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Petro Diplomacy: Back to the Future Oil and Gas at the Center of New Growth in the GCC

Conference Report



Petro Diplomacy: Back to the Future Oil and Gas at the Center of New Growth in the GCC

Conference Report

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The Arab Gulf States Institute in Washington (AGSIW), launched in 2015, is an independent, nonprofit institution dedicated to providing expert research and analysis of the social, economic, and political dimensions of the Gulf Arab states and how they impact domestic and foreign policy. AGSIW focuses on issues ranging from politics and security to economics, trade, and business; from social dynamics to civil society and culture. Through programs, publications, and scholarly exchanges the institute seeks to encourage thoughtful debate and inform the U.S. policy community regarding this critical geostrategic region.

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About This Report

This report was compiled by Omar H. Rahman, former research analyst at the Arab Gulf States Institute in Washington, following the conference "Petro Diplomacy: Back to the Future – Oil and Gas at the Center of New Growth in the GCC" held on October 18, 2018.

Petro Diplomacy is a signature annual event in Washington, DC bringing together private and public sector stakeholders from the United States and the Gulf Arab countries to discuss emerging trends in energy markets and regional politics. AGSIW leverages its position as the go-to source for analysis on the Gulf Arab states in Washington to provide access to Gulf perspectives on energy markets and politics and to offer a unique forum for industry experts to engage with policymakers and analysts looking more broadly at the region's geoeconomic and domestic political drivers.

The daylong, invitation-only event is designed as an open roundtable with a limited number of speakers and experts. The sessions take place under the Chatham House Rule to encourage more open debate.

For its fourth consecutive year, AGSIW convened its Petro Diplomacy conference to engage stakeholders in the energy sector of the Gulf Arab states, global supply competitors in North America, analysts, and policymakers to discuss how changes in technology, fiscal priorities, and opportunities for growth continue to alter the relationship between politics and energy for the region and beyond.

Video of the conference's keynote session is available online at:

https://agsiw.org/programs/petro-diplomacy-back-to-the-future-oil-and-gas-at-the-center-ofnew-growth-in-the-gcc-states/

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Foreword

On behalf of the Arab Gulf States Institute in Washington's board of directors and staff, I am pleased to share with you the report of our fourth annual energy conference:

"Petro Diplomacy: Back to the Future – Oil and Gas at the Center of New Growth in the GCC."



Ambassador Marcelle M. Wahba, President, AGSIW

Hosted on October 18, 2018, the conference brought together experts from the oil industry, finance, government, and academia to discuss critical issues facing the energy sector, including new technology in oil production, as well as petrochemicals and privatization, all against the backdrop of regional politics, particularly the reimposition of sanctions on Iran and its oil exports.

His Excellency Shaikh Nawaf S. Al-Sabah, chief executive officer of Kuwait Foreign Petroleum Exploration Company, offered keynote remarks on the current state of and developments in the oil industry, as well as the role of conventional oil and the future of Kuwaiti oil and gas production.

I would like to thank our corporate sponsors for supporting our work in the energy field. I hope you find this report informative, and I look forward to engaging with you in the future on issues critical to the Gulf Arab states and their implications for U.S. businesses and policymakers.

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Ambass'ador Marcelle M. Wahba President, Arab Gulf States Institute in Washington

Executive Summary

After years of surviving in a low oil-price environment, energy exporters in the Middle East finally entered a period of supply-demand balance. And yet, the geopolitical landscape in the region remains complex and unpredictable.

On October 18, 2018, the Arab Gulf States Institute in Washington convened its fourth annual Petro Diplomacy conference, "Back to the Future – Oil and Gas at the Center of New Growth in the GCC States." Bringing together thought leaders from the oil industry, finance, government, and academia, participants assessed the latest trends and challenges at the crossroads of energy and politics.

