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Introduction

Energy is essential for all economic activities and the welfare of society as a whole. Lack of regular access to modern energy represents an important stumbling block to development for low-income communities worldwide. In such economies, governments often lower the prices paid by consumers in order to make energy affordable for poor households and raise the standard of living. But subsidies that are not accurately targeted to those that need them result in a distortion of market incentives and misallocation of resources that have far-reaching consequences for a country's social and economic interests.

The decision about where to allocate a country's resources impacts all citizens, and it is therefore vital that there is public discussion about what is subsidized, how much it costs, and who benefits. This requires transparency of data and information relating to subsidies, which is too often difficult to find and understand. This guide aims to give civil society groups and journalists the tools to stimulate informed public debate about energy subsidies and the issues that surround them.

The following pages gather the best available information on the costs and benefits of energy subsidies. The first part of the guide gives an overview of various types of subsidized energy in Malaysia. The second analyzes the impact of these subsidies on the citizens of Malaysia and the country's economic development. The final section discusses energy subsidy reform, drawing lessons from international experience.



AN OVERVIEW OF MALAYSIA'S ENERGY SUBSIDIES





1. An Overview of Malaysia's Energy Subsidies

Transport fuel has been subsidized in Malaysia since 1983 and is now an intensely political issue. In 2011, more than 10 per cent of the government's operating expenditure was spent on fuel subsidies. This accounted for more than 43 per cent of its gross development expenditure (Ilias, Lankanathan & Poh, 2012). In contrast, the Ministry of Health and Ministry of Education accounted for just 3 per cent and 13 per cent respectively (Ministry of Finance [MoF], 2011).

Table 1 » Fuel Subsidies Under Government Operating Expenditure

Year	As % of operating expenditure	As % of GDP
2005	11.23	2.05
2006	7.03	1.27
2007	6.06	1.14
2008	11.43	2.30
2009	3.95	0.88
2010	6.31	1.21
2011	11.18	2.30

Source: Ilias, Lankanathan & Poh, 2012.

There are two estimates for how much of the government's operating expenditure is spent on fuel subsidies, and large discrepancies between them. The International Energy Agency (IEA) estimates that in 2009, MYR13.95 billion (US\$4.45 billion) was spent on fossil-fuel subsidies, accounting for 2.4 per cent of GDP (IEA, 2011), whereas the Malaysian Ministry of Finance (MoF) states that in 2009, MYR6.19 billion (US\$1.98 billion) was spent on fossil-fuel subsidies, which amounted to only 0.88 per cent of GDP (Ilias, Lankanathan & Poh, 2012).

This disparity between international and national estimates is probably due to the different methodologies used by each institution. The IEA figures are based on a methodology called the "price-gap approach," which compares average end-user prices paid by consumers with reference prices for the cost of supply. The Ministry of Finance has as yet not disclosed what method it uses to calculate its subsidy estimates. Without comparing methodologies it is impossible to determine which estimates are more accurate. For the purpose of this Guide, we will use the more conservative estimates given by the MoF.

SECTION ONE | AN OVERVIEW OF MALAYSIA'S ENERGY SUBSIDIES



1.1 What is an Energy Subsidy?

The definition of subsidies is often contentious because it affects the scope of policies included and, in some cases, disciplines imposed on the use of those policies. The only internationally agreed definitions are those of the UN Statistics Division, which is used to construct national accounts, and of the World Trade Organization (WTO) Agreement on Subsidies and Countervailing Measures, supported by 158 countries, which is used for regulating subsidies that affect trade.

The WTO definition is the more comprehensive of the two and can be summed up as follows: a subsidy is a financial contribution by a government, or agent of a government, that confers a benefit on its recipients. This means that the word "subsidy" is much broader than just a direct payment made from the government budget to an economic actor; it also includes any other mechanism by which a government can confer a financial benefit, such as tax exemptions, providing goods or at services below-market rates, purchasing goods and services at above-market rates and providing income or price support with regulation.

In the context of fossil fuels, subsidies are often split into two non-exclusive categories: those that reduce the price of consuming energy, called *consumer subsidies*, and those that support the domestic production of fossil fuels, called *producer subsidies*. In practice, governments use a variety of methods to promote the production and consumption of fossil fuels (see Table 2), with methods often combined to affect both the consumer and the producer side simultaneously.

It is important to note that subsidies do not reduce the cost of energy—they just change the proportion paid by consumers or producers, and move the rest of the costs onto other parts of the population. Someone still pays, but through taxes, foregone expenditure, foregone revenue or lack of investment in energy infrastructure. Indeed—the inefficiency of subsidies can actually increase the overall cost burden on society.



Table 2 » Common Methods of Delivering Energy Subsidies

		How the	subsidy usua	lly works
Government intervention	Example	Lowers cost of production		Lowers price to consumer
Direct financial transfer	Grants to producers Grants to consumers Low-interest or preferential loans	X		Х
Preferential tax treatment	Rebates or exemptions on royalties, sales, taxes, producer levies and tariffs Tax credit Accelerated depreciation allowances on energy-supply equipment	X X		Х
Trade restrictions	Quotas, technical restrictions and trade embargoes		χ	
Energy-related services provided at less than full cost by government	Direct investment in energy infrastructure Public research and development Liability insurance and facility decommissioning costs	X X X		
Regulation of the energy sector	Demand guarantees and mandated deployment rates Price controls Market-access restrictions	Х	X X X	Х

Source: United Nations Environment Programme (UNEP), 2008.

1.2 Why Subsidize Energy?

Policy-makers offer various reasons for why subsidizing energy is necessary and beneficial to society. It is commonly argued that production subsidies boost domestic fuel production, thus reducing a country's dependency on imports, or that they encourage economic diversification by supporting energy-intensive industries. One of the most frequent justifications for fuel subsidies is that they improve the welfare of the poor by making fuel more affordable and thus enabling a higher standard of living.

The extent to which subsidies actually benefit the poor is discussed in Section Two of this Guidebook, but first we provide a brief overview of the types and size of Malaysia's fossil-fuel and electricity subsidies.

SECTION ONE | AN OVERVIEW OF MALAYSIA'S ENERGY SUBSIDIES

1.3 Overview of Malaysia's Subsidies by Fuel Type

Fossil Fuels

Fossil fuels are non-renewable fuels such as coal, crude oil (petroleum) and natural gas. In 2011, oil represented 33.1 per cent of global energy consumption and renewables accounted for only 2.1 per cent, while coal consumption grew by 5.4 per cent (BP, 2012). The IEA's latest analysis estimates that worldwide, fossil-fuel consumption subsidies amounted to US\$523 billion in 2011, a 27 per cent increase from US\$412 billion in 2010 (IEA, 2012)

In 2011, the IEA reviewed the consumer subsidies of 12 economies in the Asia–Pacific Economic Cooperation (APEC) forum, which together represented roughly a quarter of global subsidies. On a per-capita basis, Malaysia had the third-highest fossil-fuel subsidies, spending US\$199.6 per person in 2009, behind Brunei at US\$804.1 and Russia at US\$274.3 (IEA, 2011). The study also indicated that Malaysia spent 2.4 per cent of GDP on fossil-fuel subsidies, just behind Vietnam, with the highest expenditure by GDP at 2.8 per cent.

