



A QUARTERLY JOURNAL FOR DEBATING ENERGY ISSUES AND POLICIES

This issue of the *Oxford Energy Forum* is devoted to energy pricing reforms in the MENA. It has been nearly three years since the collapse in global oil prices and there have been mixed outcomes for the MENA. While some countries (which had already initiated reforms) benefited from the low oil price, in others it triggered a spate of pricing reforms following fiscal crises. Although there is now an unequivocal consensus over the necessity for these reforms, their manner and pace of implementation thus far has evoked fresh debates over their long-term sustainability and ensuing impact on the region's rigid economic and social structures. The first four articles in this issue of the *Forum* explore overarching questions related to MENA energy pricing reforms, while the last seven delve deeper into country-specific experience.

The issue opens with an article by *Steffen Hertog* who looks at the history of wealth-sharing in the MENA. He argues that, in contrast with conventional political economy arguments on the social contract, energy subsidies are better understood as part of a broader regime of quasi-welfare in which policies like subsidies and excessive public employment are used in lieu of conventional social welfare tools to distribute wealth in the region's authoritarian systems. This quasi-welfare system has created rigid systems

of entitlement and expectations, complicating the transition to a less distortive welfare system. The author uses cross-country data to explore the links between state and regime type and subsidies, suggesting that while the use of subsidies as an authoritarian patronage tool is a global phenomenon, the effect is stronger and more significant for countries with rents. Moving towards a new, broader social contract that replaces subsidies with conventional income support and active labour market policies will be hardest in the most statist republics with the deepest nationalist-populist legacy – ironically, the same regimes that set out with the greatest ambitions of development and welfare more than half a century ago.

*Rahmat Poudineh* argues that while the MENA's copious natural capital has transformed its economies over the last century, opportunity costs are mounting. Further, the conventional 'social contract' argument is frequently used to analyse the complexities of energy price (or subsidy) reforms, and while this explains the need for rent distribution, it does not account for why subsidies have been chosen over other social welfare instruments. Energy price reform is but one element of several interrelated components in a sustainable energy strategy, which include investment in energy efficiency and alternative energy,

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### MENA Energy Pricing Reforms

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attempted to adjust water charges for the lowest bands of consumption, resulting in the dismissal of the minister for Electricity and Water.

In its second phase of reform (2017–20), the Saudi administration plans to gradually increase energy prices from 2017 up to a ‘reference price’ while instituting a USD6.7 bn fund for cash transfers to low- and middle-income households based on predefined income brackets (see [‘Historic Saudi budget shows effort to win support for change’](#), Bloomberg, 22 December 2016). Eligible households will be able to register for the scheme from February 2017 and, in a move reminiscent of India’s direct cash transfer programme, the first cash payments will be made *before* the price increases are implemented – reflecting an effort to garner public support. These reforms are closely tied to the administration’s ‘Fiscal Balance Program’, which aims at eliminating the budget deficit by 2020. It has been estimated that these reforms could save SAR209 bn (around USD55 bn) per year by 2020 (see [‘Blow of higher utility bills softened for low-income Saudis’](#), *Arab News*, 24 December 2016).

Whilst this represents the Kingdom’s most radical energy reform move yet, there are several factors which will need to be addressed before it can be seen through successfully. The ‘reference price’ for adjustments, as well as the adjustment mechanism (automatic or periodic), have yet to be determined for different fuels. It is unclear whether these would be international prices or some approximation of import-parity prices (for natural gas, for example). A strategy incorporating energy efficiency will be needed to manage the impact of second-round inflationary pressures on the competitiveness of energy-intensive industries which currently dominate the Saudi economy. And last, but not least, the system of cash transfers will need to be designed credibly to be: straightforward, transparent, efficient, and (most crucially) accompanied by measures to engage public support through public awareness and communications campaigns about the long-term benefits of cost-reflective energy prices. This reflects the continuing relevance – as well as the changing nature – of the social contract, despite arguments to the contrary.

### Conclusions

It is possible to draw two main insights from the experience of energy pricing reforms in GCC countries thus far (see [‘Striking the right balance? GCC energy pricing reforms in a low price environment?’](#), B. Fattouh, A. Sen, and T. Moerenhout, OIES Comment, 2016).

