Monthly Newsletter: November 2013

The Middle East Solar Industry Association (MESIA) unveiled the winners of the 2013 Middle East Solar Awards during a gala ceremony on November 19, 2013. The **Media Personality of the Year** award went to Robin Mills, head of consulting at Manaar Energy.

November 2013

UAE: **Office No.606, 6th F, Sama Tower, Sheikh Zayed Road**
P.O. Box: 192089, Dubai, United Arab Emirates
Tel: +971-4-3266300, Fax: +971-4-3266363

Iraq: **Hai Al Tashreefat, International Zone, Baghdad**
Tel: +964-780-738-5724 E-mail: admin@manaarco.com

Erbil: **Sofi Mall, Gullan Street, Erbil, Iraq**

Contents

US ban on crude exports a bemusing boon for foreign producers

By Robin Mills

A major oil producer forbids crude exports by law. Is it perhaps one of the former Communist countries? Maybe an anti-western firebrand like Venezuela, Iran or North Korea? Or environmentally-friendly Norway? No, it is the supposedly free-market United States that, since 1975, has had this strange law on its statute books.

A recent Bloomberg report suggested the American Petroleum Institute (API), an industry group, was preparing a legal argument that the ban on crude exports violates World Trade Organization (WTO) rules.

Until a couple of years ago, such a case would have been as unthinkable as it was unnecessary. The prohibition on exports had almost no practical effect: the US was a large and ever-growing importer of oil. The ban's main effect was to ensure Alaskan cargoes went to the US West Coast rather than to Japan.

But from 2005 onwards, US oil consumption dropped under the pressure of high prices and improving efficiency. And from 2009, oil production grew, first steadily, then explosively, as shale drilling in North Dakota and in south and west Texas took off.

By some measures, the US is now the world's largest producer of petroleum liquids. Net imports have fallen from two-thirds of consumption to just one third. Analysts at Citibank believe North America overall could be an oil exporter by the 2020s.

This glut has led to major dislocations in trade flows and product prices. The flood

of very light shale oil, with heavy oil from western Canada, has reversed the traditional system which moved oil imports north from the coast of the Gulf of Mexico. West Texas Intermediate crude has at times traded at US$10 or $15 per barrel cheaper than the international benchmark, Britain's Brent crude, so that inland refineries make windfall profits.

US imports of light oil from countries such as Nigeria have slumped, but the Arabian Gulf's medium crude sales have been little affected so far.

Unlike crude, exports of refined oil products – such as diesel, petrol and jet fuel – are legal. US Gulf coast refineries are running flat-out to make products for Latin America and Europe. Even though the US is not yet a net exporter, individual companies still want to export light oil in excess of reasonable needs, and import some heavier oil to get a suitable blend for refining.

But this is where the ban comes in. The commerce department permits some small shipments to eastern Canada on a case-by-case basis. But large-scale exports would require legislation. And this is sure to be fiercely contested by consumer-rights advocates, environmentalists hostile to "Big Oil", oil refiners benefiting from cheap crude, and national-security hawks. If ever launched, the API's WTO case would probably take years to resolve.

Objectively, the US should allow exports. This would have little impact on domestic consumers, since refined product prices are still set in world markets. It would ensure US oil producers continue to receive international prices, and so sustain shale oil output.

While the ban endures, it is hypocritical, not to say bizarre, for US presidents to threaten to "jawbone Opec", or blame Russia as a gas monopolist, or castigate Chinese bans on exports of rare earth elements. In the case of a major global oil supply crisis, US allies in Europe, Japan and South Korea would be furious at being left in the lurch.

Middle East oil producers, on the other hand, while standing aloof from domestic US politics, benefit from the ban. Forty years after the Arab oil embargo, they now appear as more reliable suppliers. They can be quietly relieved that the curious dysfunction of the US political system will somewhat blunt the shale oil challenge.

Benchmark Crude Remains Strong Despite Iran Nuclear Deal

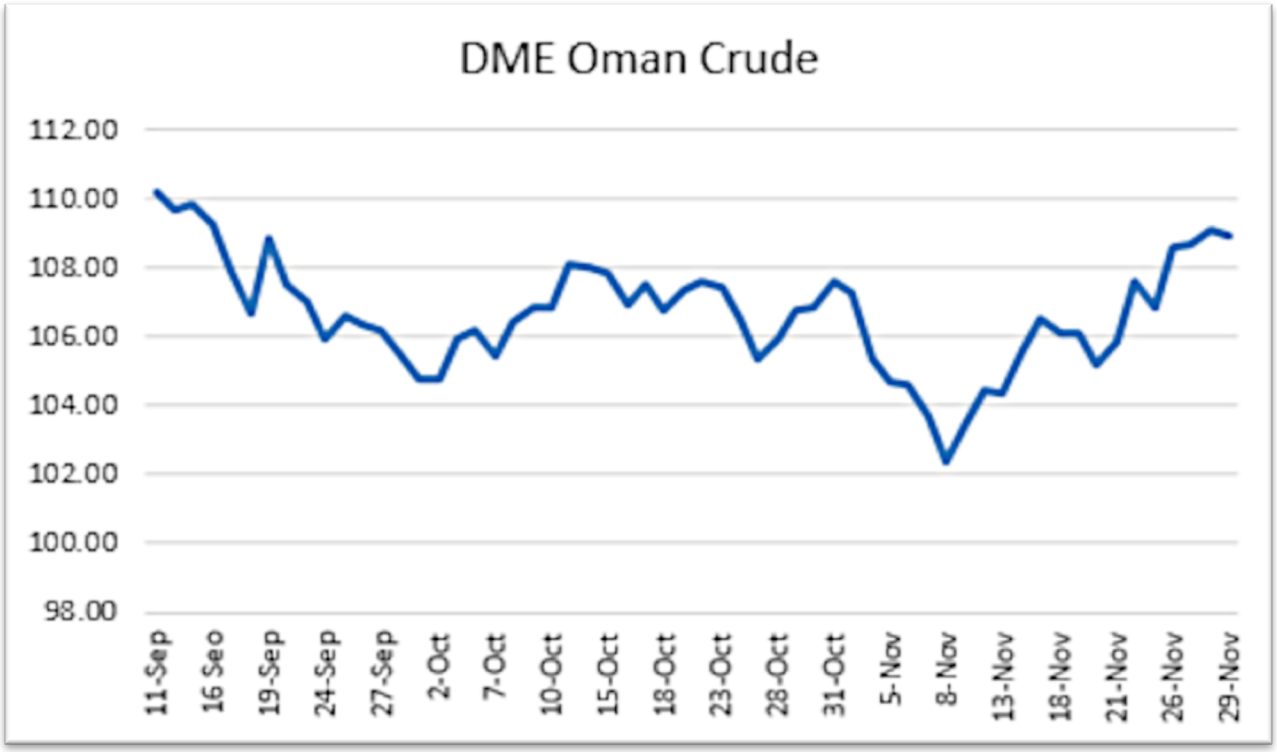
Oman crude oil trading on the **Dubai Mercantile Exchange** during November ended the month on a firm footing, although failed to hold onto the three-month highs of more than $109 per barrel for oil loading in the month of January.