Petroleum Products

Petroleum products are chemical mixtures derived from crude oil, including fuels such as diesel, kerosene, jet fuel, asphalt and lubricating oils. In 2011, oil products accounted for over half of all global subsidies (IEA. 2013).

The entire ownership and control of the petroleum resources in Malaysia are vested with its national oil company, PETRONAS, which is wholly owned by the government. It produces and supplies both oil for petrol and diesel, as well as the gas used for electricity generation.

The Malaysian government has set prices for petrol (RON92 and subsequently RON95), diesel and liquefied petroleum gas (LPG) since 1983¹ through what it calls an "automatic pricing mechanism" (APM). The price of RON97 has been allowed to float since September 2009. "Pricing mechanism" refers to the way in which point-of-sale prices are set (whether by the market, by the government, or a mixture of the two). In Malaysia, the pricing mechanism is called "automatic." Typically, this suggests a pricing system that passes price fluctuations through to the consumer using a predetermined formula.

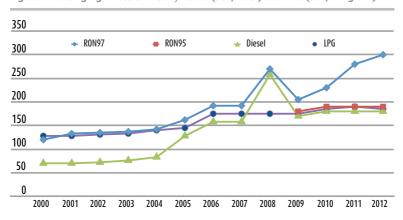
However, the prices of RON95, diesel and LPG have barely changed since 2009 (see Figure 1), meaning price fluctuations have not been passed through to the consumer. Rather, in Malaysia the

¹The government subsidized RON92 until May 2009, when it was withdrawn and replaced with RON95, which has been similarly subsidized since the changeover.



so-called "APM" is a formula used to determine how much subsidy is needed to cover the difference between a fixed retail price and the market price.

Figure 1 » Changing Prices of Diesel, Petrol (sen/litre²) and LPG (sen/kilogram)



Source: Compiled from Index Mundi, 2013; Malaysiakini, 2011; Tan, 2013; World Bank, 2013.

How does the Malaysian pricing mechanism actually work? The pricing mechanism maintains a low retail price for petroleum products by ensuring that the difference between the retail price and actual market price is made up by 1) exemption from sales tax and 2) subsidies. The government has disclosed that there are six components to the pricing mechanism through which it constructs the retail price of fuel, which are as follows:

- The reference product cost of petroleum products, which is taken from the Mean of Platts Singapore (MOPS), an index used by many ASEAN countries, based on the daily average of trading transactions of petroleum products.
- "Alpha": The difference between the MOPS price and purchase price of Malaysian oil companies. Alpha acts as a kind of buffer for the oil companies, so that if the price of the petroleum product is higher than the MOPS price by an amount greater than Alpha, the oil company bears the extra cost (and vice versa).
- Operational costs cover transport and marketing costs of petroleum products. They are set at 9.54 sen (US\$0.03) per litre for the peninsua.

 $^{^{2}}$ Malaysian sen = 1/100 of a Malaysian ringgit (MYR).

SECTION ONE I AN OVERVIEW OF MALAYSIA'S ENERGY SUBSIDIES

- Oil companies' margin is set at 5 and 2.25 sen (US\$0.02 and US\$0.01) per litre for petrol and diesel respectively.
- 5. **Station operators' margin** is set at 12.19 and 7 sen (US\$0.04 and US\$0.02) per litre for petrol and diesel respectively.
- 6. **Sales tax and subsidy:** According to the Sales Tax Act (1972) the government *could* collect a maximum of 58.62 and 19.64 sen (US\$0.18 and US\$0.06) per litre of petrol and diesel respectively. However, this only comes into effect when the point-of-sale prices are lower than the fixed retail price. If the calculated pump price of petrol and diesel is higher than the retail price—after taking into account the sales tax exemption—the government provides a subsidy to stabilize fuel retail prices (Ministry of Cooperatives and Consumerism, 2009; Tan, 2009).

Initially, when the pricing mechanism was introduced in 1983, the government only had to vary the tax payable by the producers because the market price of oil was lower than the fixed retail price. But once the former rose above the latter, the government had to start paying a subsidy too. Malaysia has thus been subsidizing LPG since January 1990, diesel since October 1999 and RON95 since June 2005 (Cheong, 2009) in addition to foregoing the sales tax.

How is the price of fuel calculated? The product cost, operational cost, oil company margin, station operator margin and sales tax are added up to make the *actual price* of the fuel. Then, the sales tax and subsidy are deducted from this to reveal the *retail price*. Table 3 gives an example of this process for the calculation of the price of RON97 in July 2005.

Table 3 » Calculation of Price of RON97 in July 2005 (sen/litre)

+ Reference product cost	164.21
+ Operational cost	9.54
+ Oil company margin	4.45
+ Station operator's margin	8.00
+ Sales tax	58.62
Actual Price	244.82
– Sales tax	58.62
– Subsidy	24.20
Retail price	162.00

Source: Economic Planning Unit (EPU), 2005.



Who actually receives the subsidy? The government fixes fuel prices below the market rate and pays the subsidy to the fuel retailers to compensate them (United States Department of the Interior, 2009).

What are the effects of this pricing mechanism? The pricing mechanism effectively lowers the consumer price, while at the same time guaranteeing positive profits. It thus arbitrarily determines the price on the consumer side, while also regulating profits and utilities on the production side. Unsurprisingly, the rise in international petroleum prices has substantially increased the financial burden that this imposes on the state budget.

In 2012 the government paid for 28 per cent of the cost of RON95, 32 per cent of the cost of diesel, and more that 51 per cent of the cost of LPG (see Table 4). Comparatively, Malaysia has the second lowest price for petrol and diesel in the region, second only to Brunei (see Table 5). To maintain this, the government loses revenue through the two channels outlined above: foregoing sales tax and paying subsidy.

Table 4 » Cost of Subsidies to Petroleum Products in Malaysia, 2012 (MYR)

	LPG (14kg tank)	RON95 (litre)	Diesel (litre)
Actual price	54.39	2.63	2.66
Subsidy	27.79	0.73	0.86
Consumer price	26.60	1.90	1.80

Source: Ministry of Domestic Trade, Cooperatives & Consumerism, 2011.

Table 5 » Price Differences of Petroleum Products Across Countries, December 2012 (MYR)

Country	LPG (kg)	RON95 (litre)	Diesel (litre)
Thailand	2.73	4.72	3.01
Singapore	-	5.23	3.96
Indonesia	1.86	2.88	2.73
Malaysia	1.90	1.90	1.80
Brunei	-	1.50	0.90

Source: Ministry of Domestic Trade, Cooperatives & Consumerism, 2011.

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Petrol and Diesel

Petrol (gasoline) is used in passenger cars and small transport vehicles. Its share of total petroleum product consumption varies across countries depending on both income and the importance of the diesel market (Bacon & Kojima, 2006). Diesel is used mainly in transportation (for large vehicles such as buses and transport trucks) and agriculture, and also as a backup fuel for power generation.

Malaysian consumers use two different types of petrol to fuel their vehicles: RON97 and RON95.³ RON97 is not currently subsidized, so its price is consistent with the real market price (MYR3.00 or US\$0.97 per litre in December 2012). As already discussed, the government subsidizes RON95 in two ways: by removing the sales tax and adding a subsidy to the petrol. Consequently the price of RON95 has been maintained at MYR1.90 (US\$0.61) per litre since December 2010, instead of its market price of MYR2.63 (US\$0.85).