After years of surviving in a low oil-price environment, energy exporters in the Middle East finally entered a period of supply-demand balance. And yet, the geopolitical landscape in the region remains complex and unpredictable, with forces capable of destabilizing markets at every turn. At the top of the list is the return of economic sanctions on Iran and its oil exports, which has the potential to cause significant strain on global oil supply.

Speakers and discussants tackled this theme and others, including how Gulf Arab states are focusing on diversifying their economies through the development of downstream and petrochemical sectors, the impact of technology on unlocking new sources of oil and gas in the region, the emerging relationship between OPEC and Russia, and how the security and political environment affect energy production and pricing.

Introduction

From mid-2014 to 2017, global energy markets were vastly oversupplied and oil prices came crashing down. While the negative aspect of this period was clear for oil-exporting countries, which faced severe fiscal crises stemming from the loss in revenue, the slack in the global oil supply mitigated the effects of geopolitical unrest, with ongoing conflict throughout the Middle East failing to register meaningfully on prices.

Today, energy market dynamics appear much different than they did only a few months ago. Fundamentals in supply and demand are relatively balanced, with oil prices at their highest levels in years. While this has given a much-needed boost to export-dependent economies, it has once again raised the risk of geopolitical instability. One such cause for concern is already imminent: the reimposition of economic sanctions on Iran by the United States, especially on Iranian oil exports. The loss of more than 1 million barrels per day (mb/d) of Iranian crude exports could send prices skyrocketing if they are not offset by sufficient additional supply.

As a result, U.S. President Donald J. Trump has called upon OPEC to fill the void in supply and keep oil prices stable. Much of the onus has fallen on Saudi Arabia, the world's traditional swing producer and close ally of the United States. While Saudi Arabia claims a production capacity of 12 mb/d, it is currently producing 10.7 mb/d – its highest level on record – and it is far from clear if the kingdom will be able to replace Iranian supply on its own.

Moreover, the duration of sanctions is indefinite, and new sources of supply will be needed to

meet future growth in demand. This raises questions about where new oil supplies will come from and if technological advances will help bridge the gap as Gulf Arab producers try to tap into their own unconventional oil reserves.

To add an additional layer of complexity, the Gulf states are in the midst of large-scale economic transformation programs meant to diversify their economies away from a reliance on oil exports, including a focus on privatization and capturing more of the downstream end of the value chain. These shifts require a massive investment of resources. Yet the fluctuation in oil prices only adds more risk to these programs by impacting fiscal balances, putting pressure on expensive energy subsidy policies, and jeopardizing fiscal resources if prices are low, or dulling the will for implementing change if they are too high.

At this moment of transition, the Arab Gulf States Institute in Washington held its fourth annual Petro Diplomacy conference, "Back to the Future – Oil and Gas at the Center of New Growth in the GCC States," to engage stakeholders in the energy sectors of the Gulf Arab states, global supply competitors in North America, analysts, and policymakers to discuss how changes in technology, fiscal priorities, and opportunities for growth continue to alter the relationship between politics and energy for the region and beyond.

Downstream Dreams?

While national oil companies in the Middle East are driving the move into downstream industries, they have also made promises to open up the sector to privatization or private investment.

In an effort to diversify their economies away from crude oil production and export, several Gulf Arab states have based their strategies on developing the downstream portion of their energy sectors, especially adding production capacity for petrochemicals, and exploiting the full value chain of their natural resources. The focus on petrochemicals is based in part on the Gulf states' perceived comparative advantage in access to cheaper feedstocks linked to upstream production, as well as their geographic proximity to manufacturing and end-user markets in Asia.

Moreover, unlike with transport fuels such as gasoline and diesel, which could reach peak demand in the near future according to some experts, the petrochemical sector is believed to be a growth industry. According to one expert, combined annual growth from petrochemicals is anticipated to be from 6-7 percent, double the global economic growth as a whole, and triple the growth in demand for oil.

According to a recent outlook by the International Energy Agency, one-third of the growth in demand for petroleum liquids in the next 10-20 years will be related to petrochemicals. This will not only be in the production of plastics but also in the move toward the production of cleaner energy as petrochemicals are used in the manufacturing of solar panels, wind turbines, and electric batteries.

