

Energy Subsidies in the Middle East and North Africa: Lessons for Reform

March 2014

Energy subsidies are widespread across the Middle East and North Africa (MENA), accounting for about half of global energy subsidies. While these subsidies provide some support to poor consumers, their benefits go mainly to the better-off. They also weigh on government budgets at the expense of much-needed investment in health care, education, and infrastructure; tend to encourage capital-intensive industries to the detriment of employment-intensive activities; and foster overconsumption and damage to the environment.

For these reasons, subsidy reform can have big payoffs in terms of higher growth and greater equity. Yet energy subsidy reform is complex, both technically and politically. Careful planning, including on the timing and pace of reform is crucial, as are compensatory measures—preferably through better-targeted cash transfers for those who are hardest hit by the removal of subsidies. Another key ingredient for success is a communications campaign that raises awareness about the cost of subsidies and the benefits of reform, and helps generate broad political and public support.

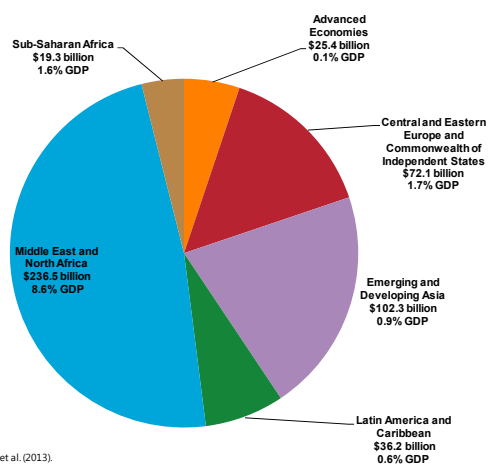
Energy Subsidies: A Costly Endeavour

For decades, countries in the MENA region—both energy importers and producers—have relied heavily on generalized energy price subsidies as their main tool to provide social protection and share hydrocarbon wealth.¹²

IMF estimates suggest that, for the region as a whole, pre-tax energy subsidies—that is subsidies measured as the difference between the value of consumption at world and domestic prices—cost about \$237 billion in 2011.³ This amount is equivalent to 8.6 percent of regional GDP, or 22 percent of government revenue, and accounts for 48 percent of global energy subsidies (Figure 1). Energy subsidies far exceed in value other subsidies that are also being provided in many MENA countries. For instance, food subsidies are estimated to have amounted to 0.7 percent of GDP in 2011 in the region.

About one-half of total energy subsidies in MENA are accounted for by petroleum products, while the remainder represents subsidies on electricity and natural gas. There is a wide dispersion of subsidies in the region, with subsidies being more prevalent in oil exporters (Figure 2). Energy subsidies exceeded 5 percent of GDP in two-thirds of the countries in the region.

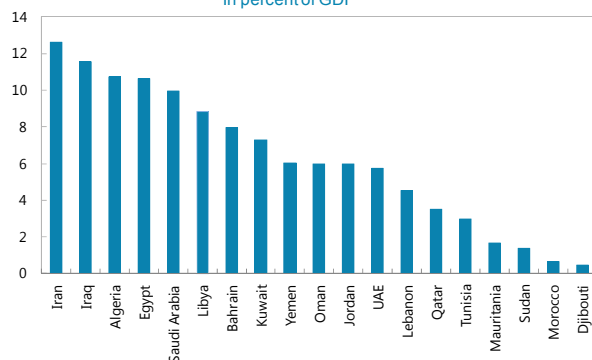
Figure 1. Total Pre-Tax Energy Subsidies by Region, 2011 1/
\$492 billion; 0.7% GDP



Source: Clements et al. (2013).

1/ Includes petroleum, electricity, natural gas, and coal subsidies.

Figure 2. MENA Pre-Tax Energy Subsidies, 2011 1/
In percent of GDP



Source: Clements et al. (2013).

1/ Includes petroleum, electricity, natural gas, and coal subsidies.

