

The Gulf Intelligence **OIL MARKETS** **WORKSHOP**

*What is the Future Outlook for
Middle East Oil Products Benchmarks?*

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CAPITAL CLUB, GATE VILLAGE, DIFC
DUBAI, UAE

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Port of Fujairah



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The Gulf Intelligence Oil Markets Workshop

What is the Future Outlook for Middle East Oil Products Benchmarks?

In recent years, the Gulf has seen the growth of an array of key features of a world-class oil trading hub. It has become a major logistics hub, with pipelines, vast storage and several deep-water ports. It is supported by growing financial centers and now the majority of banks, oil companies multi-nationals, national oil companies (NOCs) and trading houses are represented there. The region is also in the midst of a refining construction boom, with more than a million barrels a day of capacity added in the last few years. There is plenty more to come.

Yet the physical spot markets are still somewhat old-fashioned. In essence, they revolve around benchmarks based in other regions and are not supported by deep, localized derivative markets. Physical trades tend to be point-to-point, without chains of traders or position-taking – both key generators of liquidity. Plus, transparency around pricing and fundamentals data is sporadic.

There is a growing desire to see the market develop, as the domestic downstream markets in the region post some of the strongest growth figures of any in the world and the refining construction boom looks set to continue. The soaring regional demand for jet fuel, naphtha, diesel, gasoline and fuel oil are propelling discussions on the need to establish independent oil products benchmarks in the Gulf.

The Oil Markets Workshop attempted to put forward actionable recommendations to tackle two critical questions:

What are the barriers to establishing the region as a global trading hub?

What steps can be taken to support the arrival of independent Gulf products benchmarks?

The ultimate drivers of high rates of energy consumption in the Gulf are government policies. In the early days of oil, policy focus was on national development. Energy resources were seen foremost as generators of export revenues, which were then invested to advance improvements in infrastructure and economies.

In 1973, oil consumption in Arabia was less than 1% of global demand. Forty years later, the Gulf States, with just 0.5% of the world's population, consumed 5% of its oil. Primary energy consumption in the past decade has grown more than twice as fast as the world average of 2.5% per year. The Gulf's 2001 consumption of 220 million tons of oil equivalent nearly doubled by 2010 and is expected to nearly double again by 2020.



Saudi Arabia, the largest of the Gulf States by population, economy and energy reserves, has shot up the ranks of global oil consumers. By 2009, the kingdom had surpassed Brazil and Germany to become the world No. 6 oil consumer, despite its comparatively small population economy, and industrial base. By 2014, Saudi Arabia and Russia – another major oil producing and exporting country – were consuming oil in nearly equal amounts: 3.185m b/d in Saudi Arabia and 3.196m b/d in Russia. While Russia’s plentiful natural gas supply allows it to substitute for oil in the domestic economy, oil-based energy prices in Russia are also much higher. For example, a liter of gasoline sold for 86 cents in Russia in 2014, but 12c in Saudi.

SAUDI OIL CONSUMPTION IN PERSPECTIVE				
Country	Oil consumed 2014 (m bbl/d)	GDP 2014	Population 2014	Oil consumption per capita (bbl/yr)
Brazil	3.23	US\$2,353bn	203 million	5.8
Germany	2.37	US\$3,860bn	81 million	10.7
Saudi Arabia	3.20	US\$752bn	31 million	37.8
Russia	1.50	US\$1,857bn	144 million	8.1

Source: IMF World Economic Outlook 2015, BP Statistical Review 2015

Power generation growth in the GCC countries has been nothing short of dramatic, given that most of the region was un-electrified as recently as 1960. In Oman, large-scale electrification did not even unfold until well into the 1970s. Many residents can remember the difficult days before refrigeration and air conditioning. Residents of the richer states of Kuwait, Qatar and the UAE now consume more electricity, on average, than residents in the US.

Power generation growth averaged 10% per year since 1973, slipping to 7% per year between 2000 and 2010, which was slightly faster than average GDP growth that decade of 6.5%. About 60% of power generated in the GCC countries flows from natural gas-fired plants, versus 40% for liquid fuels, such as crude oil, diesel and heavy fuel oil. Overall, about a third of all natural gas produced in the Gulf States is consumed in regional power generation. Gas demand is exacerbated by its use in producing desalinated water, often in co-generation plants that use waste heat to produce electricity.