DME Oman traded at a low of $102.48/b on Nov 8 and a high of $109.09/b on Nov 28, before ending the month at 108.90/b

– or just over 1% up from the corresponding October expiry price of $107.63/b. The monthly average of the DME, which is used by Oman and Dubai to set their official selling price (OSP), was 105.97/b, slightly down on October average price of $106.71/b.

region, Oman oil prices came under pressure but have since recovered.

While the initial agreement does not significantly increase Iranian oil exports, it does loosen shipping and insurance sanctions, which some market watchers



Market watchers cited a combination of strong Asian crude demand for the first quarter of 2014, buoyed by healthier refining margins, China's steady manufacturing growth, and the realization that any deal on Iranian sanctions would take some time before significant volumes of crude are pushed onto the spot market.

Following the historic agreement on Iran's nuclear program which paves the way for a loosening of sanctions against Iran and eases geopolitical tension in the

believed would have a negative impact on oil prices. Global oil values initially retreated by 2-3% on the news of the Iranian deal but most sanctions remain in place, including oil supplies to Europe, and will not be lifted until a final agreement in six months' time.

Iran's biggest customers -- China, India, Japan and South Korea -- were already given waivers to continue Iranian crude purchases and volumes are expected to increase at a modest rate – but the significant buildup in Iranian crude oil

stocks is unlikely to clear in the short term.

As such, focus switched back to more immediate fundamentals, but any increase in Iranian exports will certainly play a major role in market psychology and is likely to be a key discussion topic at the December OPEC meeting, where the producer group will also tackle other key issues such as accommodating increasing Iraqi exports and competition from US shale oil.

Since 2011, OPEC members generally pump as much oil as possible with only Saudi Arabia varying production based on domestic and international demand, and global prices. But analysts will be keenly watching for signs of a more disciplined approach to exports from next year, as more oil comes into the market.

Middle East crude generally outperformed Western benchmarks during November as the Brent/Oman spread narrowed to around $1.50/b, compared to around $2.00/b in October. But US benchmark WTI was the big loser over the month as Brent/WTI widened out to levels not seen since February of this year at close to $20/b – as oversupply concerns returned to plague the US market.

A version of this article appeared in The National newspaper on November 10, 2013

About DME

DME is the premier international energy futures and commodities exchange in the Middle East. It aims to provide oil producers, traders and consumers engaged in the East of Suez markets with transparent pricing of crude oil.

Launched in 2007, DME has rapidly grown into a globally relevant exchange. Its flagship Oman Crude Oil Futures Contract (DME Oman) contract is now firmly established as the most credible crude oil benchmark relevant to the rapidly growing East of Suez market. Reflecting the economics of the Asian region like no other contract, and the largest physically delivered crude oil futures contract in the world, DME Oman is the world's third crude oil benchmark and the sole benchmark for Oman and Dubai exported crude oil.

Manaar appreciates the assistance of the Dubai Mercantile Exchange in providing this market commentary

---

Spectre of resource regionalism haunts the Middle East

By Robin Mills

It's remarkable how oil, this sticky black fluid, arouses ambitions – ranging from the quixotic to the Machiavellian. Entrepreneurs see it as a ticket to wealth; ambitious politicians, the tool to achieve nationalist dreams; local people, as a route out of poverty. These ambitions merge into a spectre that is haunting the wider Middle East – the spectre of resource regionalism

In Iraqi Kurdistan, recent oil and gas finds offer the region the prospect of independence – whether formal or factual – from Arab Iraq, and aspirations to leadership of the wider Kurdish community. But for now, the Kurdish budget still comes almost entirely from

Baghdad, and independent exports require agreement with Turkey.

Next door, Syria's Kurds seem to have achieved at least temporary control over the oil-producing north-east.

In Libya, federalists under Ibrahim Al Jathran have declared autonomy for the eastern Barca (Cyrenaica) region, with two-thirds of the country's oil production and three-quarters of its reserves, and announced their own national oil company. This remains so far without legal basis and the federalists may not even command much support within their own region, but oil production has been almost entirely halted. Meanwhile protests in the west by the Amazigh community have also closed down fields.

The Somaliland and Puntland regions of Somalia, autonomous though internationally unrecognised, are at a much earlier stage but have still attracted several international companies to explore. Among these is Genel, headed by former BP chief executive Tony Hayward, which is also a leading player in the Kurdistan region.

Over the past decade or more, a major concern of oil companies was resource nationalism – the phenomenon where strong leaders such as Hugo Chávez in Venezuela or Vladimir Putin in Russia strengthened the central state's control over oil and gas resources, reduced or eliminated the role of international companies, and raised taxes on the industry.

But the events in Kurdistan, Barca and Somaliland are different – they represent resource regionalism. For Massoud Barzani in Erbil, Jathran in Benghazi, and Somaliland oil minister Hussein Abdi Dualeh in Hargeisa, oil can help bolster their claim to autonomy, right perceived historic wrongs of unfair distribution of wealth with a central government, and fund their region's economic development. And international oil companies are, so far, their allies rather than adversaries.

Why is resource regionalism rising now? Revolutionary political change has broken down the central power that once emanated from Tripoli, Baghdad or Damascus. Now the genie is out of the bottle, it's hard to imagine the Kurds in particular will give up their hard-won autonomy and relative peace and prosperity. High prices make oil a prize worth struggling over – and at the same time, encourage companies, firstly entrepreneurial wildcatters, then behemoths such as ExxonMobil – to take a chance in politically risky areas.

The question of "fair distribution" of revenues where one region holds a large share of a country's oil will always trigger tension. Local people want to see reinvestment, jobs and compensation for environmental damage. Central government needs funding for broader national development.

Khuzestan, the heart of the Iranian oil industry which complains of

discrimination, the separation of South Sudan from Khartoum's rule, Nigeria's oil-rich but violent Delta, poor but gas-endowed Balochistan in Pakistan – even North Sea petroleum that might fund a Scottish vote for independence, and exaggerated Canadian fears of a "petro-state" distorted by Albertan oil – are all facets of this question.

Each of these debates has its unique local characteristics and possible solution. Sometimes, only independence or loose federalism will suffice. In others, devolution of some powers, fairer revenue-sharing and local decision-making may be enough.

But if these regionalist disputes aren't resolved, they will undermine national finances, stymie regional development – and prevent the oil companies from profiting from their gambles.

A ***version of this article appeared in The National newspaper on November 17, 2013***

Oil and gas reliance in question amid 'largest carbon bubble'

By Robin Mills

Are we on the verge of "the largest bubble ever", as the former United States vice president Al Gore puts it? He argued this month that to meet environmental goals, trillions of dollars of assets worldwide – particularly oil, gas and coal reserves – were "unburnable carbon".

Action on climate change would mean at least two-thirds of those reserves would have to be left in the ground. And a collapse in the value of major fossil fuel companies could trigger another financial crisis.

He called on companies and investors to assess and disclose the carbon risks in their investments, diversify into renewable energy and stop investing in new carbon-intensive projects.

Greenpeace, of course, goes further and argues that since current fossil fuel reserves are already enough to cause catastrophic climate change, exploration for new resources should stop entirely.

