

Getting the Prices Right: Economy-wide Policies to Promote Structural Change: Egypt

Case Study 6. Energy Subsidy Reform in Egypt

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Context

In the aftermath of the Arab Spring, Egypt faced both political and economic challenges, affected by a growing fiscal deficit, economic slowdown, increasing poverty, socioeconomic transition, and energy shortages. In 2013, Egypt's power sector was recovering only about 30 percent of its operational and capital costs, while government expenditure on energy subsidies had reached an estimated 22 percent of the budget and 7 percent of GDP, exceeding combined expenditure on education, health, and infrastructure (ESMAP 2017). Electricity supply was unreliable, with frequent outages that affected both consumer welfare and manufacturing output. At the same time, substantial liquid fuel subsidies incentivized excessive production and consumption of fossil fuels, and therefore GHG emissions, harming the environment and the climate and discouraging investment in energy efficiency and cleaner power generation alternatives. This case study provides an overview of the government's efforts to reform energy subsidies between 2013 and 2017 and discusses main challenges, implementation approaches, and outcomes.

Policy

In 2014, Egypt embarked on an ambitious and comprehensive effort to reform energy subsidies as part of a broader effort to tackle long-standing structural constraints to inclusive growth and macroeconomic stability. Egypt's development partners supported the energy subsidy reforms, which were part of the government's broader macrofiscal reform efforts. The three-year Development Policy Financing (DPF) series, supported by the African Development Bank, the Agence Française de Développement, and the World Bank, provided a total of \$3.15 billion in financing in support of the government's program that focused on fiscal consolidation, sustainable energy, and competitiveness. In addition, a three-year, \$12 billion International Monetary Fund (IMF) program approved in 2016 featured energy subsidy reform as a main pillar. In the context of the broader program, the government requested technical and advisory support from the World Bank, part of which was funded by a series of technical assistance grants from the Energy Subsidy Reform Facility within the Energy Sector Management Assistance Program (ESMAP 2017), provided between 2014 and 2020.

The stated goal of the reform effort was to reduce energy subsidies to 0.5 percent of GDP by 2019 by imposing gradual increases in fuel and electricity prices and

maintaining limited support for liquefied petroleum gas (LPG) and electricity for poor and vulnerable households. The government took decisive action from the outset and gradually implemented the planned reforms. In July 2014, the government implemented the first annual electricity tariff adjustment, raising electricity tariffs by 31 percent on average and petroleum and natural gas prices by 40 to 78 percent (World Bank 2016c). Implementation of the first annual electricity tariff adjustment was achieved as part of a five-year tariff reform plan outlined in Prime Ministerial Decree No. 1257 of 2014 to reform gas and electricity subsidies. The second annual electricity tariff adjustment in 2015 increased average electricity tariffs by another 19 percent (World Bank 2016c).

The government implemented an annual electricity tariff adjustment in 2017, raising tariffs by 33 percent on average, at a much higher rate than the planned 17 percent increase over the previous five-year tariff adjustment plan. Specifically, diesel and gasoline prices increased by 40 to 55 percent and electricity tariffs by 40 percent on average. LPG cost recovery was estimated at only 35 percent, even after the tariff adjustment (World Bank 2017). This time, LPG prices were also included, doubling to bring prices closer to costs, with the last price increase announced in October 2021, bringing it to its current price of LE 70 per cylinder.

In view of challenging macroeconomic circumstances, in 2017 the cabinet approved the deferral of the deadline for the power sector to reach full cost recovery. Starting in 2016, instead of announcing an electricity tariff trajectory, the government set a subsidy target in its Medium-Term Fiscal Framework as part of the broader set of steps agreed with the IMF, and adjusted tariffs annually to achieve the then-target of full cost recovery by FY2018–19. Although projected at 2.5 percent of GDP for FY2016–17, energy subsidies reached 3.9 percent (2.9 percent for fuels and 1 percent for electricity). Due to the devaluation of the currency, even with the retail tariffs for consumers in FY2017–18 already higher than originally targeted for FY2018–19, the original objective of full cost recovery by FY2018–19 could not be reached, and the cabinet approved a new subsidy trajectory targeting FY2021–22. The current five-year plan extends from FY2021 to FY2025.

To mitigate the potential adverse impacts from energy price increases, along with broader macroeconomic pressures and inflation, the reforms were accompanied by action in multiple domains. To facilitate the acceptance of the reforms, the government launched a proactive communications effort to explain the rationale of the reforms and inform the public about what the reforms entailed. Among other important communication elements, the efforts included a public multimedia campaign emphasizing the importance of energy efficiency measures to mitigate the impact of the price increases.

