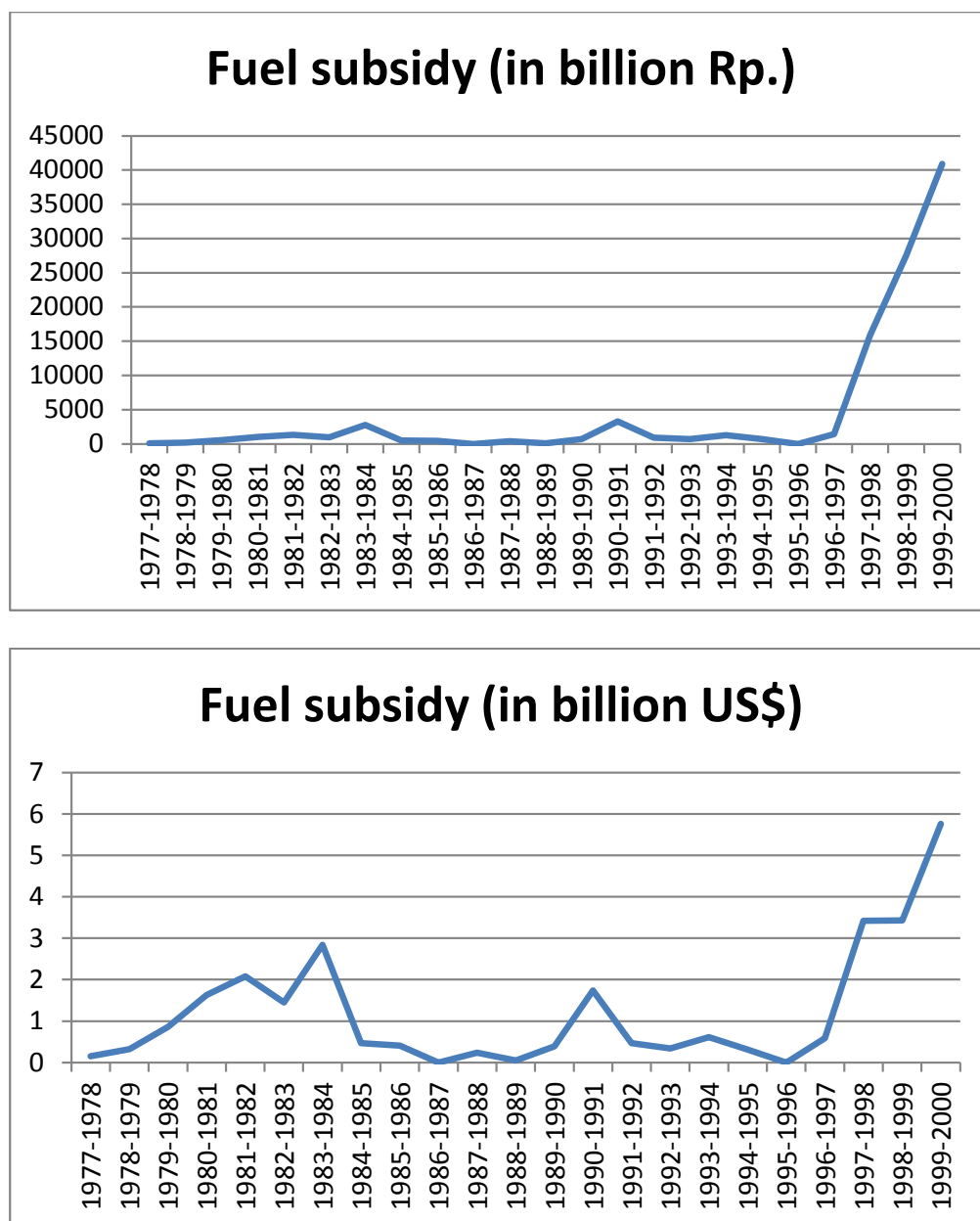
Most importantly, there is an immediate need for the government to improve its communications plan to convey clear messaging about the rationale and benefits of subsidy reform; the policy changes to be implemented, including a clear timeline for the reforms; and how the savings will be reinvested to meet the government's public policy priorities.



## 2.0 Brief Background on Indonesia's Fuel Subsidies

Indonesia has subsidized fuel since the country's independence in 1949 (Beaton & Lontoh, 2010, p. 2). In the 1960s, fuel subsidies accounted for about 20 per cent of the state budget (Hidayatullah, 2010). While the New Order Government (1966–1998) took steps to adjust the price of fuels, the reforms were temporary. Since the mid-1990s, fuel subsidies have significantly increased.

**FIGURE 2: FUEL SUBSIDIES DURING THE NEW ORDER GOVERNMENT**



Source: (2007: 32), Lestiyowati (2011), and Antweiler (2009)



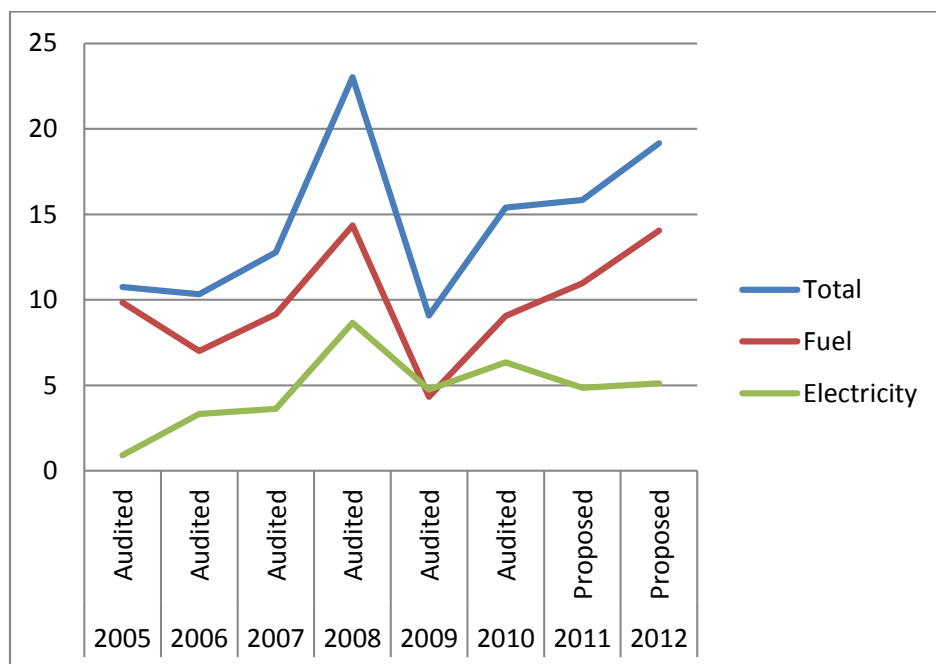
Three major efforts to reform fuel subsidies in Indonesia were undertaken in 2003, 2005 and 2008. The first effort followed the launch of the National Energy Policy of 2003–2020 (Kebijakan Energi Nasional, 2003–2020),<sup>5</sup> when the government of President Megawati Sukarnoputri raised fuel and electricity prices. However, these reforms were met with widespread protests and the government eventually reinstated the subsidies.

The administration of President Susilo Bambang Yudhoyono (2004–present) has been more successful at reforming fuel subsidies, as part of a broader effort to improve energy conservation and diversification. In 2006, President Yuhoyono issued Presidential Decree No. 5/2006, which committed the government to reaching “the fuel market price in a gradual manner.”<sup>6</sup> Decree No. 5/2006 also established the Blueprint for National Energy Management, 2006–2025, which further emphasized the government’s commitment to fuel subsidy reform.

In line with the blueprint commitment, the Yudhoyono administration reformed energy subsidies in 2005 and 2008. The government used two rationales to justify the reforms: first, that a significant increase in the global price of oil had forced it to reduce subsidies, and second, that rising costs for fuel subsidies were undermining the government’s ability to fund vital public services, such as health, education and infrastructure development.

Despite these reforms, fuel subsidies remain high in Indonesia, as rising global oil prices and increased demand for oil products has offset progress on subsidy reform. The government, in its 2012 state budget, allocated up to IDR168.6 trillion (US\$19.15 billion) for energy subsidies, with IDR123.6 trillion (US\$14.05 billion) and IDR45 trillion (US\$5.1 billion) allocated for fuel and electricity subsidies respectively (Figure 3).

**FIGURE 3: FUEL SUBSIDIES IN INDONESIA, 2005–2012 (IN BILLION US\$)**



Source: Ministry of Energy and Mineral Resources (undated)

<sup>5</sup> The launch of the National Energy Policy of 2002–2020 was regulated under the Minister of Energy and Natural Resources Decree No. 0983 K/16/MEM/2004 on the National Energy Policy. For further details on the National Energy policy of 2003–2020, see Ministry of Energy and Mineral Resources, Republic of Indonesia (2003).

<sup>6</sup> For further details of the Presidential Decree No. 5/2006 see the Government of the Republic of Indonesia (2006).



## 3.0 *Government Roles and Responsibilities*

### 3.1 Ministries and Agencies

A number of different government ministries and agencies have an influence on Indonesia's fuel subsidies, and therefore have an important part to play in the reform effort. The following section briefly describes the primary players.

#### 3.1.1 Ministry of Energy and Mineral Resources and Directorate General of Oil and Natural Gas

The Ministry of Energy and Mineral Resources (MEMR) has proposed schemes to reduce fuel subsidies, and also assesses schemes proposed by other government departments. The ministry is part of the government team that presents subsidy reduction schemes to the Parliament. Within MEMR, most of the work on subsidies is carried through the Directorate of Oil and Natural Gas (Ditjen Migas); however, the Centre for Data and Information also works on assessing the impacts of various subsidy reduction schemes.

In the fourth quarter of 2011, Ditjen Migas prepared three options for subsidy reduction for review and decision by the cabinet. The following options were based on recommendations from a study carried out by three universities (Institute Technology Bandung [ITB], University of Indonesia [UI] and University Gadjah Mada [UGM], see section 4 for more details), and co-ordinated by the Ministry of Finance:

1. Option one: increase the price of subsidized gasoline (Premium), step by step, in IDR500 per litre or IDR1,000 per litre increments
2. Option two: keep the price of Premium gasoline as it is, but regulate more tightly who gets access to it (e.g., prohibit use by private motorists)
3. Option three: A combination of (1) and (2)

In addition, five special task forces were established in July 2011, each for a period of one month (although some undertook activities beyond the one month time frame). Ditjen Migas led two of them. The task forces were given the following goals:

1. Evaluate the readiness of infrastructure (supply, storage, dispensing equipment, etc.) to distribute increased volumes of non-subsidized fuels, assuming that much of the demand for Premium might shift to non-subsidized gasoline. Based on the existing infrastructure and fuel depots, Pertamina could implement the subsidized fuel restriction in the Java and Bali regions. However, nationwide there are 4,600 gas stations, of which 2,000 sell only subsidized fuels and do not have the capacity to sell non-subsidized fuels. Led by Pertamina.
2. Identify measures to be taken to stop the smuggling of Premium gasoline (and diesel oil), region by region. The task force is responsible for implementing administrative and operational measures to ensure the optimal distribution of restricted subsidized fuels. Led by BPH Migas (Downstream Oil and Gas Supervisory Agency), with others, including the National Police and Attorney General's Office.
3. Prepare materials for a government communications campaign that will highlight the negative impacts of subsidies, in particular on the state budget. The campaign has included placing banners in public gas stations and advertising in the media, including discussions on talk shows. Led by Ditjen Migas.



4. Prepare a regulation signed by the president, once the House of Representatives (Dewan Perwakilan Rakyat [DPR]) has approved the recommendation scheme, which will detail who will be entitled to buy Premium, the volumes, details of phased price increases, etc. Led by Ditjen Migas.

5. Assess the socioeconomic impacts of the selected subsidy reduction/withdrawal scheme. Led by the State Ministry of National Development Planning (Badan Perencanaan Pembangunan Nasional [Bappenas]), with other ministries, including the Ministry of Agriculture, Ministry of Cooperative and Small Medium Enterprises and the Central Statistics Agency.

In January 2012, the government established four new coordinating teams to continue similar activities (see section 5 for overview of these teams' composition and roles).

### 3.1.2 Coordinating Ministry for Economy

The Coordinating Ministry for the Economy synchronizes the development and implementation of the government's economic policy. With respect to fuel subsidies, its main role is to bring together proposals for fuel subsidy reform and present these to the cabinet. It also has an advisory role, and helps the cabinet decide on the trade-offs that are associated with such proposals. Recently, the ministry's main activity has been in assessing various options for subsidy withdrawal.

### 3.1.3 Ministry of Finance

The Ministry of Finance prepares the annual state budget on behalf of the government, for submission to the Parliament, including the amount set aside for energy subsidies. The ministry is also responsible for assessing the economic impact of various key budget items, such as energy subsidies. Recently, the ministry helped to prepare a road map that sees all fuel subsidies being phased out by 2014 on a region-by-region basis.

