

# Durability as a measure of success: An analysis of fossil fuel subsidy reform in Indonesia

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# **Table of Contents**

ACI	KNOWLEDGEMENTS	4	
L	LIST OF ABBREVIATIONS5		
L	LIST OF FIGURES5		
L	LIST OF TABLES5		
EXEC	CUTIVE SUMMARY	6	
1.	Introduction	7	
2.	Redefining subsidies and qualifying success	7	
3.	Examining the ebb and flow of fossil fuel subsidy reform	8	
3.1	Case study justification and background	8	
4.	Managing the crisis	10	
5. S	SBY and the beginning of the social welfare politics	10	
6. 0	Oil market crash and "complete" reforms	13	
8. [	Discussion	14	
9. C	Conclusions	15	
REFE	REFERENCES		

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# **LIST OF ABBREVIATIONS**

IDR Indonesian rupiah

IEA International Energy Agency
IMF International Monetary Fund
LPG Liquid Petroleum Gas

NGOs Non-governmental organisation

OECD Organisation for Economic Co-Operation and

Development

OPEC Organization of the Petroleum Exporting Countries

SBY Susilo Bambang Yudhoyono

UNEP United Nations Environment Programme

USD United States dollar

# **LIST OF FIGURES**

Figure 1: Indonesia fuel prices compared to international oil market prices

Figure 2: Fuel subsidies in Indonesia (2006-2015)

Figure 3: Fluctuations of subsidies and currency exchange rate

# **LIST OF TABLES**

Table 1: Timeline of fossil fuel subsidy reforms

# **EXECUTIVE SUMMARY**

Fossil fuel subsidies are widely used around the world to reduce the cost of energy production and end prices paid by consumers. In 2014, world fossil fuel subsidiey expenditures totalled USD 493 billion. In emerging markets, fossil fuel subsidies are justified as beneficial for poverty alleviation but quite often the populations that benefit most are not the populations most in need of subsidies. The IMF estimates that the poorest 20 per cent of households receive less than 7 per cent of the benefits generated by fossil fuel subsidies. Additionally, fossil fuel subsidies also create a series of negative externalities such as: undermining the competitiveness of renewable energy generation; reinforcing lock in of fossil fuel technologies in the electricity system; reducing market energy market efficiency and discouraging investment in renewable energy technology. In 2009, G-20 leaders committed to "rationalize and phase out over the medium term inefficient fossil fuel subsidies that encourage wasteful consumption." While the process of fossil fuel subsidy reduction is ongoing, it is at an "alarmingly slow" rate, according to the OECD.

Notorious for its wasteful fossil fuel subsidies, Indonesia offers a checkered history over 14 attempts at reform. The case of Indonesia provides important insights on the political challenges of implementing reforms in developing countries in the context of vested interests, corruption, strong interest groups and a poor population susceptible to the indirect effects of reducing fossil fuel subsidies. The first attempt at reforms during the aftermath of the Asian financial crisis incited violent protests over fuel price increases and the legacy of rampant corruption, contributing to Suharto's overthrow in 1998. In contrast, President Jokowi's 2015 reform was met with broad-based support. Using qualitative analysis, this paper examines the factors that contributed to the variation in the social acceptability and durability of fuel subsidy reforms over the nearly 20-year history. The success of reforms, which are defined here in terms of their durability, is examined from two angles—their social acceptability and their economic effectiveness. While the literature on fossil fuel subsidies covers many case studies of reform, there is a lack of theorizing on the factors necessary for successful reform. This paper contributes to filling that gap by providing an analysis of the drivers of successful reform.

The analysis found that economic crises overwhelmingly drove reforms but social assistance, strong political leadership and communication campaigns, presenting strong political and economic policy choices, were the most critical factors in facilitating durable reform in Indonesia. Nevertheless, even with social assistance and political leadership, the efficiency of reforms are mitigated by the volatility in the oil and currency markets. Two strong examples of fuel subsidy reforms in Indonesia are the 2005 reforms and the 2007 reforms since they achieved both social acceptability as well as economic objectives of reducing budgetary deficits. The key aspects of these reforms included social assistance to the poor to offset the impacts of fuel price hikes and strong communication strategies to disseminate information regarding the reforms and relief of the budgetary crises. The other subsidy reforms that were repealed when prices were again reduced following fluctuations in the currency or oil markets would not qualify as successful as they do not meet the durability requirement. The Indonesia case also provides useful insights into how fluctuations in the oil and currency markets can limit the effectiveness of fossil fuel subsidy reforms.