- First, it is clear that they were driven primarily by short-term revenue needs, but their longer-term sustainability is contingent upon GCC governments achieving a balance between fiscal, economic, and political incentives to see through reform.
- Second, although the first phase of reforms indicated (contrary to conventional wisdom) that the social contract is not as rigid as had been perceived, this article has argued that its relevance increases, in so much as it relates to the need for greater engagement with the public through appropriate communication campaigns and mitigation measures which emphasize the importance of energy pricing reform for national transformation. Rather than a redundancy, what may be in progress is a reshaping of the social contract.



## Reforming electricity, water, and fuel subsidies in the United Arab Emirates

Tim Boersma and Steve Griffiths

For many years, the reduction of energy subsidies in the Gulf Cooperation Council (GCC) countries was considered a near impossibility. This is because energy subsidies have

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been considered an unbendable form of social contract between GCC governments and their citizens, albeit an expensive and inefficient contract. In contrast, the period from 2014 to 2016 has been a period of remarkable change in GCC subsidies. As oil prices have fallen substantially since June 2014, all GCC countries have implemented subsidy reforms in one form or another.

By initiating electricity and water price reforms more than eight years ago, the United Arab Emirates (UAE) stands out as a leader among its GCC peers.

- Within the UAE, the emirate of Dubai was a trailblazer by carrying out electricity and water reforms in 2008, and implementing further pricing reforms in 2011.
- In January 2015, after years of internal debate, the emirate of Abu Dhabi



followed Dubai, and has initiated a new round of reforms for 2017.

- Electricity and water tariffs for the northern emirates (Ajman, Fujairah, Ras al-Khaimah, and Umm al-Quwain) were revised upwards in 2015, but the primary focus was on prices charged to expatriates.
- In the emirate of Sharjah, a new tariff system for the consumption of electricity and water by commercial and industrial entities was introduced in 2014, but residential prices were not increased.

In addition, throughout the UAE, subsidies on fuel (namely gasoline and diesel) have been removed to ease pressure on the country's budget. Prices, based on a global prices benchmark, are now set each month. In this article, electricity, water, and fuel price reforms in the UAE are assessed, with emphasis being placed on electricity and water pricing reforms in Dubai and Abu Dhabi.

**Electricity and water tariff reforms in Dubai**

Subsidy reform in Dubai is directly linked to its energy portfolio in the late 2000s. The emirate has long been import-dependent and energy prices have therefore always been relatively high. At the time, soaring demand for energy resources (in particular natural gas) outstripped supplies. Subsequently, the emirate turned to imports of liquefied natural gas (LNG) and while the costs rose, the sales price did not. There is a widely shared view that this, combined with rising demand, incentivized the emirate to initiate further reforms in 2011.

The Dubai Supreme Council of Energy, which was established in 2009 to serve as a gathering place for all key stakeholders to discuss long-term targets and objectives (mostly focusing on increased renewable energy and energy demand reduction) announced

a series of energy reforms as one of its first acts. Dubai then had an extensive public relations campaign, in which the incoming tariff changes were explained, and the population was urged to reduce consumption. Prior to that, a system of four tariff classes based on consumption level had been introduced in 2008 by the Dubai Electricity and Water Authority (DEWA). As costs per tariff class (or slab) rose, the tariff-based system was designed to reward the most efficient resource users, with prices rising for higher tranches of consumption.

In 2011, a 15–20 per cent increase in the slab unit cost of electricity and water was introduced for residential expats, industry, and government. For UAE nationals, a modest electricity tariff increase was introduced, together with a modest water tariff for nationals with a consumption level exceeding 20,000 imperial gallons (IG) per month. Next to the slab tariffs, DEWA adds a fuel surcharge to the water and electricity costs. This surcharge is supposed to vary monthly, and is based on the cost of the fuel source that is supplied to DEWA generation plants. However, UAE nationals are exempted from the surcharge and in practice it rarely changes. Most end consumers stay in slab one for the bulk of the year, except during peak demand in summer. The result is that Dubai expat residents pay between USD0.08/kWh and USD0.12/kWh for electricity and between USD2.10/m<sup>3</sup> and USD2.75/m<sup>3</sup> for water, depending on consumption level. UAE nationals pay three to four times less than expats for electricity and water. As a point of reference, Moody's stated in 2016 that the cost-reflective electricity tariff for residential consumers in both Abu Dhabi and Dubai is between USD0.086/kWh and USD0.089/kWh. In 2013, the Abu Dhabi Regulation and Supervision Bureau (RSB) stated that the cost-

reflective water tariff in Abu Dhabi was considered to be approximately USD2.84/m<sup>3</sup> for all customers.