Should companies assess the impact of climate policy on their assets? Of course, and many already do so. Major oil companies such as BP and Shell have included carbon in their assessments since the late 1990s. The slow pace of global climate policy to date just does not suggest stringent reductions in emissions are likely any time soon – and investors know that.

Of course, a series of natural disasters linked to climate change, or a sudden rapid warming of the climate, might change the political situation and lead to stringent policies to reduce carbon dioxide emissions. But that would have a major impact on the whole economy, not just the fossil fuel sector.

More likely, a slow strengthening of climate regulations – carbon taxes, renewables targets and so on – is already included in projections for demand and prices of fossil fuels. Even in the International Energy Agency's scenario for tight restrictions on carbon, fossil fuel consumption falls by just 11 per cent by 2035.

In 1986, the oil price collapsed to US$14 a barrel from $30 almost overnight – and while oil companies and countries were badly hit, the global economy grew strongly. So incremental changes in climate policy are well within the range of normal business risks faced by companies.

Events in 2035 contribute almost nothing to the valuation of an oil or gas company. At a typical discount rate of 10 per cent, a dollar earned in 2035 is worth just 12 cents today. And Shell's "reserves life" – its reserves divided by the annual production rate – is just 11 years, showing that the majority of its current reserves will have been produced long before 2035. The vast bulk of fossil fuel reserves are held by coal giants such as India and China, and state oil and gas producers in Saudi Arabia, Qatar and Iran, not by publicly traded companies.

The concept of a "carbon bubble" also assumes that fossil fuels cannot be part of a climate-friendly future. But oil is still essential in cars and planes, and has no real current competitor. Gas is a low-carbon fuel anyway and by 2035, its use is likely to increase substantially to replace coal and support renewable energy. And coal power plants, though the dirtiest source of electricity, can be fitted with carbon capture and storage to eliminate most of their emissions – as can gas plants.

But for one class of investors – major petroleum exporters – the "carbon bubble" is more serious. These countries depend on their oil and gas earnings to power their economies, and they have long reserve lives, up to a century. Though not doomed by Mr Gore's "bubble", concerted global action on climate change does present them with serious, albeit long-term, challenges. This is one more reason for the Opec states, including the UAE, to diversify their economies, move to lower-carbon and more efficient systems at home, and advocate stringent but sensible climate policy abroad.

A ***version of this article appeared in The National newspaper on November 24, 2013***

Key MENA Energy Issues Scorecard

MENA energy price reform	🟠	⇔	
MENA unconventional oil & gas	🟠	↑	Kuwait pushes back northern gas targets to 2020; signature on BP's Khazzan Oman tight gas project expected in December
MENA alternative energy	🟢	↑	Dubai's Expo2020 win to use 50% solar power; Abu Dhabi to propose 500 MW rooftop solar PV; Jordan to build 117 MW wind farm
MENA nuclear power	🟡	⇔	Egypt announces restart of Dabaa plant construction but progress unlikely; earthquake near Iran's Bushehr plant
Energy infrastructure security	🟠	⇔	Serious protests at oil camps in southern Iraq; attack on Yemen oil pipeline to Gulf of Aden; further Amazigh protests in western Libya shut down power; Libyan oil workers negotiating with protesters to reopen Ras Lanuf terminal
OPEC production	🟠	↓	OPEC target expected unchanged at next meeting
East Mediterranean gas commercialisation	🟡	⇔	Gas discovery (~600 Bcf?) at Tamar SW in Israel; renewed talks on development of Gaza Marine; Turkey reportedly not looking for Israeli gas in TANAP pipeline
Kuwait energy projects progress	🟠	⇔	Kuwait pushes back northern gas targets to 2020
Abu Dhabi concessions renewal	🟠	↑	Reports of ~$3/bbl fee for new ADCO partners; Asian partners to be included
Baghdad-Erbil oil agreement	🔴	⇔	KRG-Turkey oil deal not signed yet but may be imminent; KRG claims damages from Baghdad
Iraq oil production build-up	🟠	⇔	Oil exports rise to 2.253 Mbpd in October as export terminal work completed; expat oil workers withdrawn due to serious protests
Egypt subsidy reform	🔴	⇔	Government says to start fuel subsidy cuts in 2014 but its capacity to deliver in doubt
Iran oil sanctions	🟡	↑	Interim deal agreed, giving Iran access to some frozen funds and shipping insurance; exports unlikely to recover significantly until full deal in 6+ months

Source: Manaar research

🟢	Very positive	↑	Improvement in last month
🟡	Positive	⇔	No change
🟠	Negative	↓	Deterioration in last month
🔴	Very negative		

Energy Prices and Generation Costs in the Middle East

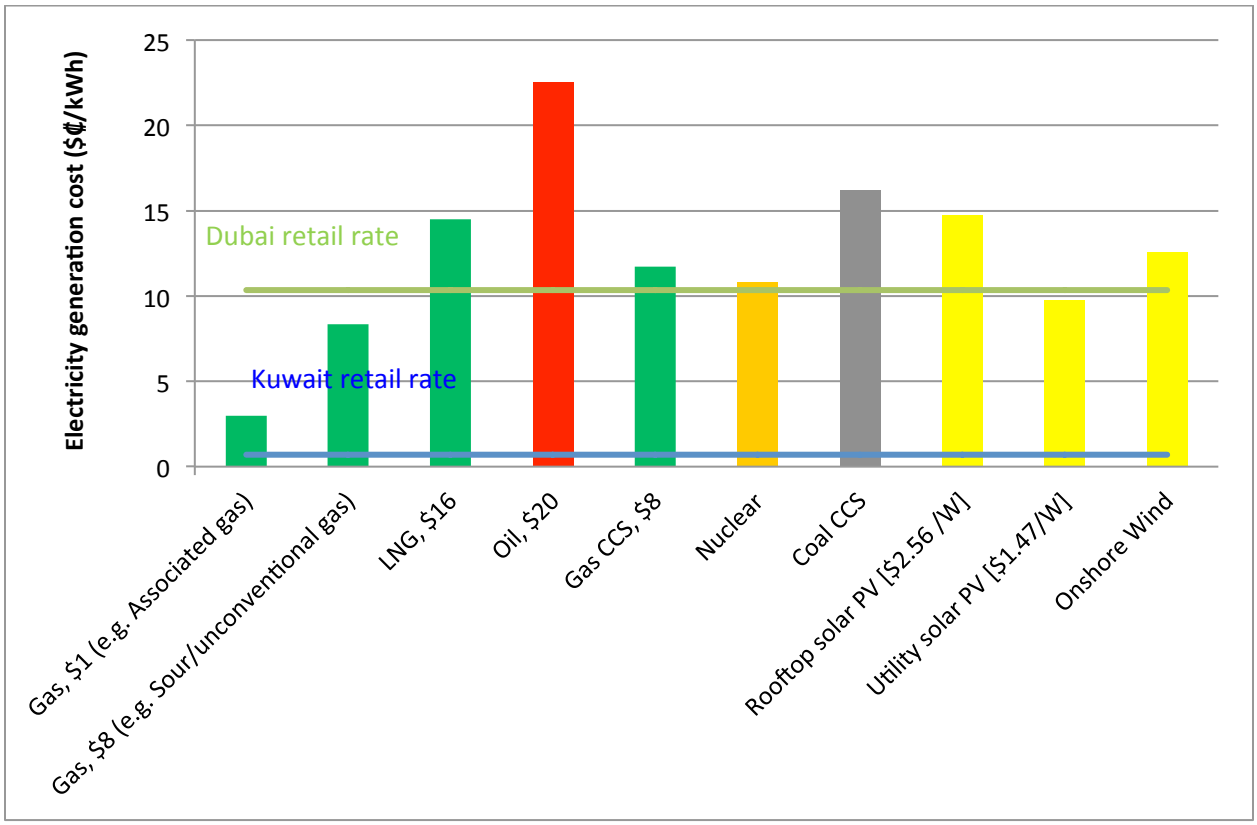
The following table represents October 2013 gasoline, diesel and electricity prices (top rate for residential consumers) in selected MENA countries, with the US for comparison, and the direction of change since last month.

