Recent Developments in Iran’s Energy Subsidy Reforms

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Introduction

Subsidies for fossil fuel consumption have come under scrutiny in recent years because of the onerous burden they place on governments’ treasuries—particularly those of oil-importing countries—as a result of rising oil prices. Creating excessive and inefficient energy use, contributing to price volatility, discouraging much-needed investment in the energy sector and incentivizing fuel smuggling are just some of the negative impacts of subsidies that are encouraging governments to take initiatives for their reform.

In December 2010, the Government of Iran undertook bold economic reforms to phase out subsidies to energy products and replace them with nationwide cash transfers as compensation for rising energy prices. As the country approaches the second year of implementation, speculations over the success or failure of the reforms have mounted due to recent changes in economic and political conditions both domestically and internationally. While it is relatively impossible to draw a concrete conclusion on the degree of success at this stage, attempts have been made to elaborate on the reform process and identify recent challenges that the Iranian government has faced in accomplishment of its once called “grand economic surgery” (Government of Iran, 2010).

What does the Reform Act say?

In March 2010, the Iranian parliament ratified the Targeted Subsidies Reform Act (henceforth the Reform Act) calling for a gradual increase of energy prices within a five-year period (2010–2015). The retail prices of petrol, diesel, fuel oil, kerosene and liquefied petroleum gas (LPG) are required to increase to no less than 90 per cent of Persian Gulf free on board (FOB) prices. Natural gas retail prices are also envisaged to increase to at least 75 per cent of average export prices after deducting transmission costs and export taxes. For electricity and water, the prices are set to increase to cover full cost price. The Reform Act also stipulates gradual subsidies elimination for wheat, rice, cooking oil, milk, sugar, as well as postal, air and rail services within the same five-year period. In order to

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1 This policy brief aims at reviewing the recent course of events in Iran and their consequent impacts on the subsidies reform process. For a detailed account of Iran’s subsidies reform plan, including the initial design and implementation, see Guillaume, Zytek, and Farzin (2011) and Amuzegar (2011).

2 According to the International Energy Agency, Iran was ranked as the largest subsidized economy in 2009, granting US$66 billion worth of fossil-fuel consumption subsidies (International Energy Agency, 2010).
manage future fuel price volatility, the Reform Act has authorized the government to absorb up to 25 per cent of the FOB Persian Gulf price increases (relative to FOB Persian Gulf prices of 2010 when the Reform Act came into force) through further subsidization without changing the consumer price. Furthermore, its Note 3 of Article 2 envisages minimum and maximum revenue of IRR100 thousand billion and IRR200 thousand billion (approximately US$10 and US$20 billion) from price increases in the first year of the reform.3

To compensate the nation for higher energy prices, the law has authorized payments of a maximum of 50 per cent of the fiscal revenue resulting from price increases to the population in the form of:

- In-cash and in-kind payments bearing in mind each family’s level of income.
- Social security system, including introduction of national health insurance, job creation and house mortgage loans.

The Reform Act has also designated payment of a 30 per cent share of the income from price increases to support industries and producers through interest subsidies on loans for the adoption of new energy-saving technologies and credit lines to reduce the impact of higher energy costs on cash-flow. The remaining 20 per cent share has been allocated to government to cover its subsequent increases in costs and to improve its infrastructure.

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3 Due to changing economic and political conditions in recent months, the Iranian foreign exchange market experienced an unprecedented volatility that created different official and free market foreign exchange rates (details to be explained below). Hence, to minimize confusion, in this policy brief the exchange rate is equivalent to the official rate of US$1=IRR12,260.
What were energy prices changed to?

To begin the reforms, the government decided to take a “shock therapy” approach and substantially increased prices overnight (Jamshidi, 2010). For petrol, while pre-reform prices for regular and premium grades for all vehicles were IRR1000 and IRR1500/litre respectively, post-reform prices were classified in three different categories; subsidized prices of IRR1000/litre, semi-subsidized or rationed price of IRR4000/litre and free market price of IRR7000/litre. The subsidized prices were allocated to governmental fleet and vehicles mostly used in industrial and agricultural sectors, such as vans; semi-subsidized prices were designated for domestically manufactured vehicles with an engine size of less than 2000 cubic centimeters (National Iranian Oil Refining & Distribution Company, 2011).

