As oil and gas fall out of fashion, their prices will reflect customers' preferences and become depressed accordingly

IAEA Director General Yukiya Amano at the Barakah nuclear power plant construction site (ENEC / CC BY-SA 4.0)

Economic and Energy Aspirations of the Middle East

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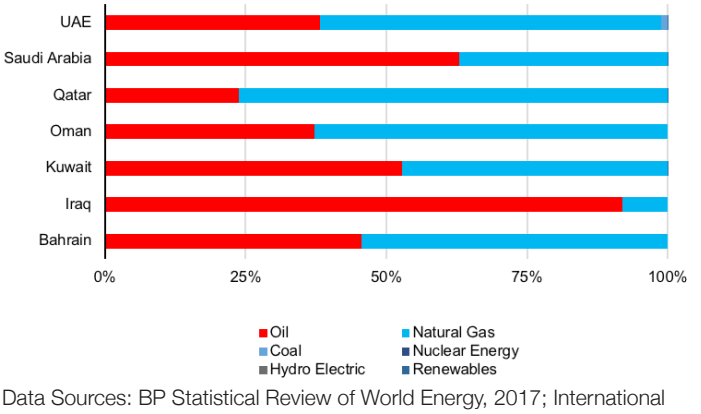
TWIN PROBLEMS

The Middle East has several features that distinguish it from the rest of the world. Apart from sitting on the largest proven oil and gas reserves, the region is famous for its complicated politics, challenging demographics and fragile economic structures.

For oil- and gas-rich states, limited economic diversification is acute; this is where we find government dependence on hydrocarbon revenues reaching as high as 95 percent in countries like Iraq. This is also where we find a poorly diversified primary energy mix, which is heavily reliant on oil and gas (Figure 1), in a sharp contrast to the norm elsewhere where local energy needs are met by diverse sources of energy, mainly oil, gas, coal, nuclear, and renewable energy.

Figure 1: Energy Consumption by Fuel



Data Sources: BP Statistical Review of World Energy, 2017; International Energy Agency (IEA), 2017

The lack of diversification – both in terms of the economy and energy mix – brings serious challenges for the region. The economic performance of the oil- and gas-rich states has simply mimicked the volatile and unpredictable movement in oil prices: when oil prices are high, these economies grow rapidly, but when oil prices go in the other direction, they shrink in tandem. Additionally, the dependence on oil and gas to meet local energy needs has caused two problems: first, the trade-off between the more lucrative exports and the highly subsidized domestic market, and second, the higher carbon footprint because of the absence of greener sources of energy.

In a world where international competition for global market share in oil and gas and the fight against climate change intensify, the region's leaders seem to be increasingly convinced that the old model of governance is simply not sustainable.

PRICE PRESSURE

Since its onset towards the end of the last decade, the North American shale revolution has significantly changed international oil market dynamics. As it unlocked massive resources which hitherto were uneconomic to exploit, it has since put a downwards pressure on oil prices and created stronger competition among established producers for global market share. The United States, which for decades has been a major net oil importer, has seen an amazing turn in fortunes as its oil production continues to register record levels, exceeding the peak reached in 1970 which was followed by more than 35 years of declining production — a trend that was reversed following the onset of the shale revolution towards the end of the last decade. The country is on the way to become a net oil exporter by late 2020s according to the IEA, challenging traditional exporters, such as those in the Middle East.[1]

Climate change is another, though longer-term, threat. Climate policies are primarily geared towards ending the fossil fuel age — a pledge that the G7 leaders committed to achieve by the end of this century at their annual summit in 2015. Countries like France and the United Kingdom announced they were banning the sales of gasoline and diesel engines as early as 2040 while renewable energy is the largest source of energy growth, gaining share in the power sector at an unprecedented rate, according to BP.[2]

As oil and gas fall out of fashion, their prices will reflect customers' preferences and become depressed accord-

ingly. Any oil and gas producer should therefore be concerned. For Middle East oil- and gas-rich states, this is even more so; after all, oil and gas are their bread and butter.

Of course, one can argue that since they are the low-cost producers, in either scenario, they are the last to leave the market. Indeed, when oil prices collapsed in the summer of 2014, the first victims they claimed were the high-cost producers and the axe fell on expensive projects such as in the Arctic and deepwater. Arab producers managed to survive that storm although not without registering serious budget deficits and experiencing economic difficulties. Saudi Arabia, the region's largest oil producer, saw its foreign reserves declining by a staggering USD $190 billion (around 27 percent) — the equivalent of the Gross Domestic Product (GDP) of Greece in just two years (from 2015 to 2017).[3]
As competition further intensifies, the low-cost producers will try to squeeze other suppliers out by offering lower prices. Such a strategy can help them to temporarily safeguard their market share. Inevitably, as the market shrinks, the profit margins will also shrink accordingly, risking destabilizing those producers' poorly diversified economies.