Since December 2010, diesel sold to both public transport vehicles in the land and river passenger sectors (and to fishermen) is subsidized, with its price at MYR1.80 (US\$0.58) per litre (Ministry of Domestic Trade, Cooperatives & Consumerism, 2011). Diesel is sold to factories and businesses at market price. About 15 per cent of vehicles and 80,000 fishermen qualify for subsidized diesel (Energy Sector Management Assistance Program [ESMAP], 2006). In addition, like petrol, diesel is exempted from sales tax, further increasing the cost to the government.

This two-tier pricing system has led to significant purchases of diesel at the subsidized price by consumers other than the targeted group, with the government repeatedly issuing warnings against filling station owners and fishermen who divert the subsidized fuels (ESMAP, 2006). In 2006, to try to combat this illegal activity, the government launched an e-diesel subsidy scheme for fishermen, costing MYR10 million (US\$ 3.2 million), which uses smart cards, making unqualified purchases of subsidized diesel more difficult (Vagliasindi, 2012). The scheme sets a monthly quota according to boat size, and enables fishermen to purchase diesel at MYR1 per litre from outlets using the smart card system. The boat owner's name, vessel registration number and monthly quota are printed with each transaction (Ministry of Domestic Trade, Cooperatives & Consumerism, 2011).

In March 2006, a system of "fleet cards" was also introduced for public transport operators that are entitled to the diesel subsidy. Those certified by the Ministry of Domestic Trade and Domestic Affairs are entitled to a discount of 15 sen (US\$ 0.05) per litre when purchased using the fleet card. Each category of vehicle has a monthly quota, ranging from 570 litres for school buses and 720 litres for taxis, to 2,280 litres for express buses (Ministry of Domestic Trade, Cooperatives & Consumerism, 2011).

³ "RON" stands for Research Octane Number, with the higher number referring to higher levels of octane.



Liquefied Petroleum Gas (LPG)

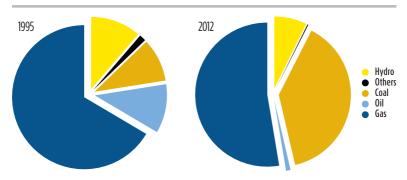
LPG is bought in pressurized cylinders and used for cooking, heating and lighting. Unlike kerosene, it is the fuel of choice for upper- and middle-income households in urban areas that are not connected to a centralized gas network (Bacon & Kojima, 2006). In Malaysia, LPG is heavily subsidized, with a 14 kilogram tank of gas costing consumers MYR26.60 (US\$8.64) instead of the market price of MYR54.39 (US\$17.58). Analysts forecast that gas consumption is set to outpace domestic production in Malaysia, whose gas prices continue to be the lowest in Southeast Asia, as a result of this substantial subsidization.

Electricity

The electricity sector in Malaysia is dominated by a range of independent power producers (IPPs) and three government-linked companies (GLCs): Tenaga Nasional Berhad (TNB) which oversees Peninsular Malaysia and Labuan, and Sarawak Energy (SEB) and Sabah Electricity (SESB) which are responsible for their respective states (Oxford Business Group Malaysia, 2011). The IPPs contribute around 40 per cent of national electricity supply (Vagliasindi, 2012). Electricity consumption is split largely between consumers (13.8 per cent), transport sector (36.5 per cent) and the industry sector (42.6 per cent) (FOMCA, 2011).

Electricity generation comes principally from natural gas and coal, with their shares respectively decreasing and increasing dramatically over the past 17 years, as Figure 2 shows. Coal now accounts for 38.9 per cent of electricity generation compared with 9.7 per cent in 1995, and gas for 52.7 per cent, compared with 66.5 per cent.

Figure 2 » Generation Mix of Electricity by Fuel Type



Source, EPU 2012.

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Electricity generators are subsidized through a centrally imposed low gas price. Petronas, a producer and distributor of gas, is required to sell to electricity generators at a controlled price of MYR10.70 (US\$3) per million metric British thermal units (mmbtu). Consequently, Petronas has lost an estimated MYR20 billion (US\$6.4 billion) in foregone revenues by subsidizing the gas used by industries, including the power sector (see Figure 3) (Foong, 2012). Petronas also subsidizes gas imported from Indonesia, Thailand and Vietnam, which forms about 32 per cent of peninsular Malaysia's demand (Aris, 2012). Consequently, Malaysia has the second lowest end-user gas prices in Southeast Asia, behind Brunei (MoF, 2012).

Power sector (TNB)
Power sector (IPPs)
Non-power sector (industries; commercial)

15
10
5
0
2007
2008
2009
2010
2011

Figure 3 » Gas Price Subsidies (Funded by PETRONAS, MYR billion)

Source: Ilias, Lankanathan & Poh, 2012.

Electricity users are subsidized by a monthly rebate. Since 2008, the government has provided a MYR20 (USD\$6.4) subsidy on monthly electricity bills to all customers of TNB. Furthermore, TNB gives its "privileged customers" (including government schools and institutions of higher learning, places of worship and welfare homes) a 10 per cent discount on their electricity bills (TNB, 2012). This concession cost TNB MYR7.8 million (US\$2.5 million) in 2012, and is due to be extended to institutions that are partly funded by the government (TNB, 2012). SESB also receives substantial diesel and fuel oil subsidies from the government to lower the cost of electricity generation, amounting to MYR543.4 million (US\$173.3 million) in 2012 (TNB, 2012).



IPPs, PPAs and Government Subsidies

A system of power purchase agreements (PPAs) means that the costs of gas shortages have also been borne by the government and Petronas. IPPs have been able to sign rigid PPAs with their respective GLCs since 1990, enabling them to monopolize local transmission and distribution systems⁴ (Oxford Business Group Malaysia, 2011). In Peninsular Malaysia there are three types of PPAs, the earliest form of which gives considerable benefits to the IPPs. Importantly, it allows IPPs to pass on the cost of burning more expensive distillates when there are gas shortages to TNB, which is then compensated by the government and Petronas (Ismail, 2012). For example, a prolonged gas shortage caused by maintenance activities at Petronas meant TNB had to burn oil and distillates, resulting in a MYR3.1 billion (US\$1 billion) cost between January 2010 and October 2011. But the government then agreed to pay TNB MYR2.02 billion (US\$648 million) in compensation, half of which came from Petronas ("Petronas president," 2012).

Further analysis of the power sector is made difficult by the government's refusal to disclose payments made to the various IPPs and the opacity of PPAs (Teh, 2011a). The independent, not-for-profit research institute Research for Social Advancement (REFSA) stresses that the gas subsidies incurred by Petronas have created inefficient IPPs with bloated cost structures (Foong, 2012). Malaysian IPPs generate power at about 59 sen (US\$0.19) per kilowatt hour (kWh), which is more than residential consumers in Singapore pay (52 sen; US\$0.17) where electricity is sold at the market price, without any subsidies, and with transmission and distribution costs included (Teh, 2011a). This suggests that at the current rate, IPPs are generating profit from the cheap gas which is subsidized by Petronas, although the government denies that IPPs profit from gas subsidies.

⁴Although it should be noted that some locations, such as resorts on the peninsula, can establish their own network.