		Gasoline ($/Litre)	Diesel ($/Litre)	Electricity ($¢/kWh)
Saudi		0.21	0.09	6.9
Qatar		0.25	0.25	2.7
Bahrain		0.27	0.17	4.2
Kuwait		0.32	0.27	0.7
Iraq		0.34	0.72	6.7
Yemen		0.35	0.47	7.9
Oman		0.40	0.48	7.8
UAE	Dubai	0.48	1.01	10.35
	Abu Dhabi	0.48	0.88	4.0
	Sharjah	0.48	0.90	8.0

	Gasoline ($/Litre)	Diesel ($/Litre)	Electricity ($¢/kWh)
Egypt	0.59	0.46	6.8
Iran*	0.687**	0.348**	1.64**
US	*0.93*	*1.022*	*12.61*
Lebanon	1.17	0.88	13.3
Jordan	1.26	1.24	33.2

* Non-subsidized allocation, at current (volatile)
** Values changed mainly due to changes in the exchange rate
Open-market exchange rate (US$1:IR 24942)
Source: Gulf Oil Review; Manaar research

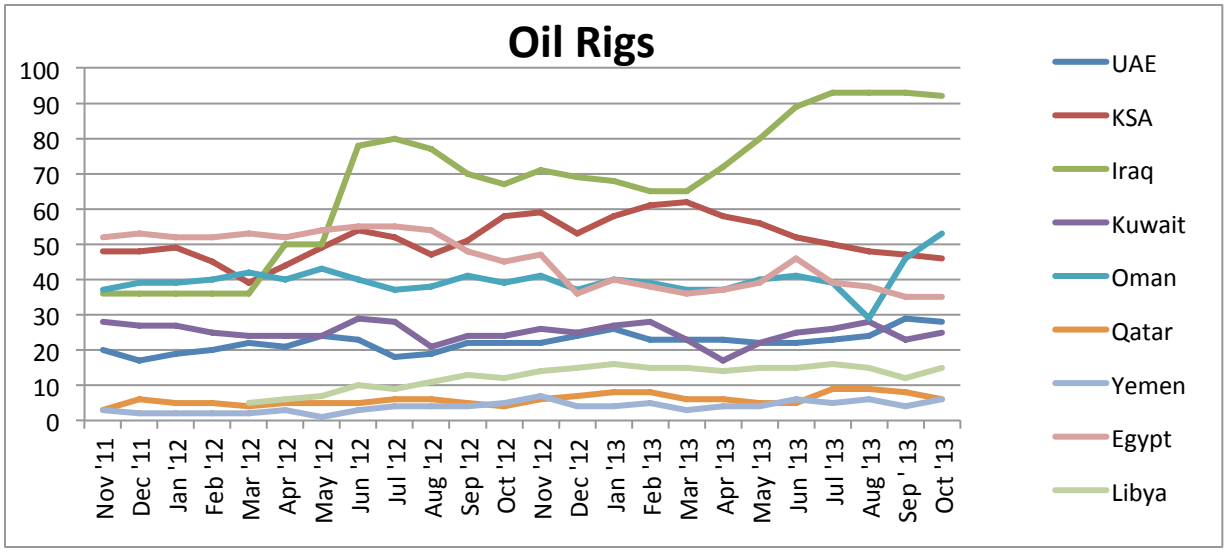
Note: The figures of the gasoline and diesel in the table above represent the pump prices. Only the US, Lebanon and Jordan prices can be considered non-subsidised.



Main changes: increased capital cost of nuclear in line with UAE programme; reduced uranium price; included nuclear decommissioning costs; included onshore wind in UAE conditions; differentiation of utility-scale and rooftop solar; inclusion of 1 c/kWh transmission & distribution credit for rooftop solar; slight increase to assumed LNG price; significant increase to capital & operating costs of coal CCS based on latest EIA assessment; minor changes to costs & heat rates for other plants based on latest EIA assessment.

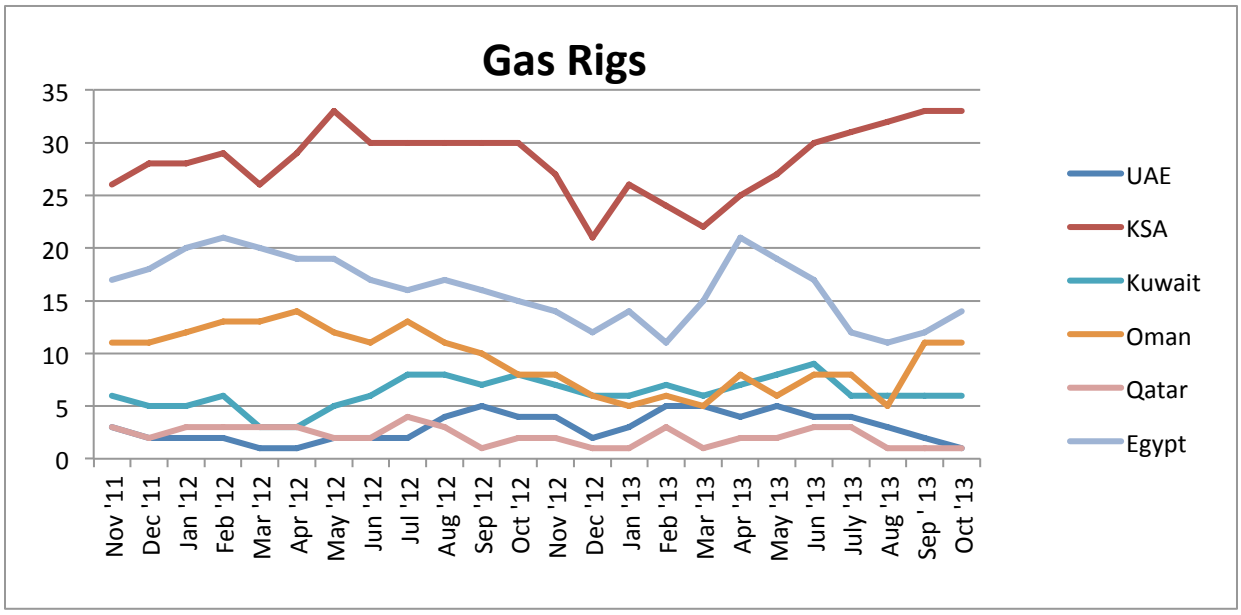
- Utility-scale solar PV is now clearly a more economic option than LNG- or oil-fired power generation, even allowing for the cost of back-up plants
- Gas CCS, though higher cost than solar and nuclear, could still be a viable low-carbon option, particularly if combined with use of CO_2 for enhanced oil recovery
- Coal CCS is much less attractive now, due to the significant increase in its capital and operating costs
- Unconventional gas remains economically attractive, still with a 15-25% cost advantage over nuclear and solar PV
- Onshore wind (based on UAE conditions), even with gas backup, appears competitive with LNG-fired power, but may be limited to suitable sites. Areas with good wind resources, such as the Red Sea coast of Saudi Arabia and Egypt, may offer lower costs
- In the GCC, only Dubai has top-rate tariffs that are representative of the new era of generation costs