The ministry has also assessed the inflationary impacts of restricting consumption of gasoline subsidies for 2012. If the reform is limited to private motorists, inflation will increase by 0.5–0.6 per cent. However, if subsidies were removed for all users of transport fuels, the impacts would be much greater (Fitriany, 2011).

### 3.1.4 National Energy Council (Dewan Energi Nasional)

The Dewan Energi Nasional (DEN) has four key roles: formulating and updating the national energy policy (to be approved by the government and the DPR); designing national-level strategic master plans for implementing the policy; preparing action plans to deal with energy crises and other emergency situations; and finally, monitoring the implementation of energy policy by government institutions, particularly those which are cross-sectoral.

DEN's activities have taken on a higher profile in recent months, as the updating of the national energy policy has entered its final phase.

Relating the tasks mentioned above to the government's handling of oil product subsidies in Indonesia, DEN has an important role to play in helping to define plans for oil product subsidies going forwards, or the reduction and eventual phasing out of these subsidies, in the national energy policy. Once these plans have been defined in the national energy policy, DEN has a key role to play in ensuring that government institutions meet the targets that are set in the energy policy (for instance for subsidy withdrawal) and fully implement any programs that are defined in this national energy policy relating to the reduction or phasing out of these subsidies.



In support of these roles, DEN recently conducted an impact assessment of energy subsidies on social and economic conditions, the highlights of which are detailed in Section 4 of this report.

### 3.1.5 Bappenas

Bappenas acts as a steering committee in the fuel subsidy reform process. It helps develop plans and monitor their implementation. It is not, however, empowered to initiate programs. Bappenas's main focus is to identify programs to ensure low-income earners are protected from fuel price increases. In 2005, for example, Bappenas carried out the first comprehensive census of low-income earners.

Recently, Bappenas has been assessing options for providing public services as compensation for fuel subsidy reform, such as health (through national health insurance), education (through scholarships) and food (through subsidies). Bappenas has also evaluated cash transfers for the very poor and micro-credit for the "near poor."

### 3.1.6 BPH Migas

BPH Migas, the downstream oil and gas regulatory body, has several main roles with respect to fuel subsidies: (a) it organizes a tender each year to decide which parties (besides Pertamina, the state-owned oil and gas company) should have rights to supply subsidized oil products under the Public Service Obligation (PSO) system; (b) it helps MEMR to implement any schemes to reform oil product subsidies; (c) it advises the government on issues related to oil distribution; and (d) it applies controls over the amount of subsidized oil products consumed to ensure they stay within quota and to advise on how to prevent smuggling/illegal use. However, BPH Migas does not play any significant role in decision-making on subsidy reduction and price increases.

Recently, BPH Migas ran the PSO tender in the fourth quarter of 2011, for the year 2012. The result was that two local companies, PT AKR and PT Surya Param Niaga, were given the right to distribute subsidized oil products in 2012. Unlike in previous years, the volumes they are allowed to sell, and the locations in which they can sell them, have not been made public. Since the annual tender started in 2007, the volumes granted to third parties (i.e., not Pertamina) have always been very small and usually in remote areas (i.e., outside of Java).

## 3.2 Parliament

The Indonesian Parliament, also known as the DPR, plays an important role in the formulation of fuel subsidy policy. The DPR has three central functions: legislative, budgeting and oversight. The DPR's primary influence over fuel subsidy policies lies in the state budget (Anggaran Pendapatan dan Belanja Negara [APBN]). The APBN, which sets out the government's annual financial planning, requires approval from the DPR. The APBN covers a period of one year, from January 1 until December 31.

### 3.2.1 Process for Developing the State Budget

Developing the APBN involves seven steps: (1) preliminary discussions, (2) consultative process, (3) proposal preparation, (4) state-budget proposal delivery, (5) approval process, (6) ratification (or refusal) and (7) revision.

#### 1. Preliminary Discussions

The preliminary discussions normally take place around mid-May of each year, and include a series of meetings between the government and the DPR to discuss the "Fiscal Guidelines and Macroeconomic Policy." These talks cover issues such as basic economic assumptions, indicators, targets and priorities, and the overall fiscal policy for



the following year. From the government side, the Ministry of Finance, with the assistance from its own Directorate of Fiscal Balance (Direktorat Jendral Anggaran dan Direktorat Jenderal Perimbangan Keuangan), the Directorate General of State-Budget and Fiscal Balance (Direktorat Jendral Anggaran dan Perimbangan Keuangan) and Bappenas will normally be highly involved in these discussions. The overall outcome of this preliminary discussion is known as the General Fiscal Policy and Priority.

## **2. Consultative Process**

The consultative process usually takes place between June and late July. In this phase, the General Fiscal Policy and Priority agreed between the government and the DPR is turned into guidelines for: (1) a development budget in which governmental agencies draft their work plans and budgets (this process is normally coordinated between the Ministry of Finance and BAPPENAS) and (2) the preparation of the revenue-expenditure components of the APBN, which is to be prepared by the Ministry of Finance. This phase will also be filled with numerous consultative sessions between different governmental agencies and their counterpart commissions at the DPR. With regard to the discussion on energy subsidies, the Ministry of Energy and Natural Resources would normally consult with the Energy Commission (or Commission VII) at the DPR. The Director General of Oil and Gas and other related energy director generals would also normally play active roles in the preparation of materials throughout these discussion processes.

## **3. Proposal Preparation**

All governmental agencies normally submit their work plans and budget proposals to the Ministry of Finance during the months of July and August. The Ministry of Finance then drafts the Fiscal Note and Proposal of the State Budget (Nota Keuangan dan [RAPBN]) for the following year.

## **4. Proposed APBN Delivery**

The President of the Republic normally delivers the Fiscal Note RAPBN on August 16, one day prior to the celebration of the national independence day.

## **5. Approval Process**

Between the presidential speech in August and the end of October, the DPR holds a session to consider the proposed APBN. The Ministry of Finance normally acts as the lead negotiator for the government. During this time, the DPR is able to call specific ministers to discuss the budget proposals from their respective ministries. A Budget Body (Badan Anggaran), is the most significant player whose advice will influence the output of budget negotiation from the parliamentary side. Under the Act No. 27/2009, Article 107, Point (1)b, the Budget Body bears the task of deciding the state budget with the government after receiving reports from the commission (i.e., from the negotiation between the Government representative and the energy commission). The Budget Body is divided into three special commissions, including: (1) Commission for State Revenue and Expenditure, (2) Commission for the Central Government Budget and (3) Commission for Regional Government Budgets.

## **6. Ratification**

The process of ratifying the APBN is conducted by the DPR and usually takes place in late October or early November of each year.



## 7. Revision

The government is able to propose further revision to its existing APBN in March of the following year. This process would normally run until May when the DPR gives their decision on whether or not to approve the APBN. It is also important to note that the revision of the APBN is conditional in nature. The government should be able to propose a revision any time during the implementation period of the existing fiscal year, should events take place that change the government's initial assumptions, or if there is an emergency situation that disrupts the existing budget.

### 3.2.2 Non-Budgetary Responsibilities

The DPR is also involved in other fuel-subsidy policy-making under its oversight functions. With regard to this specific function, the DPR normally exercises two types of its rights vis-à-vis the government: the rights of inquiry (hak angket) and interpellation (hak interpelasi). The right of inquiry enables the DPR to carry out an investigation into the implementation of an Act and/or government policy, while the right of interpellation allows it to request relevant information from the government. In terms of fuel subsidy, the oversight function of the DPR can be exercised any time, either during the implementation of the APBN or when a new fuel-subsidy policy is issued by the government.

### 3.2.3 Party Positions Toward Fuel Subsidy Reform

Table 1 outlines how various political parties have voted on fuel subsidy reform policies in the past. At present (early 2012), there appears to be a consensus between the government and the majority of the members of the DPR that fuel subsidy reform needs to be carried out in the near future. This consensus was illustrated in the 2012 State Budget when the government and the DPR reached an agreement to launch a measure to limit the use of subsidized fuels for private cars. However, there is disagreement over the approach and timeline. While the government had initially pushed for implementation in April 2012, various members of the DPR have resisted, prompting the government to revise its plans.





**TABLE 1: THE POSITIONS OF DIFFERENT POLITICAL FACTIONS/MPs ON FUEL SUBSIDY REFORM**

Year		2005 <sup>a</sup> (March)		2005 (September)	2008 <sup>b</sup>		2009
Reasons to hold parliamentary session		Blocking fuel price increase	Blocking fuel price increase	Blocking the second state budget revision with a potential price increase measure	Factions' Views and Voting to use the investigative rights of the DPR and to set up a Inquiry Commission on Fuel		Factions' Views to the Initiative to use the expressing the opinion rights of the DPR
No	Political Factions <sup>c</sup>	Faction's Views / Vote Distributions <sup>d</sup>					
1	Golkar Faction	X	X	X	X	X	A
2	PDIP Faction	O	Walk Out	O	O	O	O
3	PPP Faction	X	X	X	X	O	X
4	PD Faction	X	X	X	X	X	X
5	PAN Faction	O	O	X	O	O	X
6	PKB Faction	O	Walk Out	Walk Out	O	O	X
7	PKS Faction	O	X	X	X	O	X
8	BPD Faction	X	X	X	O	O	O
9	BR Faction	O	X	X	O	O	X
10	PDS Faction	O	O	X <sup>i</sup>	X	O	X
	Total number of political factions/MPs <sup>g</sup>	O = 6 X = 4	O = 297 X = 56	O = 84 X = 273 A = 30		O = 233 X = 127	O = 2 X = 7 A = 1

**Note:**

<sup>a</sup> There are three columns for 2005: the first column shows the result of factoins' views to challenge the government's fuel price increase policy, the second column shows the result of individual voting to challenge the government's fuel price increase policy, the third column shows the result of individual voting to approve the revision of State Budget proposal which led to a fuel price increase.

<sup>b</sup> The two columns below the year 2008 indicate the political position at the beginning of the initiative (first column) and the result of the final voting (the second column).

<sup>c</sup> Abbreviations: Golkar (Functional Group Faction); PDIP (Indonesian Democratic Party for Struggle Faction); PPP (United Development Party Faction); PD (Democratic Party Faction); PAN (National Mandate Party Faction); PKB (National Awakening Party Faction); PKS (Welfare Justice Party Faction); BPD (Pioneer Star of Reform Faction); BR (Reform Star Faction); PDS (Peace Welfare Party Faction).

<sup>d</sup> O = agree; X = refuse; A = Abstain.

<sup>f</sup> Of the 12 members of the PDS Faction, four members were against holding the investigation initiative, while the other eight did not vote.

<sup>g</sup> When the number is below 10, this indicates the views of the existing political factions that were set up at the DPR at any given time . Otherwise, the figures indicate the total number of votes of individual members of Parliament.



## 4.0 *Research Inputs for the Government's Reform Plans*

In the most recent attempts (2011–2012) to reform fuel subsidy policies in Indonesia, the government has conducted several studies on the subject on its own and in cooperation with other research institutes. The final reports and key findings of these research activities have not been made publicly available but are summarized below.

### 4.1 **Studies by an Independent Research Consortium**

In early 2011, MEMR established an independent research team to identify options for limiting the volume of Premium consumed, in order to stay within the quotas allocated in the 2011 State Budget. The team consisted of members from ITB, UGM and UI, each with a different research focus. The team from UGM was responsible for analyzing the economic impacts of the options, while the UI team was responsible for analyzing institutional readiness, especially for monitoring and supervision, should the restrictions occur. Finally, the ITB team was responsible for the infrastructure readiness, from fuel depots to gas stations.

In March 2011, after completing some rigorous interviews with key stakeholders, the team recommended three options to reduce gasoline subsidies:

1. Increase the price of Premium gasoline by IDR500 per litre and combine it with a smart-card system for supporting a cash-back mechanism for public transportation
2. Maintain the current price of Premium (IDR4,500 per litre) and implement a consumption limit for some consumers (e.g. private motorists)
3. A combination of (1) and (2).

As the implementation of each option needs the support of the institutions responsible for monitoring and supervising the activities, the team also identified some aspects of institutional arrangements needed to carry out the tasks. The team agreed there was no need to create a new institution to oversee the process; instead, more focus should be placed on improving and enhancing the existing institutions, such as BPH Migas, Ministry of Finance, Ditjen Migas, Pertamina, Gaikindo (the Indonesian Auto Manufacturing Association) and Hiswana Migas (the National Oil and Gas Retailers Association).

Improving monitoring and supervision activities is important, as there will still be a price gap between subsidized fuels and market price that creates incentives for black market trading. The research team identified the potential problem of embezzlement of subsidized fuels along the distribution lines: from the depot to the gas station (in the cases of gasoline and automotive diesel oil), from the depot to the distribution centre (in the case of kerosene) and at the receiving point of the end users (for example the industries).