Currently, 14 percent of world oil demand is going toward the production of petrochemicals, as well as 8 percent of global natural gas supply. Yet one expert said this could rise to as

much as 50 percent of demand. There is also an enormous inflow of private investment in the petrochemical sector, especially in the production of ethylene in the United States. Gulf Arab states are likely to tap into this flow of foreign direct investment for the development of their domestic industries.

This shift from West to East is already apparent. While refineries in Europe are facing consolidation and shutdown, Asia and the Middle East and North Africa are experiencing a rapid rise in refining capacity expansion that will allow these regions to be more efficient and responsive to petrochemical demand in the future. Indeed, 80 percent of capacity additions until 2040 will be in those regions.

While national oil companies in the Middle East are driving the move into downstream industries, they have also made promises to open up the sector to privatization or private investment. This poses a distinct challenge given that energy exports have been the core source of state revenue for so long, and some countries are already signaling their reluctance to make the transition, according to some participants. Moreover, from the point of view of private investors, the low tax base in Gulf countries may not be enough of an incentive to attract significant private capital. Commodity chemicals are not a high-margin business and carry significant risk with the extreme volatility in the oil markets. However, if Gulf states are able to expand into niche chemical products, it could prove more appetizing.

Saudi Aramco, in particular, has set its sights on becoming an integrated company for years, and not just a leader in upstream production. It has already made huge strides increasing the scope and scale of its production of petrochemicals and developing partnerships with key international firms. In 2000, for example, the kingdom produced around 30 different kinds of petrochemical products. Today, the offering is more than a hundred. Aramco has partnered with U.S.-based Dow Chemicals in the world's largest petrochemical complex, Sadara, located in Jubail, Saudi Arabia. In March, Aramco finalized a joint venture project with Malaysia's Petronas to develop a \$27 billion refinery and petrochemical complex in Malaysia. In April, Aramco signed a \$5 billion agreement with French energy firm Total to develop another giant petrochemical complex in Jubail. Also in April, Aramco signed a memorandum of understanding with an Indian refining consortium to develop a \$44 billion-megaproject for refining and petrochemicals on India's western coast.

This project may come to include the involvement of the Abu Dhabi National Oil Company, which has also been at the forefront of Gulf national oil companies' push into the downstream. Indeed, ADNOC has allocated 40 percent of its five-year investment plan to downstream and petrochemical development with the aim of adding domestic refining capacity and tripling petrochemical output by 2025. ADNOC is also making headway in privatization, including selling 10 percent of its fuel distribution business, and recently signing a public-private partnership agreement with leading oil services firm Baker Hughes.

However, this downstream strategy is not without significant risks, including production capacity outpacing demand. Moreover, the focus on petrochemicals is based in large part on the presumption of access to relatively cheap feedstocks. Yet, as natural gas-producing countries move beyond associated gas (a byproduct of crude oil production) to feed their growing downstream industries, gas prices are likely to continue rising. Some Gulf countries,

especially Bahrain and Kuwait, do not have access to domestic low-priced gas and must import their natural gas from abroad. The only country in the region with access to abundant, lowpriced natural gas is Qatar, which has been cut off from part of the region by the economic and diplomatic boycott initiated by Saudi Arabia, the United Arab Emirates, Bahrain, and Egypt. Nonetheless, even without the boycott, it is unlikely that Qatar would provide its neighbors with under-market-priced natural gas. And even those Gulf countries that produce their own natural gas, such as Saudi Arabia, will have to rationalize the economic benefits of subsidizing their petrochemical sectors with cheap feedstock instead of selling natural gas at a higher price on the global market.

There are also other reasons to question the soundness of the downstream strategy, especially with regard to job growth, diversification, and environmental impact. While there is financial gain for corporations in capturing the value-added component of downstream, this alone will not solve the challenge of job growth, nor will it diversify Gulf economies away from core reliance on petroleum. To do this, Gulf countries will need to go further and develop industrial parks that can turn petrochemicals into manufactured products and employ more people in the process. This, however, will require these economies to be competitive with more developed manufacturing economies in Asia, which is no easy task.