<sup>1</sup> IEA 2015a

<sup>&</sup>lt;sup>2</sup> Arze del Granado et al.. 2010

<sup>&</sup>lt;sup>3</sup> GSI 2014; WEF 2009; Whitley 2013

<sup>&</sup>lt;sup>4</sup> IEA et al.. 2009

<sup>&</sup>lt;sup>5</sup> Doyle 2015

### 1. Introduction

Indonesia's first attempt at fossil fuel subsidy reform following the Asian financial crisis in 1997 exacerbated the already dire economic situation for people across the country. The dramatic increase in fuel prices ignited protests and violent riots, representing the breaking point in public patience for the Suharto's regimes rampant corruption and poor governance; the weeks of unrest following the reforms contributed to Suharto's resignation in 1998. Numerous fuel subsidy reforms were attempted in Indonesia in the nearly two subsequent decades but with varying degrees of success due to factors such as: the onset of external shocks or economic crises; the strength of political leadership; effective communication campaigns and the provision of social assistance. This paper asks whether the Indonesia case provides an example of "successful" subsidy reform by analysing three periods of reform – the aftermath of the Asian financial crisis under President Suharto, Megawati and Wahid (1997-2003), the introduction of social assistance programmes under SBY (2004-2013), and the most recent reforms under Jokowi in 2014/2015. The success or durability of these reforms will be examined from two angles—the social acceptability of the reforms and the economic effectiveness of reforms at relieving budgetary pressure. Following the political economy approach, this paper will look at the factors that contributed to the successful removal of the subsidies and increase in energy prices, the social acceptability of these reforms, and the political and economic challenges in implementing these policies. Indonesia presents an excellent case study to shed light on the factors that contribute to the durable reform of fossil fuel subsidies in a developing country.

# 2. Redefining subsidies and qualifying success

Fossil fuel subsidies are widely used around the world to reduce the cost of energy production and the end price paid by consumers. In 2014, world fossil fuel subsidy expenditures totalled USD 493 billion.<sup>6</sup> In emerging markets, fossil fuel subsidies are justified as beneficial for poverty alleviation but quite often the populations that benefit most are not those in most need. The IMF estimates that the poorest 20 per cent of households receive less than 7 per cent of the benefits generated by fossil fuel subsidies.<sup>7</sup> Additionally, fossil fuel subsidies create a series of negative externalities such as undermining the competitiveness of renewable energy generation, reinforcing lock in of fossil fuel technologies, reducing market efficiency, and discouraging investment in renewable energy technology.<sup>8</sup>

In their joint G-20 report on the phasing out of fossil fuel subsidies, the IEA, OECD and the World Bank define an energy subsidy as "any government action that lowers the cost of energy production, raises the revenues of energy producers, or lowers the price paid by energy consumers." Energy subsidies can include several elements: direct budgetary spending and tax relief, provision of resources below market rates, market price support and market transfers (purchase obligations, tariffs and mandates). Energy subsidy reform does not have a common definition, yet a shared measurement is necessary for determining change and effectiveness in policy. While many scholars and media often reference the change in the share of government expenditures on fuel subsidies in the overall budget as reform, this is misleading for two reasons: firstly, change in global oil prices affects the share of expenditures on fuel subsidies; secondly, the overall currency exchange rate also has an impact on the share of government expenditures on fuel subsidies, particularly for imported fuels, which is often overlooked in the literature. Subsidy reform is also measured by the increase in energy prices and the reduction of the subsidies. However, without the removal of all price controls so that domestic fuel prices reflect the global oil market, fuel subsidy reform is incomplete. Furthermore, it is important to distinguish between what qualifies as political reform and what drives "successful" reform. Hill defines successful reform as "durable and significant policy change that improves aggregate socio-economic welfare, consistent also with an objective function that recognizes distributional and environmental considerations." A "durable" reform implies that they are socially and politically acceptable and can be implemented without public protest.

The political economy literature has outlined several studies on drivers of political reform, such as external shocks or crises, political leadership for reform and strong communication campaigns. Negative external shocks, such as economic crises for example, provide necessity and urgency in initiating required reforms that may be unpopular under stable economic times.<sup>13</sup> These shocks can also allow reforms to be carried out as "low politics", or without an ideological base, which makes them easier to pass with public support.<sup>14</sup> The role of the public support for reforms, whether community groups, industry associations or students, is important in determining the durability of political reforms.<sup>15</sup> Strong communication campaigns explaining the reforms and the policies for reducing their subsequent

<sup>&</sup>lt;sup>6</sup> IEA 2015

<sup>&</sup>lt;sup>7</sup> Arze del Granado et al.. 2010

<sup>8</sup> GSI 2014; WEF 2009; Whitley 2013

<sup>9</sup> IEA et al. 2009

<sup>10</sup> GSI 2014

<sup>&</sup>lt;sup>11</sup> Diop 2014

<sup>&</sup>lt;sup>12</sup> Hill 2013, p. 109

<sup>13</sup> Drazen and Grilli 1993; Aswicahyono et al. 2009; Hill 2013

<sup>&</sup>lt;sup>14</sup> Soesastro 1989

<sup>&</sup>lt;sup>15</sup> Basri and Hill 2004

negative impacts are an important element for success, by helping the public that is most affected better understand the economic logic behind the changes. 16 This paper aims to fill gaps in the existing literature by illuminating the political and economic factors that contributed to successful reform of fossil fuel subsidies in Indonesia.

# 3. Examining the ebb and flow of fossil fuel subsidy reform

Returning to definitions, this paper will define fuel subsidy reform as the change in fuel prices to reduce subsidies to alleviate budgetary deficits. However, the complete reform of fossil fuel subsidies requires the removal of price controls so that domestic fuel prices reflect the global oil prices. A successful reform involves the achievement of socio-economic benefits as well as distributional considerations. In the case of Indonesia, this involves the reduction of budgetary deficits, the redistribution of the budget to contribute to economic development, and creating a buffer for poor populations impacted by negative externalities of fossil fuel subsidy reform (i.e. inflation and a rise in the price of consumer goods).