In terms of technical or infrastructure readiness, the team found that switching the Premium to non-subsidized gasoline at gas stations, in general, could be done without a major overhaul since the existing storage tanks can be used interchangeably, at least after flushing and conditioning. However, special consideration should be given to evaluating the limited number of storage tanks in each gas station, particularly those that are located in rural areas. Most of them have only two storage tanks, one for gasoline and one for diesel oil. A problem would arise if they were required to sell both Premium and non-subsidized gasoline, as additional storage tanks would be needed. Furthermore, since the income per capita in rural areas is less than in urban areas, there should be a mechanism to ensure the profitability of gas stations, as owners would be required to sell more non-subsidized gasoline, which is not very popular in rural areas.



## 4.2 Study by the National Energy Council (DEN)

Using a computable general equilibrium model, the DEN conducted an impact assessment of energy subsidies on social and economic conditions, and also the potential for renewable energy development. This ongoing study covers both fuel and electricity subsidies.

The objectives of this study are:

- To formulate policies and strategic recommendations for phasing out energy subsidies in accordance to Presidential Decree No. 5/2006 of the National Energy Policy, which stipulates the target of achieving economic energy prices while supporting the poor for limited periods (Art. 3; Item 2.c), and to adjust the energy prices in stages to achieve the phase-out on a specific time frame for optimizing the energy diversification target (Art. 5; Items 1 and 2)
- To establish a fund that will use the savings from phasing out energy subsidies to invest in renewable energy development

Using eight scenarios to address the subsidy removal of oil fuels and electricity in different phases, the study has already identified several preliminary findings:

- In general, subsidy removal would have positive impacts on the gross domestic product; however, the removal would have adverse effects if applied to electricity tariffs alone. These adverse effects would occur in household consumption and unemployment.
- In the long run, subsidy removal would result in economic sectors becoming more capital-intensive, reducing average energy intensity and emission reduction.
- Fuel subsidy removal would be more effective for achieving the national energy-mix target when compared to electricity subsidy removal alone.
- Without other supporting policies (e.g., policy on renewable energy), the removal would promote the use of coal and natural gas more than the renewable resources, which would move away from the targeted energy mix.



## 5.0 *Challenges and Opportunities to Fossil-Fuel Subsidy Reform*

The following sections outline in more detail some of the key challenges and opportunities that the government faces as it pursues its goal of reforming fuel subsidies. The study focuses first on aspects of the political economy of reform, and in particular the positions of key stakeholder groups in the private sector and civil society. Next, the study examines the government's plan to limit quantities of subsidized gasoline and develop gas-based alternative transport fuels, in order to identify some of the practical challenges.

### 5.1 Political Considerations: Stakeholder Positions on Fuel Subsidy Reform

This project carried out a series of consultations and surveys in 2011 with the private sector and civil society in order to gain an understanding of how different groups of stakeholders view current fuel subsidy policies and the options for reform. Opinion in both sets of stakeholder groups is sharply divided. Nonetheless, the results offer a basis for considering how the government should design its longer-term reform policies, and how those reforms should be communicated.

#### 5.1.1 Industry

From the project consultations with companies operating in a variety of different industry sectors, it is apparent that their views toward the withdrawal of fossil-fuel subsidies are distinctly polarized, depending on which industry sector they are operating in.

Generally, companies who operate in sectors that are being harmed by fossil-fuel subsidies will be more vocal about their desire to see these subsidies go, expressing their views individually or through organizations, such as industry associations. By contrast, companies operating in those sectors, where the withdrawal of fossil-fuel subsidies is seen as a threat to their businesses, are not likely to state this publicly, but will work more behind the scenes to maintain the status quo.

Table 2 details some of the key industry groups that are likely to be affected by fossil-fuel subsidy withdrawal. Their position on the withdrawal of fossil-fuel subsidies is indicated, with some brief comments to support this assessment.



**TABLE 2: INDUSTRY PERSPECTIVE ON GASOLINE AND DIESEL OIL SUBSIDY WITHDRAWAL**

INDUSTRY SECTORS		SUPPORTIVE OF GASOLINE SUBSIDY AND DIESEL OIL WITHDRAWAL										COMMENT
		LOW ← → HIGH										
OIL SUPPLY CHAIN	Refiners								■			Pertamina concern about loss of transport fuel market share and competition from importers
	Importers/Traders											
	- Existing	■										Existing importers aligned to Pertamina will see volumes decline
	- New										■	Big volume increase as insufficient domestic supply of 92, 95 RON
	Sellers (to end users):											
	- Pertamina			■								Pertamina say they will require some protection
	- Pertamina Dealers			■								May accept some <b>limited</b> subsidy withdrawal as long as significant price advantage maintained over competitors
	- Others										■	Shell, Total, Petronas, etc will see volumes grow
OIL CONSUMERS	Private Motorists:											
	- Cars			■								Likely short-term shock but likely to adapt
	- Motorbikes	■										Low-income earners may be hit hard
	Public Transport	■										Cost increase
	Hauliers	■										Expenditure on fuel is a key cost component. Will see cost increase if currently using subsidized gasoline/diesel.
	Mining Companies							■				Expenditure on fuel is a key cost component. Will see cost increase if currently using subsidized gasoline/diesel.
	Government Institutions			■								Will increase their fuel expenditure
	Fishing	■										Will increase costs and reduce margins
	Palm Oil Producers			■								Expenditure on fuel is a key cost component. Will see cost increase if currently using subsidized gasoline/diesel.
COMPETING ENERGY INDUSTRIES	Gas Suppliers (Piped, CNG, LNG)										■	Better able to compete if gasoline and diesel oil not subsidized
	LNG Suppliers										■	Better able to compete if gasoline and diesel oil not subsidized
	Biofuels Suppliers (Palm Oil, Sugar Cane, Cassava)										■	Better able to compete if gasoline and diesel oil not subsidized
	Suppliers of Gas/LPG Equipment										■	Better able to compete if gasoline and diesel oil not subsidized
OTHERS	Manufacturers of Cars			■								Car sales likely to reduce in 2012 (credit squeeze) and higher fuel costs might depress demand further
	Manufacturers of Motorbikes	■										Ideal market now--higher fuel prices may constrain future growth rates.



### *Industry Sectors in Favour of Fossil-Fuel Subsidy Withdrawal*

There are several industry sectors that appear to clearly favour fossil-fuel subsidy withdrawal. Within the oil supply chain, these include: (a) importers of oil products whose business is currently limited by the low demand for non-subsidized oil products (gasoline and diesel oil) and who do not import oil products for Pertamina, the state-owned oil and gas company and (b) owners and operators of non-Pertamina-owned retail sites, who are not currently able to sell subsidized oil products (apart from perhaps a very small volume under the annual PSO tender process, which generally can only be sold in remote areas). From competing energy industries, almost all companies clearly favour fossil-fuel subsidy reform, including suppliers of compressed natural gas (CNG), liquefied petroleum gas (LPG), and biofuels for use as transport fuels, and suppliers of related equipment.

### *Industry Sectors Not Supportive of Fossil-Fuel Subsidy Withdrawal*

There are several industry groups that appear to be concerned about fossil-fuel subsidy reform. Within the oil supply chain, these include: (a) existing oil refiners (i.e., Pertamina; see further comment below) and (b) importers of oil products who have been doing business with Pertamina for many years, such as supplying Pertamina with gasoline and diesel shortfalls, where domestic refinery production is not able to fully meet the demand for these products (the vast majority of which are sold at subsidized prices).

One group of companies that has more recently become concerned about fossil-fuel subsidy reform are the dealers who own and operate the majority of Pertamina's sites. They worry about the loss of sales through their sites, particularly if plans to prohibit sales of subsidized fuels to private motorists are introduced (see further comment below).

### *Oil Product Consumers*

Oil product consumers who are currently buying subsidized fuels are not likely to be keen to see these subsidies go. Certainly operators of commercial transport fleets, such as taxis, buses and mini-buses will see their costs rise as a direct result of a subsidy withdrawal. Their ability to pass this price hike on to their customers may be limited, and perhaps restricted by government regulation. Operators of road haulier fleets may also be hit, possibly hard (though it is unclear whether they are currently still able to purchase subsidised oil products or not). Other large consumer groups who will be negatively affected include fishing fleets and government institutions.

Finally, there are operators of large fleets of vehicles, for whom transportation costs constitute a very significant part of their expenditure, but whose main business is not transportation of goods or people. Two such examples are coal mining companies and palm oil producers (typically transportation accounts for 30 per cent of total costs for coal producers). Officially, these companies are not entitled to buy subsidized oil products and should be paying market prices for them. However, there is considerable evidence to suggest that some (but certainly not all) of the companies operating in these sectors are indeed buying subsidized oil products from retail sites. As a result, these companies will wish to see the status quo maintained so they can keep their transportation costs down. However, those companies that are paying market prices for their fuels would be happy to see subsidies withdrawn, putting an end to any unfair competition from the illegal purchase of subsidized oil products and the reputational damage this may bring to the industry as a whole.

One coal producer also pointed out that the withdrawal of oil product subsidies (and electricity subsidies) would provide the foundation for a much more sustainable coal supply chain to meet domestic needs. If the Indonesian



state utility Perusahaan Listrik Negara (PLN) paid market price for all of its oil products (it is not clear if PLN does in fact pay full market price) and PLN and other power generators could buy coal at market price, there would be no need for the government to impose a domestic market obligation for coal. Both coal producers and power generators would earn bigger returns, which would allow them to invest more into expanding coal production/transportation and power generation/transmission facilities, respectively.

### *Car and Motorbike Manufacturers*

Most new cars will not operate well on Premium gasoline, which is 88 RON, so many new buyers will need to buy higher grade, non-subsidized gasoline (Pertamax and Pertamax Plus, 92 and 95 RON respectively). Car manufacturers are already concerned that sales are likely to decline this year as a result of the Eurozone financial crisis (which will restrict the amount of credit available to car buyers) and the increase in the new car registration tax that is occurring in many regions. They are therefore concerned that if the government introduces a scheme that prohibits private motorists from using subsidised fuels, this will reduce the disposable income of these private motorists and reduce demand for new cars.

### *Pertamina*

Pertamina's position requires special mention, given the dominant position it holds as a seller of transport fuels in Indonesia. It has recently appeared to support the government scheme to prohibit private motorists from using subsidized fuels from April 1, 2012.

Pertamina began a program to extend the availability of non-subsidized gasoline (Pertamax and Pertamax Plus) at retail sites, as many sites, particularly outside of large cities, did not stock these grades. However, the vast majority of their retail sites are dealer owned and operated, and it is believed it may have been difficult for them to convince some of these dealers to undertake the expenditure needed to stock and sell non-subsidized products. Some dealers are apprehensive that competitors selling other brands will be encouraged to rapidly build many new retail sites, resulting in tough competition and a reduction in their sales. Dealers are concerned about how long it will take to recover their investment in the new equipment and storage tanks.

Notably, the CEO of Pertamina, Karen Agustiawan, was recently quoted in the press as stating that Pertamina needed protection from competition from foreign private companies with regard to the retail sale of non-subsidized fuels (Jakarta Globe, 2012). She proposed that these competitors should be obliged to buy non-subsidized, high-octane gasoline from Pertamina, and only be allowed to import non-subsidized fuels when Pertamina cannot supply them. A third option proposed was to keep a permanent price differential between Pertamina's non-subsidized high octane gasoline (Pertamax and Pertamax Plus) and the equivalent gasoline grades of competitors. She added that other countries provide protection to their national energy companies. One driver behind Pertamina's position is its increasing concern about its brand image lagging behind that of new entrants in the retail fuel market, such as Shell and Total.

## **5.1.2 Civil Society**

Civil society organizations (CSOs) play a significant part in determining the success or failure of the government's fossil-fuel subsidy reform efforts, given their ability to influence and mobilize their constituents. Given the diversity of CSOs in Indonesia, positions among these groups obviously vary considerably.



CSOs include those that are in support of and against fossil-fuel subsidy reform. Those in support tend to argue that fuel subsidies should be gradually removed, but at the same time complementary policies must be applied to reduce or lower the direct and immediate impacts to the poor and marginalized groups, and money saved in the reform activities should be allocated to improve energy access, diversify energy sources to renewable resources and better public transport systems.

A second camp opposes reform, for two primary reasons. One is the belief that the government's priority should be on better managing oil and gas resources by improving governance and anti-corruption measures in the upstream and downstream levels. They argue that once oil and gas governance improves, the revenue from this sector will increase and offset the costs of fuel subsidies. The second common concern is that removing fuel subsidies will make poor and marginalized groups worse off and increase the welfare gap.