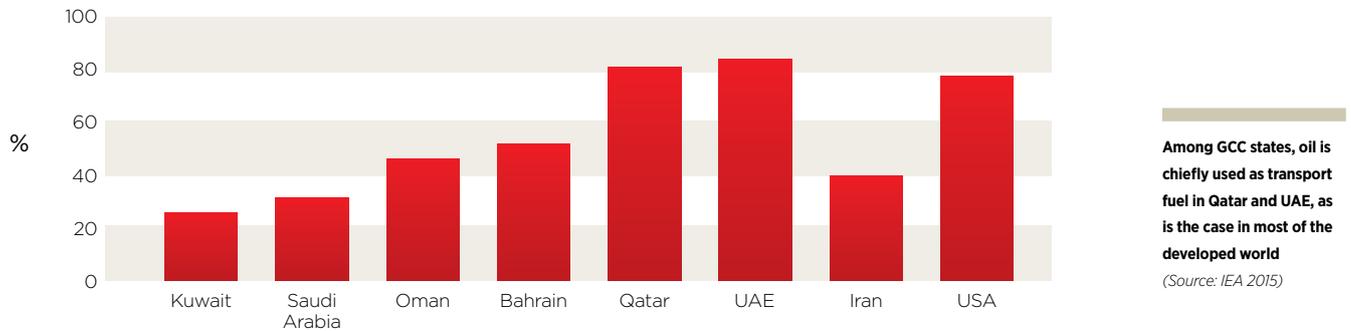
In recent years, growth in electricity demand has outstripped domestic supply of natural gas in five of the six GCC states. Only Qatar commands sufficient supply for the foreseeable future. This shortage leaves Gulf States facing higher marginal costs for new power generation and production of desalinated water. In the past, governments had to cope with the cost of building plants, while surplus feedstock was made available as a byproduct of oil production.

Now, policymakers must contend with market-priced imported fuels, expensive production of unconventional gas, or the opportunity cost of burning crude oil and other costly liquid fuels. Oil demand has risen across the GCC by an average of 9% per year since 1973, growing faster than GDP, on average. Aggregate oil consumption in the six GCC States was less than 500,000 b/d in 1973 and more than 4m b/d in 2014.

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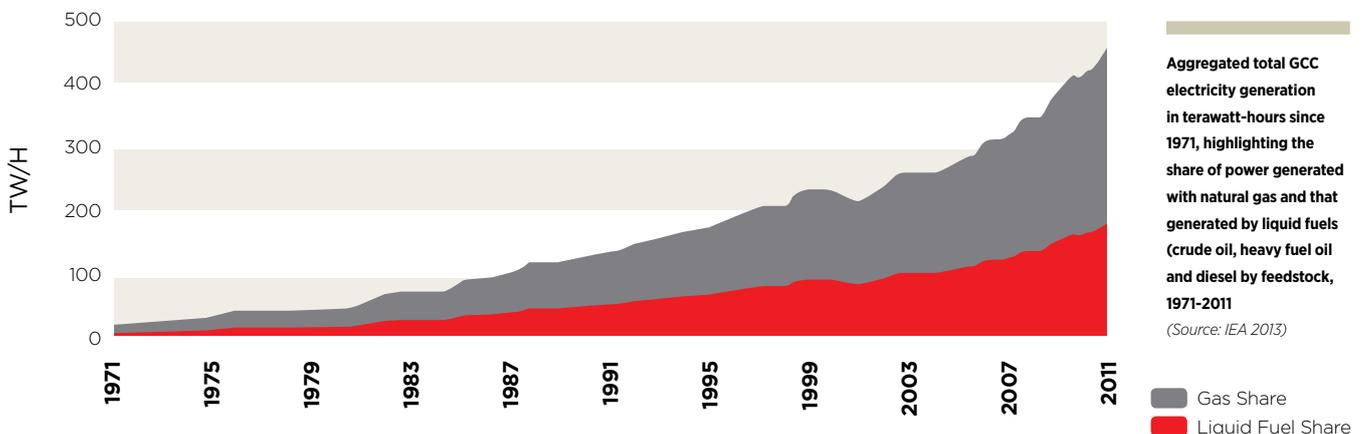
Although power demand has been problematic in all GCC States outside Qatar, Saudi Arabia and Kuwait face the highest demand pressure because of their reliance on liquid fuels – crude oil, heavy fuel oil and diesel fuel – for most of their power generation feedstock. Hence, while oil consumption in the remaining GCC states is weighted more heavily toward the transport sector – where oil is considered most valuable – burning of liquid fuels for power generation is still dominant in Saudi Arabia and Kuwait. (See charts)