ECONOMIC REFORMS

Given such potential scenarios, over the last few years, the major Arab oil and gas producers announced bold reforms that center around achieving greater economic diversification and reducing their dependence on hydrocarbon revenues. Abu Dhabi Economic Vision 2030 and Kuwait Vision 2035 are some examples. Vision 2030, which Saudi Arabia announced in 2016, is perhaps the most ambitious plan the region or any oil-rich developing country has ever seen. The Vision calls for the introduction of basic taxes, such as income tax and a value-added tax (VAT), a reduction in energy subsidies, promotion of the private sector, and support for the role of women in the economy, to name but a few but the most prominent changes announced are the sale of a 5 percent share of Saudi Aramco, the national oil company, and the creation of the world's largest sovereign wealth fund.

Economic diversification has been advocated for some time by international organizations and experts alike. They have, however, failed to translate into concrete governmental policies in the region. Some Middle Eastern oil exporters refer to the growing share of the non-oil GDP as evidence for greater economic diversifi-

ORYX GTL Plant in Qatar (SASOL / CC BY-SA 4.0)

cation. The growth of the non-oil GDP, however, is still following the movement in oil prices, clearly indicating otherwise. The cynic would therefore argue that the recent reform trend is a déjà vu and the related excitement would wane as soon as oil prices recover.

ENERGY REFORMS

The reform wave also encompasses the energy sector, aiming primarily at diversifying its sources and improving its efficiency.

Ambitious targets to increase the share of renewable energy can be found across the region and in countries like the United Arab Emirates (UAE) and Saudi Arabia, nuclear energy is also being pursued. The first unit of the UAE's flagship project, Barakah, which is the world's largest nuclear project and the Arab region's first nuclear power plant, has become operational in March 2018. The plant is part of the Emirates' Energy Plan 2050, which targets 50 percent of the country's electricity from clean energy (including nuclear) by 2050.

Another notable trend is pricing reforms. Energy subsidies are epidemic in the region. Although they are considered a way for these governments to redistribute their oil wealth and benefit local industries such as the petrochemical industry, they have encouraged wasteful consumption because they distort market price signal, which is typically the antidote to achieving efficiency. In Bahrain, for instance, energy intensity is more than double that of Norway's, which unlike Arab peers, not only does not offer such subsidies but also imposes a carbon tax.[4]

Despite the recent effort, the IMF argues that more work still needs to be done as the price gaps remain considerable — not surprisingly since the energy prices pre-reforms were amongst the lowest in the world.[5] Also, it is difficult to remove subsidies once people are accustomed to them.

REAL CHANGE?

There is no doubt that there is a new policy direction in the Middle East. The agendas announced are audacious and the targets set are neither easy nor cheap to accomplish, especially considering that the benefits of such reforms are not immediately observable.
The U-turn risk cannot therefore be ruled out, as past experience shows. However, one can only hope, since the new and probably irreversible dynamics in the global energy markets as well as the local social challenges and the need to create real jobs to a rapidly growing young population will provide a stronger impetus for a long-term commitment to reforms. To stay on track will require not just the right policies but strong political will. Only time will show whether that exists.

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[1] Kim Tae-Yoon, "WEO Analysis: A Sea Change in the Global Trade," *International Energy Agency*, February 23, 2018, < https://www.iea.org/newsroom/news/2018/february/weo-analysis-a-sea-change-in-the-global-oil-trade.html> (accessed April 22, 2018).
[2] British Petroleum, "Renewables,"*BP Global*, 2018. <https://www.bp.com/en/global/corporate/energy-economics/energy-outlook/demand-by-fuel/renewables.html> (accessed April 20, 2018).
[3] International Monetary Fund, "Regional Economic Outlook: Middle East and Central Asia," *IMF*, April 2017, <https://www.imf.org/en/Publications/REO/MECA/Issues/2017/04/18/mreo0517> (accessed April 22, 2018).
[4] Energy intensity is one measure of energy efficiency; it refers to the amount of energy used to produce one unit of economic activity (per unit of GDP). Improving energy efficiency means reducing the amount of energy used to produce each unit of economic output, hence a reduction in energy intensity.
[5] International Monetary Fund, "If Not Now, When? Energy Price Reform in Arab Countries; April 2017 Rabat, Morocco," *IMF*, June 13, 2017, <https://www.imf.org/en/Publications/Policy-Papers/Issues/2017/06/13/if-not-now-when-energy-price-reform-in-arab-countries> (accessed April 22, 2018).

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