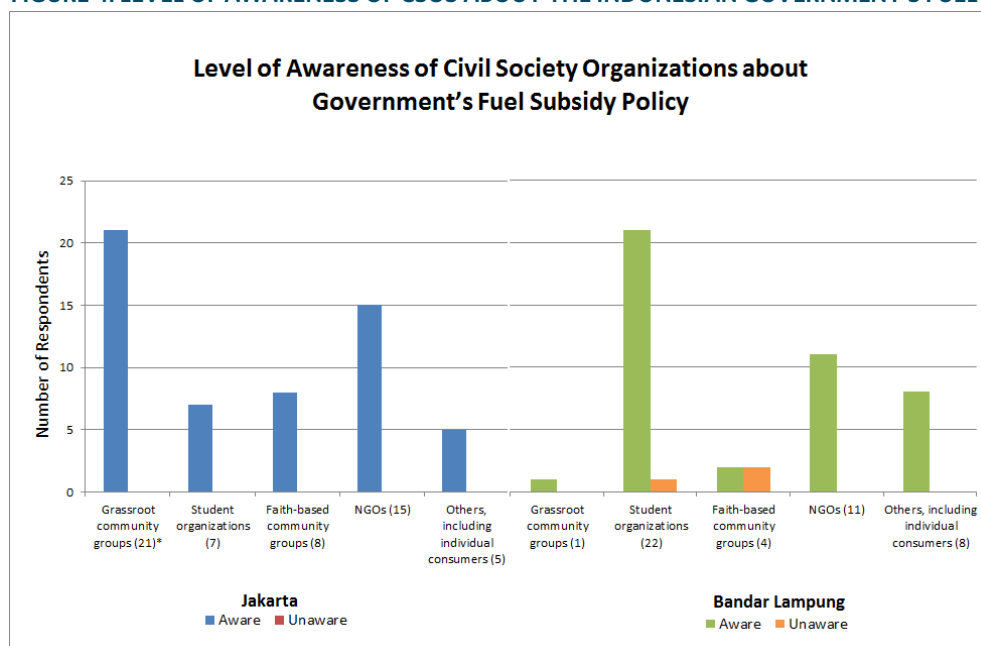
This project carried out surveys in Jakarta and Bandar Lampung to map the opinions of influential CSOs. The surveys were conducted by interviewing 102 representatives of CSOs, and sought their views on their level of knowledge about fuel subsidy policies, their views on reform and their opinions on how the government has communicated its reform plans.

While "CSO" is a broad category, our surveys focused primarily on the following: NGOs working in areas of public policy, research and academic institutions, and grassroots community groups (including faith-based community organizations and student organizations).

### *Awareness of Fuel Subsidy Policies*

An overwhelming 97 per cent of respondents felt that they were highly aware of the existing fuel subsidy policy of the government. While the survey did not test actual levels of knowledge, the results suggest that fuel subsidy policies are a mainstream issue for broad range of CSOs.

**FIGURE 4: LEVEL OF AWARENESS OF CSOS ABOUT THE INDONESIAN GOVERNMENT'S FUEL SUBSIDY POLICY**



\*The number in the bracket indicates the total number of respondents representing each category of CSO.





### *Position Toward Existing Fuel Subsidy Policy*

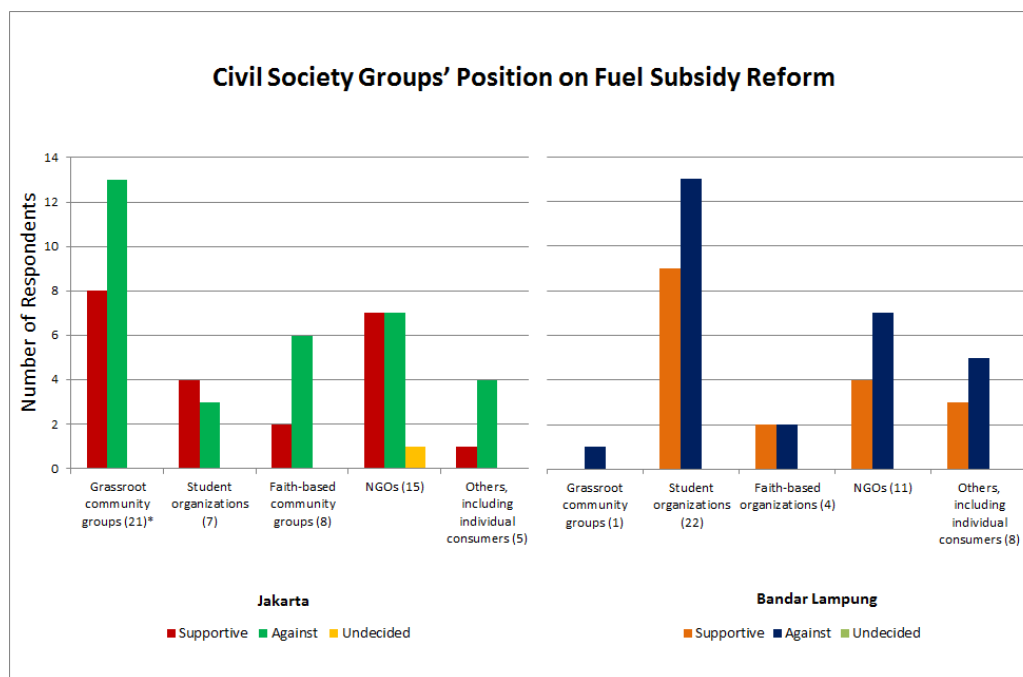
Notably, 70 per cent of respondents strongly disapproved of the current fuel subsidy policy, 23 per cent were supportive, and the remaining 7 per cent were undecided on the issue. Respondents in favour of the current fuel subsidy tended to stress that it is an important source of support for the poor. Those who were critical of current fuel subsidies overwhelmingly emphasized that it is not well targeted to poorer consumers.

### *Position Toward Fuel Subsidy Reform*

It is interesting that, while a majority of respondents disapproved of current fuel-subsidies, there was far less support for reform. Sixty per cent of respondents were against fuel subsidy reform, and the remaining 40 per cent were supportive. The proportion of those supportive of the government's fuel subsidy policy was slightly higher in Jakarta than those in Bandar Lampung. While pro-subsidy respondents amounted to about 25 per cent out of the total respondents in Jakarta, the proportion of respondents with similar views in Bandar Lampung only amounted to 19.5 per cent.

In rejecting subsidy reform, respondents noted several concerns: a lack of clarity on the government's reform plans, negative impacts on the poor and a lack of consultation and opportunities for the public to engage in the policy-making processes.

**FIGURE 5: CSOS' POSITIONS ON FUEL SUBSIDY REFORM**





### *Preferred Forms of Compensation Packages*

The surveys questioned respondents about the preferred types of compensation packages that should be included in the government's fuel subsidy reform policy. The questionnaire highlighted four commonly discussed compensatory measures: cash transfers, development of transportation infrastructure and services, improvement of health services, and investment in education. In addition, respondents were invited to add other forms of compensation packages they considered to be priorities.

Investment in the education sector, with a total of 51 endorsements, was the most popular form of compensation among the respondents, followed by investment in health service, with a total of 45 votes.

Notably, investment and improvement of transport infrastructure and services, a problem that limits economic growth and contributes pollution in major cities such as Jakarta, was not considered a priority for the majority of respondents in both cities. In Jakarta, for instance, this form of compensation package only received support from two respondents.

Cash transfers, which were a key component of the government's reform packages in 2005 and 2008, also received relatively little support from the surveyed CSOs. Some respondents argued that the BLT program was too small to make any meaningful impacts. Respondents also contended that cash transfer programs are vulnerable to corruption.

Respondents were also allowed to specify other forms of preferred compensation packages. Poverty reduction, social welfare programs and general infrastructure development were the most commonly cited forms of compensation. Other selected options included: investment in agriculture, environmental protection, energy diversification programs and disaster management.

### *Opinions on the Government's Communication Strategy*

The majority of the surveyed CSO representatives thought that the government's efforts to communicate its reform strategies had been poor. In both Jakarta and Bandar Lampung, 84 per cent replied that the government needed to improve its communication effort to the public. Three areas of improvement were commonly cited: active communication through the news media; communication through local community groups, which includes efforts to engage the public in the official decision-making processes; and clear, transparent and easy-to-understand information about energy subsidies and plans for reform.

### *Pro-Reform CSOs*

A number of prominent organizations that favour reform are beginning to devote considerable attention to the cause. These organizations argue that the existing fuel subsidy policy is ineffective, and can be reallocated to support spending on other public services (e.g., health, education, etc.), infrastructure development and environmental protection.

Examples of pro-reform organizations based in Jakarta, Surabaya and Bandar Lampung are listed in Table 3. The list would most likely be expanded if our consultations extended to areas outside of these cities.



**TABLE 3: EXAMPLE OF STRATEGIC NGOS TO WORK ON FUEL SUBSIDY REFORM**

ORGANIZATIONS	WORK PRIORITIES	INTEREST AROUND FUEL SUBSIDY REFORM
<b>NGOS</b>		
Institute for Essential Services Reform (IESR)	Energy, climate justice and extractive industries	Overall fuel subsidy reform
Indonesian Consumer Foundation (YLKI)	Public services, services safety, public transportation, sustainable consumption, banking services and cigarette control	Fuel subsidy reform with regard to public transportation
Publish What You Pay (PWYP)	Extractive industries	Overall fuel subsidy reform
Worldwide Fund for Nature (WWF)	Environmental conservation and protection	Environmental protection
Indonesian Forum for Budget Transparency (FITRA)	Governance, state budget transparency	State budget on energy subsidy
<b>ACADEMIC RESEARCH INSTITUTES</b>		
Indonesian Institute for Energy Economics (IIEE) <sup>7</sup>	Energy security, sustainable development, climate change and governance	Overall fuel subsidy reform
Reforminer Institute	Mining, energy and environmental issues	Overall fuel subsidy reform
Center for Strategic and International Studies (CSIS)	Economics, politics and international relations	Overall fuel subsidy reform
Institute for Economic and Social Research of the University of Indonesia (LPEM-UI)	General economic issues	Overall fuel subsidy reform; one of the research institutes commissioned by the Government to undertake research on options for fuel subsidy reform.

### 5.1.3 Addressing the Political Challenges

It is clear that a number of political barriers exist to fuel subsidy reform. These barriers include the politics associated with government decision-making on any scheme that will result in an increase in fuel prices, the fact that certain industry and business groups may feel threatened by the full or even partial withdrawal of fuel subsidies and the majority view among the CSOs surveyed that citizens will be worse off if fuel subsidies are withdrawn.

Building public support for reform is a critical element to overcoming these political challenges. That support needs to be established in two ways. The first is developing a clear strategy for reform and ensuring that citizens understand it. Confidence in the government's reform plans have been undermined because the plans frequently change, leading to a vicious circle in which low levels of public support leads to political opposition, which leads to reform plans being changed or postponed, which further undermines the public's confidence. A key message coming out of the civil society consultation is that there is a lack of certainty in the government's reform strategy. Strong political leadership will be required to overcome this particular challenge.

<sup>7</sup> IIEE is one of the co-authors of this report.



The second necessity is to build public confidence in the benefits of reform. The public is concerned that subsidy reform will leave them worse off, at least temporarily. Even if major new projects are initiated today to provide better public services, such as transport facilities, it may well be several years before those who will struggle to pay for transport fuels when they are sold at market price will be able to access these improved facilities. Resistance to reform also flows from the belief among many Indonesians that the country's energy resources are not well managed, and that better governance over the resource sector should be the first priority. Overcoming this challenge requires sequencing reform with tangible improvements in governance and social services, and drawing the link between the two. It also requires persistent communication about the benefits afforded by fuel subsidy reform and a willingness to engage with stakeholders throughout the reform process to seek input on the government's priorities and process for reform. The government may also have to tell the public that they are aware that some subsidy reform programs may be vulnerable to abuse, and hence have installed safeguards to counter these.

## 5.2 Practical Considerations: Implementing Consumption Restrictions on Premium and Developing Alternative Fuels

On January 30, 2012, MEMR and Ditjen Migas presented a plan to reduce gasoline subsidies to the House of Representatives Commission VII that would take effect in April 2012. The reform plan is divided into two main programs: i) restricting consumption of subsidized gasoline and ii) the deployment of gas-based fuels, CNG and liquid gas for vehicles (LGV), as alternative transport fuels. This research analyzes the feasibility of implementing a restriction on the consumption of Premium and the deployment of gas fuels, and identifies some of the practical challenges for the government's implementation program.