# 3.1 Case study justification and background

Indonesia is a case study that illustrates the political challenges of implementing fossil fuel subsidy reform in a developing country. Fossil fuel subsidies have had a major impact on Indonesia's energy policy, development and overall economic health—but not in the way the government intended. Following the 1973 Oil Crisis, Indonesia benefitted from rising global oil prices and domestic production. As Indonesia became an OPEC member and major producer in the mid-1960s, the government began subsidizing fossil fuels for domestic consumption to alleviate poverty, reduce the effect of inflation and as a basic public service obligation underlined in the Constitution. 19 Oil exports fueled an economic boom throughout the 1980s and 1990s, but mismanagement, overproduction and corruption led to long-lasting negative impacts. One of the most significant consequences was Indonesia's transition from a net oil exporter to net-importer in 2004 due to decades of mismanagement and a lack of investment in the oil sector; this change meant the government began subsidizing imported fuels, which quickly became unsustainable. Fuel subsidies not only encourage energy consumption, due to cheap energy prices, distort energy markets, and provide an opportunity for fuel smuggling, but they also produce macroeconomic instability exacerbated by volatility in the currency exchange rates and global oil market. 20 Subsidies contributed to the ongoing energy crises exacerbated by inadequate supplies coupled with growing demand and much-needed infrastructure investment, by swallowing up to 24 per cent of government expenditures. 21 These challenges have put pressure on the Indonesian government to prioritize energy diversification, reduce subsidies and raise fuel prices.<sup>22</sup> Indonesia makes an excellent case study because it illustrates the challenges involved in subsidy reform in developing countries—including corruption, vested interests, democratization and domestic energy consumption dependent on fossil fuels.

Using qualitative analysis, this paper examines the fossil fuel subsidy reforms starting in 1997, in the aftermath of the Asian financial crisis and the fall of President Suharto, up until the recent reforms administered by President Jokowi (2014-2015). The various reforms are detailed in Table 1 below. The factors of external crisis, political leadership and strong communication campaigns along with social assistance, are evaluated across three periods of reforms using process tracing.<sup>23</sup> Data was collected from primary and secondary documents, field research and semi-structured interviews. Primary documents include analysis of government budgets, government expenditures, Ministry of Energy presentations, and local newspaper articles covering the reforms. Secondary documents include policy analysis of fossil fuel subsidy reform and articles and reports published by other scholars and organisations. Interviews were carried out in Jakarta, Indonesia from July-August 2015 with a range of government officials from the Ministry of Finance and Ministry of Energy, policy analysts, international organisations and local NGOs working on energy subsidy reform.<sup>24</sup>

Table 1: Timeline of fossil fuel subsidy reforms<sup>25</sup>

Date	Pricing Reform
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<sup>&</sup>lt;sup>16</sup> Pradiptyo et al. 2015; Odugbemi and Jacobson 2008; Indriyanto et al. 2013; Beaton, Christensen and Lontoh 2015

<sup>&</sup>lt;sup>17</sup> Hill 2013

<sup>18</sup> Aldy 2013

<sup>&</sup>lt;sup>19</sup> Gol 1945

<sup>&</sup>lt;sup>20</sup> Indonesia allocated subsidies to a range of fuels, including LPG, kerosene, automotive diesel, gasoline, as well as electricity. HSKIP 2013, p. 78-79; Bridle and Kitson 2014, GSI 2014; World Bank 2009

<sup>&</sup>lt;sup>21</sup> HKSIP2013

<sup>&</sup>lt;sup>22</sup> EIA 2014; Bridle and Kitson 2014; Differ Group 2012

<sup>&</sup>lt;sup>23</sup> Checkel 2006; Collier 2011

<sup>&</sup>lt;sup>24</sup> Interviews were carried out predominantly with government officials, as well as with IISD during 2015 field research in Jakarta. A full list of interviews is in the bibliography.

<sup>&</sup>lt;sup>25</sup> ADB 2015; Beaton and Lontoh 2010; IMF 2013

1997	Following the Asian Financial Crisis, gov't increased kerosene by 2%, diesel by 60% and gasoline by 71%.
2000	Kerosene, diesel and gasoline prices raised for households despite violent demonstrations
2001	Kerosene, diesel and gasoline prices raised for industry
2003	Attempt made to link movements in domestic fuel prices and international prices
2005	Price increase by 29% in March and 114% in October. Industry no longer eligible to access subsidized diesel
2006	Price increase for industrial users
2007	Introduction of Kerosene-to-LPG conversion programme to encourage LPG use and phase-out kerosene subsidy
2008	Price increases in May of 33% for gasoline, 28% for diesel, and 25% for kerosene. Gasoline and diesel prices were lowered in December by 20% and 15% respectively, as international oil prices eased.
2009	Prices lowered in January by 11% and 7% respectively, leaving gasoline prices the same as diesel prices (close to 2005 levels)
2013	One-time price increase averaging 40%
2013	Base tariff increased 15% over 2013 (households consuming > 450-900 va not included)
January 2014	Attempt to raise prices of 12 kg cylinders, but the price increase was rolled back
November 2014	Gov't initiated price increases of 31% and 36%, respectively
January 2015	Subsidies for gasoline entirely removed, but low oil prices cause a price decline of 12%. Diesel subsidies reduce to IDR 1,000 per litre.