2. Are Energy Subsidies Good for Malaysian Citizens?

In Malaysia, energy subsidies are intended as a mechanism to keep energy affordable for its citizens. Subsidies do this directly, by enabling consumers to pay less for fuel, and indirectly, by making the goods and services that use subsidized fuel (such as public transport) cheaper by reducing input costs. Yet there are also both direct and indirect costs associated with subsidies that are not always obvious, such as increasing national debt, worsening pollution, and widening socioeconomic gaps. This section highlights the many social and economic consequences of subsidies, as well as some of the economic and political forces that keep them in existence.

2.1 Do Poor People Benefit?

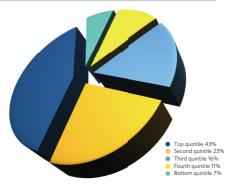
One of the most common justifications for fossil-fuel subsidies is that they improve the living conditions of the poor by making fuel for cooking and heating, such as kerosene, LPG and electricity, more affordable. In developing countries where such subsidies are common, they can considerably raise the standard of living by enabling traditional fuels to be phased out. As a result, these communities experience less indoor pollution and a reduction in time spent gathering fuel, resulting in more time for education and other productive activities (UNEP, 2008).

Nevertheless, studies show that, in general, the poor are not the principal beneficiaries of energy subsidies—a situation that also holds true in Malaysia. This is because subsidies are rarely targeted specifically at the low-income groups that need them, but are often "blanket subsidies," available to all consumers, regardless of their wealth. As a result, these subsidies benefit energy companies, suppliers, and wealthy households in urban areas comparatively more than they do poor households. A recent study by the International Monetary Fund (IMF) revealed that the bottom 20 per cent of households received on average only 7 per cent of the total subsidy, whereas the top 20 per cent received 43 per cent. Even kerosene subsidies, which are typically seen as being pro-poor, are not well targeted, with the top 60 per cent of households always receiving more than 57 per cent of the subsidies (Baig, Mati, Coady & Ntamatungiro, 2007).



Figure 4 » Fossil-fuel Subsidy Allocation by Income Quintile (Across 20 Countries)

Moreover, blanket energy subsidies can often leave the poor worse off, as they bear the same costs of the subsidy, while accruing fewer of the benefits than the rest of the population. For example, a wealthy person can afford to purchase more subsidized petrol than a poor person, meaning the wealthy person consumes more of the subsidy than the poor person, even though the cost of the subsidy is borne equally by both consumers in the



Source: IMF. cited in World Bank. 2012.

form of taxes and opportunity costs. It is nevertheless true that the marginal dollar is more valuable to the poor (and so it means a lot more to them even though they capture a smaller portion of the total subsidy bill). Yet blanket subsidies that do not discriminate between income groups still divert a large portion of funds to the rich, funds which could have been used to aid the poor. This diversion not only encourages overconsumption among high-income groups (thus exacerbating inequality), but also means less funds are available to provide assistance to the poor than would otherwise be.

Malaysia is no exception. Some estimates indicate that higher-income groups make up more than 70 per cent of the beneficiary of the subsidies for fuel products (National Economic Advisory Council [NEAC], 2009).

Similarly, if the price of petroleum fuels were raised in Malaysia, it is estimated that the top 20 per cent of the income bracket would be most adversely affected. This group would lose more than 9 per cent of real income—more than twice that of poorest 20 per cent of households in the country (Moradkhani, 2010, cited in Vagliasindi, 2012). That said, if the price of electricity were to increase, the loss of real income would be spread equally across the entire population.

The regressive nature of subsidies in Malaysia is exacerbated by the absence of a comprehensive social safety net, which fails to mitigate the effect of higher fuel prices on the poor (Vagliasindi, 2012). The centralized e-Kasih system, which was recently created to identify poor households suffers from coverage and accuracy issues and the inability to successfully target low-income groups (Vagliasindi, 2012).



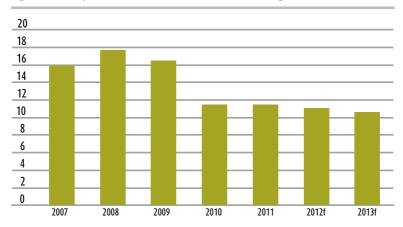
2.2 Are Energy Subsidies Good for Economic Development?

While subsidies present a straightforward way of stimulating certain sectors of the economy, they also encourage overconsumption and inefficient resource allocation, which work to the detriment of economic efficiency. Subsidies drain state budgets, discourage investment and competition, and encourage fuel smuggling, the costs of which are ultimately borne by society. Moreover, the consistently low fuel prices in Malaysia have created a dependency that will make removing subsidies both socially and economically disruptive—and politically unattractive.

Fiscal Pressures

Subsidies put pressure on the national budget by draining government finances, especially when international oil prices are high. As already mentioned, in 2011, more than one-tenth of the government's operating expenditure was spent on fuel subsidies, more than 43 per cent of its gross development expenditure (see Table 1) (Ilias, Lankanathan & Poh, 2012). Moreover, in 2012 subsidies were set to exceed the budgeted amount for the third consecutive year (Ilias, Lankanathan & Poh, 2012) as a result of high international oil prices. Nevertheless, oil-related expenditures were superseded by oil-related revenues, thus the current account remained in surplus in 2012, although a slowly narrowing one (Sander & Hanusch, 2012).

Figure 5 » Malaysian Current Account Balance as Percentage of GDP



Source: Sander & Hanusch, 2012.



Malaysia should be able to benefit from higher oil prices through increased exports leading to both a larger trade surplus and higher government revenues through taxes, royalties and dividends from PETRONAS. However, a couple of factors preclude it. First, as oil prices increase, the subsidy burden on government expenditures also increases. Also, because the subsidy payments are incurred monthly (whereas the oil-related revenues only accrue once or twice a year) increases in oil prices disrupt cash flow management (Sander & Hanusch, 2012).

Second, Malaysia's oil production has been declining, while consumption continues to rise. The lower output results from the natural depletion of existing fields and problems with sand in the oil at the Kikeh reservoir off Sabah—the first deepwater reservoir in Malaysia—which has impacted production levels ("Murphy moves to address," 2011). The consistently steep rise in consumption is a consequence of fuel subsidies distorting incentives for domestic demand. According to the IEA, Malaysia only has 33 years of natural gas reserves and 19 years of oil reserves left (FOMCA, 2011), while the consumption of oil rose from 465,000 barrels per day (bpd) to 524,000 bpd between 2000 and 2010 (Index Mundi, 2012).

· Import Burden

By artificially increasing energy demand, consumption subsidies lead to both an increase in imports and a decrease in exports. The rise in imports imposes a direct financial burden on the economy, especially in times of high international oil prices. For net exporting countries such as Malaysia, the sharp rise in domestic demand is of concern because it reduces the amount of oil available for export.

In Malaysia, the rise in domestic consumption and decline in oil production have led to a decline in net exports of roughly 43,000 bpd, on average, between 2005 and 2010 (Sander & Hanusch, 2012). Meanwhile, in 2011 the value of petroleum exports increased, rising from 9 per cent of total exports, to 10 per cent from 2010 to 2011 (EPU, 2012) signifying their importance as a source of national revenue. However, steps are being taken to address the decline in production. PETRONAS is investing in marginal oil fields offering tax breaks to both foreign and domestic companies, and is expediting the repair of existing fields, and oil production is expected to recover in 2013 with the opening of new deepwater oilfields (Sander & Hanusch, 2012).