Last but not least is the environmental impact of sustained petrochemical growth, particularly the manufacturing of plastics, which must be disposed of and cannot be produced indefinitely. Indeed, several of the world's largest companies, such as McDonalds and Starbucks, have already begun moving away from plastics in their products. If this trend expands, expectations of petrochemical growth in plastics will need to be re-evaluated.

To ensure overcoming these challenges, finding technological solutions will be fundamental.

New Technology and New Discoveries in Oil and Gas Production

It is clear that Gulf national oil companies understand the imperative of taking advantage of technological shifts happening outside the region, and capturing technology for domestic use.

Over the next two decades, world oil and gas demand is expected to continue rising, driven in large part by economic growth in Asia. A greater share of the supply that will meet that demand will likely come from the United States, Russia, and the Middle Eastern members of OPEC. Yet, as a result of the 2014 oil price collapse, large cuts were made to capital expenditures designated for exploration and development. This has raised the possibility of a major supply shortfall in the next five years.

While there are new conventional sources of supply among these countries, mainly in Iraq, there are also unconventional sources of supply in the Middle East that can be exploited. However, compared with the United States, where years of technological innovation and improvements in efficiency have brought the cost of production down steeply, unconventional production in the Middle East is still very expensive. To tap these resources and generate

value, Middle Eastern oil companies need to capture technological innovation and incorporate more efficient practices into their business models.

For many years, the Gulf region has been the beneficiary of relatively low-cost conventional oil production, which has allowed exporting countries to generate revenue in spite of fluctuations in the global market. However, recent trends in the energy industry and rising costs domestically have forced Gulf producers to re-evaluate their complacency in the face of changes in the industry.

Indeed, as technological innovation in the United States, coupled with sustained high prices, unlocked a major new source of oil into global supply – tight, or shale, oil – during the past decade, Gulf countries have felt the impact and some have taken the initiative to introduce progressive changes in their energy sectors by making their national oil companies more competitive.

Some Gulf states have focused on optimizing their energy sectors by streamlining national oil companies, privatizing subsidiaries, overhauling management, rationalizing energy use, and eliminating waste by making the companies more commercially focused. At the forefront of these change agents are Aramco and ADNOC, which have taken great strides to develop their domestic personnel and capture knowledge and technology from their international partners. Both companies have focused not only on educating their personnel abroad, but also having them gain experience on projects throughout the world.

It is clear that Gulf national oil companies understand the imperative of taking advantage of technological shifts happening outside the region, and capturing technology for domestic use.

Saudi companies, in particular, are investing heavily in research and development on a global scale, opening research institutions in the United States, India, China, and South Korea.

Yet capturing technology from abroad, especially in the energy sector, will also require increasing the attractiveness of concessions and contracts with international oil companies. At the moment, the UAE, Iraq, and Iran offer the least attractive terms in the region, according to one participant. On the other hand, Qatar, Oman, and Bahrain are considered the most attractive. In the case of the latter two, much of this comes from the imperative to counter steadily dwindling production volumes over the last few years, as well as cash-flow challenges.

The results have started to pay dividends, both for greenfield, or new, unconventional projects and brownfield, or old, conventional projects. In Oman, for example, enhanced oil recovery techniques have led to production from the Mukhaizna oil field and will eventually lead to production from the Hubhub oil field. Enhanced oil recovery is also being used to boost production from the aging Block 6 oil field, which first began producing in 1967. Bahrain also made a large-scale offshore unconventional discovery in April, with the help of leading international firms. Yet extracting the tight oil and gas will not be simple or inexpensive.