Most importantly, the government also took concrete action to strengthen the country's social protection mechanisms. The main element of the effort was to move

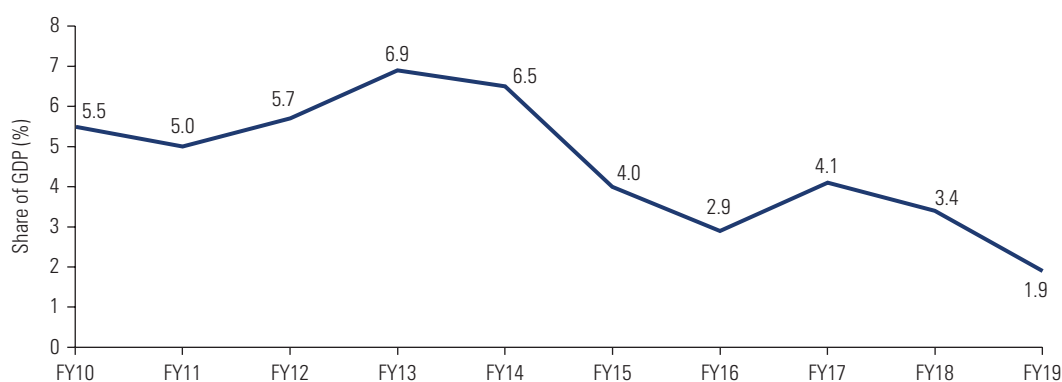
away from broad-based price subsidies toward targeted support, including through cash transfers. The government increased the social protection budget allocation by about LE 85 billion (approximately \$5 billion) in FY2017–18, or by 60 percent compared with the previous period. The government also took critical action to broaden the coverage of the social protection system, while providing broader support through skill enhancement and youth employment programs, along with improved service delivery.

The government of Egypt continues to strengthen the country’s social protection mechanisms, including through efforts supported by complementary World Bank operations to develop, fund, and strengthen the *Takaful* and *Karama* cash transfer program. *Takaful* (“dignity” in Arabic) is a cash transfer program that is conditional on school attendance and the use of maternal and child health care services to promote the accumulation of human capital among children. *Karama* (“solidarity” in Arabic) provides a monthly income to poor people over the age of 65 and people with severe disabilities who are unable to work. These programs are based on a proxy means-testing questionnaire cross-checked with a unified national registry, linked with a unique identification number. Throughout their lifetime, the programs have reached approximately 31 million registered applicants in the database; about 3.11 million households are currently enrolled, three-quarters headed by females.

Results and Impacts

Implemented alongside crucial macrofiscal reforms, Egypt’s energy subsidy reform efforts contributed to the government’s efforts to ease fiscal pressures, with the budget deficit falling from 12.9 to 8.1 percent of GDP between 2013 and 2019 (World Bank 2020b). Energy subsidies declined from 6.9 percent of GDP in FY2013 to 1.9 percent in FY2019 (figure 3.6). While the share of energy subsidies stood at 1.9 percent in

FIGURE 3.6 Evolution of Egypt’s Energy Subsidies, FY2010–19



Source: World Bank 2020b.

Note: FY = fiscal year; GDP = gross domestic product.

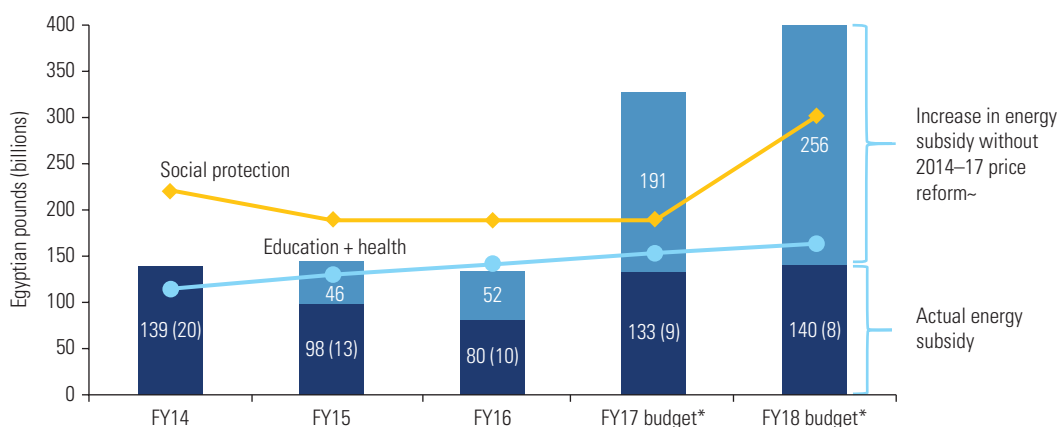
FY2019—above the government’s original target of 0.5 percent set in 2014—the electricity and fuel pricing reforms, together with other macroeconomic reforms and strengthened social assistance programs and accompanying delivery mechanisms, strengthened Egypt’s macroeconomic resilience to face shocks, including the impacts of the COVID-19 crisis.