**TABLE 1: FUEL PRODUCTS’ PRICE INCREASE**

<table>
<thead>
<tr>
<th>FUEL PRODUCT</th>
<th>PRE-REFORM PRICE (IRR/LITRE)</th>
<th>POST-REFORM PRICE (IRR/LITRE)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SUBSIDIZED</td>
<td>SEMI-SUBSIDIZED</td>
</tr>
<tr>
<td>Petrol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regular</td>
<td>1000</td>
<td>1000</td>
</tr>
<tr>
<td>Premium</td>
<td>1500</td>
<td>-</td>
</tr>
<tr>
<td>Diesel</td>
<td>165</td>
<td>-</td>
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</tbody>
</table>

Source: National Iranian Oil Refining & Distribution Company (2011)

The diesel prices also experienced a 9- to 18-fold increase, reaching to IRR1500/litre for semi-subsidized prices (designated to public transportation, industrial and production sectors) and IRR3500/litre for free market prices (National Iranian Oil Refining & Distribution Company, 2011).

For natural gas and electricity consumption, a multi-tier tariff structure was adopted in which tariff rates varied based on consumption volume, sector, and geographical region. For natural gas consumption, the minimum price increase was for the public sector, from IRR690 to IRR1000/m³, and the maximum price increase targeted the power generation and industrial sectors, from IRR49.3 and IRR15.85 to IRR800 and IRR700/m³, respectively.

**FIGURE 1: NATURAL GAS PRICE INCREASE—IRR/M³**

Source: Ministry of Energy (2011)
Prices were also significantly increased in the electricity sector, with a maximum rise for the public sector from IRR152 to IRR1300 per kilowatt hour and the lowest increase for households in more temperate regions.

**FIGURE 2: ELECTRICITY PRICE INCREASE—IRR/KWH**

*Source: Ministry of Energy (2011)*

**Has the reform plan been implemented as envisaged?**

Inconsistent interpretations of the Reform Act by the Iranian government and the parliament have resulted in significant implementation challenges. Most of the disagreements can be attributed to the lack of comprehensive details in the Reform Act itself, leaving the door open for multiple interpretations of some critical issues.