# 4. Managing the crisis

In the six months following the Asian financial crisis between July 1997 and January 1998, the rupiah collapsed from 2,500 to the US dollar to nearly 10,000, dramatically increasing prices and halting imports. 26 To abate the Asian financial crisis, President Suharto committed to a 50-point agreement with the IMF to qualify for an emergency loan.<sup>27</sup> Some of the points included dismantling state and private monopolies and cutting subsidies of basic commodities, including fossil fuels. While the IMF package envisioned a gradual phase out of subsidies between 1998 and 1999, the government dramatically raised prices on kerosene (25 per cent), diesel (60 per cent) and gasoline (71 per cent) in May 1998 prior to the first IMF loan disbursement meeting.<sup>28</sup> The result was disastrous. Student groups in cities across Indonesia went to the streets in protest of rising prices, which they deemed a result of corruption. The subsidy reform and fuel price increases were the tipping point in the discontent with the rampant corruption under Suharto's regime. For three months, student protestors demanded the resignation of Suharto and eventually occupied Parliament. Suharto formally resigned and handed power to his Vice President, B. J. Habibie, on May 21, 1998.<sup>29</sup> The new government had a heavy agenda due to the economy in a state of free-fall with high inflation, food shortages, bankruptcies and economic paralysis, due to the rupiah's dramatic depreciation. There were five subsequent attempts made to reform subsidies by President Wahid and President Sukarnoputri (Megawati) between 2000 and 2003, with varying degrees of success depending on global oil prices. The first round of reforms and price hikes under Wahid were put in place when global oil prices were low.<sup>30</sup> However, the reforms put in place under Megawati in 2002 were soon undermined by gradual increases in global oil prices that ended in violent demonstrations by students and a public convinced that the price increases were linked to powerful interest groups. 31 The government formula-based system for adjusting prices was eventually abandoned following these protests. 32 During the Wahid and Megawati reforms, the government provided compensation packages called the Energy Subsidy Reduction Impact Mitigation Programme that provided support for education, health, social welfare and unemployment, among other objectives.<sup>33</sup> Nonetheless, these social assistance programmes were criticized for not being launched in parallel to price hikes, which brings into question their impact in reducing protests.

During this period, the external shock of the Asian financial crisis and the conditionality attached to the IMF stabilization loan was the major factor in driving the adoption of the fossil fuel subsidy reform policy. However, despite the fact that the economic crisis was important in creating the urgency for reforms, it was unsuccessful in shifting fuel subsidy reform to "low politics"; the problems with government corruption surrounding this period were too severe for reforms to be disassociated from politics. There was also a negative impact from fluctuations in the oil market on the effectiveness of the reforms and social assistance provisions. The next period looks at a more successful series of reforms in the mid-2000s, as social assistance is introduced alongside subsidy reform policies.

### 5. SBY and the beginning of the social welfare politics

As Indonesia grappled with the fallout from the Asian financial crisis, this period marked the beginning of a shift in Indonesian energy policy, whereby the necessity of reforming subsidies overrode the lack of political favourability for reform. In this period, the Indonesian government began initiating a social welfare system to compensate poor populations for the indirect economic burden caused by subsidy reforms. These programmes were important in winning over popular opinion, which helped make substantial price changes possible. In 2004, Susilo Bambang Yudhoyono (SBY) was elected as the Indonesian president in the same year that Indonesia shifted from a net-oil exporter to a net-oil importer. The government's subsidies on imported fuels had a disastrous impact on the budget. Spending on fossil fuel subsidies for gasoline, diesel and kerosene rose to IDR 105.4 trillion (USD 8 billion).<sup>34</sup> The SBY government was forced to remove fuel subsidies to alleviate the budget deficit.<sup>35</sup> Fuel prices were increased in March and October by 29 per cent and then 114 per cent, which reduced the deficit by IDR 49.3 trillion (USD 4.5 billion) and then USD 131.7 trillion (USD 10 billion), respectively.<sup>36</sup> This reform was arguably possible politically – without a major backlash from the public – due to the introduction of social assistance programmes.

<sup>&</sup>lt;sup>26</sup> Pisani 2014, p. 47

<sup>&</sup>lt;sup>27</sup> IMF 2013; Beaton and Lontoh 2010

<sup>&</sup>lt;sup>28</sup> Beaton and Lontoh 2010

<sup>&</sup>lt;sup>29</sup> Mydans 1998

<sup>&</sup>lt;sup>30</sup> Beaton, Lontoh and Wai-Poi n.d.

<sup>31</sup> Bacon & Kojima, 2006; Beaton and Lontoh 2010

<sup>&</sup>lt;sup>32</sup> Beaton, Lontoh and Wai-Poi n.d.