### 5.2.1 Restricting Consumption of Premium

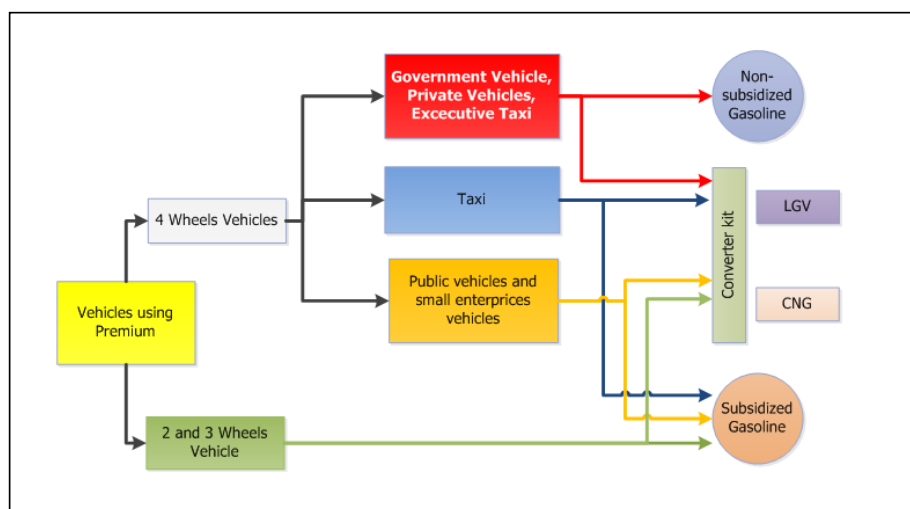
The government's plan to restrict consumption of subsidized gasoline has four aspects:

1. All vehicles that belong to government agencies, state-owned enterprises and regional, government-owned enterprises in Java and Bali will no longer be permitted to use Premium gasoline.
2. Private vehicles in the Greater Jakarta region will no longer be permitted to use Premium gasoline.
3. The role of the task force on monitoring and enforcement, led by BPH Migas, will be enhanced. The task force's role is to investigate and resolve issues of fraud, fuel smuggling and illegal use of subsidized fuels.
4. Facilities for supplying non-subsidized fuel will be developed. Pertamina's gasoline stations have more subsidized Premium tanks than non-subsidized gasoline (Pertamax). Restricting the consumption of Premium will create higher demand for non-subsidized gasoline and fuel stations will need to ensure they have the facilities to supply it. The government's plan to increase deployment of gas fuel will also require new facilities.

MEMR's plan to reduce consumption of subsidized gasoline is illustrated in Figure 6.



**FIGURE 6: SCHEME TO LIMIT VOLUME OF PREMIUM GASOLINE IN GREATER JAKARTA**



Source: Legowo (2012)

The State Budget Law for 2012 (Law No. 22 of 2011, Art. 7, Para. 4) states that the subsidized fuel restriction is intended for private four-wheel vehicles in the Java and Bali regions. However, the Ditjen Migas in late January 2012, clarified that this restriction will only apply to private four-wheel vehicles in Greater Jakarta and to official vehicles in Java and Bali. These targets will be implemented in April 2012.

Preparation to implement the consumption restriction is being carried out by four new teams, some of whom continue the work of the task forces established in 2011:

1) The public communications team, led by Ditjen Migas

This team is responsible for public communications and socialization in the regions where the consumption restrictions will be imposed. This team has prepared public communications materials such as modules, leaflets and stickers. The communications plan includes training for students, from elementary to high school and universities, community-based organizations and NGOs, among others. In addition, public communications will include service advertisements on the radio, TV, online media, billboards, moving cars and in the print media. The government plans to undertake an evaluation of the results of socialization of the communications campaign.

2) The monitoring team, led by BPH Migas

BPH Migas is coordinating a team involving the Ditjen Migas, law enforcement, local government, the Directorate of Land Transportation, the Land Transport Association, the Business Entity of P3JBT and Hiswana Migas to monitor and evaluate implementation of the consumption restrictions.

This team will undertake the following:

- a. Pre-emptive activities, including supervising the supply and distribution of Premium gasoline, socializing and counselling for stakeholders of fuel distribution and law enforcement (including the Navy and Army), providing facilities and infrastructure



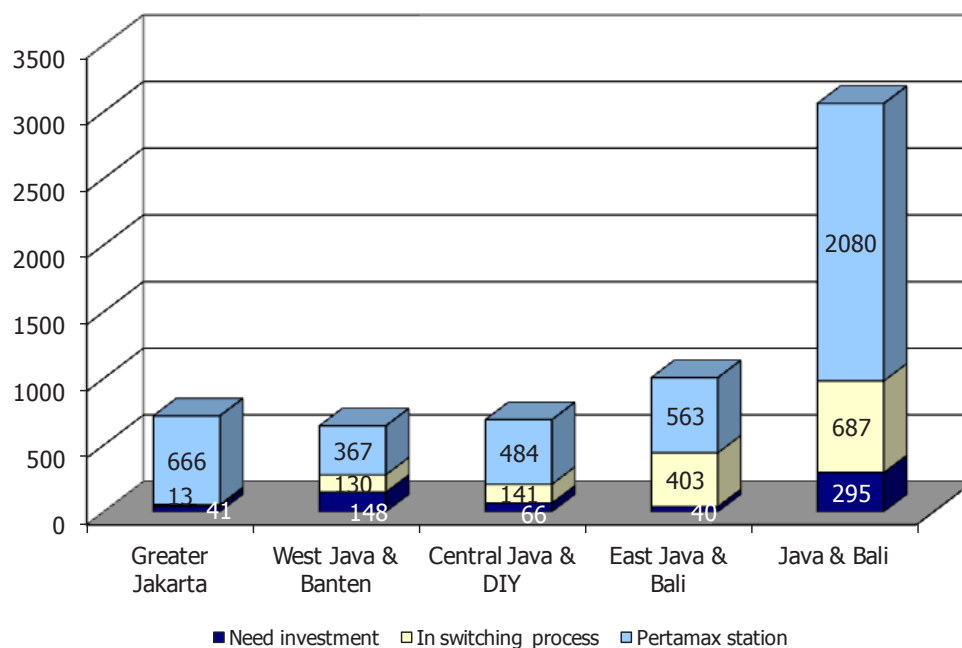
- b. Preventive activities, including ensuring fuel distribution is carried out in accordance with regulations and on target; close supervision; establishing the task force for monitoring and enforcing fuel provision and distribution abuse
- c. Persuasive activities, including educating offenders on how to abide by rules and regulations in future
- d. Repressive activities, including conducting raids, prosecution and law enforcement operations, confiscating evidence, and revoking business licenses
- e. Setting up a public communications space where citizens can report the actions of offenders

The monitoring and enforcement task force will increase its role, with the goals of preventing diversion of subsidized fuels and encouraging the provision and distribution of subsidized fuels within the established quotas. The team consists of the Ministry of Political, Legal and Security; MEMR; the Army, BPH Migas; the National Intelligence Agency; the attorney general, police and Bakorkamla (the Maritime Security Coordination Agency).

### 3) Operational team, led by the Ministry of Industry and Pertamina

This team monitors and evaluates the readiness of non-subsidized fuel infrastructure and diversification of oil fuel to gas fuel for transportation. Figure 7 illustrates the number of filling stations in the Java and Bali regions that: i) are currently supplying non-subsidized gasoline (Pertamax), ii) are in the process of switching facilities to supply non-subsidized gasoline and iii) need new investments to switch facilities. In total for these regions, there are 2,080 filling stations that already supply non-subsidized gasoline, 687 filling stations that are in the process of switching and 295 filling stations that still need to invest in new facilities. The switching process typically takes between one and three months to complete. The government has announced it will offer soft loans to filling stations to assist with the investments needed to switch facilities.

**FIGURE 7: STATUS OF FILLING STATIONS THAT SUPPLY PERTAMAX**



Source: Legowo (2012) Source: MEMR (undated)



4) Social impact analysis team, led by the Ministry of Political, Legal and Security Affairs

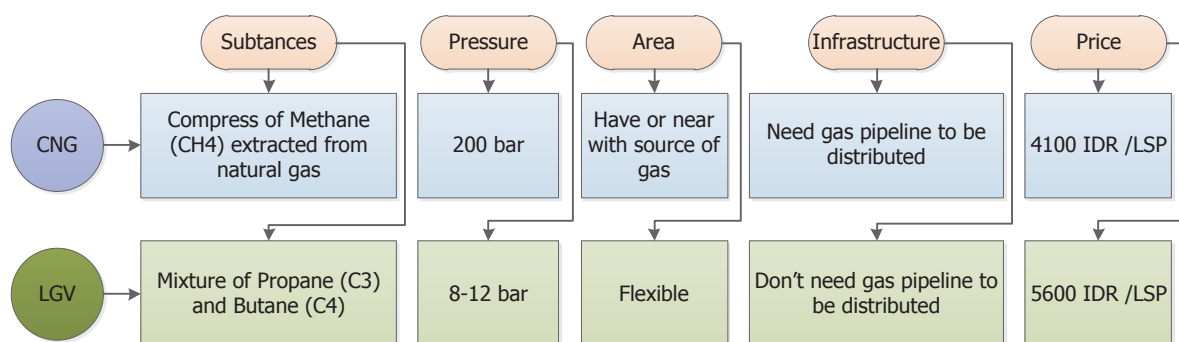
This team is responsible for analyzing changes in consumer behaviour in response to the restrictions of Premium consumption. The team will also monitor the social impacts of the implementation program and any corrective policies needed to minimize negative impacts.

### 5.2.2 Deploying CNG and LGV as Alternative Transport Fuels

Indonesia's natural gas resources present an opportunity to develop an alternative and cleaner transport fuel; however, infrastructure is required to increase its deployment. LPG, known as LGV when used as a transport fuel in Indonesia, requires less infrastructure deployment, as it is not piped.

The government plans to include two types of fuel—CNG and LGV—within its diversification program. Figure 8 shows the difference between CNG and LGV.

**FIGURE 8: THE DIFFERENCE BETWEEN CNG AND LGV**



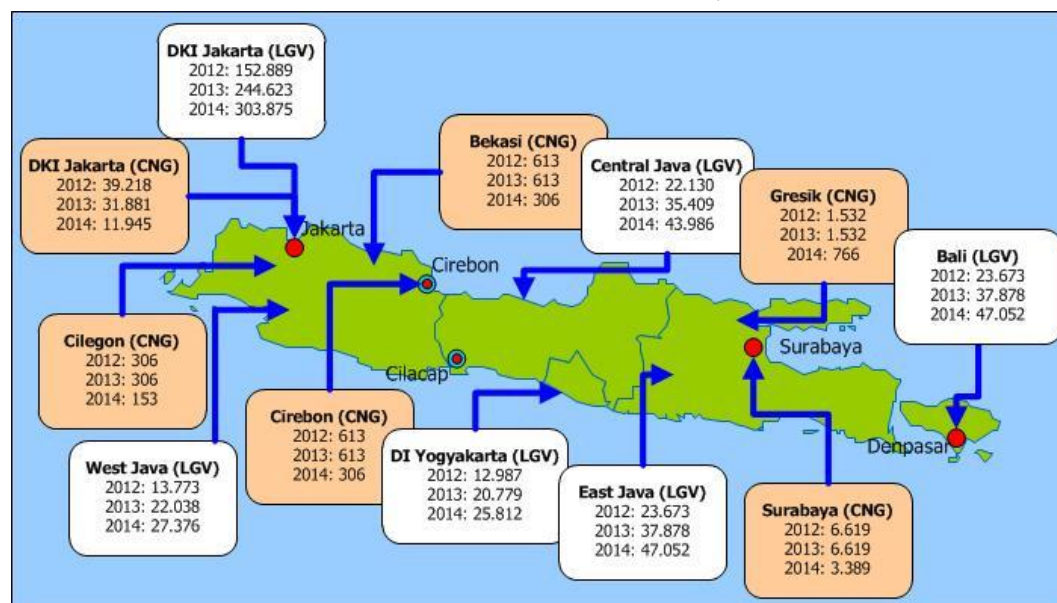
Source: Ministry of Energy and Mineral Resources (2012)

The government intends to encourage the use of CNG for urban public transport where the natural gas resources and distribution infrastructure (pipeline systems) are available. LGV will be provided in areas where natural gas resources are unavailable. In addition, LGV will also be encouraged for use by exclusive public transport (e.g., luxury taxis) and private vehicles. The government plans to distribute converter kits for CNG and LGV in public transportation, free of charge. However, converter kits for private vehicles will cost between IDR10 million and IDR13 million (US\$1000–US\$1400) per vehicle. MEMR plans to implement the conversion program in Jakarta first and then Greater Jakarta, before the program is rolled out in other cities.

The government's target is to convert 46,000 vehicles to CNG and 250,000 vehicles to LGV by the end of 2012 in the Java and Bali regions (see Figure 9). The gas-filling stations to be converted include 55 stations for CNG and 108 stations for LGV in the Java and Bali regions. The government's implementation plan will focus on the Java and Bali regions initially and then roll out nationwide.