Regional Energy Statistics



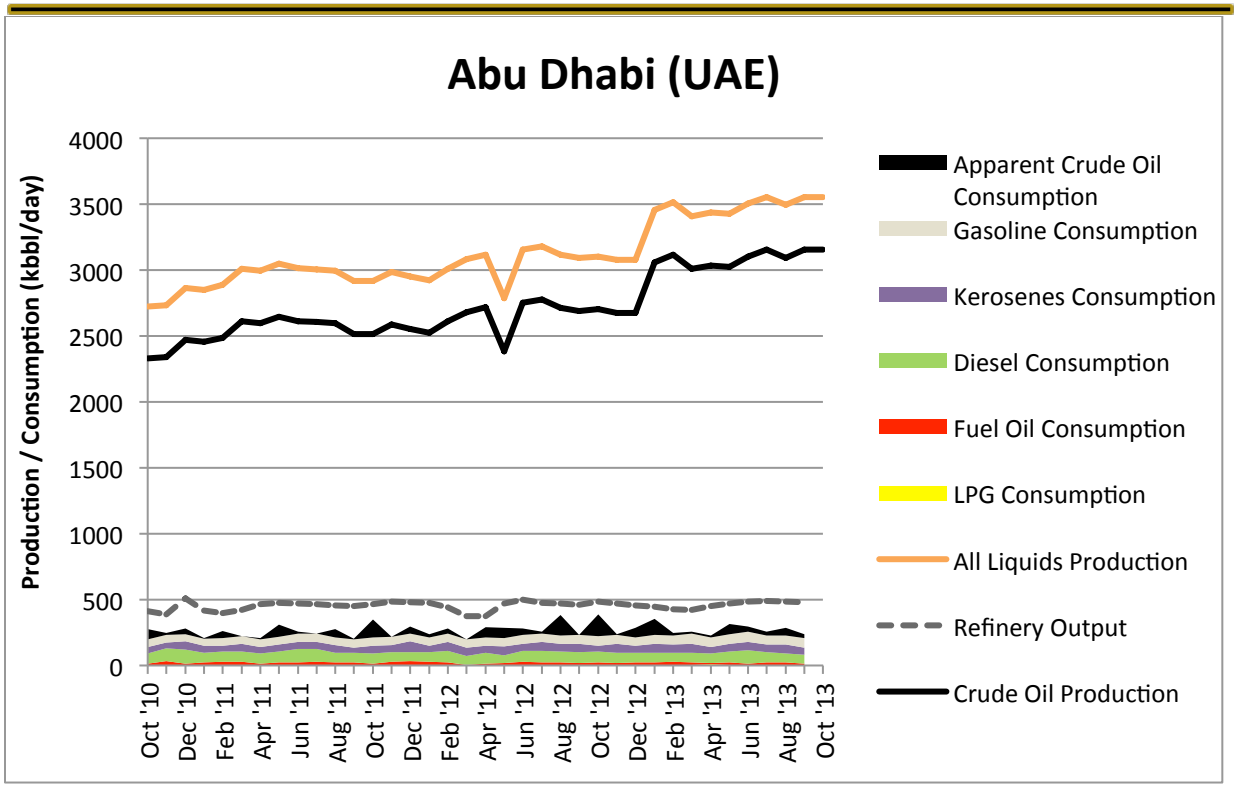
Source: Baker Hughes, Iraq: Baker Hughes and OPEC Monthly Oil Market Report

- Saudi Arabia drilling continues to decrease for the seventh consecutive month; however, the Kingdom is expected to increase to a record 170 rigs (oil + gas) by the end of 2014 due to Khurais and Shaybah expansions
- Iraq rig count remained constant over the summer months after five months of continuous growth
- Oman rig count rebounded to a two-year high of 53 as continuing field development takes place.
- All other countries' rig counts remained quite stable over the month