**Price increases—how much and at what rate?** In order to control inflation and minimize the resulting economic pressure on people, the Reform Act stipulates a *gradual* price increase to no less than 90 per cent of the FOB Persian Gulf prices. However, it failed to define a clear rate based on which prices should reach their international market level within a five-year period. As a result, the government took the “shock therapy” approach and substantially increased prices in order to counter excessive energy consumption and ensure an increase in real price of fuels in the light of the annual inflation rate (Amuzegar, 2011). Its approach, however, received much criticism from members of the parliament, who were expecting a gradual price increase of 20 per cent per year. The parliament accused the government of creating an uncontrollable rate of inflation through this sudden and dramatic price rise (for some energy products around 80 per cent of their international prices in one go) (“Government’s violations,” 2012). The rate at which the government increased the prices in the first reform phase and its intention to further increase the prices in the second phase raised concerns amongst members of the parliament over the government exceeding the “no less than 90 per cent of Persian Gulf FOB price increase” provision as stipulated by the Reform Act (Proponents and Opponents to Targeted Subsidies Act, 2012). Hence, the parliament recently amended the Act to place a cap on energy price increases of “no more than 90 per cent of Persian Gulf FOB price” (Parliament of Iran, 2012).
Cash payments—how much & to whom? The Reform Act authorizes only in-cash and in-kind payment of a maximum 50 per cent of the revenues resulting from price increase to families giving consideration to their average income. However, the Act does not establish a method or set a benchmark on which to evaluate families’ level of income, nor does it specify the exact amount of monthly payments. Therefore, the government, facing difficulties in identifying the target groups, announced that all Iranians living in the country were eligible to receive monthly cash payments of IRR455,000 (around US$45). In the first year of reform, from December 2010 to December 2011, the cash payment to 73 million Iranians cost the government IRR3,300 billion every month. Despite the government’s revenue of around IRR30,000 billion from the price increases in the first year of the reforms, which far exceeded the total annual gain of US$10–20 billion as stipulated by the Act, the actual public cash payment in the corresponding year was approximately IRR45,000 billion (“Proponents and opponents,” 2011). In order to cover the IRR15 thousand billion deficit, the government distributed the 30 per cent and 20 per cent shares allocated for industry and the government itself, in addition to taking loans from the Central Bank; it also used tax revenues and the development funds of Ministries of Oil and Energy (“Government’s Violations,” 2012). In the new financial year, the parliament also legalized an increase of the cash payment share to 80 per cent and ratified the Budget Act 2012–2013, after two months’ delay and intense debates with the government over its ratification. The new Budget Act calculates an additional IRR12 thousand billion income from price increase, raising the government’s allocated total revenue from the subsidy reforms to IRR66 thousand billion in 2012–2013 as opposed to IRR$54 thousand billion designated in the Budget Act of the previous year. It allocates IRR48 thousand billion for direct cash handouts (a 20 per cent increase), IRR10 thousand billion for industries and producers, IRR6 thousand billion for health care and IRR2 thousand billion for an unemployment insurance fund. As a result, the initial balance of 50 per cent and 30 per cent shares for cash payment and industries respectively have changed to 80 per cent for public payments and 20 per cent for the industrial sector, while completely eliminating the government’s 20 per cent share of the reform income.

Second phase of reform—The government’s recent decision to implement the second phase of subsidies reform triggered criticism from experts and members of the parliament. In the second phase, energy prices are expected to further increase another 30 per cent and the amount of the monthly cash payments will rise from IRR455,000 to IRR735,000 rials per person (“Potential Scenarios,” 2012). To accommodate the IRR280,000 increase in cash payments, the government has announced that the cash payment program will be more targeted, with 10 million citizens no longer eligible to receive payments under the scheme. Iranian media reported that, in March 2012, many citizens, including those belonging to low-income families, received a text message from the Subsidy Reform Organisation calling them to voluntarily withdraw from receiving cash payments due to their financial abilities (Vaez, 2012). The criteria by which some citizens are expected to be eliminated from the cash payment scheme have not been clarified by the government. It is also unclear whether they will be ineligible to receive the additional payment of the second phase or will be eliminated from receiving cash payment altogether.

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4 In the new Budget Act, the government is authorized to obtain IRR56 thousand billion of revenue from further increases in energy products’ prices and the remaining IRR10 thousand billion reductions to the subsidies of bread, electricity and other products.
5 Concerns over implementation of the second phase of the reforms led to Ali Larijani, the head of parliament, asking the Supreme Leader, Ayatollah Khamenei, to prevent the government from proceeding with its plan (“Larijani’s Request,” 2012).
6 Dr. Mohammad Reza Farzin, the spokesperson for the Subsidy Reform Organisation, stated that “the government has its own test means” to identify ineligible citizens (Rafie, 2012).
What have been the impacts of the reforms?

One and a half years into the reform process, assessment of its actual impacts on different segments of Iran’s economy remains difficult due to contradictory information from official and non-official sources. The following accounts of the reform’s impacts are, however, based on officially valid data and statistics.

**Consumption**—According to official reports, the sharp increase in energy prices appears to have a downward impact on consumption of most energy products (Ministry of Energy, 2011). In the first year following the reforms, in comparison to the average annual consumption growth rate of 10 per cent for energy commodities, consumption of fuel oil decreased by 36.4 per cent, petrol 5.6 per cent, diesel 9.8 per cent and kerosene 2.9 per cent. In the corresponding year, consumption of electricity, LPG and water also declined by 1.7 per cent, 10.6 per cent and 6 per cent respectively. The exception is, however, in natural gas consumption, which experienced an overall growth of 6.1 per cent, with the exception of the household sector, which witnessed a 1.5 per cent reduction (Ministry of Energy, 2011). The reform appear to have been successful in meeting one of its objectives, namely shifting consumption from oil products to natural gas in the domestic market (particularly in power generations) in order to increase the country’s oil and gas export capacity. Iran’s gas export capacity reached 9.1 billion cubic metres (bcm) in 2011 from 5.67 bcm in 2009, an increase of 82 per cent (British Petroleum, 2012).