**FIGURE 9: REGIONAL TARGETS FOR THE GASOLINE-TO-CNG/LGV CONVERSION PROGRAMS**



Source: Legowo (2012)

### Gas Availability

The CNG conversion program can only be implemented in areas where sources of gas and other infrastructure, in this case the distribution pipeline, are available. Table 4 illustrates the volumes of CNG required to meet the government's targets. For example, by 2012, Jakarta, Banten and West Java will need 26.1 million standard cubic feet per day (MMSCFD) (42 gas stations) and East Java will need 6.7 MMSCFD (13 gas stations).

**TABLE 4: CNG NEEDED TO SUBSTITUTE SUBSIDIZED GASOLINE (MMSCFD)**

Region	2012	2013	2014
Java-Bali	32,8*	65,6	82
Sumatera	-	8,8	13,2
Borneo	-	0,8	1,2
Sulawesi	-	-	0,32
Maluku and Papua	-	-	-
<b>Total</b>	<b>32,8</b>	<b>75,2</b>	<b>96,72</b>

Source: Legowo (2012)

Distribution of LGV, on the other hand, can be implemented across the entire region, because it is much easier to transport than CNG. The government's target to is convert 250,000 vehicles from gasoline to LGV in the Java and Bali regions by the end of 2012.





**TABLE 5: LGV NEEDED TO SUBSTITUTE SUBSIDIZED GASOLINE (METRIC TONNES PER DAY)**

Region	2012	2013	2014
Java-Bali	681.199	1.089.918	1.353.640
Sumatera	-	239.782	297.861
Borneo	-	87.193	108.313
Sulawesi	-	-	94.774
Maluku and Papua	-	-	14.253
<b>Total</b>	<b>681.199</b>	<b>75,2</b>	<b>1.868.841</b>

Source: Legowo (2012)

### Gas Fuel Infrastructure

New infrastructure and facilities will be required to implement the subsidized gasoline to CNG and LGV conversion programs. Currently, there are eight CNG gas stations in Jakarta and one in Surabaya. Table 6 illustrates the government's plans to develop CNG stations in the regions of Java and Bali during the year 2012.

**TABLE 6: CNG STATIONS TO BE DEVELOPED IN JAVA AND BALI IN 2012<sup>8</sup>**

Region	Gas Station	Month									Total
		4	5	6	7	8	9	10	11	12	
DKI Jakarta	Mother station			3		3					6
	Daughter station	18		5	8	8					29
West Java	Mother station						1				1
	Daughter station	1		1			2				4
Banten	Mother station										0
	Daughter station						2				2
Central Java											0
Yogyakarta											0
East Java	Mother station							2		1	3
	Daughter station							5		4	9
	Online station									1	1
Bali											0
Total		19	0	9	8	11	5	7	0	6	55

Source: Legowo (2012)

Table 6 also shows that there is no plan to develop CNG gas stations in Central Java, Yogyakarta or Bali, as natural gas resources are not available in these regions.

Jakarta also currently has 10 LGV gas stations. Table 7 illustrates the government's plans to develop more LGV stations in the Java-Bali area.

<sup>8</sup> The "mother-daughter system" is used to transport CNG to areas that are not covered by the gas pipeline network. "Mother" refers to the main CNG station and "daughter" refers to the pump station where the fuel is sold. CNG is transported between the two by truck.



**TABLE 7: LGV STATIONS TO BE DEVELOPED IN JAVA AND BALI IN 2012**

Region	Month								Total
	4	5	6	7	8	9	10	11	
DKI Jakarta	16								16
West Java			8		7				15
Banten		5		6					11
Central Java				7		18			25
Yogyakarta					3		1		4
East Java					11		21		32
Bali						2		3	5
<b>Total</b>	<b>16</b>	<b>5</b>	<b>8</b>	<b>13</b>	<b>21</b>	<b>20</b>	<b>22</b>	<b>3</b>	<b>108</b>

Source: Legowo (2012)

Pertamina is planning to develop more filling stations to meet higher demand as a result of the gasoline-to-LGV and CNG conversion programs. To facilitate this, Pertamina needs support from local governments to obtain land-use permits. In the second quarter of 2012, Pertamina will start operating a floating storage and regasification unit (FSRU) in Jakarta Bay to supply gas to PLN for needs such as power generation and transportation. Through its subsidiary, Pertagas, Pertamina is also developing a floating LNG storage and regasification terminal in Central Java and are now finalizing a tender to select the FSRU to be used for this project. The FSRU will receive LNG from various domestic natural gas sources and then supply the fuel through an integrated pipeline built across the Java region. Pertamina will also optimize the mother-daughter system to distribute gas to consumers.

### *Certification of Garages, Technicians and Converter Kits*

Garages, technicians and converter kits will all require certification, to be carried out by the government when the conversion program is implemented. The regulations for certification have been divided into two different processes, one for LGV and one for CNG. For LGV certification, the Directorate General of Land Transportation is responsible for issuing the standards for converter kits (No. 78/2009 and UN ECE-R67 standard) and for certifying installations. The certification process will require that each brand and type of vehicle be tested to ensure the converter kits can be installed properly. CNG converter kits, on the other hand, follow the Indonesian National Standard for pressurized natural gas conversion equipment on vehicles (BSN SNI 7407 2009) issued by the Indonesian National Standards Agency.

The Directorate General of Land Transportation is also responsible for the certification of garages and technicians. Garages must meet such requirements as having a competent technician, special equipment for installing gas fuel systems, equipment to detect gas leaks and safety facilities. Regular monitoring (e.g., every 6 months) will include routine inspection or testing of equipment and installations. Technicians must meet certain professional requirements, including at least two years' experience as a technician and a certification of competence in the field of gas fuel systems.



### 5.2.3 Pilot Projects

#### *Using Radio Frequency Identification to Monitor Consumption in Public Transportation in Jakarta*

In August 2011, the government initiated a pilot project to limit the volume of Premium gasoline consumed in Jakarta using Radio Frequency Identification (RFID) control kits. The purpose of the RFID project is to monitor the fuel consumption of public transportation (mini-buses) in Jakarta. The target is to limit the consumption of Premium gasoline for mini-buses to 50 litres per day and monitor consumption through an online system. MEMR, in coordination with Pertamina, installed RFID sensor and monitoring systems in four fuel stations and issued more than 1,500 unique identity stickers to mini-buses in Jakarta.

The project was scheduled for three months and will be reviewed. Initial survey findings suggest that 42 per cent of fleet drivers equipped with an RFID tag did not understand the purpose or functions of the RFID mechanism. The drivers thought they were still entitled to refill their vehicles with Premium gasoline in non-RFID fuel stations and so did not adhere to the volume restrictions.

#### *Conversion from Gasoline to Gas Transport Fuels in Palembang*

In December 2011, MEMR started a pilot project in Palembang to introduce alternative transport fuels. MEMR has allocated 200 free converter kits for public transportation and taxis and has built four gas stations in Palembang area. This pilot project will be expanded in 2012.

#### *Jakarta's Blue Sky project*

The Jakarta province, with support from the World Bank, started a project to introduce alternative transport fuels back in the late 1980s. The main objective of the program was to reduce emissions from the city's public transportation network by using cleaner and more efficient fuels. The government cooperated with local taxi companies to install over 200 converter kits and establish gas stations in Jakarta, but after two years in operation, the project failed. The main challenges were: the lack of awareness among the taxi drivers; gas tanks designed to hold 15 litres where average consumption was 30 litres per day; and few filling stations, which were located far from the taxis' normal transport routes. For these reasons, taxi drivers continued to prefer Premium rather than gas, despite gas being the cheaper fuel.

In 2005 the administration in Jakarta required all public transportation vehicles, as well as the city administration's operational vehicles, to switch to gas. More than 2,530 bajaj (three-wheeled, motorized vehicles) have been converted to CNG since 2005. The administration has destroyed the old bajajs to reduce air and noise pollution. Additionally, the Governor of Jakarta has promoted a mass public transportation service, called trans-Jakarta, which runs more than 500 buses on gas, serving 250,000 passengers everyday.

### 5.2.4 Implementation Challenges

#### *Restricting Consumption of Premium*

**Facilities required to supply non-subsidized gasoline** – As of the beginning of 2012, in the Java and Bali regions, 687 fuel stations were in the process of switching to non-subsidized gasoline, but 295 fuel stations still need new investors to help develop facilities for supplying non-subsidized fuel.

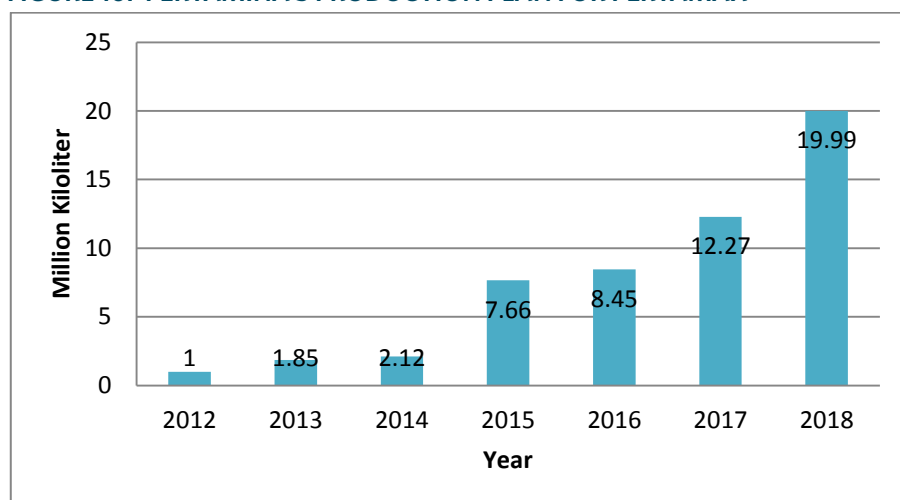


**Access and layout of fuel stations** – The layout of most fuel stations is designed to serve Premium and non-subsidized fuel to any consumer. In order to control access to Premium, the layout could be redesigned to prevent unauthorized consumers from accessing the Premium, thereby minimizing confrontations between fuel station operators and consumers.

**Non-subsidized fuel volume and stock** – Current demand for subsidized Premium gasoline per year is approximately 24 million kilolitres, while the demand for non-subsidized gasoline is approximately 800,000 kilolitres. Only two (out of six) of Pertamina's refineries are able to produce non-subsidized gasoline. Pertamina's refineries produce 12 million kilolitres of Premium and 500,000 kilolitres of Pertamina per year; importing the remainder 12 million kilolitres of Premium and 300,000 kilolitres of Pertamina (Pradipta, 2012b). When the government implements a restriction on the consumption of Premium, Pertamina estimates the demand for Pertamina will increase to 3–4 million kilolitres (Pradipta, 2012b).

Building new refineries and upgrading will take between two and four years. The Cilacap refinery will start producing Pertamina in 2014. Pertamina announced that it will be ready to produce and supply Pertamina to fully meet demand by 2017. At that time, the production of Pertamina will reach 12.27 million kilolitres (see Figure 10).

**FIGURE 10: PERTAMINA'S PRODUCTION PLAN FOR PERTAMAX**



Source: Antara News (2012)

### *Developing Gas Alternatives*

**Limited fuel stations and quality of gas** – Currently, there are eight CNG filling stations, 10 LGV filling stations in Jakarta and one CNG filling station in Surabaya. The limited number of stations can cause long queues and some vehicles, including bajajs, have switched from CNG back to Premium gasoline because of the drivers' reluctance to queue (Republika Online, 2011). TransJakarta bus drivers often complain about the poor quality of CNG due to high water content and low methane gas, which causes rapid engine damage and decreases the lifespan of buses (Republika Online, 2011).



**Development of natural gas reserves** – Indonesia has a substantial volume of natural gas resources and these need to be developed to meet the demand for industrial consumers, power plants, export and gas-based transport fuels. According to MEMR, in 2012, 26.1 MMSCFD of CNG will be required in the areas of DKI Jakarta, Banten and West Java for the transport fuel conversion program; in East Java, 6.7 MMSCFD of CNG will be required, with possibly 50 MMSCFD as standby. In addition, in 2012, the gasoline-to-LGV conversion program in Java and Bali will require 681,000 metric tonnes per day (Republika Online, 2011).

**Land development** – Jakarta is a densely populated area, making it difficult to obtain permission and source adequate investments to access land and build new filling stations. The city government of Jakarta and other regions could support these activities by providing land to build the infrastructure and facilities needed to supply gas fuels.

**Quality of converter kits** – According to the Association of Indonesian Automotive Industries (Gaikindo), converter kits can have two negative impacts on vehicles: they can decrease engine performance and risk warranty loss. Engine performance may decrease due to the different octane levels of alternative fuels: cars that are manufactured today do not have components for high-octane fuel such as gas. Second, in order to install a converter kit, three components of the engine must be replaced: the CNG valve, valve seat and piston rings. Gaikindo claims that damages caused by the modification of a car outside an official workshop will invalidate the car's warranty. Some car manufacturers have announced they will provide a converter kit, but expect the preparation to take two years. If the deployment of CNG and LGV as an alternative transport fuel is rolled out nationwide, car manufacturers will be able to produce cars that run on gas by 2014. In the meantime, the government intends to import converter kits and request PT. Dirgantara Indonesia (an aerospace company with an automotive manufacturing arm) to produce converter kits based on the Indonesian National Standard.