OIL CONSUMED IN TRANSPORT SECTOR AS SHARE OF TOTAL DEMAND IN 2012



Saudi Arabia consumed more than a quarter of its overall production in 2013. Direct burn of crude oil for power generation reached an average of 0.7m b/d from 2009 to 2013 during the months of June to September, with peak month power sector consumption rising as high as 900,000 b/d. While Kuwait is gradually shifting toward natural gas via imported LNG, Saudi crude burning looks set to top 1m b/d by 2020. Low domestic prices for crude oil – roughly \$5/bbl in Saudi Arabia – are a major factor encouraging crude oil demand.

GCC POWER GENERATION BY FEEDSTOCK SINCE 1971



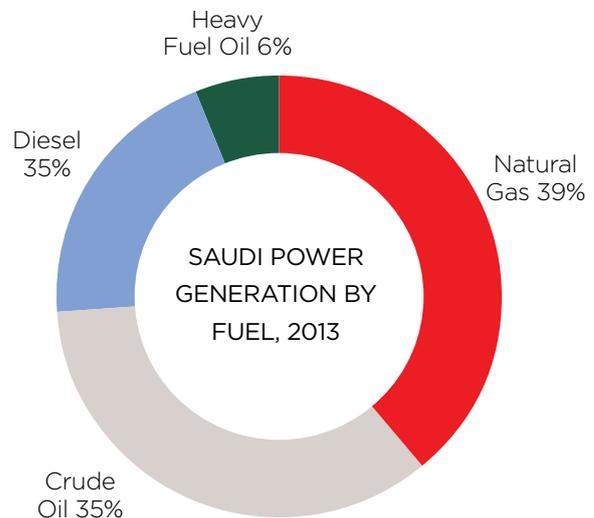


Intensifying domestic crude burning coupled with a 1.4m b/d increase in crude shipments to Aramco refineries inside and outside the kingdom signal that Saudi Arabia is moving beyond its long-held role as the world's market-balancing supplier of crude oil. Recent data show slipping Saudi crude exports, alongside flat or rising production. Assuming that Saudi crude production remains constant at around 10m b/d, the amount of crude available for export could fall below 5m b/d by 2020.

There have been several shifts in the global dynamics that will impact the Middle East's product market. Investments in downstream infrastructure and subsequent oil product supply in the Middle East, which sits in the heart of the New Silk Road, has become increasingly prominent – especially as European suppliers shrink back after more than a century of dominance.

Plus, the lifting of sanctions on Iran in January will likely have a significant impact on the Gulf's oil product supply and access to Asian clients, especially in the fuel oil market. Iran's fuel oil exports in January were up 81% from around 420,000 million tonnes in January 2015 and February exports are roughly double the year before. Around half of Iran's estimated 1.2 million tonnes of fuel oil exports loading in February are expected to end up in Singapore, with the other half of likely to find a home in the Fujairah bunker fuel market.

State Oil Company of Azerbaijan Republic (SOCAR) is considering exporting oil products to Tehran, which could be incorporated into its plans to trade around 22 million tones of its own supply this year and about 11 million tonnes of non-Azeri oil & products globally – unchanged on 2015. Plus, there are opportunities for the Middle East's oil product traders in India's rising gasoline consumption? There was roughly half a million barrels per day of motor spirit in January 2016 – February 2016, according to India's Petroleum Planning and Analysis Cell of the Ministry of Petroleum.



