Update on Fossil Fuel Subsidies in Indonesia

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Director General of Oil and Gas
Ministry of Energy and Mineral Resources

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DREAM

± 5,000 km

± 4,600 km
INDONESIA

GDP 2015: USD 872.6 billion (16th in the world)
Economic Growth 2015: 4.79%
Population: 250 million
## Indonesia is both a producer & consumer.

<table>
<thead>
<tr>
<th></th>
<th>Production</th>
<th>Import</th>
<th>Consumption</th>
<th>Annual Consumption Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CRUDE OIL</strong></td>
<td>830,000 BOPD</td>
<td>770,000 BOPD</td>
<td>1.6 million BOPD</td>
<td>3%</td>
</tr>
<tr>
<td><strong>LPG</strong></td>
<td>2.27 million MTonnes</td>
<td>4.3 million MTonnes</td>
<td>6.57 million MTonnes</td>
<td>13%</td>
</tr>
<tr>
<td><strong>GAS</strong></td>
<td>8,113 MMSCFD</td>
<td>3,048 MMSCFD</td>
<td>3,703 MMSCFD</td>
<td>2%</td>
</tr>
</tbody>
</table>

Gas export & consumption as of October 2015
History of Gasoline Price in Indonesia

- **Presiden Soeharto**
  - 18x Price Increase
  - No Price Rise
  - Rp. 1,200 to Rp. 1,000

- **Presiden BJ Habibie**
  - 2x Price Increase
  - 7x Price Adjustment
  - Rp. 1,000

- **Presiden Abdurrahman Wahid**
  - 2x Price Increase
  - Rp. 1,000

- **Presiden Megawati**
  - 3x Price Increase
  - Rp. 4,500

- **Presiden Joko Widodo**
  - Rp. 8,500

Gasoline Price vs. ICP (US$/bbl)
1. Since 2005, MOPS was used as a basis pricing formula, due to multi retail players assigned to manage PSO

2. Starting in 2015, targeted subsidy with fixed subsidy level
Total Subsidy for the last 10 years: USD 110.95 Billion

- Consumption of LPG 3 kg is continuously growing:
  - Open distribution system → no limited users, everyone can buy a subsidized commodity
  - Illegal practice: taking out LPG from 3 kg canisters to be refilled to 12 or 50 kg canisters → price disparity
  - Migration of users: people who previously used LPG 12 kg prefer to buy LPG 3 kg because of the cheaper price
Shifting Fossil Fuel Subsidies

- Government has larger fiscal space for State Budget
- The funds are used for infrastructure development and social security program
- Not only for developing energy access, also can be used for multi sectoral infrastructure

Encourage the construction of public infrastructure, such as Bridge, Irrigation, Road, etc
Shifting fuel subsidy to infrastructure & social security program
Shifting fuel subsidy to infrastructure & social security program
Subsidy Scheme Reform
(Transformed from Floating to Fixed Subsidy)

MEMR 18/2013
- Premium: Rp.6.500/ltr
- Kerosene: Rp.2.500/ltr
- Diesel: Rp.5.500/ltr

Realization:
- ICP: 105.42 US$/bbl
- Exchange Rate: Rp.11.500/US$1
- ICP: Rp.7.623/ltr

MEMR 34/2014
- Premium: Rp.8.500/ltr
- Kerosene: Rp.2.500/ltr
- Diesel: Rp.7.500/ltr

Realization Nov'14
- ICP: 75.39 US$/bbl
- Exchange Rate: Rp.12.097/US$1
- ICP: Rp.6.736/ltr

Since January 1st, 2015:
- Gasoline 88 is no longer subsidized
- Fixed subsidy of HSD 48
- Fixed retail price of kerosene (fluctuative subsidy)

Price calculation:
- Monthly average
- 3-month-average

Fixed Subsidy of HSD 48:
- Fixed subsidy: Rp 1,000/liter
- Fixed subsidy: Rp 500/liter

Fixed subsidy will result in a fluctuation of retail price
Strategy How to Handle Gasoline RON 88 Price Fluctuation

- Retail Price 1 Nov – 31 Dec USD 0.689
- Retail Price 1 Mar – 27 Mar USD 0.552
- Retail Price 5 Jan – 31 Mar USD 0.564
- Retail Price 1 April – 31 Dec USD 0.523
- Retail Price 18 Nov – 31 Dec USD 0.689
- Retail Price 19 Jan – 28 Feb USD 0.535
- Retail Price 28 Mar – 4 Jan USD 0.592

USD/liter

Retail Price (USD/liter)  Calculated Price (USD/liter)  Daily Price (USD/liter)
Strategy How to Handle HSD 48 Price Fluctuation

<table>
<thead>
<tr>
<th>Retail Price 1 – 18 Jan</th>
<th>USD 0.588*</th>
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<tr>
<td>Retail Price 10 Okt – 4 Jan</td>
<td>USD 0.543*</td>
</tr>
<tr>
<td>Retail Price 5 Jan – 31 Mar</td>
<td>USD 0.458*</td>
</tr>
<tr>
<td>Retail Price 1 April – 31 Dec</td>
<td>USD 0.418**</td>
</tr>
<tr>
<td>Retail Price 18 Nov – 31 Des</td>
<td>USD 0.608*</td>
</tr>
<tr>
<td>Retail Price 28 Mar – 9 Okt</td>
<td>USD 0.560*</td>
</tr>
<tr>
<td>Retail Price 19 Jan – 27 Mar</td>
<td>USD 0.519*</td>
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* Subsidy Rp 1.000/liter
** Subsidy Rp 500/liter
Fuel Price vs Macroeconomy Indicators
Subsidy Scheme Reform
Shifting Subsidy Budget