<sup>&</sup>lt;sup>33</sup> Beaton, Lontoh and Wai-Poi n.d.

<sup>34</sup> Beaton and Lontoh 2010, p. 8

<sup>35</sup> Basri 2015b; Beaton and Lontoh 2010

<sup>36</sup> Beaton and Lontoh 2010

The trouble with fossil fuel subsidy reform in Indonesia is that subsidies were originally implemented for poverty reduction, yet they did not reach their targeted population. The World Bank found that for 2012, nearly 40 per cent of fuel subsidies went to the richest 10 per cent of households and less than 1 per cent went to the poorest 10 per cent, which makes fuel subsidies essentially "generous transfers of taxpayer money to the rich." Indonesia's fuel subsidies covered mainly transportation fuels, which mainly benefitted largely middle to upper class households that could afford vehicles. Yet indirectly, fuel subsidy reforms negatively impacted poor populations since the increase in fuel prices creates headline inflation, raising the overall cost of consumer goods and the subsequent cost of living; this affects all consumers but hits the poor populations the hardest. He hardest of reforms. This is an important point in the case of Indonesia as it differs from other countries where the populations most directly impacted by reforms receive compensation such as tax breaks or direct assistance, such as in the case of Iran.

The provision of social assistance also illustrates the Government of Indonesia's prioritization of poverty alleviation and shift towards a welfare state. In the early 2000s in the post Suharto era, the government became increasingly accountable to the public and candidates in local and national elections promised ambitious social welfare assistance for education, poverty reduction and healthcare. All Social assistance became a salient issue in politics. SBY's tremendous public support can be attributed to heavy investment in social programmes, which improved his poll figures. All To overcome the political challenges of subsidy reform and to alleviate the burden of price increases on the poor, SBY's administration started to provide compensation programmes ranging from the distribution of clean cook stoves using liquid petroleum gas (LPG) instead of kerosene), and a cash transfer programmes to an overall increase in spending on health, education and social welfare.

With the objective of reducing subsidies for kerosene, the SBY administration undertook a major energy conversion programme between 2007 and 2011 to convert 50 million households from using kerosene to LPG. The government had subsidized kerosene for household cooking, heating and transportation for decades, but with the growing population and increasing price of oil, the subsidies were creating a large budget deficit, representing 9-18 per cent of state expenditures. The conversion programme, which provided a free 3 kg LPG tank and a compact LPG stove, resulted in cumulative gross savings of the equivalent of USD 2.9 billion between 2007 and 2010 owing to the removal of kerosene subsidies. The conversion also reduced the dependence on imported kerosene in distribution areas. By the time the programme ended in 2011, there was a dramatic increase in household use of LPG for cooking across 30 million households concentrated across East, Central and West Java. The success of the programme is attributed to strong public policies supporting the conversion, buy in from various levels of government, and the support of Pertamina in approaching local governments and opposition parties, as well as effective government communication campaigns. The succession of the programme is attributed to strong public policies supporting the conversion, buy in from various levels of government communication campaigns.

While this period showed the positive impacts of social welfare in shifting the political support for subsidy reform, the effects of fluctuating global oil prices cannot be overlooked in limiting the role of social assistance. For example in 2008 and 2011 when oil prices breached USD 100 per barrel, the fiscal burden of energy subsidies rose as well. In response to high oil prices, Indonesia attempted to initiate energy subsidy reforms and raise prices. In May 2008, the Indonesian government raised the price of diesel and kerosene by 30 per cent and then lowered them by 20 per cent and 15 per cent, respectively, when international oil prices decreased (raising gasoline prices from IDR 4,500 to IDR 6,000 and diesel from IDR 4,300 to IDR 5,500) (See Figure 2).<sup>47</sup> Despite the fact that the unconditional cash transfer, "rice for the poor", and a loan-interest subsidy for small enterprises were dispersed through social assistance programmes, the fluctuations of oil prices were too volatile to maintain fuel price increases (See Figure 2).

Reforms were attempted again in 2010-2012 when oil prices increased, but price increases could not be implemented due to a lack of political support. SBY had issued contradictory communication campaigns in 2011 and 2012, first that prices would not increase in 2011, followed by an attempt to increase prices in 2012 since alternative policies of restricting access to subsidized fuels was insufficient to alleviate budget issues.<sup>48</sup> There were over 1,000 public protests in March 2012 alone, which influenced

<sup>&</sup>lt;sup>37</sup> Diop 2014, p. 4

<sup>38</sup> HKSIP 2013

<sup>&</sup>lt;sup>39</sup> ADB 2016; Beaton et al. 2013; Casier and Beaton 2015; Whitley and van der Burg 2015; Guillaume, Zytek, and Farzin 2011; Hassanzadeh 2012

<sup>&</sup>lt;sup>40</sup>Guillaume, Zytek, and Farzin 2011

<sup>&</sup>lt;sup>41</sup> Aspinall 2013, p. 114

<sup>&</sup>lt;sup>42</sup> Mietzner 2009

<sup>43</sup> World Bank 2013

<sup>44</sup> Budya and Arofat 2011

<sup>45</sup> Budya and Arofat 2011

<sup>&</sup>lt;sup>46</sup>PT Pertamina and WLPGA 2009

<sup>&</sup>lt;sup>47</sup> IMF 2013; ADB 2015; Beaton and Lontoh 2010

<sup>&</sup>lt;sup>48</sup> Diop 2014; Indriyanto et al. 2013

the decision of Parliament to overrule the price increase.<sup>49</sup>

Figure 2: Indonesia fuel prices compared to international oil market prices<sup>50</sup>