Saudi power generation by feedstock, with shares given for liquid fuels, 2013
(Source: MEES 2014)



Confirmed Participants

Adel Jebara Al Falahi, Marketing & Refining Advisor, Abu Dhabi National Oil Company
Albert Stromquist, Partner & Managing Director, Lanstrom Advisors
Ammar Kutait, Chief Executive Officer, Socar Aurora Fujairah Terminal FZC
Bode Gbadamosi, General Manager, FenderCare Marine Middle East
Bora Bariman, Head of Energy & Marine, National Bank of Fujairah
Capt. Mousa Morad, Mousa Morad, General Manager, Port of Fujairah
Capt. Salem Al Hamoudi, Deputy Terminal Manager, Port of Fujairah
Dave Ernsberger, Global Head of Oil Content, Platts
Dr. Salem Abdo Khalil, Technical Advisor, Government of Fujairah
Eric Salomons, Director, Head of Markets, Dubai Financial Services Authority
Ghazi Abu Al-Saud, Managing Director, Mercuria Energy Trading Middle East
Henry Lancaster, Trader, Chemoil
Jean-Christophe Desaintfuscien, Executive Director – Global Head of Commodities Traders, National Bank of Abu Dhabi
Jonathan Brown, Partner, Head of Maritime, Transport & Trade, Hadeff & Partners
Jonty Rushforth, Editorial Director, Oil and Shipping Methodology and Pricing, Platts
Kamal Siada, Managing Director, Kalina Global Advisory Services LLC
Khalid Al Kalbani, Project Manager - Floating Storage, OTTCO
Khameis Al Khaddeim, General Manager Gulf Petrol Supplies, GPS Chemoil LLC FZC
Malek Azizeh, Commercial Director, Fujairah Oil Terminal
Martijn Notten, Fujairah Oil Tanker Terminals Manager, Port of Fujairah
Meng-Chan Shu, Director Business Development, Dubai Gold and Commodities Exchange
Mirko Rubeis, Partner & Managing Director, Dubai Office, Boston Consulting Group
Nasser Khamis Al Suwaidi, Managing Director of Petroleum Economics Department, Ministry of Energy, UAE
Owain Johnson, Managing Director, Dubai Mercantile Exchange
Paul Himsworth, Managing Director, Vitol Dubai Limited
Paul Young, Head of Energy Products, Dubai Mercantile Exchange
Raja Sengupta, Head of Risk Management, Gulf Petrochem
Sadiq Jafar, Managing Partner, Hadeff & Partners
Sebastiaan Welling, MD & Head of Commodities Clients, MENA, East Africa & Indian Sub-continent Energy, Commodities & Transportation Clients, ABN AMRO (Dubai)
Simon O'Brien, Senior Manager – Market Infrastructure & Products Financial Services Regulatory Authority, Abu Dhabi Global Markets
Stuart Wood, Vice President, Commercial Products, Platts
Tetsuro Kuwabara, Acting External Director, Pavillion Gas
Tom Lloyd Hughes, Head of Commercial, FIS DMCC
William G. Vandenberg, Director, Starfuels Pte Ltd Singapore

Workshop

Rules & Format

The Chatham House Rule will be invoked at the meeting to encourage openness and the sharing of information. When a meeting, or part thereof, is held under the Chatham House Rule, participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed.

OPEN MIC: Following the Welcome Note, Problem Statement by the Host and Moderator and Featured Speakers, the Breakout Session Discussion will begin under an Open Floor format. During the Breakout Session Discussions, all participants will be encouraged to pro-actively engage in the free flowing conversation and not wait to be called upon to speak.

COME PREPARED WITH RECOMMENDATIONS: All Participants will be encouraged to come to the table with "Recommended Strategies" in answer to the session's Critical Question.

