



United Arab Emirates

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1. OUTLOOK

Oil and gas revenues have been the mainstay of UAE's economy accounting for one third of the country's GDP. Sitting atop 8% of the world's proven oil reserves (97.8 bn barrels) and almost 5% of the world's natural gas (5.8 trillion cu metres); the UAE's extraordinary hydrocarbon wealth gives it one of the highest GDP per capita in the world.

UAE is a member of the Organisation of the Petroleum Exporting Countries (OPEC) since joining in 1967. The emirate of Abu Dhabi is the centre of oil and gas industry followed by Dubai, Sharjah and Ras Al Khaimah. Abu Dhabi owns the lion's share of the oil and gas resources - 95% of the oil and 92% of gas.

Abu Dhabi is the heart of UAE's hydrocarbon and industrial power. Abu Dhabi National Oil Company (ADNOC) is the largest state owned company; it operates 17 subsidiaries and has the right to take up to 60% share in all new major oil projects. The Abu Dhabi National Oil Company asserted in August 2006 that the UAE is presently ready to expand production of crude oil to 2.8m barrels per day (bpd) and is targeted to push production to 4m bpd.. Given these vast resources, oil and gas continue to play a crucial role in the country's economic profile.

Principal offshore oil fields are Umm Shaif, Lower Zakum, Upper Zakum, Al Bunduq and Abu Al-Bukhoosh. The main onshore fields are Asab, Bab, Bu Hasa, Sahil and Shah. Almost 92 per cent of the country's gas reserves are also located in Abu Dhabi and the Khuff reservoir beneath the oil fields of Umm Shaif and Abu al-Bukhoosh ranks among the largest single gas reservoirs in the world. The UAE exports majority of its crude oil to Japan making it the UAE's largest customer. 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.

1.1 GLOBAL OIL MARKET IN 2009-2010

The oil market in the end quarter of 2008 and 2009 has been strongly impacted by the financial crisis, global recession and resulting erosion in world oil demand. These factors have substantially magnified the uncertainties affecting the market and contributed significantly to volatility.

World oil demand forecast in the next few years is expected to show the following trends:

- World GDP will grow at a slow pace from the contraction.
- Apart from the slow economic recovery, various factors will slightly thin oil demand growth in Asia such as the removal of price subsidies, fuel switching and energy conservation programmes.
- There will be stronger utilization of nuclear power plants and usage of biofuels is expected to grow rapidly, adding another 0.15 mb/d.
- The world will see strong movement toward use of smaller and more economical vehicles, due to which most of the growth in oil usage will be in the transport fuel and petrochemical sectors.
- Industrial oil consumption will show only moderate growth as a result of delayed and slow economic growth.
- OECD economic recovery will be moderate and steady.

1.2 EVOLUTION OF THE OIL MARKET

Since its discovery in 1859 by Mr. Edwin Drake, oil's application and value in daily life has increased. The earliest deposits of oil were found in the United States, first in Pennsylvania and Ohio then in 1901 with larger reserves in Texas and Oklahoma; the same year Arabian/Persian Gulf exploration began.

In 1901, Mr. William D'Arcy, a British businessman, was awarded a 60 year exploration, extraction, and sales concession from the Persian (Iranian) government. D'Arcy in return paid 20,000 and 16% of the profits to Persia. The importance of oil is seen as early as 1905 when the British government provided financial assistance to D'Arcy to prevent bankruptcy, fearing the concession's sale to another government. In 1908, larger oil deposits were discovered.

Between 1908 and 1944, oil reserves were discovered throughout the Gulf region. In 1944, Mr. Everette DeGolyer, a prominent petroleum geologist, submitted a report to the U.S. government that a minimum of 25 billion barrels of crude oil were in the region; 5 billion in Saudi Arabia alone. DeGolyer also provided an unofficial estimate of 300 billion barrels, a third in Saudi territory.

In 1944, the Middle East produced approximately 5% of the global oil supply, the U.S. supplied over 60% of the global supply. The rate of production from U.S. reserves and its longevity was a concern coinciding with declines in the Saudi Arabian economy due to pilgrims unable to reach Mecca during WWII. This alignment of concerns contributed to the cooperation between the two governments to explore and extract oil within Saudi Arabia and others throughout the region.

2. UAE IN THE GLOBAL OIL BALANCE

UAE through its dominance of world oil reserve ownership occupies a central position in the global energy balance although the latter is not yet well developed.

The continued strength of oil in global energy stems from its dominance of the transportation sector to industrial sector. Power generation sector has lost ground to coal, gas, and nuclear power in these sectors. The rate of substitution away from oil is directly related to how technically feasible such changes are and to the availability of cost-effective substitutes, which explains why oil has continued to dominate the transportation sector, where efforts to introduce alternatives have so far had limited success.