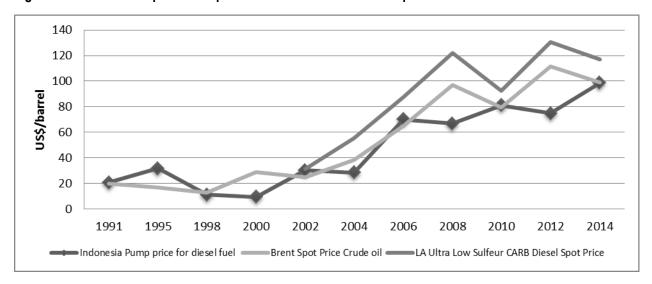
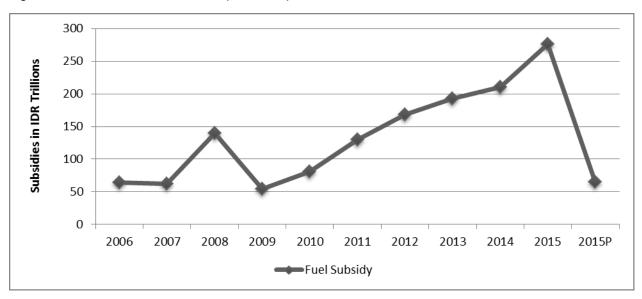


Figure 3: Fuel Subsidies in Indonesia (2006-2015)<sup>51</sup>



Energy subsidies on imported fuels leave the fiscal policy vulnerable to fluctuations in the global oil price as well as on the currency exchange markets. A weakening of the rupiah means a higher price of energy products on the domestic market and subsequently a higher share of subsidies if domestic prices are not adjusted.<sup>52</sup> This was evident in the 2008 Financial Crisis, when the Indonesian rupiah lost 28 per cent of its value against the dollar between October and November 2008.<sup>53</sup>

http://beta.data.worldbank.org/indicator/EP.PMP.DESL.CD?locations=ID&view=chart, as well as data on crude oil and diesel in the spot market from the EIA, source: https://www.eia.gov/dnav/pet/pet\_pri\_spt\_s1\_a.htm. Conversions to US\$/barrel were done using the EIA energy conversion calculator: http://www.eia.gov/kids/energy.cfm?page=about\_energy\_conversion\_calculator-basics#oilcalc.

<sup>&</sup>lt;sup>49</sup> Indrivanto et al. 2013

<sup>&</sup>lt;sup>50</sup> Data collected from World Bank data on Indonesia's fuel prices at the pump, source:

<sup>&</sup>lt;sup>51</sup> Prawuraatmadja 2015

<sup>&</sup>lt;sup>52</sup> Diop 2014, p. 2

<sup>53</sup> Basri and Rahardja 2011

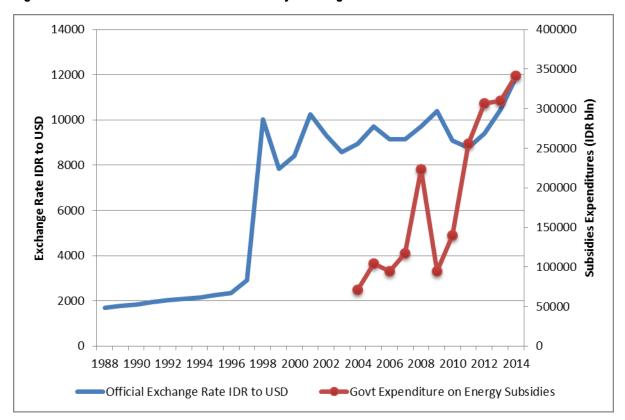


Figure 4: Fluctuations of subsidies and currency exchange rate<sup>54</sup>

By 2013, there was a large current account deficit due to imported fuel subsidies, price disparity, oil smuggling and rising global oil prices. In June, the government implemented a fuel price adjustment and gasoline and diesel prices were increased by 33 per cent (gasoline from IDR 4,500/litre to IDR 6,500/litre and diesel from IDR 4,500/litre to IDR 5,500/litre), which generated fiscal savings with subsidy reduction. <sup>55</sup> Price increases resulted from a nearly 3 per cent inflation rate. Thousands of protesters, including labour groups and student groups, staged rallies and burned tires to protest against energy price increases. <sup>56</sup> To compensate poor populations impacted by the price increases and resulting inflation, the SBY government extended an unconditional cash transfer programme to 15.5 million households through post offices using a new Social Protection Card, as well as conditional cash transfer, scholarships and rice subsidies. <sup>57</sup>

These reforms illustrated the importance of political leadership with strong communication campaigns and social assistance programmes to provide a buffer against the indirect effects of fuel subsidy reform. However, the external shock of the fluctuating oil market and currency exchange rate mitigates the effectiveness of subsidy reform because the volatility means the government's purchasing power for oil imports varies—undermining economic stability and a reduced capacity to alleviate budget deficits.