In STREAM 1:

Shortlist 5 Recommendations

SHORTLISTING 5 RECOMMENDATIONS

The 1 Hour Session will be broken into 3 parts:

- Commentary from Facilitators
- Open Mic with Recommendations Put Forward
- Voting on Recorded Recommendations with final shortlist of 5

In STREAM 2:

Reduce Shortlist from 5 to 3 Recommendations

SHORTLISTING 5 RECOMMENDATIONS

The 1 Hour Sessions will be broken into 3 parts:

- Commentary from Facilitators on shortlist of 5
- Author of each of the 5 shortlisted recommendations will get 5 minutes to promote & defend their recommendation - votes collected to reduce shortlist to top 3 recommendations

WORKING LUNCH:

The Shortlist of 3 in each stream will be voted on to secure a ranking in order of importance 1-2-3.

Structure

30 Invited Delegates to Participate in Workshop

DATE & TIME APRIL 27, 2016 8.00 – 2.00PM

NETWORKING BREAKFAST

PLENARY SESSION

STREAM 1

"What are the Top 5 'Next Step' Recommendations Required to Establish a Liquid Trading Hub in the Gulf by 2020?"

SESSION A

Shortlist Top 5 Recommendations

STREAM 2

"What Are the Top 5 'Next Steps' Recommendations Required to Deliver Successful & Independent Oil Products Benchmarks in the Gulf?"

SESSION A

Shortlist Top 5 Recommendations

COFFEE BREAK

SESSION B

Top 5 Recommendations Shortlisted to 3

SESSION B

Top 5 Recommendations Shortlisted to 3

WORKING LUNCH

POLL SURVEY on TOP 3 RECOMMENDATIONS in EACH STREAM

Final Declaration of Recommendations & Closing Comments

Stream 1

“What are the Top 5 ‘Next Step’ Recommendations Required to Establish a Liquid Trading Hub in the Gulf by 2020?”

A strategic location, easy access to capital, ever-growing infrastructure, healthy volumes of trade, bunkering facilities and robust benchmarks should be in place to create the ecosystem for a global liquid trading hub to emerge in the Gulf. Geography puts the region at the crossroads between Europe, Africa and Asia, and places it at the heart of the new energy corridor opening up East of Suez to Asia. Storage is a key component to establish a Trading Hub, with Singapore hosting at least 30 companies with Landed Storage – however Singapore has stopped allocating land for new terminals, while Malaysia is now included as part of the Straits brand. Fujairah is fast catching up with Singapore in this area with Private Tank Storage expected to reach 9 million cubic meters this year and exceed 14 million cubic meters by 2020. The Gulf is also supported by increasingly well-established financial centres with the DIFC in Dubai, the ADX in Abu Dhabi and the Bahrain Financial Harbour, and now the majority of international banks and their national peers are putting their balance sheets to work in the region. The international and national oil companies (NOCs), along with the global trading houses are all present in the region. While the Gulf has many of the vital tools in its toolbox already, some need sharpening if the region wants to have the same global influence in oil product markets as Houston, Rotterdam and Singapore. **What are the Next Steps Required to Establish a Liquid Trading Hub in the Gulf by 2020?**

Talking Points

- Access to capital represents the vital roots from which a liquid oil products trading hub can grow. How easily can firms access capital today, and from whom? Where are the funding gaps?
- What are the best strategies to grease the wheels of finance going forward? Seed loans, syndicated loans & export credit agency (ECA) funding for infrastructure projects?
- The wider Gulf region will see major additions of oil product storage capacity in locations such as Fujairah, Sohar, Ras Markaz and in time Duqm in Oman. What is the best way that this growth in storage capacity should be managed, especially with the current contango – who will be the winners and losers?
- Following the lifting of sanctions on Iran on January 17, how likely is it that Iran’s oil product demand-supply will be processed and shipped via Fujairah? Iran has close ties with Oman – what is the best strategy to divert potential business from Duqm to Fujairah?
- Has the trend amongst NOCs to integrate trading into their core business had an impact on trading and liquidity in the Gulf, or plans to deepen the region’s position as a global hub?