“For the last 10 years, Government has spent USD 100 Billion for fuel subsidy (LPG not included), in the next 5 years it is expected that fuel subsidy will decrease by USD 50 Billion”

Energy Subsidy
National Infrastructure

Premium (Gasoline 88)  HSD 48  Kerosene

Subsidies are assumed to be dependent on shifting policies and State Budget.
Fuel Price vs. Inflation

- Inflation of 7.8%-8.5% (yoy) is a result of increasing fuel price in 2014.
- Transportation cost also increased by 14% (considered only fuel price) and affected the inflation rate by 2.58%.
- But if transportation cost also takes other costs into account, the transportation cost would increased by 27.26% and affect the inflation rate by 3.26% (yoy).

### Impact of Subsidized Fuel Price Increase

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### Indirect Impact to Transportation Cost

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<td>0.01</td>
<td>28.58</td>
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<tr>
<td>Intercity Transport</td>
<td>0.66</td>
<td>27.26</td>
</tr>
<tr>
<td>Public Transport</td>
<td>2.57</td>
<td>47.08</td>
</tr>
<tr>
<td>Sea Transport</td>
<td>0.05</td>
<td>5.92</td>
</tr>
<tr>
<td>Train</td>
<td>0.12</td>
<td>11.16</td>
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<tr>
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### Indirect Impact to Other Commodity

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<td>63.1</td>
<td>0.57</td>
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<td>Volatile Food</td>
<td>17.46</td>
<td>1.21</td>
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**Total Impact to Inflation:** 3.26

### Impact to Transportation Cost

- Impact to Transportation Cost is conservative, considering the rise of staple costs in 2014 (not only fuel oil, but also other components such as capital costs, cost of crew, depreciation, etc.)
- Indirect costs are based on estimation using latest data (elasticity of 10% subsidized fuel increase will raise the pressure of core inflation of 0.17% and Volatile food of 0.36%)

### Regulated Transportation Tariff

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**Total Impact to Inflation:** 2.58

- Impact to Transportation Cost is optimistic, and only considers the rise of fuel oil of Rp 3,000/liter (reflecting upon the success of regulating transportation tariffs in 2013)
- Indirect costs are based on estimation using latest data (elasticity of 10% subsidized fuel increase will raise the pressure of core inflation of 0.17% and Volatile food of 0.36%
Success Story Of Kerosene To LPG
Background of Kerosene to LPG Conversion

In 2006, fuel subsidy was amounted to IDR 64.212 Trillion. Out of that amount, IDR 31.58 Trillion was dedicated for Kerosene that put a huge burden to the State budget.

National Energy Policy → to diversify sources of energy supply and reduce dependency on fossil fuels in particular Kerosene.

LPG has a higher energy density and lower emission compared to Kerosene.

Reducing Kerosene will deliver advantages:

- Added value → Kerosene can be upgrading to avtur
- Reducing misuse of subsidized kerosene
- Remanaging the distribution system of subsidized fuel to minimize illegal practice and shortage
Distribution | 57,19 million initial packages

- Million Packages:
  - 2007: 3.70
  - 2008: 15.76
  - 2009: 24.16
  - 2010: 10.37
  - 2011: 0.00
  - 2012: 0.00
  - 2013: 1.30
  - 2014: 0.78
  - 2015: 1.12
  - Total: 57.19

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**Kerosene to LPG Conversion Area**

Area 2007-2008

Area 2009

Area 2010

Area 2012 – 2015

Conversion Planning

Ministry of Energy & Mineral Resources Republic of Indonesia
Savings Due to Conversion Program

Sales of Kerosene vs Sales of LPG 3 kg
1 liter kerosene ~ 0.4 kg LPG

Diminishing misuse of Kerosene for Cooking
(due to illegal practice)

Subsidy Saving (un-audited)
Reaching USD 15.16 Billion
Since its launching in 2007 the kerosene to LPG program has distributed ±57 million initial packages.

LPG 3 kg consumption and its subsidy is growing rapidly.

Open distribution system, no limited access.

Implementation of Closed Distribution System

- Targeted Group
- Quota Based
- Appropriate Price

Re-arranged Distribution System, Information Technology, Law Enforcement

- Efficient
- Accountable
- Transparent
- Under Control
- Sustainable

Indonesia LPG Price from 2009 to 2016
Advantages of Closed Distribution System of LPG 3 Kg

Government

- Subsidy is given only to the targeted group

People

- Security of supply

People

- Wealth improvement

People

- People buy LPG 3 kg according to the price stipulated by the local government
Next Step

• Continuous Reform to targeted subsidy as single social security policy

• Establishment of “Energy Resiliency Fund” to develop NRE, energy infrastructure development, R&D and HRD
  - Create Dynamic Adjustment Retail Oil Pricing Scheme
  - Fundraising strategy
  - Fund Management
Indonesia is both a producer and consumer.

Total Fuel Subsidy Spending in last 10 years:

USD 110.95 Billion

Harmonizing fuel pricing policy

To maintain economic stability