Gulf countries are also trying to rationalize their own domestic use of oil barrels, particularly in electricity generation. Instead of burning oil and, in effect, reducing the availability for export, countries across the Gulf are taking steps to find alternatives, including natural gas and renewables. One major source of supply that is already developed but sitting idle is production in the Neutral Zone between Saudi Arabia and Kuwait, which has a capacity of 500,000 to 600,000 barrels per day. Yet, for almost five years a political dispute has kept the area out of production.

Regional Politics, Price Volatility, and New Partnerships

In addition to several conflicts in the Middle East and North Africa, including the fragmentation of states and emergence of nonstate actors, the region is being impacted by macro-shifts that are heightening the potential for instability.

The effect politics can have on energy prices is well understood, as the disruption in the flow of oil can immediately push prices higher. But also considerable are the long-term effects of sustained prices in either direction. The 2000s were a perfect example of this process: Record-high prices during the latter half of the decade helped facilitate a notable transformation in the dynamics of the oil market by incentivizing high-cost unconventional production that led to breakthroughs in shale extraction in North America. This, in turn, drove prices down for more than three years, leading to new modes of cooperation between energy exporters and forcing Gulf Arab governments to overhaul their economies. It also sowed the seeds of future price volatility by reducing capital expenditure investments in finding and developing new sources of oil and gas.

Today, oil markets are adequately supplied for the first time since mid-2014. While there are slight imbalances – the U.S. Gulf coast is oversupplied due to high levels of domestic production, while the Pacific basin is undersupplied after a summer of high demand in China – overall there are no tensions driving the market.

During the four years prior, an oversupply of oil helped mitigate a significant amount of geopolitical instability, particularly in the Middle East, as well as low production levels from important OPEC producers, including Venezuela, Nigeria, Libya, Iraq, and Iran.

And yet, geopolitical risks capable of significantly affecting prices remain active. In addition to several conflicts in the Middle East and North Africa, including the fragmentation of states and emergence of nonstate actors, the region is being impacted by macro-shifts that are heightening the potential for instability. These include the changing role of the United States in the region as well as the increased presence of Russia in Middle Eastern affairs. More directly, the emergence of Riyadh and Abu Dhabi as regional centers of power and influence has increased tensions with Iran. All of this leaves a more balanced oil market exposed to price volatility.

Adding to that volatility, the production losses from Nigeria, Libya, and Iraq have largely been reversed. Moreover, output from the United States has increased rapidly over the past 12 months, making the United States the largest oil producer in the world. Saudi Arabia is also producing at its highest level on record. With global supply continuing to tighten regardless of this uptick in production, and crude stocks below their five-year average, there is little spare capacity in the event of a major supply disruption.

Yet such a disruption is imminent. On November 5, the United States reimposed sanctions

against Iranian oil exports. While several important energy importers are unhappy with the Trump administration's unilateral decision, by most accounts businesses around the world are expected to comply. This could reduce current oil supply by up to 1.5 million barrels per day.

Trump has put the onus of filling this gap on OPEC producers from the Gulf states and, in particular, Saudi Arabia, which wants to maintain good relations with the administration in Washington and weaken its rival, Iran. While Riyadh claims that it has a production capacity of 12 million barrels per day and will be able to meet global demand, it has never produced that amount and the market has signaled some skepticism that it can rise to that level immediately.

Saudi Arabia also has a longstanding policy – formed after its failure to counter multiple oil shocks in the 1980s at great harm to itself – to not regulate supply all on its own.

Moreover, Saudi Arabia has incentives not to keep oil prices as low as possible. If prices continue to rise, Saudi Arabia will boost its revenue, cut its fiscal deficit, and have more resources to carry out its economic transition away from oil dependence. Saudi Arabia also does not want to risk the cooperation agreement it forged with Russia during the height of the oil price collapse, which was instrumental in helping bring the market into balance.

While it is not clear if this new relationship extends beyond bilateral cooperation on oil policy, the coordination of two of the largest energy producers in the world sends a strong signal to the market, especially at a time of little faith in OPEC's ability to regulate markets effectively. A break in this alliance, caused by Saudi Arabia pursuing its oil policy according to the needs of the White House, could undermine that hard-won market confidence.