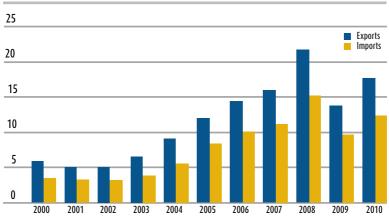


Figure 6 » Value of Oil Exports and Imports (US\$ billion) 2000–2010

Source: Index Mundi, 2012.

Investment

Consumer subsidies adversely impact investment resources by reducing energy companies' revenues and consequently limiting their capacity to invest in expanding and maintaining energy-related infrastructure (IEA, OPEC, OECD & the World Bank, 2010).

Since 1997 PETRONAS has paid more than MYR160 billion (US\$51 billion) to subsidize the power sector in Malaysia, including privately owned power producers, and commercial, residential and transport sectors (Aris, 2012). It is estimated that in 2012 the cost to subsidize gas alone amounted to MYR28 billion (US\$8.9 billion) (Lee, 2012). These funds could have been used not only to invest in its own technology and infrastructure, but also to pay higher dividends and corporate tax to the government, its sole shareholder, which would have offset some of the financial burden.

Competition

Subsidies to specific energy types undermine the development of other technologies that might be more economically (as well as environmentally) efficient (UNEP, 2008). Fossil-fuel subsidies thus "lock in" technologies that rely upon oil and gas, to the exclusion of those which use renewable



fuels. At market price, power from diesel or oil is relatively expensive and would therefore be open to healthy competition from renewable energy sources. However, when oil and diesel are heavily subsidized, as they are in Malaysia, renewable energy is unable to compete because the market is distorted. Furthermore, by increasing demand for fossil fuels, subsidies undermine consumer demand for alternative energies (International Institute for Sustainable Development [IISD], 2012).

Opportunity Cost

Fuel subsidies represent a serious opportunity cost by diverting funds that could have been used to finance projects to improve the quality of life of Malaysian citizens, such as welfare schemes or research and development. In 2011, subsidies to all products amounted to 78 per cent of the government's gross development expenditure (GDE) (Ilias, Lankanathan & Poh, 2012), money which could instead have been used to fund public projects.

Smuggling and Corruption

Energy subsidies encourage fuel smuggling by enabling consumers to profit from selling the cheap fuel in countries where prices are higher. This profit comes at the expense of the subsidizing country, which experiences losses from uncollected taxes and duties (IEA, OPEC, OECD & the World Bank, 2010).

It is estimated that losses due to smuggling in Malaysia amount to MYR10 million (US\$3.1 million) a year for LPG alone, and that each successful diesel smuggling attempt translates to 40,000 litres lost (Karim, 2012). Fuel price differences between Malaysia and Thailand encourage Thai motorists to refuel in Malaysia, leading to fuel shortages along the border (ESMAP, 2006). Smuggling also encourages corruption within the private sector as border patrol officials are rewarded for facilitating the illegal operations.

To try to curb illicit activity, countries bordering the Straits of Malacca have stepped up maritime surveillance, but the smuggling operations can be huge in scale, involving modified trawlers that can hold up to a million litres of fuel (ESMAP, 2006). Ending subsidies in the ASEAN region is the obvious solution to curb smuggling by narrowing fuel-price differences between countries.

Subsidized fuels are also illegally traded *within* the Malaysian border, as subsidized petroleum products intended for consumers are diverted to the industrial sector. In 2006 the government introduced a system of "nano-tagging" to mark the subsidized petrol and diesel to ensure it is not used by industries. Collaboration between government agencies resulted in 631 cases relating to subsidized petroleum products being handed over for further investigation in 2011 (Ministry of Domestic Trade, Cooperatives & Consumerism, Malaysia, 2011).



2.3 What About the Environment?

By generating a lower end price for consumers, energy subsidies discourage efficient energy use, leading to waste and overconsumption. This inevitably has a harmful impact on the environment. Burning fossil fuels leads to higher greenhouse gas emissions, increasing urban smog and acid rain. The production of fossil fuels can pollute water supplies and degrade the environment (UNEP, 2008). This pollution increases global warming, which is expected to accelerate the melting of ice and snow, leading to rising sea levels and changing weather patterns across the globe.

Various studies indicate that fossil-fuel subsidies are an important factor in exacerbating climate change (UNEP, 2008). A recent OECD study suggested that if the 37 countries covered by the IEA fossil-fuel subsidies database were to remove their subsidies between 2013 and 2020, global greenhouse gas emissions would be reduced by 8 per cent compared with business-as-usual levels in 2050 (Burniaux & Chateau, 2011).

Malaysia became a net emitter of greenhouse gases in 2005. The energy sector is the biggest source of emissions, with fugitive emissions from oil and gas systems accounting for 10 per cent of total emissions (Ministry of Natural Resources and Environment, 2011). Electricity generation is the largest emitting sector, accounting for 43 per cent of total emissions, and it is estimated that, without mitigation measures, 286 million tonnes of CO₂ will be emitted in 2020, a 69 per cent increase on 2000 (Safaai, Noor, Hashim, Ujang, & Talib, 2010). This large rise in CO₂ emissions could be explained by Malaysia's gradual shift towards coal (the most polluting fossil fuel) for electricity generation over the past 17 years. It is feared that this shift would be accelerated if the natural gas subsidy were to be removed because coal is cheaper at market price (as is currently happening in Germany). It is therefore important that credible alternatives to natural gas and coal exist before subsidies are phased out, to avoid an escalation of CO₂ emissions.

Energy subsidies also impact environmental sustainability indirectly, by diverting funds that could otherwise be invested in the development and commercialization of cleaner energy sources. A study by McKinsey Global Institute revealed that ensuring the minimum energy access for all globally could be achieved for just 12 per cent of current fossil-fuel subsidies (United Nations Economic and Social Commission for Asia and the Pacific [UNESCAP], 2011). The same study estimates that yearly, between 60 per cent and 90 per cent of fossil-fuel subsidies could finance shifting to a low-carbon powered economy, for the next two decades through renewable energies and carbon emission reduction (UNESCAP, 2011).



2.4 Who Would Be the Winners and Losers From Energy Subsidy Reform?

Reforming energy subsidies is commonly seen as a "win-win" policy that could encourage economic growth and environmental sustainability worldwide (Victor, 2009). However, on a country-by-country basis, although the long-term benefits are evident, the short-term consequences are potentially socially disruptive, reducing the political motivation for reform.

As the above discussion reveals, fuel subsidies in Malaysia tend to principally benefit high-income groups, given their higher consumption of energy, while the costs for subsidies fall on the entire population. As such, in the short term removing subsidies will have a greater impact on high-income groups who will inevitably have to reduce their fuel consumption. Moreover, energy demand is more elastic in the long term (as people find ways to reduce their consumption rather than bearing the brunt of a short-term price hike) so the decline in consumption would be expected to continue over time.

Reforming subsidies would contribute to general inflation as the price of energy inputs to all products would rise as a result (Ilias, Lankanathan & Poh, 2012). Inflation would affect all citizens, but low-income groups will be most adversely affected, especially those living in urban areas, since they rely more on modern amenities. Nevertheless, the rise in government revenue from cutting subsidies should also benefit all sectors of society by increasing the funds available for investment in social welfare.