Moderator SEAN EVERS

Sean Evers is founder and Managing Partner of Gulf Intelligence. Sean has spent his career building ground-breaking media enterprises, starting with the award winning Punchbag Productions across Britain and Ireland, securing top award at the 1992 Edinburgh Festival. In the mid-1990s Sean Evers was appointed Cairo correspondent for The Financial Times. In 1997 he was recruited by Bloomberg to open up the Middle East commencing in the UAE and over the following decade he built-out the U.S. media company’s regional network of bureaus from Cairo to Tehran, culminating in 2008 in Dubai being designated as the firm’s fourth global hub. He attained a BA in Politics & Economics from the University of Notre Dame in Indiana in 1988, and went on to secure his LLB law degree at the National University of Galway, Ireland.

“What Are the Top 5 ‘Next Steps’ Recommendations Required to Deliver Successful & Independent Oil Products Benchmarks in the Gulf?”

Independent and successful benchmarks are underpinned by transparency, robust methodologies and a level playing field that allow price formation to take place in the open, rather than behind closed doors. This gives all market participants robust pricing data and insights on which to base their trading activities. The demand for commodities, including oil products, is steadily shifting from West to East and the Gulf is well-placed at the heart of the global crossroads. The continues to invest billions in ramping up its refining capacity with modern refining infrastructure – the same complex setups that Europe’s dying refining sector lacks. The UAE’s newly expanded Ruwais refinery has over 900,000 barrels a day of refining capacity and Kuwait’s 615,000 barrels a day Al Zour refinery is on track for 2019 – two examples that illustrate the Gulf’s refining might, which is aimed at locking in new Asian and European clients. But fortunate geography and rising appetite does not immediately translate into well-defined oil products benchmarks in the Gulf. Prices on an island in Southeast Asia are used to value most of the refined products produced, consumed and traded in the Middle East, even pump prices in the UAE are determined by Platts Singapore. **What are the five most effective Next steps that the Gulf can take to develop independent and robust oil products benchmarks in the Gulf?**

Talking Points

- What are the top three benefits of developing independent oil products benchmarks in the Gulf?
- Which of the oil products would generate the most liquidity if facilitated by an independent pricing benchmark in the Gulf? For example, is there is an argument for saying an independent fuel oil contract would gain traction quickly, considering the significant demand in Pakistan?
- Through Singapore, Asia has long had a significant influence on the pricing of oil products in the Gulf and China is in the embryonic stages of planning its own trading hub. Is now a golden opportunity for the Middle East’s oil product benchmarks – is it now, or never?
- What infrastructure is required – at Fujairah, for example – to facilitate the liquidity needed to launch and sustain a successful oil products benchmark?
- What opportunities or challenges are presented by the lifting of sanctions on Iran and the flood of fuel oil it is putting out onto the market?



Moderator ALBERT W. STROMQUIST

Albert W. Stromquist has a distinguished career in the international energy industry as a scientist, executive, and business innovator. His work with leading brands including Amoco, Amerada Hess, Total and Enron has spanned the energy value chain. In 2004, Albert was invited by Abu Dhabi government to join Mubadala Development Company at its inception where he engaged from concept to execution in the Dolphin Gas Project, and was an architect and inspiration for Masdar and Mubadala Petroleum LLC.

Presently, Albert is Founder, Senior Partner and Managing Director of Abu Dhabi-based Lanstrom Advisors, leaders in corporate strategy, public policy, and bespoke investments in socially conscionable alternative energy technologies. He earned a Bachelor of Science in Mechanical Engineering from Worcester Polytechnic Institute and a Master of Science in Geology from the University of Massachusetts.



Stream Host

The port is a multi-purpose port covering a variety of activities including; Oil and Bunkering and Maritime supply through the Fujairah Anchorage, as well as General and Project cargo, Containers and Bulk cargo. The port predominately exports Aggregate through two Bulk Loaders and also hosts the UAE's strategic grain reserve facility.

The strategic position of the Port and its Anchorage outside the Straits of Hormuz is the basis of its success and the catalyst for growing investments in the Port and Emirate. Fujairah is amongst the top three Bunkering locations in the world, alongside Singapore and Rotterdam, and serves as an Anchorage with 13,734 calls in 2015.

Private Tank Storage, both refined product and crude, the Storage Capacity will be over 9 million cubic metres by the end of 2016, and 13 million cubic metres by the end of 2018.