**Inflation**—One of the major challenges in implementing the energy price reform was managing its impact on inflation due to rising commodities’ prices and increasing liquidity as a result of monthly cash payments. In October 2010, two months before the start of the reforms, the inflation rate was reported to be around 12 per cent (Central Bank of Iran, 2010). However, in January 2011, two months after the reforms, the inflation rate increased significantly, reaching 15.8 per cent and then 18 per cent in February (Central Bank of Iran, 2011).

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*It should also be mentioned that the reduction in consumption of petrol, diesel and other like products can be, to some extent, attributed to reduction in fuel smuggling to neighbouring countries. In contrast, downward consumption in electricity and water are more indicative of actual domestic consumption reduction as they cannot be diverted to the black market.*

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**FIGURE 3: INFLATION RATE (OCTOBER 2010–APRIL 2012**

*Source: The Central Bank of Iran (2012)*
Based on monthly reports from the Central Bank of Iran, in the period between April 2011 and January 2012, the inflation rate fluctuated between 20 per cent and 22 per cent. However, in January 2012, immediately after the imposition of the new round of international sanctions, inflation accelerated, reaching 23.9 per cent in April 2012 (Central Bank of Iran, 2012). While not releasing data on inflation in the months of May and June 2012, the Central Bank announced inflation rates of 22.9 per cent and 23.5 per cent for July and August 2012 respectively (Central Bank of Iran, 2012).

**BOX 2: HOW INTERNATIONAL SANCTIONS AFFECTED THE REFORM PROCESS**

In January 2012, a new round of international sanctions targeted key sectors of the Iranian economy, i.e., Iran’s oil sales and the Central Bank, causing dramatic impacts on the inflation rate and the foreign exchange market.

**Inflation:** Contradictory reports have been released as to the actual rate of inflation following the imposition of new sanctions. While the Iranian Central Bank announced a 22.9 per cent inflation rate in July 2012, the country’s Statistics Centre reported an inflation rate of 26 per cent (Statistics Centre of Iran, 2012). The researcher’s field studies, however, demonstrate an average inflation rate of 63 per cent, almost compatible with the result of a report prepared by the Research Centre of the parliament predicting an inflation rate of 60 per cent (“Proponents and Opponents,” 2012). A major concern over the rising inflation rate is its impact on diminishing the value of the cash payments, reducing people’s financial abilities to cope with the rising costs of commodities.

**Foreign exchange market:** The foreign exchange market in Iran also experienced drastic instability immediately after imposition of the sanctions in January 2012, causing a 150 per cent increase in the value of the U.S. dollar against the Iranian rial. The government’s attempt to control the sharp devaluation of the Iranian rial led to the introduction of an official exchange rate of IRR12,260 in place of the hovering free exchange rate of around IRR26,000 as of September 2012. As the prices of most energy commodities are to be adjusted based on FOB Persian Gulf prices, the current official 25 per cent increase in U.S. dollar exchange rate can be interpreted as a return of 25 per cent of the government’s energy subsidy back into the market.

**Industries and producers**—The 30 per cent share of government revenue from price reform to support industries and producers was expected to be a significant stimulus to Iran’s domestic production and further diversification efforts (Guillaume, Zytek, & Farzin, 2011). As illustrated in the charts above, the rise of energy prices in the industrial and production sector was among the highest in the recent price increases, causing high production costs. At the same time, for fear of triggering public unrest resulting from increase in commodity prices, government authorities prohibited producers and retailers from increasing the prices of their products, conducting frequent inspections to enforce it (Protection of Customer’s and Producer’s Rights Organization, 2010). Facing, on the one hand, rising production costs and, on the other hand, strict price controls from the government, the production sector has found

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8 As a result of imposition of the new sanctions, Iran’s oil production has dropped from 3,706 thousand barrels per day (tb/d) in 2010 to 2,817 tb/d in July 2012, reducing its export capacity from 1.9 million b/d to 900,000 b/d (OPEC, 2012).