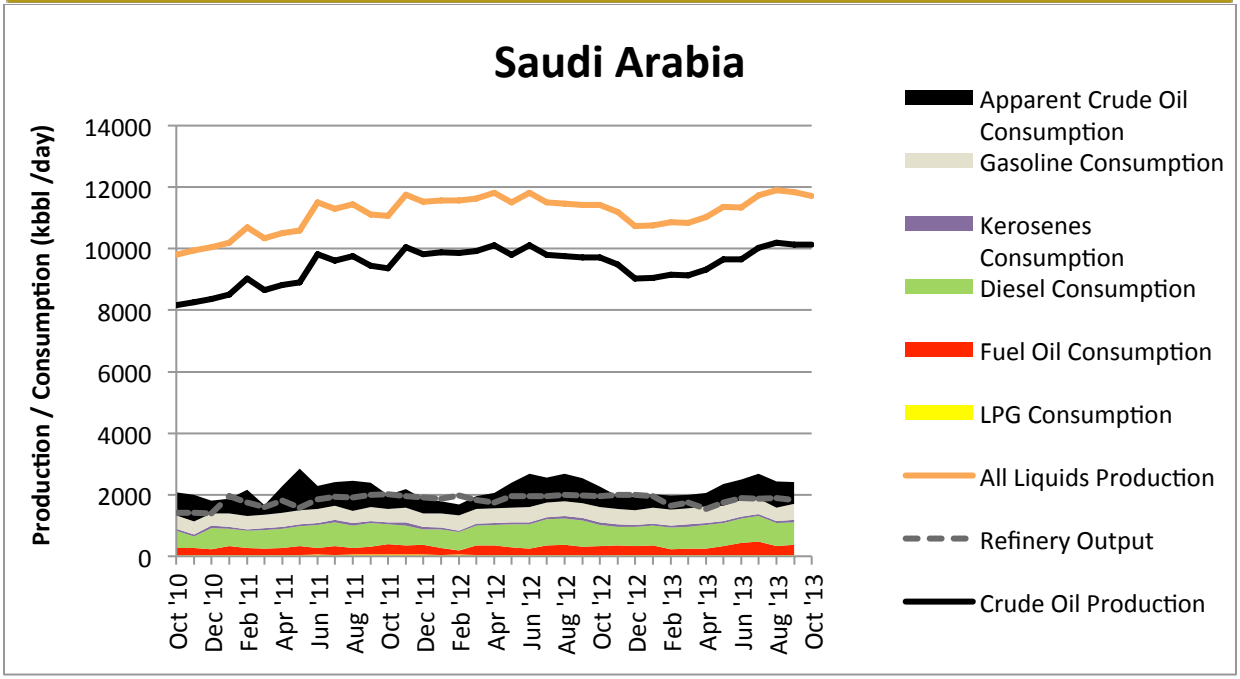


Source: Baker Hughes

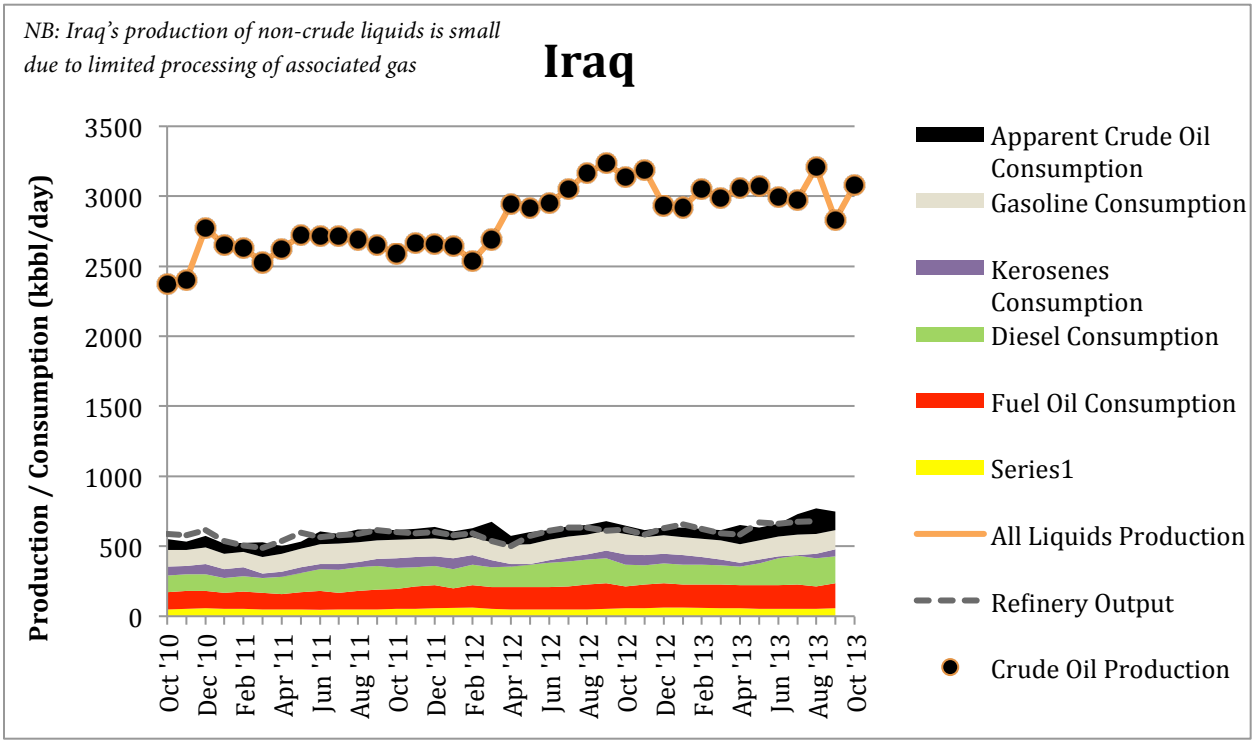
- Saudi Arabia's gas drilling continued at a high of 33 in September reaching the record high level of May 2012
- The number of rigs in Abu Dhabi decreased to 1 in October; Dubai has no rigs
- Oman October rig count remains constant at year-long high of 11 rigs, higher than October 2012 of 10 and expected to ramp up further when work commences on BP's Khazzan tight gas project
- Qatar rig count dropped in September and remained at only one rig through October with the completion of drilling on the Barzan gas project (which had been using three jack-ups)

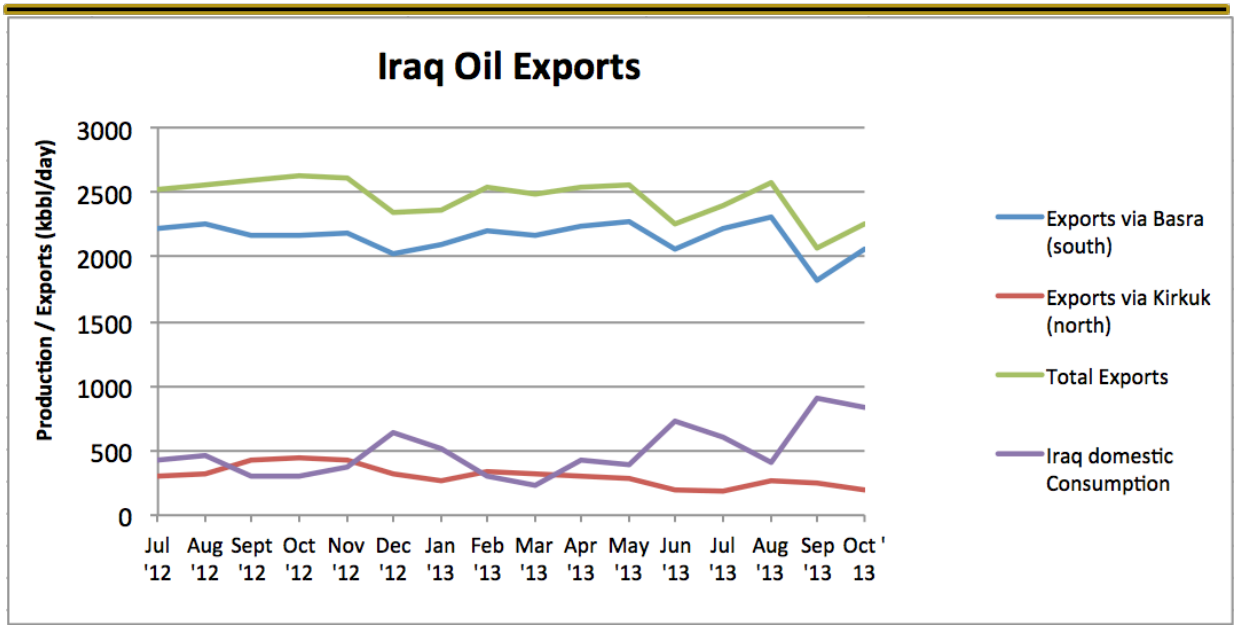


- The UAE's production trend increased following the summer months
- ADNOC is pushing forth with plans to boost production at the Upper Zakum field by 28 percent to 750 000 barrels per day from 585 000 barrels per day by 2017
- Abu Dhabi is to introduce a new blend, Das, to improve shipping flexibility as the UAE seeks to boost production. Daswill replace Abu Dhabi's Umm Shaif and Lower Zakum grades. Das crude will go on sale in July at about the same price as Lower Zakum.