3,170 metres of fully equipped Oil Berths are operational, (830 metres becoming operational during 2015). A VLCC Berth is scheduled for completion by June 2016. To the North of the Port, the Abu Dhabi Crude Oil Pipeline Project which involves the transport of Crude Oil through a 360 kilometer land Pipeline, interim storage, and export through 3 single point mooring buoys for deep water loading.

The facility is expected to cater for 60% of the UAE's total Crude Oil exports. The Fujairah Refinery, will be designed initially to produce 200,000 barrels per day, it will take its feedstock partially from ADCOP but will also require to import, through the Port different grades of crude. Its product will serve the local market but a significant amount may in due course be exported. The Port continues to investigate Bitumen, LNG and Petrochemical opportunities.



Dr. Salem Abdo Khalil
Technical Advisor, Government of Fujairah

Dr. Salem Abdo Khalil graduated from Egypt and awarded the Post Graduation from Reading University, UK. Since joining the government of Fujairah in late 1979, Dr. Salem has been instrumental in initiating and realizing many of the major projects, which are all now forming solid foundation for Fujairah's future prosperity. The involvement and achievement of Dr. Khalil include Industrial & Agricultural Projects, Real Estate, Port, Airport, Free Zone, Banks, Oil Terminals, Refineries and the development of Fujairah as a leading bunkering and storage centre.

In his capacity as Technical Advisor of the Government of Fujairah, Dr. Salem Khalil is Board Member of Fujairah Port and Fujairah Refinery Company Limited, Secretary of the Board of National Bank of Fujairah, Board Member of Fujairah Transport Corporation, Board Member of Fujairah Education Council, Honourable Member of Fujairah Welfare Association.

Stream Host

About Platts: Platts is the leading independent provider of information and benchmark prices for the commodities and energy markets. Customers in over 150 countries look to Platts' expertise in news, pricing and analytics to deliver greater transparency and efficiency to markets and help them make better informed trading and business decisions. Founded in 1909, Platts' coverage includes oil and gas, power, petrochemicals, metals, agriculture and shipping. A division of McGraw Hill Financial, Platts is headquartered in London and employs over 1,000 people in more than 15 offices worldwide. Additional information is available at <http://www.platts.com>.

About McGraw Hill Financial: McGraw Hill Financial (NYSE: MHFI) is a leading financial intelligence company providing the global capital and commodity markets with independent benchmarks, credit ratings, portfolio and enterprise risk solutions, and analytics. The Company's iconic brands include Standard & Poor's Ratings Services, S&P Capital IQ and SNL, S&P Dow Jones Indices, Platts, CRISIL and J.D. Power. The Company has approximately 20,000 employees in 31 countries. Additional information is available at www.mhfi.com.



Dave Ernsberger
Global Head of Oil Content, Platts

Dave Ernsberger is Platts' Global Head of Oil Content. Based in London since 2010, he is responsible for managing Platts' worldwide editorial coverage of crude oil and oil products. Prior to this, Dave was Senior Editorial Director for Asia, managing Platts' editorial and analytical groups in Singapore, Japan, Australia, the Philippines, and China from 2004 until 2009. He joined Platts in 1996 as a metals reporter, and, in 1999, Dave took on responsibility for Platts' new European power start-up ventures as editor-in-chief, launching coverage of the deregulating electricity and natural gas markets in the European Union. He relocated to Houston in 2001 as bureau chief, before moving to Singapore in November 2003. A native of Boston, Massachusetts, U.S., Dave has a bachelor's degree in philosophy and politics from Warwick University, England, and a master's degree in international relations from Southampton University, England. Dave also speaks Spanish.

Notes

Notes

Energy Markets Forum 2016

SEPTEMBER 22ND
NOVOTEL HOTEL, FUJAIRAH, UAE

Under the Patronage of
His Highness Sheikh Hamad Bin Mohammed Al-Sharqi
The Ruler of Fujairah, UAE

COMMODITY SUPER SUPPLY CYCLE:

NAVIGATING ERA OF PLENTY ON SOUTH-SOUTH CORRIDOR?

FORUM PARTNERS





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