# 6. Oil market crash and "complete" reforms

The last series of reforms implemented by the Jokowi administration in 2014 attempted to finalize a complete reform to peg the domestic fuel prices to the global oil market and to remove price controls under the rhetoric of the need to reallocate the budget towards infrastructure investment, particularly in the energy sector. <sup>58</sup> The government received advice from bilateral and multilateral development organisations, such as the World Bank, JICA, ADB, on how to best to redistribute the subsidy budget. <sup>59</sup>

<sup>&</sup>lt;sup>54</sup> CEIC data – currently working to obtain data from the 1998-2004 period.

<sup>55</sup> Diop 2014; Teather 2013

<sup>56</sup> Cochrane 2013

<sup>&</sup>lt;sup>57</sup> Diop 2014; ADB 2015

<sup>&</sup>lt;sup>58</sup> Tumiwa 2015; Soeseilo 2015; Beaton, Christensen and Lontoh 2015

<sup>59</sup> Qadir and Puguh 2015; Soeseilo 2015; Suseno 2015

The fossil fuel subsidy reforms coincided with the crash of the global oil market. Some scholars argued this was the best moment to introduce reforms since price shocks would be low.<sup>60</sup> However, the reforms were not implemented because the rupiah depreciated to IDR 13,271 against the US dollar, levels not seen since the Asian financial crisis and fall of Suharto.<sup>61</sup> Since the removal of subsidies was already signed into law in 2015, the 2016 budget did not include a budget line for gasoline subsidies, but kept subsidies for 3 kg LPG tanks, diesel and new and renewable forms of energy.<sup>62</sup> Consumer prices stayed the same and the burden of subsidies was transferred to Pertamina, which covered the difference from the production costs and market price of oil.<sup>63</sup> The government did not reimburse Pertamina for losses from price controls during 2015, which amounted to USD 1 billion (IDR 15 trillion).<sup>64</sup> The 2016 budget will need to provide for Pertamina's deficit to prevent it going bankrupt.<sup>65</sup> Since Pertamina is a state-owned enterprise, the government has a fiscal liability to recapitalize it. The fact that the price controls were not fully removed means that the fossil fuel subsidy reform is incomplete. The full removal of fuel subsidies would necessitate the provision of a buffer to guard against the issues of currency exchange fluctuations and changing global oil market prices. This buffer can only be implemented once all price controls are removed.

The major opposition to subsidy reform during this period was launched by Prabowo Subianto—Jokowi's rival in the 2014 elections and the son-in-law of Suharto. 66 His Red-White coalition rejects fuel subsidy reforms on the misleading argument that reforms are unnecessary in the light of low oil market prices and the discourse that reforms will increase poverty. 67 However, their opposition is likely linked to corruption and vested interests from the old KKN regime under Suharto. 68 Furthermore, a 2014 IISD survey revealed that there was a strong majority of the public that was either unaware that the government subsidized fossil fuels, or underestimated the budget allocation for the subsidy. 69 The authors found that public ignorance with regard to fossil fuel subsidies caused by ineffective communication campaigns might correlate with higher public resistance to the fossil fuel subsidy reforms. Overall, public resistance in the lead up to fuel subsidy reform was muted in this period compared with past periods which may also be due to the low oil prices. 70 The Ministry of Energy has increased information dissemination on fluctuations in the energy price to improve communication. 71 The ability of the government to get a fuel subsidy reform passed without public backlash shows a demonstrable evolution in public perception of subsidy reform and a strong potential for removal of price controls. Yet the lack of clear communication and public awareness on subsidy reform, as well as a lack of transparency on the shift of the subsidy burden to Pertamina are disconcerting. Depending how the budget and subsidy issue are resolved will provide further indication of a negative shift in the government's transparency regarding energy policy. This period reflects the necessity of communication campaigns and the limits to social assistance and political leadership reforms in the face of currency market fluctuations.

### 8. Discussion

From Suharto to SBY to Widodo, there was an evolution in fossil fuel subsidy reform policies across the three periods of analysis that help determine the factors contributing to the success and durability of reforms. Success is defined by the ability of the government to raise energy prices without overwhelming public protest and the achievement of economic objectives, such as relieving budgetary deficits, to provide for durable reforms. The relevant factors in the case of Indonesia were: external shocks and economic crises, strong leadership and communication campaigns, and the provision of social assistance. The analysis below will take each factor in turn.