In several countries, the true cost of energy subsidies is higher than what is reflected in the budget. In Iraq, for instance, budget spending on energy subsidies was eliminated in 2007, but the population continues to receive a sizeable implicit subsidy as domestic fuel prices—including those charged to domestic power plants and refineries—are set well below international levels. The size of this implicit subsidy was estimated at over 11 percent of Iraq's GDP in 2011.



INTERNATIONAL MONETARY FUND

Washington, D.C. 20431 • Telephone 202-623-7100 • Fax 202-623-6772 • www.imf.org

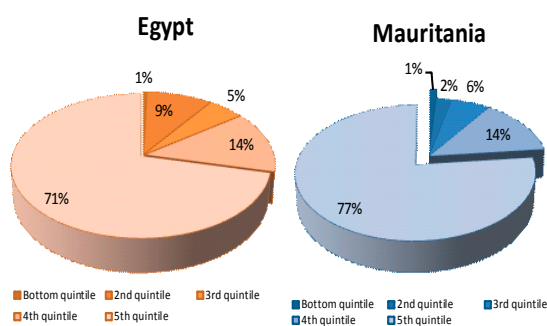
Hidden Costs of Energy Subsidies

Energy subsidies appeal to governments because of their administrative ease relative to other, more targeted, social safety net instruments, such as cash transfer schemes or direct income support. In energy-rich countries, subsidies are also seen as a direct way to share the country’s natural resource wealth. But subsidies create more problems than those they intend to address.

Energy subsidies do not provide effective support to the poor, and they weigh on public finances. They also create distortions that are harmful for the economy, which is important even in countries that are large energy producers and are therefore less concerned about the budgetary and balance of payments implications of energy subsidies.

Energy subsidies benefit households directly through lower prices for energy used for cooking, heating, lighting, and personal transport, but also indirectly by reducing production costs for other goods and services that use energy as an input. However, energy subsidies are highly inequitable as they mostly benefit upper-income groups. For instance, in Sudan the poorest 20 percent of the population receives only about 3 percent of fuel subsidies, whereas the richest 20 percent captures more than 50 percent. The situation is similar in many other countries across the region (Figure 3).

Figure 3. Share of Benefits from Diesel Subsidies in Selected MENA Countries



Source: IMF Staff estimates based on information available in the 2008-2009 household surveys for Egypt and Mauritania.

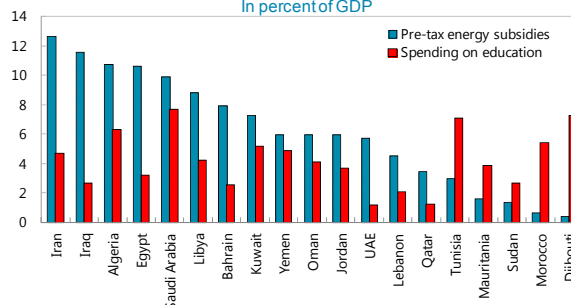
Energy subsidies also exacerbate the difficulties that countries face in dealing with the volatility of international energy prices. The balance of payments of many energy-importing countries is vulnerable to

international price increases. These effects could be offset by allowing domestic energy prices to rise in line with international prices, possibly combined with a smoothing mechanism to avoid overly sharp domestic price changes.

Energy subsidies create distortions that are harmful to the economy. They can discourage investment in the energy sector and in more labor-intensive industries, and create incentives for waste and smuggling.

Energy subsidies also divert public resources away from spending that promotes more inclusive growth (Figure 4). For example, despite several reforms in Yemen, pre-tax energy subsidies still amounted to about 6 percent of GDP in 2011 and exceeded public capital investment. In Egypt, total energy subsidies were three times the spending on education and seven times health expenditures in 2011.

Figure 4. MENA Pre-Tax Energy Subsidies and Spending on Education 1/2/ In percent of GDP



Source: Clements et al. (2013).
 1/ Includes petroleum, electricity, natural gas, and coal subsidies.
 2/ Pre-tax subsidies refer to 2011, education refers to the latest available data.