Beyond Russia and Saudi Arabia, U.S. oil companies are also capable of increasing their production by a significant margin. Investment in shale production has risen from \$40 billion in 2016 to \$110 billion in 2018. While logistical bottlenecks are certain to impede the full flow of oil, this level of investment is still capable of bringing new barrels to market and compensating for the loss of Iranian crude.

For now, Iran is hoping to get around the complete restriction of its oil exports, an area where it has much experience. One participant noted that even after the end of sanctions in 2016, Iran anticipated future sanctions and continued to develop the means of withstanding them.

Conclusion

The nature of economic risk in the Middle East and North Africa is becoming more complex as a result of the evolving geopolitical landscape. Nowhere is this more apparent than with the production and export of energy. The confrontation between Iran and the United States and Gulf Arab states – at the political and economic levels – has added a new layer of complexity to an already volatile price environment.

The oil producing countries of the Gulf are trying to meet more of global energy demand themselves, by tapping new streams of output, and by harnessing the full chain of production, from crude oil and natural gas to petrochemicals.

Yet the path forward is not altogether clear, even if their goals are. Gulf states will need to navigate a number of challenges, uncertain if their investments will deliver the desired results, in part because the nature of demand for petroleum products is also changing. In any case, the moves to become more commercially oriented, integrated, and technologically advanced will serve their interests in any future environment.



H.E. Shaikh Nawaf S. Al-Sabah presents keynote remarks (left); Al-Sabah answers questions from the audience during the question and answer session, moderated by Ambassador Deborah K. Jones

Agenda October 18, 2018

All panel discussions were held under the Chatham House Rule.

Session 1: The Downstream Story Petrochemicals and Privatization as a Means of Economic Diversification

This panel addressed broader diversification ambitions of national oil companies in the Gulf to transform traditional oil firms into international energy firms, with some privatization opportunities. Experts provided an inside look at recent privatization efforts and how major players in the downstream market of petrochemicals are evolving.

Session 2: New Technologies and New Discoveries in Oil and Gas Production

This panel addressed the continued dynamics of new technology in discovery and production of nonconventional oil and gas, with some attention to recent discoveries in the Gulf, and new projects in Oman. Is the "Shale Revolution" exportable? What does this do to U.S. shale producers? Is there opportunity for broad technology transfer and investment cross-regionally?

Keynote Address

Introduction:

Ambassador Deborah K. Jones, Former U.S. Ambassador to Kuwait

Keynote Address:

H.E. Shaikh Nawaf S. Al-Sabah, Chief Executive Officer, Kuwait Foreign Petroleum Exploration Company

Shaikh Nawaf S. Al-Sabah was appointed the eighth chief executive officer of the Kuwait Foreign Petroleum Exploration Company, the international upstream subsidiary of stateowned Kuwait Petroleum Corporation, in May 2013. Prior to his appointment at KUFPEC, Al-Sabah spent 14 years at KPC, with the last eight years as deputy managing director and general counsel, as principal in-house counsel and an active member of KPC's negotiating teams on the corporation's strategic projects. He was also a board member of KPC's international downstream subsidiary Kuwait Petroleum International and of MEGlobal, an olefins joint venture involving KPC's petrochemicals subsidiary. From 2002 to 2004, Al-Sabah was head of KPC's Washington office. Al-Sabah holds an AB degree magna cum laude from Princeton University's Woodrow Wilson School for Public and International Affairs and a Juris Doctor degree cum laude from Harvard Law School.

Session 3: Regional Politics, Price Volatility, and New Partnerships

This session engaged geoeconomics and regional politics more closely, with a look at new relationships forging between OPEC and Russia, for example. The rising tensions with Iran with the U.S. withdrawal from the Joint Comprehensive Plan of Action have also roiled oil markets. How does the security and political environment affect energy production and pricing? What is expected in the near and medium term?

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