The largest driver of reforms in the case of Indonesia has been economic crises. Volatility in the oil market and currency exchange rate and external economic shocks have had an enormous impact in driving fossil fuel subsidy reforms in Indonesia. Four such shocks included the Asian financial crisis, the shift of Indonesia from a net-exporter to a net-importer of oil in 2004, the 2008 Global Recession and increase in global oil prices, and lastly, the currency exchange rate and depreciation of the rupiah in 2014. These external shocks have created economic crises and massive budget deficits in Indonesia when compounded by subsidies on imported fuels. The shocks have necessitated the Government of Indonesia to implement significant fuel subsidy reforms, even when they were extremely unpopular. While external shocks have played a large role in driving reforms, they

61 Nangoy and Suroyo 2015

<sup>60</sup> Renes et al. 2015

<sup>62</sup> APBN 2016, pp. 4-41; Soesilo 2015; Sunandar 2015

<sup>&</sup>lt;sup>63</sup> Witular 2015

<sup>&</sup>lt;sup>64</sup> Otto 2015

<sup>65</sup> Cahvafitri 2015

<sup>66</sup> Kapoor 2014

<sup>67</sup> M/L 1 004

<sup>67</sup> Wikipdr 2014

<sup>68</sup> Economist 2014; Kapoor 2014

<sup>&</sup>lt;sup>69</sup> Pradiptyo et al. 2015

<sup>70</sup> Kapoor and Suroyo 2015

<sup>71</sup> Suseno 2015

<sup>&</sup>lt;sup>72</sup> Basri 2015a

also mitigate the effectiveness of reforms in general. Until the price controls are removed and strong macroeconomic policies are implemented to with fiscal buffers, fiscal policy will remain vulnerable to volatility in the oil and currency market, necessitating the revival of subsidies.

The provision of social assistance as a buffer to poor populations against the negative externalities of fuel subsidy reform is the most important factor in its success. It can be considered a necessary condition. Social assistance became increasingly salient in political campaigns and has influenced the expectations of the public in the provision of public goods by the government. The introduction of social welfare has effectively targeted the poorest populations most affected by the negative externalities of fuel price increases and reduced public protest to reforms. While the fuel subsidies are for transportation fuels that benefit vehicle owners, the impacts of energy price hikes are also felt in poor populations through an increase in consumer prices. Therefore, social assistance programmes are felt to be indispensable to offset these negative externalities. The provision of social assistance is arguably the key factor to the success of reforms because they provide a buffer against the rise in fuel prices that negatively impacts the poorest populations. Nevertheless, without effective communication campaigns to disseminate information on these policies, successful reform would not be possible.

Political leadership and effective communication campaigns are a necessary condition of successful fuel subsidy reforms. The political capital of SBY grew tremendously in 2006 and 2009 respectively after the generous provisions of social assistance to compensate for fuel price increases. However, SBY did not administer a clear communication campaign surrounding the 2012 attempted fossil fuel subsidy reforms, and as a result, there were massive public protests against them.<sup>73</sup> In contrast, the Kerosene-to-LPG Conversion programme was accompanied by strong communication campaigns that led to a successful conversion programme in targeted communities. Lastly, under Jokowi's reforms, the IISD study found that lack of support for subsidy reform is linked to limited understanding of the reforms, and information campaigns could improve public support for fuel subsidy reform. These events illustrate that a clear communication strategy is crucial for successful and durable reform.

In closing, the main factors that have led to social acceptability of fossil fuel subsidy reforms include: economic crisis provided the impetus for fuel subsidy reforms, even while mitigating their effectiveness, strong leadership in running clear campaigns of reform, and lastly, the most important factor is the provision of social assistance and political leadership. In terms of economic effectiveness, some of the subsidy reforms have been more successful than others relieving budgetary crises over deficits, which is mainly determined by the currency exchange rates and the prices of the oil market. The social acceptability and durability of the 2005 and 2007 reforms combined with the alleviation of budgetary crises make these two series of reforms the most successful. Other reforms that were eventually retracted do not qualify as successes.

However, the price controls in the 2015 reforms still remain and cannot be considered as a complete fossil fuel subsidy reform. The economic necessity for reforms will be seen over the course of the next year, as Jokowi still needs to cover Pertamina's losses from taking on the costs of subsidies in 2015. The fossil fuel subsidies have continued to increase in 2016. A better solution and full removal of price controls is needed to ameliorate the situation. Lastly, a fiscal buffer system needs to be implemented, in parallel to strong macroeconomic policy, to prevent the repetition of historical subsidy reform cycles as a response to fluctuations in the oil market and currency exchange rates.

### 9. Conclusions

Using qualitative case study analysis of fossil fuel subsidy reforms in Indonesia between the Asian financial crisis and recent reforms in 2015, this paper investigated the factors that made successful reform of fossil fuel subsidies possible. Success of reforms is determined by both the achievements of socio-economic benefits and the social acceptance of these reforms. The major factors investigated were external shocks or economic crises, political leadership for reform and communication campaigns, as well as social assistance. The analysis found that economic crises overwhelmingly drove reforms, but strong political leadership and social assistance were the most critical factors in facilitating durable reform in Indonesia—representing strong political and economic policy choices. Two series of fuel subsidy reforms in Indonesia, in 2005 and 2007, were the most successful as they achieved both social acceptability as well as economic objectives of reducing budgetary deficits. The other reforms that reintroduced subsidies following fluctuations in the currency or oil markets would not be qualified as successful as they did not meet the durability requirement.

While Indonesia does not qualify as a country with a wide range of successful reforms or as having had success in removing price controls, it is still an important case as it illustrates the many challenges to implementing fossil fuel subsidy reform in a developing country.

<sup>&</sup>lt;sup>73</sup> Indriyanto et al. 2013

<sup>74</sup> GSI 2016

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