The negative environmental externalities from energy subsidies are substantial. Subsidies cause overconsumption of petroleum products, coal, and natural gas, and reduce incentives for investment in energy efficiency, public transport, and renewable energy. This over-consumption not only aggravates local pollution, traffic congestion, and global warming, but also leaves fewer resources for future generations.

Barriers to Reform

Despite the drawbacks caused by energy subsidies, reform has proven difficult. Country experiences suggest a number of barriers to successful subsidy reform:

Lack of information regarding the magnitude and shortcomings of subsidies. The full cost of subsidies is rarely reflected in the budget. As a result, the public is unable to make a connection between subsidies, constraints on expanding high-priority public spending, and the adverse effects of subsidies on growth and poverty reduction.

Opposition from specific groups benefiting from the status quo. Politically vocal groups that benefit from subsidies can block reforms.

Lack of government credibility and administrative capacity. Even where the magnitude and drawbacks of energy subsidies are recognized, the public often has little confidence that the government will use savings from subsidy reform wisely, and therefore resists their removal.

Concerns regarding the adverse impact on the poor. Although most of the benefits from energy subsidies are captured by higher-income groups, price increases can still have a substantial adverse impact on the real incomes of the poor through higher energy costs of cooking, heating, lighting, and personal transport, as well as indirect impacts on food and public transport. In most countries, there are no well-targeted social protection instruments, including cash transfers that could be scaled up to compensate vulnerable groups.

Concerns regarding the adverse impact on inflation, international competitiveness, and volatility of domestic energy prices. Increases in energy prices will have short-term effects on inflation, which may give rise to expectations of further increases in prices and wages. Higher energy prices may also lead to concerns about the international competitiveness of energy-intensive sectors. In addition, countries are hesitant to liberalize energy prices to avoid high volatility in domestic prices arising from international price developments.

Weak macroeconomic conditions. Public resistance to subsidy reform is less strong when economic growth is high and inflation is low—although subsidy reform cannot always be postponed and is often required as part of efforts to constrain inflation and stimulate growth.

Benefits of Energy Subsidy Reform

Subsidy reform can boost growth and reduce poverty and inequality. Reallocating the resources freed up by

subsidies to more productive public spending could help boost growth over the long run. Moreover, the removal of subsidies, accompanied by a well-designed social safety net and an increase in pro-poor spending, could yield significant improvements in the well-being of low-income groups over the longer term. Subsidy reform can also contribute to lower budget deficits and interest rates, thus stimulating private-sector investment and reinforcing growth.

By removing distortions in price signals, subsidy reform can help improve incentives to adopt energy-saving technologies. Empirical estimates suggest that higher investment in more efficient and energy-saving technologies could boost growth by up to 1 percent over the long term.⁴

Finally, eliminating energy subsidies would generate substantial environmental and health benefits by reducing local pollution.

A Roadmap for Reform

Energy subsidy reform needs to be carefully planned. Country experiences suggest the following six key ingredients for successful reform:

A comprehensive energy sector reform plan. Such a plan should be drawn up in consultation with stakeholders, and include clear long-term objectives and an assessment of the impact of the reforms.

A comprehensive communications strategy. A well-planned communications campaign is essential to help generate broad political and public support, and should be undertaken throughout the reform process. For example, in Iran the subsidy reform was preceded by extensive consultation with stakeholders and by an effective public relations campaign. The communication campaign should inform the public of the cost of subsidies and the benefits of the reform, including the budgetary savings generated to finance high-priority spending on education, health care, infrastructure, and social protection.

Another key component of a successful communications strategy involves strengthening transparency in reporting subsidies in the budget. The subsidy reform experiences during the last three years in Jordan, Morocco, and Tunisia were generally accompanied by public communication campaigns, including media coverage showcasing the government's commitment to reform.

Appropriately phased and sequenced price increases.

Phasing-in price increases and sequencing them differently across energy products may be preferable. Too sharp an increase in energy prices can generate intense opposition to reforms, especially in the absence of sufficient communication or mitigating measures, as happened with fuel subsidy reform in Mauritania in 2008. A phased strategy will allow households and enterprises to adjust and governments to develop social safety nets.