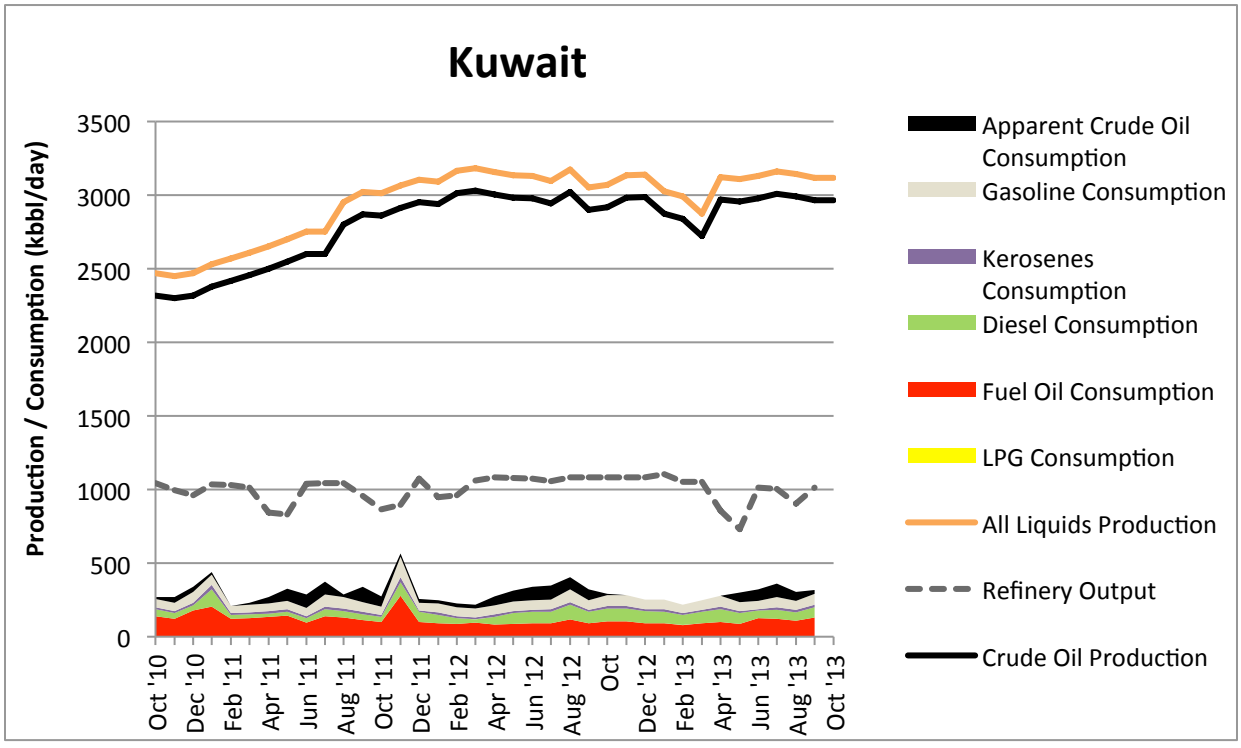
- Saudi crude oil production averaged just over 10m b/d in October, reflecting strong output from Opec's de facto leader despite fast-growing domestic consumption.
- There were no big cuts in Saudi exports last month and the production drop only reflects reduced domestic crude burning as the summer season passes.



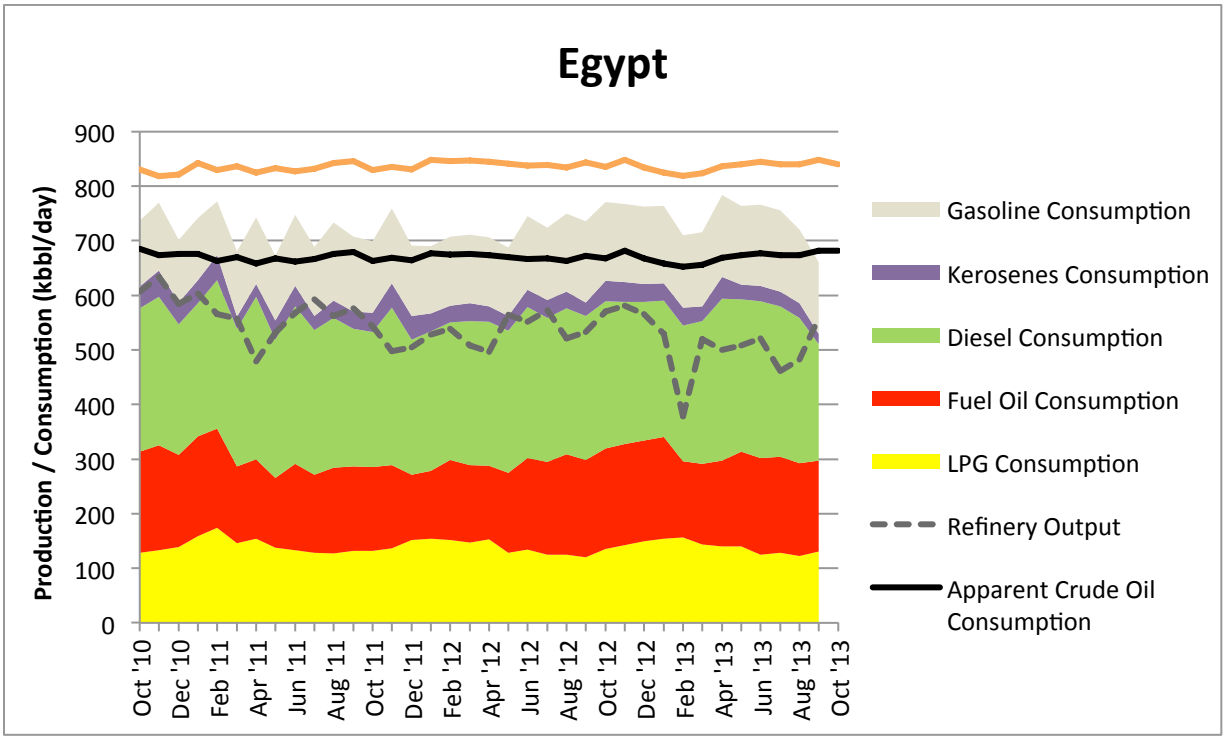


Source: Iraq Oil Ministry, Bloomberg

- In November, Iraq has exported 2.1 million bpd from its southern terminals and about 300 000 bpd of Kirkuk crude from the north, up 150 000 bpd from October.
- Iraq's production capacity is expected to increase by 400 kbpd by the end of this year as Shell started production at Majnoon in October (175 kbpd); the field is now pumping more than 200 kbpd.



- Kuwait is currently producing 2.9 Mbpd and has the capacity to produce 3.2 Mbpd.
- National targets for Kuwait aim to achieve oil production capacity of 4 Mbpd by 2020 (however this continues to face significant political challenges).



- Egypt seeks to develop three oilfields that it says were mishandled by Israel when the latter occupied the Sinai Peninsula between 1967 and 1979. The Sedr, Assal and Matarmah oilfields – now operated by Egypt's state-owned General Petroleum Company – currently produce only dozens of barrels of oil per day out of the company's total daily output of some 45 kbpd.
- The EGPC is expected to issue international tenders in early 2014 to search for shale oil

Source: JODI, OPEC, Middle East Economic Survey & EIA

NOTE: All crude oil consumption values are apparent due to unreported / misreported stock change values and refining gains/losses.