**Human resources** – Fuel station pump operators have not been adequately informed about the fuel subsidy changes. There are 120,000 employees in Java and Bali that need to be well informed of the changes and trained to manage the transition to alternative fuels. In addition, the human resources available to install converter kits are inadequate and have not been certified (Pradipta, 2012a). The Indonesian Consumer Organization demands that comprehensive socialization activities need to be undertaken to improve the safety of vehicles carrying gas-based fuel and drivers should be well trained to prevent fatal accidents.

**Monitoring systems** – In 2011, the government carried out a pilot project using RFID to monitor the use of subsidized fuel in public mini-buses. A review needs to be undertaken to assess the effectiveness of the RFID mechanism as a monitoring and evaluation tool. An initial survey shows that that 42 per cent of fleet drivers equipped with an RFID tag in the pilot project did not understand the purpose or functions of the RFID mechanism, and therefore any future use of the system should be accompanied by more effective communication and awareness raising.

**Prices of CNG and converter kits** – The private sector has asked for the price to be revised because the margins are very small and less attractive to distributors. Also, the price of converter kits is prohibitive: a converter kit costs between IDR10 million and IDR13 million per unit, which is too expensive for most private cars owners.

### *General*

**Timeline** – The government plans to convert 46,000 vehicles to use CNG and 250,000 vehicles to use LGV by the end of 2012 appear unrealistic. The Association of Fuel Station Owners claims that the station owners are not yet ready to build infrastructure to supply non-subsidized fuel and that it takes more than two months to build a new storage tank or to switch from Premium to non-subsidized gasoline storage tanks. Moreover, preparations for the



gasoline-to-CNG and LGV conversion programs will require at least three years (Kompas, 2012a). Regardless, the government needs to make a firm decision about its subsidy policy and implementation program soon so that private sector can make the necessary investments and consumers have time to adjust.

**Funding** – The Association of Fuel Station Owners claims that an investment fund of IDR1.5 billion is required to develop the required distribution facilities. The government has announced that there is funding available for soft loans for infrastructure investment; however, the loan disbursement procedures may delay the loans.

#### *Awareness among public transportation drivers*

To date, the information that communities have received about the government's subsidy reform plans has been inconsistent, with some parts of the community not receiving any information at all. The IIEE undertook a survey of 250 public transport drivers in the Jakarta area. The findings show that 25 per cent of respondents were unaware of the government's plan to limit access to subsidized gasoline. Of the 75 per cent of respondents that knew about the program, 72 per cent were aware that the program will take effect starting April 1, 2012, 12 per cent thought that the program would start in March 2012, 11 per cent thought that the program would start in February 2012, and 5 per cent were unaware of the exact starting time.

The survey showed that 74 per cent of respondents knew that the government's plan to limit subsidized gasoline will start in Greater Jakarta area, 23 per cent thought that the program would start in the Java and Bali areas, and 2 per cent of respondents thought that the program would start in the Sumatra area.

According to 45 per cent of the survey respondents, television is the most effective medium to communicate information about the government's reform plans. Twenty-two per cent of respondents claimed to have received the information about the program from friends, another 20 per cent had received information about the program from printed media (newspapers, magazines), and only 5 per cent of respondents suggested dissemination information directly at the fuel stations and terminals.

Recognizing these challenges, and particularly the feasibility of implementing restrictions on consumption and developing alternative gas-based fuels by April 2012, the government is reconsidering options to raise the price of subsidized gasoline as an additional component of its plans to reduce subsidy expenditure.

## **5.3 Fuel Pricing Reform**

Pricing policies are quicker and easier to implement than, for example, the government's program to develop alternative gas-based transport fuels. However, public reaction to price reforms can be more difficult to manage. To reduce public opposition, any negative impacts for poor and vulnerable groups from fuel price rises need to be effectively mitigated through social support schemes, and a clear and well coordinated public communications strategy deployed.

### **5.3.1 The Government's Plan to Raise the Price of Subsidized Gasoline**

In early February 2012, the government re-established an assessment team from a consortium of universities, including UI, UGM and ITB, to review the options for increasing the price of subsidized gasoline. The research teams had only three weeks to research and prepare the options. On an initial assessment, the teams provided a number of different options, including: raising the price of Premium from IDR4,500 per litre to IDR5,000 per litre, with a cash



rebate for public transportation operators, or raising the price of Premium to IDR5,500 per litre for most consumers, but maintaining a quota of subsidized fuel at the current price for public transportation and motorcycles. In addition, the Deputy Minister of Energy and Mineral Resources and the National Energy Council have considered raising the price of Premium gasoline on a regular basis, either in jumps each year, or small increments (e.g., by IDR100 or by 5 per cent) on a monthly basis until the price is raised to a pre-determined economic price (e.g., IDR7,500 and IDR8,000 have both been suggested as the ideal price).

In March 2012, the government announced that it would raise the price of Premium<sup>9</sup> by IDR1,500 per litre in April 2012. At the time of finalizing this action plan, plans for implementing these price changes, including whether prices would be raised in one hike or several, and exact dates for the changes, were not clear.

Raising the price of Premium by IDR1,500 per litre will not be sufficient to significantly reduce the government subsidy budget and align market signals with the objectives the government wants to achieve (i.e., shifting consumption to non-subsidized, higher-grade gasoline and deploying increased volumes CNG and LGV). Reducing the price gap between Premium and Pertamina (e.g., to around IDR1,500 per litre or less) is more likely to encourage motorists to shift towards consumption of higher-grade fuels. Creating higher demand for Pertamina will provide incentives to the private sector to invest in infrastructure for producing and distributing increased volumes of higher-quality fuels.

In addition, revising the pricing policy for all transport fuels will improve market signals for changing consumer behaviour, incentivizing supply of alternative fuels and minimizing market distortions. The government needs to revise its pricing policy for CNG to increase the very low profit margins for suppliers, enabling them to make a better return on their investments, thereby incentivizing private investment in the production and supply of CNG. If subsidies for 3 kilogram LPG cylinders for household use are maintained, then prices for the 3 kilogram cylinders will be lower than for transport use, encouraging illegal diversion of fuel from the 3 kilogram cylinders to larger transport cylinders, creating market distortions, increasing government subsidy expenditure and inevitably resulting in accidents. Kerosene is also often used to adulterate diesel and, as such, should be included in the pricing reforms.

Simply raising prices alone will not be sufficient to eliminate subsidies. As international oil prices fluctuate, subsidies can re-emerge when prices peak, or the government can be pressured to lower prices when the international price drops, especially before an election. The ultimate goal should be market-based prices, with no intervention from the government. The section below offers policy advice, based on international best practice for establishing different types of pricing mechanisms that can help the Government of Indonesia transition away from subsidized fuel prices toward a deregulated fuel market.

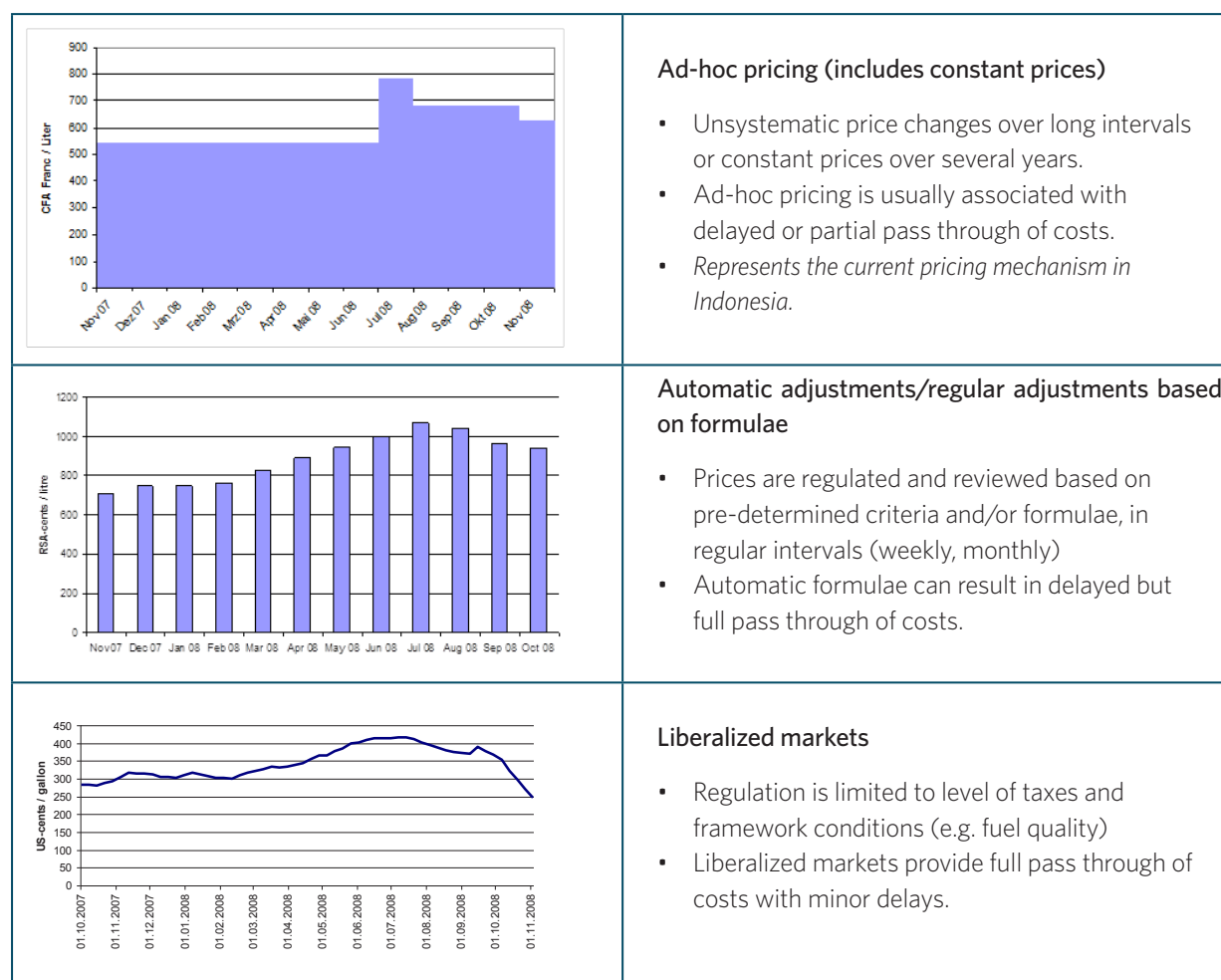
### 5.3.2 Pricing Mechanisms

The German International Cooperation agency (GIZ) illustrates three different types of price regulations: ad-hoc pricing (the current system in Indonesia), automatic and regular price adjustments (often based on a clear formula linked to the international price) and a liberalized market (see Figure 11). Establishing an automatic pricing mechanism can help a government transition to liberalized pricing.

<sup>9</sup> As of March 30, 2012 the government delayed the price increase, leaving much uncertainty about if, when or how the price of Premium may be increased during 2012 (Tampubolon, 2012).



**FIGURE 11: THREE TYPES OF FUEL PRICING MECHANISMS**



Source: Wagner (2010)

An administrative mechanism that establishes a degree of automatic linkage between domestic and international prices can reduce subsidies and expose consumers to some degree of price volatility while still smoothing out fluctuations and protecting consumers from extreme prices. For Indonesia, a net oil importing country, domestic prices should generally be based on import parity: the import market price (including insurance and freight costs) plus local taxes, fees and margins.

Transparency in pricing mechanisms is an important element of reform: it helps the public to understand how the price changes are determined and where the money is going. The government should make the following information publicly available in an easy-to-access, comprehensible and accountable manner: price data for all fuel products, timelines of prices, price components (e.g., production/import prices, taxation levels and other charges), structure and modus operandi of the pricing mechanism (if applied), and underlying legislation (Wagner, 2010).





## 6.0 Conclusion

Indonesia has made several attempts to limit its fuel subsidies over the last two decades, with a mixed record of success. Today, fuel subsidies constitute a considerable part of the government's expenditure. The current administration has committed to reducing fuel subsidies—on the basis that they hinder economic growth and are an inefficient means to alleviate poverty—focusing first on gasoline, by introducing a number of reform measures, including price increases for Premium.