Even though challenges posed by the COVID-19 pandemic affected reform implementation, the government remains committed to tackling energy subsidies through gradual increases in electricity tariffs over the medium term. For example, in July 2020, it announced a new electricity tariff in the midst of the pandemic. For liquid fuels, it implemented an automatic fuel price-indexation mechanism for 95-octane gasoline in April 2019 and approved a new price mechanism for all petroleum products in June 2019 (OECD 2021). As a result, fuel subsidies declined by approximately 65 percent from July 2019 to March 2020.

Egypt’s 2014–17 energy subsidy reforms and accompanying government policies created the fiscal space to strengthen social assistance, health, and education. Before the reform, energy subsidies had exceeded key social spending categories for many years. Consistent adjustments in energy prices and energy subsidy reductions have yielded significant fiscal savings, which the government redirected toward social protection and human development spending. Starting in FY2015, health and education expenditure exceeded energy subsidies (figure 3.7).

Together with broader energy sector reforms by the government, these subsidy reforms have helped to encourage private investment, thereby enabling increased electricity generation over the past five years. In addition to improved sector

FIGURE 3.7 Energy Subsidy and Health, Education, Social Protection Expenditure in Egypt, FY2014–18



Source: World Bank 2017.

Note: ~ = World Bank estimate; * = Ministry of Finance budget for energy subsidy. Numbers in parentheses are in \$, billions.

performance, the government's reforms, including electricity tariff reforms, FiTs, and broader regulatory framework encouraging privately developed renewables-based power generation, can be credited with two important environmental achievements. The share of oil-fired power generation went down from more than 34,000 gigawatt hours (GWh) in 2014 to 7,145 GWh in 2019 (IEA 2022b), while wind and solar power generation output increased rapidly. In 2014, solar power generation stood at 244 GWh and wind power generation at 1,444 GWh—a sixfold growth for solar and almost threefold for wind. The reforms and subsequent renewable energy (RE) scale-up allowed the government to increase its targets for the share of renewables-based generation capacity to 42 percent of total installed capacity by 2035. Reaching this target and consistently increasing RE generation output would yield substantive emissions reductions.

Key Takeaways

Through comprehensive and gradual reforms undertaken over a series of years, the government of Egypt managed to significantly reduce the fiscal burden from energy subsidies and improve energy sector financial viability, consumer welfare, and economic productivity, while attracting significant private investment in cleaner alternatives. The World Bank's Implementation Completion and Results (ICR) report for the Egypt DPF series noted the following key features of the country's energy subsidy reform experience:

- *Strong government ownership of the reform program and close cross-sectoral coordination:* The government initiated and led the reforms, mobilized the required resources, and remained committed throughout the reforms, taking strong action when required based on thorough analytical work—for example, surrounding the currency devaluation and COVID-19. It also organized an instrumental group for coordination and knowledge sharing between key agencies, to keep the reform effort moving forward smoothly and addressing issues.
- *Transparent and timely government communication with the general public regarding the reform program and associated support from international donors:* The government proactively engaged with the public and key stakeholders to raise awareness of the financial and opportunity costs of energy subsidies and supported evidence-based public debate. Through carefully designed messaging and innovative communication approaches, it has supported behavior change and facilitated acceptance of the energy price reforms.
- *Strengthened social assistance measures and delivery mechanisms helped mitigate impacts on vulnerable households:* The government adopted social protection measures throughout the reform process, redirecting fiscal savings from the energy subsidy reform to strengthen social programs.

The government expanded the food subsidy system while also doubling the maximum benefit under the Social Solidarity Pension, the country's largest social safety program. These measures are credited with preventing further deterioration of household welfare amid challenging circumstances.

- *Broader energy sector policy was a key enabler of improved outcomes:* The energy subsidy reforms were part of a much broader effort by the government to improve the energy sector's policy framework and its operational, technical, and financial performance. These include:
 - The new sector design stipulated by issuance of the 2015 Electricity Law and 2017 Gas Law
 - Fuel switching from highly subsidized and inefficient sources (for example, from heavy fuel oil to gas in power generation, from heavy fuel oil and diesel to gas in industry and transport, and from LPG to gas in households)
 - Resolving of cross-sectoral debts/receivables between petroleum and electricity, and between railways, aviation, and petroleum, which helped improve the energy sector's fiscal situation and encouraged demand control in indebted sectors
 - Improved energy supply efficiency
 - Improved billing systems via prepaid meters for electricity and gas and digital tracking of fuel transport
 - Better control of unauthorized sales of LPG and liquid fuels.