Recent & Forthcoming MENA Licensing Rounds

Country	Round	Launch Date	Blocks on Offer	km² offered	Blocks Awarded	Closing Date
Egypt	EGAS	Jun – 12	15	57,300	9	Feb – 13
Egypt	Ganope	Dec – 12	20	125,577	1*	
Iraq	Nassiriyah refinery / field development	Dec - 13	1			
Iraq	5th Licensing Round	NA	10	NA	-	NA
Lebanon	1st Licensing Round	May – 13*	10	17,901	-	Jan - 14
Oman	MOG	Jan – 12	4	26,837	2	Aug – 12
Oman	MOG	Nov – 12	7	103,422	-	Jan – 13
Yemen	6th Licensing Round	Sep – 12	5	20,132	-	NA
Yemen	March 2013 Licensing Round	March – 13	20	222,812	-	May - 13

Updates since last issue in red

Source: Deloitte; Manaar Research

* Participating in the Ganope International 2012 Bid Round #1, Dragon Oil awarded 100% interest in shallow-water block 19 in the Gulf of Suez.

Current studies

Hydraulic fracturing

Manaar has recently completed a study of the market for hydraulic fracturing in the MENA region, with PacWest Consulting. The report is available in MENA-only (29 pages) and worldwide versions (45 pages including the MENA section). The report addresses historical and forecasted frac demand, supply, utilization, constraints and trends. Market coverage also includes current hydraulic fracturing projects, unconventional potential assessments and detailed basin and play maps. The majority of the information gathered in the reports relies on primary intelligence: in-depth surveys and conversations with industry leading experts and technical specialists.

Dimension	Score	Description
Geology		▪ Excellent geology that underlies the most prolific petroleum system in the world; Rub' Al Khali results disappointing thus far
Pricing regime		▪ State-set at very low $0.70 per mcf; unlikely to change soon; very problematic for foreign operators seeking JVs; less of an issue for Aramco, which wants to displace oil
E&P diversity		▪ Aramco dominates; JVs with three IOCs in the Rub' Al Khali have been disappointing; fiscal terms are difficult
OFS capacity		▪ SLB and HAL already serve the country, and BHI and others should enter the market in the next few years
Regulatory landscape		▪ Aramco is able to operate with little government interference, but challenges exist for foreign operators, if allowed to operate in unconventional development at all
Infrastructure		▪ Very well-developed infrastructure from existing petroleum output in Ghawar and northwest, but Rub' Al Khali is isolated
Development constraints		▪ Public very supportive of increased output
Weighted Score	2.6	

Figure 1. Country attractiveness matrix for Saudi Arabia

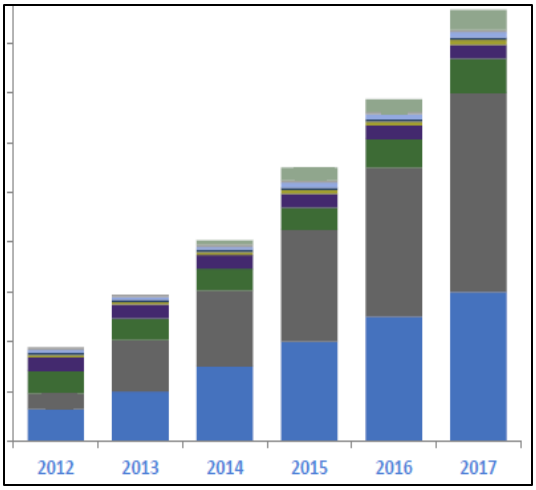


Figure 2. Forecast frac capacity, per MENA country

Please contact Roa Ibrahim r.ibrahim@manaarco.com, +971 4-3266-300 for further information and purchases.

MENA petrochemicals

Manaar is preparing a potential study of MENA petrochemicals and gas feedstock. The study will focus on

- the current gas situation in MENA,
- implications for petrochemicals in the region
- the downstream / speciality petrochemical value chain
- competitiveness of MENA petrochemical companies versus the US, EU and Asia

This study will be of key interest to large Gulf-based and international petrochemical producers and gas suppliers.

Manaar has prepared a study on the impact of global shale resources on MENA. The study will focus on:

- The strengths, weaknesses, threats and opportunities of unconventional gas in the MENA region.
- Differences in the development of unconventional gas between North America and MENA.
- Identifying MENA's unconventional gas potential; understanding current and planned activity levels per country, company and basin.
- The impact of the shale boom on future demand for MENA oil & gas, oil and gas prices, possible new pricing hubs, and oil and gas exports.

Recent & Forthcoming Events

Jaafar Altaie spoke on "Oil prices: is $100/bbl justified?" at the Centre for Global Energy Studies (CGES) November Retreat on November 19th.

Robin Mills spoke on:

- Middle East energy subsidies at the Arab Fund for Environment and Development in Sharjah on 28th November
- Shell panel for EOR at ADIPEC on 11th November
- Key geopolitical issues and their implications for energy at the CGES November Retreat on 20th November
- MENA energy security issues at the 9th Middle East Energy Security Forum in Dubai on 25th November

Robin will speak on MENA shale developments at MENA Shale in Abu Dhabi on 10th December

Please visit the links below to view some of the presentations by Manaar:

Arabian Water & Power Forum Dubai – September 2013

Power & Water Middle East Leaders Forum Abu Dhabi – September 2013

EAGE Jordan Middle East shale gas – September 2013

INSS East Mediterranean gas – September 2013

MEED UAE Oil & Gas Projects Abu Dhabi – September 2013

Key Manaar people

Jaafar Altaie,
Managing Director
Jaafar founded Manaar in 2009 in response to growing international interest in Iraq. With a background in economics and engineering, Jaafar has worked for BP, Nomura, Petrobras and the Iraq Ministry of Oil.

Robin Mills,
Head of Consulting
Robin is an expert on Middle East energy strategy and economics. He is the author of two books and a prolific writer on energy and environmental issues. He worked for 15 years in geology and economics for Shell and the Dubai government.

Mohammed Jambaz,
Head Representative in Kurdistan Region, Iraq
Mohammed represents Manaar in the Kurdistan Region of Iraq from our office in Erbil. He leads our support of companies in seismic, geoscience, exploration & production, logistics, laboratory services, energy market analysis, and other sectors of the oil industry.

Roa Ibrahim
Industry Analyst
Roa Ibrahim received her Bachelor's degree in Finance from the American University in Dubai and her Master's degree in Applied Finance and Banking from the University of Wollongong in Dubai. Roa has produced expert analysis of petroleum fiscal systems, hydraulic fracturing and shale gas.

Nour Halabi
Industry Analyst

Nour specializes in petrochemical studies and recently joined Manaar Energy with a successful track record developing strategic assessments for chemical plays and feedstock forecasting. He graduated from Bentley University in Waltham, MA with dual (Hons.) Bachelor's degrees in Finance and Economics.