A study of Malaysia's subsidy reforms between 1984 and 1985 revealed that GDP rose by 7.8 per cent in 1984, and by 4.7 per cent in 1987 (Hope & Singh, 1995). While many factors could have influenced this growth, the authors note that the reduction in the public deficit and increase in treasury revenues was at least in part due to the subsidy reform.

Thus, in the short-term, subsidy reform would require a period of adjustment both for the economy and Malaysian citizens. For this reason it would be important that reform happen gradually, and be holistic, by, for example, involving investment in public transport systems to relieve dependence on increasingly costly car travel.

In the long term, removing subsidies would benefit the entire economy, including the poor, for whom more funds would be available for targeted social support. A reduction in subsidies would also weaken the monopoly that fossil-fuel technology has on the energy market, making room for



investment into green technology and encouraging energy innovation. Furthermore, raising energy prices would increase Malaysia's energy efficiency, reducing CO₂ emissions and generating a cleaner air environment for all citizens. Nevertheless, for electricity generation, subsidies must be phased out as part of a strategic plan that promotes clean energy alternatives, in order to eliminate the incentive to replace an old dependence on natural gas with a new one on coal. Without such a plan there is a danger that gas will be substituted with coal once subsidies are removed, and CO₂ emissions will increase as a result.

2.5 What Plans to Reform Subsidies Has the Malaysian Government Announced?

Subsidy reform forms part of the New Economic Model (NEAC, 2009) and the Tenth Malaysia Plan (EPU, 2010) as part of a wide-ranging national plan to improve the economy. In the New Economic Model, the need to deal with "serious leakages" and to ensure that the poor "are really the beneficiaries of the subsidies" is highlighted as part of a general drive to make Malaysia more economically competitive and achieve the status of higher-income nation by 2015 (NEAC, 2009).

In the Tenth Malaysia Plan, it was proposed that subsidies and price controls should be gradually rationalized between 2010 and 2015 with the goal of achieving market pricing by 2015 (EPU, 2010). Under this mandate, in May 2010 the Performance Management and Delivery Unit (PEMANDU) launched the Subsidy Rationalization Programme (SRP) (Ilias, Lankanathan & Poh, 2012). The program planned to adjust the prices of subsidized commodities by a fixed percentage every six months, between 2010 and 2014 (see Table 6). For example, the price of RON95 per litre was to be raised 10 sen (US\$0.03) every six months until 2014.



Table 6 » Proposed Price Changes to Fossil Fuels Under Malaysia's Subsidy Rationalisation Programme (SRP) 2010–2014

	Proposed for 2H 2010	Proposed for 2011-2014
Fuel		
Petrol (RON95, MYR/litre)	+MYR 0.15	+MYR 0.10 every six months
Diesel (MYR/litre)	+MYR 0.10	+MYR 0.10 every six months
LPG (MYR/kg)	+10%	+20% p.a.
Gas		
Power sector (MYR/mmbtu)	+MYR 4.65	+MYR 3 every six months
Industry (MYR/mmbtu)	+MYR 2.52	+MYR 3 every six months
Electricity (MYR/kWh)	+MYR 0.024	+MYR 0.016 every six months

Source: Ilias, Lankanathan & Poh, 2012.

The increase in fuel prices was to be cushioned by a cash rebate of MYR54 (US\$17.2) per person per motorbike (less than 25cc) and MYR126 (US\$40) per person per car (less than 1,000cc), which would cost the government MYR526 million (US\$168 million) per year, but save it MYR44.9 billion (US\$14.3 billion) in five years (Jala, 2010). The rationalization of the electricity tariff would not impact the 56 per cent of consumers who use less than 200kWh per month, and was projected to save the government MYR35.9 billion (US\$11.5 billion) over 5 years (Jala, 2010). The SRP also involved increasing toll rates for highways that have alternative routes, with a discount for toll users, which would have saved the government MYR3.7 billion (US\$1.2 billion) in five years (Jala, 2010). PEMANDU also conducted a poll of the Malaysian public and found that 61 per cent thought subsidies should be reduced.

Nevertheless, after the SRP was launched, reviews involved fewer and fewer reforms (see Table 7) until, in March 2012, the government officially suspended the program. The government explained that it halted the SRP in order to shift its focus to the cost of living, which is a major election issue (Teoh, 2012). Analysts expect the SRP suspension to continue until mid-2013. However, it is likely that once reforms resume they will be gradual and selective, delaying the completion of the removal of subsidies (Ilias, Lankanathan & Poh, 2012).



Table 7 » Actual Changes to Fossil Fuel Prices Under Malaysia's Subsidy Rationalisation Programme (SRP) 2010–2011

	Actual 16/7/2010	Actual 4/12/2010	Actual 10/5/2011	Actual 1/6/2011	Total
Fuel		,			
Petrol (RON95, MYR/litre)	+MYR 0.05	+MYR 0.05	NIL	NIL	+MYR 0.10
Diesel (MYR/litre)	+MYR 0.05	+MYR 0.05	NIL	NIL	+MYR 0.10
LPG (MYR/kg)	+MYR 0.10	+MYR0.05	NIL	NIL	+MYR 0.15
	(+2.7%)	(+5.7%)			(+8.6%)
Gas					
Power sector					
(MYR/mmbtu)	NIL	NIL	NIL	+MYR 3.00	+MYR 3.00
Industry (MYR/mmbtu)	NIL	NIL	NIL	+MYR 2.65	+MYR 2.65
Electricity (MYR/kWh)	NIL	NIL	NIL	Avg. +7.12%	+MYR 0.0223

Source: Ilias, Lankanathan & Poh. 2012.

In 2011, MyPower, a special purpose entity under the Ministry of Energy, Green Technology and Water (KeTTHA), was tasked with reviewing the structure of the Malaysian energy sector. In the electricity sector, more stringent and standardized PPAs are being pushed forward with stricter guidelines and clauses that make IPPs bear the cost differential of failing to use the agreed amount of fuel (Mak & Kan, 2012). MyPower also plans to create a stabilization fund that would be used to pay Petronas the difference between the market price of natural gas and that paid by TNB and the IPPs, while subsidies are gradually removed. However, no decision has been made about how this fund would work.

Reform to the energy sector will likely be met by significant opposition. In 2006, when the government increased fuel prices by 23 per cent, public anger was intense and resulted in a wave of public protests (ESMAP, 2006). Support for the government declined after the price increase, creating a political disincentive to attempt reform again. Moreover, other sectors raised prices above the input cost of the increase in fuel prices, exacerbating the socioeconomic impact beyond what was forecast (e.g., the price of fish was reported to have risen by 60 per cent following a modest increase in May 2005) (ESMAP, 2006). For these reasons, when reform is attempted once again it must be part of a holistic program that makes public transport more available and has safety nets in place for poor. The role of the media in educating the public is also important to reduce the intensity of social unrest.







3. What Can International Experience Tell Us About Energy Subsidies and Reform?

A review of 65 developing countries found that most of these countries control and subsidize fuel prices, although the extent of subsidization varied widely (Kojima, 2013). This does not mean that the majority of governments consider fuel subsidies to be good policy. On the contrary, nearly all governments recognize that universal subsidies for energy are not well targeted to poorer citizens and are economically inefficient (Kojima, 2013). This is apparent by observing repeated attempts by governments around the world to raise prices and to reduce or remove controls.

