The United Arab Emirates and Global Oil Supply

With nearly 10 percent of the total world supply of proven crude oil reserves, the United Arab Emirates (UAE) is an important provider to global energy markets. As a mainstay to the economy, oil exports now account for about 30 percent of total UAE gross domestic product.

In addition to being an important supplier of energy, the UAE is now becoming an increasingly relevant consumer of energy. The UAE will continue its long tradition of responsible energy stewardship as it develops and diversifies its economy, accelerates the development of additional hydrocarbon reserves, and contributes to the development and implementation of alternative energy sources.

Crude Oil Production Up 31 Percent Since 2002

The UAE continues to significantly increase its production to supply the global energy markets. While some OPEC nations and many non-OPEC nations have seen production declines over the last five years, the UAE has increased its total production of crude oil by approximately 31 percent. In no year during that period has average annual production fallen below the previous year.

The UAE Plans an Additional 40% Increase

Turning to the future, upstream oil and gas entities in the UAE continue to identify new projects aimed at boosting the nation’s crude oil production capacity to nearly 4 million...
barrels per day by 2020, which would amount to an additional increase of approximately 40 percent over current production levels.

Reaching this ambitious target will represent a massive undertaking of resources and investment, particularly in light of persistent manpower and materials shortages that have afflicted the global oil and gas sector since 2003. The UAE has invested roughly $7 billion in upstream production infrastructure since 2004 and anticipates investing some $43 billion more in the coming years. At the same time, the UAE will invest more than $6 billion to expand its domestic refining capacity, which will significantly expand its ability to export refined products.

US Treasury Secretary Henry Paulson supported these efforts in a June 2008 speech saying “more liberalization along these lines would benefit all oil producing countries,” and that “in the case of the UAE, the United States is benefiting, too” as “US suppliers of oil and gas field equipment and services are 45 percent of the UAE’s total imports.”

### Seeking Innovations to Increase Production

Much of the UAE’s current crude oil production is made possible by the reinjection of natural gas to boost pressure in the nation’s major oil reservoirs. Without this massive program, the UAE’s crude production would stagnate and decline. The UAE is testing carbon capture and sequestration technologies to replace the reinjection of natural gas. This would enhance exports of natural gas, create more flexibility in oil production and provide important global environmental benefits.

### Lowering Consumption, Boosting Exports

In 2005 the UAE became the one of the first major oil-producing countries to ratify the Kyoto Protocol to the UN Convention on Climate Change. As part of its energy diversification strategy, the UAE is working in a variety of ways to reduce its carbon footprint, meet its own domestic energy needs, and expand exports:

- **Abu Dhabi is investing more than $20 billion in Masdar, the world’s largest and most comprehensive alternative energy program.** US partners include MIT, Columbia University, Colorado-based CH2MHill, Chicago-based Adrian Smith + Gordon Gill Architecture, and other institutions worldwide, such as WWF, Imperial College of London, and Tokyo Institute of Technology.

- **The UAE is exploring nuclear energy to meet rapidly growing demand for electricity,** due to tremendous growth as well as intense water desalination requirements. This reduces domestic demand for natural gas and the need for dirty, oil-burning power plants used to meet peak demand during hot summer months.

- In the first major cross-border energy deal between Gulf countries, **the UAE is importing natural gas by pipeline from Qatar.** The gas supports domestic electricity demands and frees Abu Dhabi’s natural gas supply for crude oil recovery. The project began delivering gas to power companies in the second quarter of 2007.

- **Among other energy efficiency and environmental projects, Dubai is developing the region’s most extensive light rail system,** to move cars off the road, reduce pollution and ease traffic congestion.
Working with US Partners

The UAE has a history of welcoming private-sector investment into its upstream oil and gas exploration and production sector. Abu Dhabi was the only OPEC member not to nationalize the holdings of foreign investors during the wave of nationalization that swept the global oil and gas industry in the mid-1970s, and it continues to benefit from high levels of private-sector investment. Today international oil companies from the United States, Japan, France, Britain and other countries continue to hold combined equity stakes of between 40 and 100 percent in Abu Dhabi’s vast oil concessions.

Occidental Petroleum of the US and Total of France each has a 24.5 percent equity stake in the Dolphin gas pipeline project. ExxonMobil recently won a tender for the redevelopment of the Upper Zakum field, while will ultimately increase oil production by more than 220,000 barrels per day. Most recently, ConocoPhillips won a multi-billion dollar competition for the development of significant natural gas reserves in Abu Dhabi, further limiting the amount of crude oil that would need to be burned domestically for internal electricity generation.

Securing Oil Shipments

In an effort to enhance security of supply, Gulf governments are studying the development of oil pipelines that would bypass the Strait of Hormuz. About two-fifths of the world’s traded oil currently is shipped by tanker through this 34-mile-wide passage.

If built, the pipelines could move as much as 6.5 million barrels of oil per day or about 40 percent of the amount currently shipped through the Strait. By 2010, construction of a first, smaller pipeline will be completed. Carrying 1.5 million barrels of oil per day, the pipelines will start in the UAE’s Habshan oil field and end in the emirate of Fujairah, located outside the strait on the Gulf of Oman.

A Critical Partner in Regional Security

Maintaining peace and stability in the Arabian Gulf is critical to global energy supplies and markets. The UAE cooperates closely with the US, UN, EU and NATO forces in contributing to, and benefiting from, a common regional security umbrella. In specific regard to the United States, the UAE provides unprecedented port access and logistical assistance, hosts a major US Air Base, and participates in joint military training exercises with US forces. The UAE has a pending arms sale request for a US-supplied, comprehensive missile defense system that will provide enhanced security to the UAE, including its oil production and transportation facilities.

Additional Background

The UAE’s proven oil reserves were 97.6 billion barrels as of January 2007. Abu Dhabi holds 92.2 billion barrels, followed by Dubai with 4 billion barrels, Sharjah with 1.5 billion barrels, and Ras al Khaimah with 500 million barrels.

The United States imports minimal quantities of oil and gas from the UAE, given the geographic distances and complex shipping routes that separate the two nations.
Instead, the UAE exports approximately 62 percent of its crude oil to Japan making it the UAE’s largest customer. Other Asian economies, which benefit from the same geographic proximity, consume the vast majority of the UAE’s remaining production. Gas exports are almost entirely to Japan, the world’s largest buyer of liquefied gas, with the UAE supplying almost one-eighth of Japan’s entire requirements.

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