This action plan identifies a number of practical challenges to the government's implementation plan for limiting access to Premium and developing CNG and LGV as alternative transport fuels. Notably, significant infrastructure is needed to increase the capacity of filling stations to supply increased volumes of Pertamina, to increase capacity of Pertamina's refineries to produce Pertamina, and to build new distribution facilities, pipelines and filling stations to supply CNG and LGV. Developing this infrastructure will take time and require significant investments—both public and private—and this action plan recommends that the government undertake cost/benefit analyses of the options for rolling these plans out nationwide, before committing to the reforms.

Reforming fuel pricing policies is a more effective way of reducing, and ultimately eliminating, subsidies. Price changes are also relatively simpler to implement, although public reaction to fuel price increases can be stronger if the reforms do not accommodate support measures for poor and vulnerable groups to cope with rising energy costs, and if the implementation plan is not well communicated to the public. This action plan has identified windows of opportunity for reforming fuel prices in the months ahead, but it also provides longer-term recommendations for full liberalization of fuel prices, which will improve market signals for changing consumer behaviour, incentivizing supply of alternative fuels and minimizing market distortions.

Public demonstrations against the government's reform plans in late March have resulted in the government delaying a price increase for Premium, originally planned for April 1, 2012. The discontent underlines the considerable political obstacles that the government faces in its effort to raise fuel prices. This action plan has stressed the importance of two areas of activity that are critical to building public support: 1) a coordinated government communications strategy and 2) consultations with stakeholders with the aim of designing effective support measures.

Better outreach for the government's plans for subsidy reform would likely help build public support. While the majority of the CSOs surveyed were critical of current fuel subsidy policies, much fewer were in support of reform, in large part because they were not confident in the government's reform strategy. Thus, there is a need to go beyond making the case for why fuel subsidy reform is important, and clearly communicate the strategy for reform. In addition, a strategy is required for specific groups who will be most affected by higher fuel prices. While certain industry groups will never endorse changes to the status quo, opposition can be quelled by communicating the main components and timeline of the strategy, to help the private sector adapt. The specifics of these communication strategies would need to be tailored to different interest groups.

Closely related to the communication strategy is the need for more consultations with citizens, the media and the private sector. Incorporating the interests of stakeholders into the government's reform plan can serve the twin objectives of improving the plan to provide adequate support for those who need it and winning support from key interest groups. The government's current reform plans include a proposal to redirect the savings from subsidy reform to four key areas: implementation of a cash transfer (IDR25.6 trillion), public transport subsidies (IDR5 trillion), increase in expenditure for productive activities (e.g., infrastructure development, electricity access, food security, disaster mitigation; IDR30 trillion) and increase in expenditure for education (IDR6 trillion). However, many



CSOs have expressed concern that the BLT cash transfer has not been an effective tool for reducing poverty, nor was it the preferred compensation mechanism of most of those surveyed. Moreover, CSOs are concerned that there will be a delay between raising fuel prices and implementing the cash transfer, leaving poor and vulnerable groups without support when the price of Premium is increased. Throughout the project consultations, stakeholders raised a number of other priorities, including social welfare and poverty reduction programs (e.g., national health insurance), agriculture, energy diversification and environmental protection. Improving consultations with key interest groups on setting the priorities for redirecting the subsidy savings and communicating these expenditure plans to the public would help the government overcome some of the public opposition it is currently facing.



## References

Antara News. (2012, January 24). Pertamina to produce 19.99 million kl pertamax. Retrieved from: <http://www.antaranews.com/en/news/79441/pertamina-to-produce-1999-million-kl-pertamax>

Antlöv, H., Ibrahim, R. & van Tuijl, P. (2005) *NGO governance and accountability in Indonesia: Challenges in a newly democratizing country*. Retrieved from: [http://www.justassociates.org/associates\\_files/Peter\\_NGO%20accountability%20in%20Indonesia%20July%2005%20version.pdf](http://www.justassociates.org/associates_files/Peter_NGO%20accountability%20in%20Indonesia%20July%2005%20version.pdf)

Antweiler, W. (2009). *Foreign currency units per 1 U.S. Dollar, 1948-2009*. Retrieved from: <http://fx.sauder.ubc.ca/etc/USDpages.pdf>

Asia Development Bank. (n.d.) *Vehicle emissions standards*. Retrieved from: [http://www2.adb.org/documents/guidelines/vehicle\\_emissions/im\\_ch03.pdf](http://www2.adb.org/documents/guidelines/vehicle_emissions/im_ch03.pdf)

Baig, T., Coady, D., Mati, A., & Ntamatungiro, J. (2007). *Domestic petroleum product prices and subsidies: Recent developments and reform strategies*. IMF Working Papers, 7071(200), 1-24.

Beaton, C., & Lontoh, L.A. (2010). *Lessons learned from Indonesia's attempts to reform fuel subsidies*. Global Subsidies Initiative of the International Institute for Sustainable Development: Geneva. Retrieved from: [http://www.iisd.org/pdf/2010/lessons\\_indonesia\\_fossil\\_fuel\\_reform.pdf](http://www.iisd.org/pdf/2010/lessons_indonesia_fossil_fuel_reform.pdf)

Fitriany, N. (2011, October 11). Ministry of Finance: Fuel consumption control adds 0.5-0.6% to inflation. *Indonesia Finance Today*. Retrieved from: <http://en.indonesiainfinancetoday.com/read/11864/Ministry-of-Finance-Fuel-Consumption-Control-Adds-0.5-0.6-to-Inflation>

Global Subsidies Initiative & Institute of Essential Services Reform. (2011). *A citizens' guide to energy subsidies in Indonesia*. Geneva: Global Subsidies Initiative of the International Institute for Sustainable Development. Retrieved from: <http://www.iisd.org/gsi/citizens-guide-energy-subsidies-indonesia>

Government of the Republic of Indonesia. (2006a). *Peraturan Presiden Republik Indonesia Nomor 5 Tahun 2006 Tentang Kebijakan Energi Nasional* [The Decree of the President of the Republic of Indonesia Number 5 Year 2006 Concerning National Energy Policy]. Retrieved from: <http://www.presidentri.go.id/DokumenUU.php/81.pdf>

Hidayatullah, S. (2010). 65 Tahun Ekonom Indonesia (Part 2): Ekonomi di Masa Demokrasi TelDRimpin [65 years of the Indonesian economist (part 2): The economy during the period of guided democracy]. *Kompasiana*. Retrieved from: <http://ekonomi.kompasiana.com/bisnis/2010/08/25/65-tahun-ekonom-indonesia-part-2-ekonom-di-masa-demokrasi-telDRimpin/>

Jakarta Globe. (2012, January 17). Pertamina asks Jakarta for protection against rivals. Retrieved from: <http://www.thejakartaglobe.com/business/pertamina-asks-jakarta-for-protection-against-rivals/491968>

Kompas (2012a, February 2). Perlu Tiga Tahun untuk Konversi BBM ke BBG [Three years needed to convert to CNG fuel]. Retrieved from: <http://bisniskeuangan.kompas.com/read/2012/02/02/20582672/Perlu.Tiga.Tahun.untuk.Konversi.BBM.ke.BBG>

Kompas. (2012b, February 8). Pertamina Siap Terapkan Opsi BBM [Pertamina ready to implement fuel option]. Retrieved from: <http://bisniskeuangan.kompas.com/read/2012/02/08/04092898/Pertamina.Siap.Terapkan.Opsi.BBM>

Legowo, E (2012). Pengendalian Konsumsi BBM bersubsidi 2012. In *Working Meeting House of Representatives Commission VII with MEMR "Pelaksanaan Fungsi Pengawasan."* January 30, 2012. Jakarta: DPR.



Lestyowati, J. (2011, October 31). Menguji Kekuatan Rupiah [Testing the strength of the Rupiah]. *BPPK*. Retrieved from: [http://www.bppk.depkeu.go.id/bdk/medan/index.php?option=com\\_content&view=article&id=144:-menguji-kekuatan-rupiah-mengenang-kembali-65-tahun-oeang-repoeblik-indonesia&catid=10:umum](http://www.bppk.depkeu.go.id/bdk/medan/index.php?option=com_content&view=article&id=144:-menguji-kekuatan-rupiah-mengenang-kembali-65-tahun-oeang-repoeblik-indonesia&catid=10:umum)

Media Indonesia. (2012, February 15). Pertamina Patok Penjualan BBM 57,05 Juta Kiloliter [Pertamina targets 57.05 kiloliters of fuel sales]. Retrieved from: <http://www.mediaindonesia.com/read/2012/02/15/298555/4/2/Pertamina-Patok-Penjualan-BBM-5705-Juta-Kiloliter>

Ministry of Energy and Mineral Resources. (n.d.). *Harga BBM Dalam Negeri, 1965-2000* [Domestic fuel prices, 1965-2000]. Retrieved from: [http://www.esdm.go.id/publikasi/harga-energi/harga-bbm-dalam-negeri/doc\\_download/694-harga-bbm-dalam-negeri-1965-2000.html](http://www.esdm.go.id/publikasi/harga-energi/harga-bbm-dalam-negeri/doc_download/694-harga-bbm-dalam-negeri-1965-2000.html)

Ministry of Energy and Mineral Resources. (2003). *Kebijakan Energi Nasional, 2003-2020: Kebijakan Energi yang TelDRadu untuk Mendukung Pembangunan Nasional Berkelanjutan* [The National Energy Policy, 2003-2020: An integrated energy policy to support sustainable national development]. Retrieved from: [http://www.mki-online.org/mki\\_online\\_files/Regulasi/KEN\\_Final.pdf](http://www.mki-online.org/mki_online_files/Regulasi/KEN_Final.pdf)

Ministry of Energy and Mineral Resources. (2006). *Blueprint Pengelolaan Energi Nasional, 2006-2025*. Retrieved from: [www.esdm.go.id%2Fbatubara%2Fdoc\\_download%2F714-blue-print-pengelolaan-energi-nasional-pen.html&ei=JB MqT5HblonjrAffOdnFDA&usg=AFQjCNGRNfIfoikIFDIxB4rRt-ulSiKPAg&sig2=feHmKXVn19FLT5m9X1pA\\_g](http://www.esdm.go.id%2Fbatubara%2Fdoc_download%2F714-blue-print-pengelolaan-energi-nasional-pen.html&ei=JB MqT5HblonjrAffOdnFDA&usg=AFQjCNGRNfIfoikIFDIxB4rRt-ulSiKPAg&sig2=feHmKXVn19FLT5m9X1pA_g)

Ministry of Energy and Mineral Resources. (2012, January 20). Lebih Jauh Tentang LGV dan CNG [More about LGV and CNG]. Retrieved from: <http://www.esdm.go.id/berita/migas/40-migas/5375-lebih-jauh-tentang-lgv-dan-cng.html>

Ministry of Finance (2012, March 15). Pokok-Pokok Kebijakan RAPBN-p Tahun 2012 [Principles of State Budget 2012]. *IISD and IIEE Workshop: Subsidized fuel management: Preparation for implementation and mitigation of the negative impacts*, Jakarta.

Pradipta, O.V.A. (2012a, January 18). KONVERSI BBM: Pertamina Angkat Tangan Kalau Jawa-Bali [Fuel Conversion: Pertamina gives up if it is about Java-Bali]. Retrieved from: <http://en.bisnis.com/articles/konversi-bbm-pertamina-angkat-tangan-kalau-jawa-bali>

Pradipta, O.V.A. (2012b, January 24). PEMBATASAN BBM: Pertamina Alihkan Impor Premium Ke Pertamina ([Fuel limitation: Pertamina switches Premium imports to Pertamina]). *Bisnis Indonesia*. Retrieved from: <http://en.bisnis.com/articles/pembatasan-bbm-pertamina-alihkan-impor-premium-ke-pertamax>

Republika Online (2011, November 11). "Sandungan" Lain Transjakarta: Kualitas BBG Rendah dan Jalur Rusak ["Stumbling Block" Transjakarta: BBG quality low and line damage]. Retrieved from: <http://www.republika.co.id/berita/regional/jabodetabek/11/11/11/luh71u-sandungan-lain-transjakarta-kualitas-bbg-rendah-dan-jalur-rusak>

Tampubolon, H.D. (2012, April 2). Govt fuel 'flub' fouls future plans. *Jakarta Post*. Retrieved from: <http://www.thejakartapost.com/news/2012/04/02/govt-fuel-flub-fouls-future-plans.html>

Wagner, A. (2010, October 14-15). Three dimensions of fuel pricing: Political steps and principles of setting effective fuel pricing mechanisms. *GSI-UNEP Conference: Increasing momentum of fossil-fuel subsidy reform: Development and opportunities*, Geneva. Retrieved from: [http://www.globalsubsidies.org/files/assets/ffs\\_gsiunepconf\\_sess3\\_awagner.pdf](http://www.globalsubsidies.org/files/assets/ffs_gsiunepconf_sess3_awagner.pdf)



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Subsidies  
Initiative



International  
Institute for  
Sustainable  
Development

Institut  
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