National efforts to reform subsidies in recent years have had mixed results. Volatile and record-high oil prices have made reforms more urgent but also more difficult. Fuel subsidies soared each time international prices peaked in 2004-2005, 2008, 2011 and 2012. In many cases, subsidies became unsustainable and governments were forced to attempt some level of reform. At the same time, high energy prices created pressure to maintain subsidies in order to control inflation and improve energy affordability for the poor and competitiveness of fuel-intensive industries.

A common pattern has been for countries to begin subsidy reforms but freeze or reverse price increases when international prices rose substantially. Countries that deregulated the fuels market years ago, like Thailand, have continued to intervene in pricing. Countries that linked domestic with international prices later froze prices for months or years at a time, leading to huge subsidy burdens.

In observing country experiences with the reform of fuel subsidies, it becomes apparent that there are no perfect case studies or model approaches. Even if "best practice" examples were available, they could not be applied to other countries. Each country's circumstances are unique, and there is no one-size-fits-all strategy for fossil-fuel subsidy reform. However, there are a set of planning stages that are generic, along with many common issues, challenges and potential solutions.

⁵We recommend the reader consult the paper by Kojima (2013) for a thorough analysis of recent developments in pricing policies in 65 developing countries and further case study information. The paper includes an appendix with information for each country on oil export status in 2010, current refining status, pricing and tax policy and strategy, and fuel supply conditions. Country information is also available at https://energypedia.info/wiki/International_Fuel_Prices.

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Governments have developed a great deal of good practice in preparing for fossil-fuel subsidy reform. The aim of this section is to summarize and share this experience.⁶ It identifies good practice across three core elements that should form part of any reform plan:

- Getting the prices right: How to change pricing systems for fossil fuels.
- Managing impacts: Estimating effects of reform and mitigating unwanted impacts.
- Building support: Internal organization and external consultation and communication.

3.1 Getting the Prices Right

Ad hoc pricing—where the government sets prices without reference to the cost of supply—is a common practice that leads to large subsidy bills. Increasing prices while maintaining an ad hoc system is not an effective means of eliminating subsidies. Subsidies can re-emerge when international prices rise.

Observing country experiences, it is apparent that the long-term elimination of subsidies requires:

- Transition to market-based prices for fuels (deregulated prices); electricity and natural gas prices
 that reflect the costs of supply, including production, transmission and distribution and the
 maintenance and renewal of infrastructure; and
- 2. Creating and enforcing a competitive and efficient energy market.

Ideally, a pricing mechanism should involve no subsidies, fully and automatically reflect international price fluctuations, be fully transparent and be well enforced.

⁶This section has been drawn from the IISD–GSI publication *A Guidebook to Fossil-Fuel Subsidy Reform for Policy-Makers in Southeast Asia* (Global Subsidies Initiative, in press). The guidebook provides detailed analysis of the principles outlined in this section and further case studies.



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Table 8 » Dimensions of Petroleum Product Pricing Mechanisms

	Good practice
1. Subsidies: Degree to which subsidies reduce the end price of fossil fuels by shifting costs onto the government, energy companies or other actors.	No subsidies
2. Pass through: Degree to which domestic pricing fluctuations match international price changes.	Full and automatic pass through
Transparency: Degree to which composition and regulation of energy prices is open and transparent.	Fully transparent
 Enforcement: Degree to which fuel pricing in real life actually follows officially adopted energy pricing arrangements. 	Full enforcement

An overnight change to market-based prices may be difficult to implement. An alternative would be to transition through one or more intermediate pricing policies intended to smooth price fluctuations. This helps households and businesses get used to price volatility. It also helps dissociate price changes from government decision making. Generally speaking, a formula-based automatic pricing mechanism seems to be a useful bridge towards market-based pricing. It allows for an immediate transition to full transparency and a controlled transition towards no subsidies and domestic prices that fully reflect international price fluctuations.

Policies that can reduce prices without using subsidies are those that focus on the creation of competitive markets with a level playing field. Other avenues for reducing energy costs might include: improved efficiency of distribution channels; incentivizing the exploration and exploitation of new, non-exportable energy sources; reducing wasteful energy consumption; the installation of efficient and competitive energy-producing capacity within national borders; and better enforcement of anti-collusion rules.



Table 9 » Examples of International Experience With Pricing Mechanisms

Indonesia	South Africa	Turkey	Chile
Ad hoc pricing Prices for premium gasoline (RON 88) and diesel for non-industrial consumers set on an ad hoc basis. Major price increases in 2005 and 2008 were not accompanied by a link to world prices and subsidy re-emerged as a significant issue as oil prices rose in 2010 and 2011.	Automatic price setting Government sets prices for all grades of petrol, diesel and illuminating paraffin using a pricing mechanism that is applied automatically and independently, free from government intervention for political, economic or social reasons.	Liberalization An automated pricing mechanism was introduced in 1998 and allowed refineries to make a profit. In 2005, prices were fully liberalized across the sector and state refining and oil distribution companies were privatized. Distribution margins rose 60 per cent in the 20 months after liberalization.	Variable taxation to smooth prices The government manages price volatility of the deregulated system to final consumers by a variable tax (the SIPCO) paid by consumers. This remains revenue neutral over the medium term. The tax rate is calculated by comparing the two-wee average to the fivemonth average.
Key messages If no link to world prices is made, subsidies will re-emerge when world prices rise.	Automated mechanism widely considered to have functioned well over the years.	Price liberalization is the best option to eliminate subsidies, but it requires oversight to be fully effective.	Variable taxation can be used to smooth prices. Averaging prices over a five-month period has been a sustainable methodology.
Sources (Global Subsidies Initiative, 2012); (Husna, 2011)	(Baig, Mati, Coady, & Ntamatungiro, 2007)	(Oguz, 2006); (Baig, Mati, Coady, & Ntamatungiro, 2007)	(OECD, 2011)



3.2 Managing Impacts

The first step in managing the effects of higher prices is to estimate the likely impacts. This allows unwanted consequences to be identified and mitigation measures designed. It is important to estimate both direct *and* indirect impacts, as indirect impacts are often large. Indirect effects include the flow-on effects of higher energy prices such as on public transport prices and inflation.

Where governments have resources, time and good data, the Global Subsidies Initiative (GSI) recommends a comprehensive analysis, including a full macroeconomic analysis that estimates flow-on effects throughout the economy. Where resources, time and data are limited, it is good practice to conduct a Poverty and Social Impact Assessment and review literature on past and projected reforms. Involving stakeholders in estimating impacts and choosing mitigation measures ensures that reform plans draw on their knowledge and respond to their concerns. It also raises awareness and creates stakeholder buy-in.

Mitigation measures fall into three broad categories: how reform is implemented, responses to impacts and efforts to counteract price rises (Figure 7). Some forms of assistance will need to be short-term only, phased out following an initial price shock. Others might represent a permanent alternative to subsidization and be ongoing.

Figure 7 » Types of Mitigation Measures for Fossil-Fuel Subsidy Reform

HOW SUBSIDIES ARE CHANGED: GRADUAL VS. "BIG BANG"

- · Size and frequency
- Targeting subsidy
- · Sequencing reform for different fuels
- Timing

RESPONSES TO IMPACTS: ECONOMIC AND SOCIAL ASSISTANCE

- " Anti-inflationary policy
- Target assistance to affected households
- " Target assistance to affected businesses
- " Energy access programs

EFFORTS TO COUNTERACT PRICE INCREASES

- Temporarily reduce taxes and fees
- Policies targeting fundamentals of supply and demand, e.g., competition, efficiency of distribution etc.