Improved efficiency of state-owned enterprises to reduce producer subsidies.

Improving the efficiency of state-owned enterprises can reduce the fiscal burden of the energy sector. Energy producers often receive substantial budgetary resources to compensate for inefficiencies in production and revenue collection. Strengthening the financial position and operational performance of these enterprises can reduce the need for budget transfers.

Targeted mitigating measures. Well-targeted measures to mitigate the impact of energy price increases on the poor are critical for building public support for subsidy reforms. Targeted cash transfers or vouchers are the preferred approach to compensation. When cash transfers are not feasible because of limited administrative capacity, other initiatives, such as public works programs, can be expanded while capacity is developed.

It is crucial that those who are hardest hit by the removal of subsidies be compensated from the beginning through more targeted social protection. For example, when the government of Mauritania introduced a new diesel price formula in May 2012, it included mitigating measures as an explicit component of the energy subsidy reform program, which helped contain opposition despite a price increase of more than 20 percent over a five-month period. Also, in Iran, as part of the 2010 fuel subsidy reform, bank accounts were opened for most citizens and compensating cash transfers were deposited into these accounts preceding the implementation of price increases.

Depoliticized price setting. Successful and durable reforms require a depoliticized and rules-based mechanism for setting energy prices, which can help reduce the chances of reform reversal. Adoption of an automatic fuel pricing mechanism is not in itself a solution for achieving sustained energy subsidy reform, but should be part of a broader reform strategy. In general, responsibility for implementing an automatic

pricing mechanism can be given to an independent body to help shield it from political pressures. Over the longer term, subsidy reforms for petroleum products should aim to fully liberalize pricing. In Jordan, the authorities removed the general fuel subsidy in November 2012, and resumed in January 2013 the monthly price adjustment mechanism that had been suspended in early 2011. To mitigate the social impact, cash transfers were introduced.

Time for Action

Experience has shown that structural reforms are easier and less costly to implement early on when authorities have policy buffers that allow sequencing at a pace consistent with the specific needs of a country. This suggests that subsidy reforms should be implemented proactively rather than under pressure.

The IMF and other partners can help MENA countries in the design and implementation of subsidy reform, and can provide temporary financing to enable a gradual pace of subsidy removal that has greater chances of success.

¹ Prepared by Randa Sab based on Clements, Benedict, David Coady, Stefania Fabrizio, Sanjeev Gupta, Trevor Alleyne, and Carlo Sdravovich, eds. 2013, "Energy Subsidy Reform: Lessons and Implications," (Washington, DC: International Monetary Fund) and additional work undertaken in the Middle East and Central Asia Department of the IMF.

² The MENA region includes Algeria, Bahrain, Djibouti, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Qatar, Saudi Arabia, Sudan, Syria, Tunisia, United Arab Emirates, and Yemen.

³ These subsidy estimates may differ from those in the country budget documents due to different methodologies used in their calculation to keep consistency across countries. Energy subsidies in this study include petroleum, electricity, natural gas, and coal.

⁴ Burniaux, J., J. Chateau, R. Duval, and S. Jamet, 2009, "The Economics of Climate Change Mitigation: How to Build the Necessary Global Action in a Cost-Effective Manner," OECD Economics Department Working Papers No. 701 (Paris: OECD); Ellis, J., 2010, "The Effects of Fossil-Fuel Subsidy Reform: A Review of Modelling and Empirical Studies" Untold Billions: Fossil-Fuel Subsidies, Their Impacts and the Path to Reform, (Geneva: Global Subsidies Initiative); UNEP, 2008, "Reforming Energy Subsidies: Opportunities to Contribute to the Climate Change Agenda," Division of Technology, Industry and Economics (Paris); and von Moltke, A., C. McKee, and T. Morgan, 2004, *Energy Subsidies: Lessons Learned in Assessing Their Impact and Designing Policy Reforms* (Sheffield: Greenleaf Publishing).