9 The field study was conducted in Tehran for a two-month period from May to July 2012. The average price increase for some staple foods, comparing to the same period in the last years, was 52 per cent increase for meat, 65 per cent for chicken, 81 per cent for dairy products, 83 per cent for vegetables and 67 per cent for eggs.
it very difficult to remain profitable. Based on reports from members of parliament and chambers of commerce, this has caused many small- and medium-size businesses to go bankrupt or downgrade their businesses (“Arguments,” 2012).

**Recommendations**

Drawing lessons and recommendations from Iran’s recent reform plan, in the light of its unique economic situation, is a challenging task. The subsidy reform process in Iran has been hard hit by recent large-scale international sanctions. The cash-transfer mechanism which was introduced to minimize the impacts of the subsidies reform has evolved to helping people to cope with soaring inflation due to economic sanctions, currency depreciation and rising commodity prices. Although the reform implementation process has faced numerous difficulties, some lessons can be taken from the initial design and implementation of the reform plan (See Box 3).

**BOX 3: LESSONS FROM IRAN’S SUBSIDIES REFORM PLAN***

- Strong political will to reform subsidies.
- Well-organized pre-reform preparations to attract public support.
- Excellent communication strategy and extensive public relation campaign to educate and familiarize the nation with the reform process, including negative impacts of subsidies, energy price rise and expected benefits.
- Fast and efficient upgrade of the banking system to accomplish nationwide cash transfers.
- Reform timing in which considerations were given to the lowest energy consumption period of the year with less personal travel, air conditioning demand and completion of harvest season.
- Introduction and implementation of multi-tier tariffs for electricity, natural gas and water depending on the geographical region and consumption rate.
- Government orchestrated market intervention to prevent public panic (most effective for first months of the reform).

* For a detailed account of Iran’s subsidies reform plan, see Guillaume, Zytek & Farzin (2011).

While international oil prices remain high, many other developing countries with high fuel subsidies are looking to Iran’s experience to inform their own reform plans. Although Iran’s unique economic circumstances have influenced the success and impacts of the reform, future implementation of the reforms could be improved by considering the following:

- **Strengthening political cooperation**—Given the current fragile economic conditions, the Iranian government and parliament need to maintain full cooperation and avoid corrosive engagement in political debates and propaganda.
- **Providing transparent and consistent reports**—Committing to publicize authentic data and statistics on variables in the reform process will prevent potentially conflicting views, thereby minimizing misunderstanding over the exact impacts of the reforms.
• **Communicating with public**—Recent changes in Iran’s reform process, including its plan to narrow the target recipients of cash transfers, have caught many by surprise. As the country implemented an effective communication strategy at the beginning of the reforms, there are expectations that the government will continue its approach by keeping the nation well-informed about any future changes—accurately and efficiently.

• **Downgrading the scale of cash transfers**—Universal and perpetual cash payments were not the objectives of subsidies reform. To manage their inflationary impacts, both the number of recipients and the amount of cash payments should be limited to those most in need of support. In addition, an exit strategy with a time framework for targeting subsidies and phasing out the cash payments need to be defined.

• **Replacing cash handouts with in-kind mitigation measures**—Health insurance, education services, investment in public transport, unemployment and pension funds and access to modern energies are some of the in-kind mitigating measures which can minimize government’s borrowing from the Central Bank to further reduce inflation.

• **Providing support for industries and producers to enhance energy efficiency and reduce energy consumption**—Financial assistance, including long-term low-interest loans, could be provided by the government for upgrading their technologies and coping with the impacts of higher energy costs.
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*All Farsi references are translated into English by author.


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