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

Accentuate the positive. Managing impacts should not become a negative story. Once mitigation measures have been designed, it should be possible to re-estimate the impacts of reform and show clearly and convincingly how it is in the interests of the majority, and will not harm the poor and vulnerable.

Table 10 » Examples of International Experience with Mitigation Measures

Indonesia	Iran	Jordan
Cash transfers and social spending	Measures to control inflation	Cash transfers and social spending
Fuel price increases in 2005 and 2008 saw public compensation addressed through cash transfers (reaching 19 million households) and social programs (support for health, education and infrastructure). Industrial and agricultural sectors were supported through value-added tax exemptions and increased farmer prices on some agricultural commodities and removal of certain road and transport charges.	Iran increased its energy prices several-fold at the end of 2010. To control inflation, the government: appreciated the Rial; stockpiled consumer goods and distributed public staples; and timed reform for the low-inflation period (November–December). Despite these measures, inflation rose from around 12 per cent before the reforms to 18 per cent three months after the reforms. This was partly because the government delivered cash compensation to almost all Iranians and at levels that exceeded the savings from subsidy reform.	A compensation package worth 7 per cent of the GDP was introduced over 2005–08. Measures included: bonuses to low-income government employees; cash transfers to non-government employees and pensioners; increased food subsidies and the retention of electricity subsidies; projects to combat unemployment and poverty. Subsidy removal was preceded by an extensive media campaign.
Sources: (Beaton & Lontoh, 2010)	(Guillaume, Zytek, & Farzin, 2011)	(Arze del Granado, Coady, & Gillingham, 2010); (World Bank, 2010)



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3.3 Building Support

Building support is about creating the political space that makes reform possible. This requires good effective internal consultation with the government, consultation with stakeholders and the public, and communication about the need for change and the reform plan.

Subsidy reform can have far-reaching impacts and therefore requires a "whole-of-government approach." A wide range of government portfolios, authorities and jurisdictions will hold information relevant to reform and have a legitimate interest in the process. Involving these bodies from the outset will increase the strength of the reform strategy and ensure the government speaks with one voice, despite the possibility of divergent views internally. Internal coordination is a vital first step.

Good communicators listen before talking. Effective reform plans are founded on an understanding of how stakeholders perceive reform and the options for change. Where resources and political sensitivities allow, the IISD holds good practice to be consultation that engages with and responds to stakeholders directly, including public inquiries, roadshows, discussion groups and workshops. Though resource-intensive, this helps build the legitimacy of reform plans and ensures they are well-informed. Tools such as survey research and web-based forums are also effective, though place less emphasis on interaction.

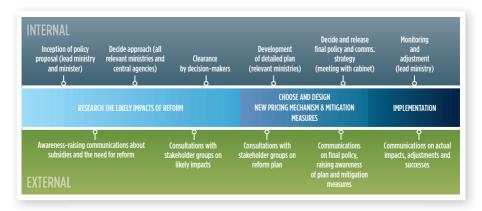
Where resources are low or political sensitivity is high, governments can gauge stakeholder views by reviewing existing literature on fuel and subsidy reform as well as local media reports that reflect stakeholder views and concerns. Interviews with energy experts and stakeholder representatives can yield a great deal of useful information with minimal investment of time and resources.

Measures to build support will be most effective if they are integrated throughout the reform process. This means that internal organization, consultation and communication are not something that happens at the "end" of planning (see Figure 8 below).

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Figure 8 » Model Policy Cycle Showing Strategic Points for Internal and External Support Building



Source: Global Subsidies Initiative, in press.

Good communications focus on simple and varied messages, targeted at specific stakeholder groups. Messages can be framed in different ways: problems or opportunities? "Problems" focus on the negative impacts that subsidies have. "Opportunities" focus on the benefits of reform. Once mitigation measures have been designed, it should be possible to show clearly and convincingly that subsidy reform is in the interest of the majority and will not harm the poor and vulnerable.

Messages drawn from country case studies are summarized in Table 11 below. Communications should use media that will best reach their target audiences. This might include political announcements, radio, television, newspapers, leaflets, debates and websites. Some governments have used "no subsidy" days and published subsidy costs at retailers and on energy bills.



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Table 11 » Problems and Opportunities: Communications Messages About the Reform of Energy Subsidies

Function	Raise awareness of subsidy problems	Neutralize opposition	Raise awareness of gains from reform	Raise awareness of reform plans
Example focus of messages	Costs, inefficiencies, comparison with other countries, impacts on the poor and the environment.	Identifying smuggling and corruption, countering misconceptions.	Savings, target aid to the poor, more social spending, better standard of living.	Explaining reforms and mitigation, showing relevance to stakeholder needs, noting successes.

3.4 Conclusion

Malaysia has subsidized fuel for 20 years, and today spends more than one-tenth of its operating expenditure on fuel subsidies. A primary rationale for lowering fuel prices is to improve affordability and access. However, as has been argued by many observers, universal subsidies are not an efficient way to target social assistance; they disproportionately benefit wealthier consumers, who consume more energy. There is also a strong environmental reason for reducing fuel subsidies, given that they encourage wasteful consumption and make it more difficult for cleaner types of energy to compete.

The Malaysian government has recognized these problems and emphasized energy subsidy reform in its national development strategies. The government has also formed a dedicated program—the Subsidy Rationalization Programme—to oversee a plan to gradually adjust fuel prices. However, that plan was put on hold in March 2012.

While there is no single recipe for how to overcome the challenges that governments face in reforming energy subsidies, international experience does provide some general lessons. A few key lessons can be summarized as follows.

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First, fossil-fuel subsidies are usually a long-term, structural problem—and they need structural solutions. Reform can be thought of as one step in a larger transition from a basic, inefficient economic and social assistance system, to a more strategic, targeted and sophisticated one.

Second, subsidies do not reduce the cost of energy: they just distribute it among the population in a different way. Someone still pays—but through taxes, foregone expenditure, foregone revenue or lack of investment in energy infrastructure. Countries should look at options to reduce prices that focus on the fundamentals of energy supply and demand.

Third, improved economic, social and environmental prosperity is the rationale for reform, but within the larger picture of overall gains, there may be unwanted negative impacts. The first step is to estimate impacts, both direct and indirect. The second step is to consider how negative impacts can be mitigated. Mitigation measures fall into three broad categories: how reform is implemented, responses to impacts and efforts to counteract price rises.

Finally, given the often strong public opposition to higher energy prices, a strategy to build support is important. Communications should be a part of that strategy. Good communications focuses on simple and varied messages, targeted at specific stakeholder groups. Good communicators also listen before talking, so consultations with citizens and interest groups should be a part of the plan from the outset.

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The International Institute for Sustainable Development's Global Subsidies Initiative

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

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

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

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

To encourage this, the GSI, in cooperation with a growing international network of research and media partners, seeks to lay bare just what good or harm public subsidies are doing; to encourage public debate and awareness of the options that are available; and to help provide policy-makers with the tools they need to secure sustainable outcomes for our societies and our planet.

www.globalsubsidies.org

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

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