**Electricity and water tariffs in Abu Dhabi**

In contrast to Dubai, Abu Dhabi has historically had less financial urgency for tariff reform. In recent years, however, Abu Dhabi has faced an increasingly short supply of low-cost natural gas as well as falling oil export revenues to support subsidies. Against this backdrop, in late 2014, Abu Dhabi announced that it was going to increase tariffs for water and electricity starting in January 2015.

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Similar to the subsidy reform approach taken by Dubai, the government in Abu Dhabi launched a campaign highlighting the need for energy and water conservation prior to the implementation of tariff reforms. This campaign, which started in the summer of 2014, contained key messages about sustainability and conservation, amongst others.

Abu Dhabi's tariff structure was implemented, with differentiation between apartments and villas to account for the intrinsically larger expected consumption of electricity and water for villas. Within each of these categories, price differentiation, based on the level of consumption, was imposed. For residential expats the unit cost of electricity rose by 40 per cent, and by up to 120 per cent for what are considered high or 'red band' levels of consumption. There was, however, no significant change for UAE nationals.

For the smaller commercial and industrial users (below 1 megawatt, MW) there was a 7 per cent increase and, more significantly, there was a 100 per cent increase for larger industrial users that required more than 1 MW between 10 a.m. and 10 p.m. (local time) during the summer peak. The aim of the latter policy was to limit summer peak demand (this was largely responsible for marginal new electricity generation capacity).

For government entities the subsidies on electricity have been removed.

The unit cost of water for residential expats was increased by 170 per cent, and by up to 374 per cent for very high levels of consumption. In addition, a new tariff for UAE nationals was introduced, although this was still about three times lower than the costs for expats. Commercial and industrial users saw their water costs rise by 82 per cent, and again for the government, the subsidy was removed.

Building on these reforms, additional electricity and water tariff increases have been announced to start in Abu Dhabi in January 2017. For residential expats, electricity tariffs will increase by 28 per cent for the lowest consumption bands; for water the increase will be 32 per cent. At the highest levels of electricity and water consumption, tariffs will be essentially unchanged. The result is that expat residents will, in 2017, pay between USD0.073/kWh and USD0.083/kWh for electricity and between USD2.13/m<sup>3</sup> and USD2.83/m<sup>3</sup> for water. For UAE nationals, electricity tariffs will increase by 34 per cent for the lowest consumption bands; for water the increase will be 23 per cent. At the highest levels of consumption, tariffs will increase by 36 per cent for electricity and 38 per cent for water.

Like the 2015 reforms, a substantial pricing disparity between tariffs for expats and UAE nationals will exist, with nationals continuing to pay four to five times less than expats for energy and

water. In the commercial, agricultural, and industrial sectors, electricity and water tariffs will be adjusted upward by more than 30 per cent in 2017, furthering the advance of pricing reforms in these sectors.

**Fuel price reforms**

In contrast to electricity and water tariffs, fuel prices are set at the UAE federal level. At the end of July 2015, fuel prices (gasoline and diesel) were structurally, and rather substantially, reformed in the UAE with uniform application to all nationalities. Reforms were incentivized by the significant fiscal burden on the UAE from fuel subsidies, which the International Monetary Fund estimated at USD12.6 billion in 2014 (or approximately 2.9 per cent of GDP). Currently, prices for gasoline and diesel are not entirely deregulated, but are set monthly by a commission, based on international prices.

The most significant thing about the UAE's fuel price reforms is that the timing of the reforms matters. As a result of the dramatic fall in international oil prices that started in June 2014, by April 2015 prices for both gasoline and diesel were actually lower (significantly lower in the case of diesel) than they had been prior to the reforms. In fact, by March of 2016, petrol prices had fallen to a level 21 per cent lower than that seen before the reforms, while diesel prices were 52 per cent lower. An environment of low oil prices therefore facilitated the UAE authorities in making the reforms, and helped both UAE nationals and expats absorb the changes.

With oil prices rising again, time will tell whether the UAE commission that sets

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**'AN ENVIRONMENT OF LOW OIL PRICES ...FACILITATED THE UAE AUTHORITIES IN MAKING THE REFORMS...'**  
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the prices will follow international prices for diesel and gasoline accordingly. What is important, however, is that the UAE seized an opportunity to put through important subsidy reforms at a rare time in history when the removal of fuel subsidies actually was able to provide economic benefit to citizens following the implementation of reforms.

**Conclusion**

As a result of diminished oil export revenues, the need for all GCC countries to undertake energy subsidy reforms has accelerated. Although once considered part of an unbreakable social contract between GCC governments and their citizens, all GCC countries have now initiated subsidy reforms in one way or another. The UAE has been a leader amongst its peers in electricity and water tariff reform efforts; Dubai undertook significant reforms in 2008, Abu Dhabi followed in 2015, with additional measures being taken in 2017. Admittedly, the UAE does have unique circumstances, such as a very large expat population (to which the most substantial price increases have been applied) and a relatively wealthy UAE national population.

Abu Dhabi and Dubai have demonstrated several best practices for electricity and water pricing reforms, which are now being replicated across the GCC. These include:

- communication of the need for subsidy reforms before implementing them,
- gradual introduction of pricing increases,
- tiered pricing based on usage (thereby letting the largest consumers carry the heaviest financial burden).

Similar practices – including the rapid removal of subsidies when opportunity





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strikes (such as the 2014 oil price collapse), and price setting according to international benchmark prices – have been applied to transportation fuel subsidies.

Because of these practices, electricity, water, and transportation fuel pricing in the UAE is steadily advancing toward cost-reflective and more transparent pricing. Improvements to the subsidy

approaches being taken in the UAE and elsewhere include:

- lower levels of electricity and water consumption to qualify for the lowest consumption band pricing;
- fully liberalized transport fuel pricing based on a formulaic approach documented in legislation, rather than on committee deliberations.

Because the UAE's national population is rather small, it may not be strictly necessary to equalize energy and water pricing for expats and nationals in order to achieve resource consumption and fiscal objectives, although this argument does not hold for most of the other GCC and Middle Eastern

countries seeking guidance from the UAE's approach. Finally, the UAE has yet to implement subsidy reforms for natural gas pricing and is lagging other GCC countries in this regard. While not a focus topic for this article, natural gas pricing is an extremely important topic for GCC countries; it is critically important for the industrial sector as well as for international oil and gas companies considering joint development of the UAE's natural gas resources. In sum, the UAE has taken important and positive steps regarding energy subsidy reforms, but more work is required in the coming years to realize the full potential of the progress underway.



## Challenges of Kuwaiti energy pricing reform in response to petroleum price volatility

Manal Shehabi

Despite Kuwait's historically strong fiscal surplus and sizeable asset accumulations abroad, the macroeconomic and fiscal impact of the recent oil prices collapse has been severe. In response, the government is reducing energy subsidies as a top priority. Subsidies have been long accepted by economists as a generally inefficient, costly means of rent distribution that leads to wasteful consumption. Energy pricing reform has repeatedly appeared as a key policy objective in Kuwait's five-year development plans. But mounting fiscal pressures, driven primarily by the recent fall in oil revenues, have created a sense of urgency to

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**'ENERGY PRICING REFORM HAS REPEATEDLY APPEARED AS A KEY POLICY OBJECTIVE IN KUWAIT'S FIVE-YEAR DEVELOPMENT PLANS.'**  
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introduce reforms at an accelerated pace, despite strong resistance, particularly from the parliament that has long opposed energy price increases. While other GCC countries have embarked on ambitious plans to liberalize energy prices, Kuwait lags behind – having been the last to raise gasoline prices.

This article examines Kuwait's energy pricing reform in response to the recent oil price fall, with reference to an economy-wide model constructed by the author for a forthcoming OIES paper ('Beyond the promise: subsidies reforms assessment following petroleum price declines in Kuwait through economy-wide analysis'). It departs from recent policy discussions that have focused on the 'why' of price reforms, instead addressing 'how' to reform. The article highlights the impact of petroleum price volatility on Kuwait and key features of its

economy, and summarizes Kuwait's pricing reform experience. It then identifies stabilization mechanisms in the economy – the expatriate labour channel being key – and relevant implications of reforms that should be considered when attempting successful implementation.

### Petroleum price volatility and features of the Kuwaiti economy

Like all petrostates, reliance on an inherently volatile commodity renders the Kuwaiti economy susceptible to boom and bust cycles. Kuwait is like Norway in that it has enjoyed enviable wealth, a fiscal buffer, and massive foreign accumulations in its sovereign wealth funds (SWF). Yet unlike Norway, Kuwait's economy has suffered a large fiscal deficit following the sharp fall in oil revenues. When the oil price collapsed from USD103/barrel (b) in January 2014 to USD30/bi in