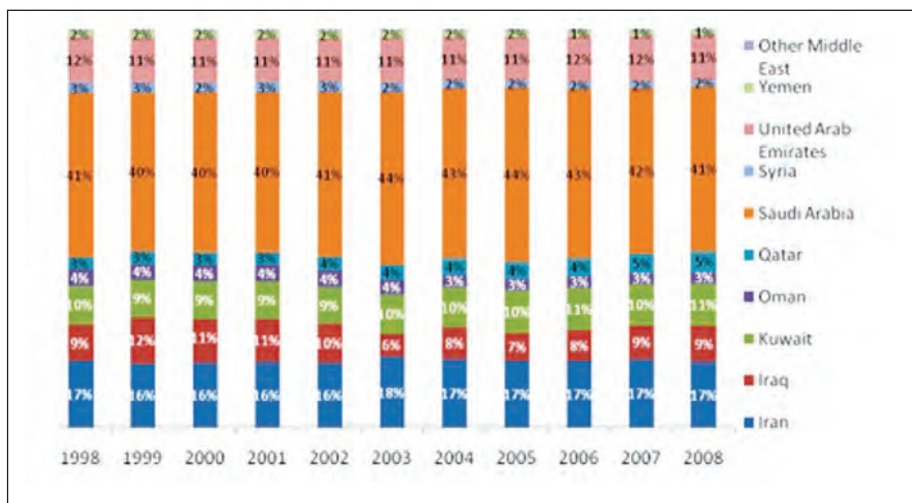


Figure 1: Graph depicting % share of oil production in the Middle East (1998-2008)

Within Middle East, UAE ranks fourth highest in terms of oil reserves. It has multiple reserves which are being continuously exploited by the established players like ADNOC in UAE. Government is taking many initiatives and investing in research for enhancing the oil production capacity and exploring more reserves in the area.

In contrast to oil, the share of natural gas in total primary energy has been on the increase spurred by a combination of higher oil prices, the need for energy self-sufficiency in the major consuming countries, and diversification as well as recent environmental concerns relating to global warming and climate change. The use of natural gas has also increased as a result of secular growth in the petrochemical industry, where it is the main feedstock for a wide variety of petrochemical products.

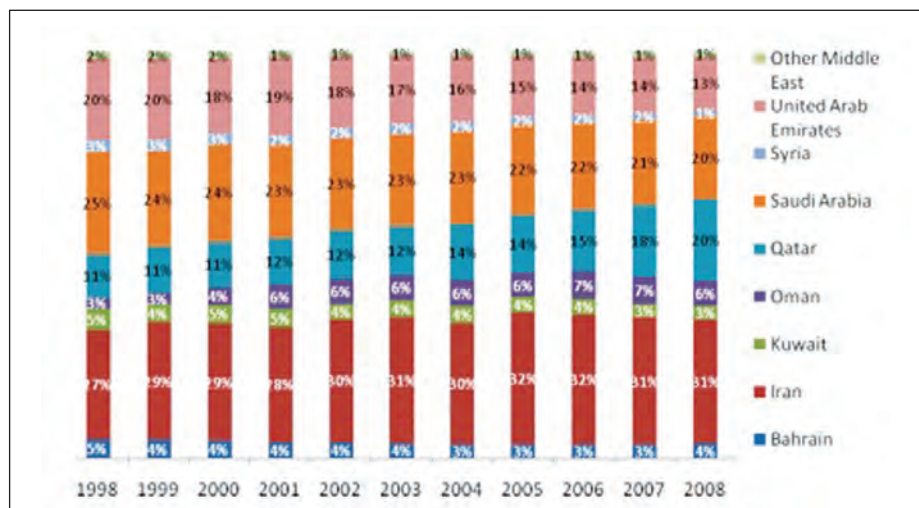


Figure 2: Graph depicting % share of natural gas production in the Middle East (1998-2008)

2.1 UAE OIL AND GAS RESOURCE ENDOWMENTS

As part of the region's efforts toward industrialization, and to increase the value added to the oil sector, many Middle Eastern oil producers have built their own refineries, alone or in partnership with international oil companies. As of 2008, UAE crude oil production was 3.6% of the world production which makes United Arab Emirates (UAE) 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.

2.1.1 Projections of Demand for UAE Oil and Gas

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.

The UAE is a member of the Organization of the Petroleum Exporting Countries (OPEC) since joining in 1967. The emirate of Abu Dhabi is the center of the oil and gas industry, followed by Dubai, Sharjah, and Ras al Khaimah. In 2004, natural gas supplied 64% of the country's total energy consumption, and oil supplied the remaining 36%. The UAE's crude price is relatively expensive compared to other Middle Eastern benchmarks due to its sweet and light composite.

The UAE along with other GCC nations have undertaken significant expansion projects in order to increase production capacity and maintain market stability. 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.

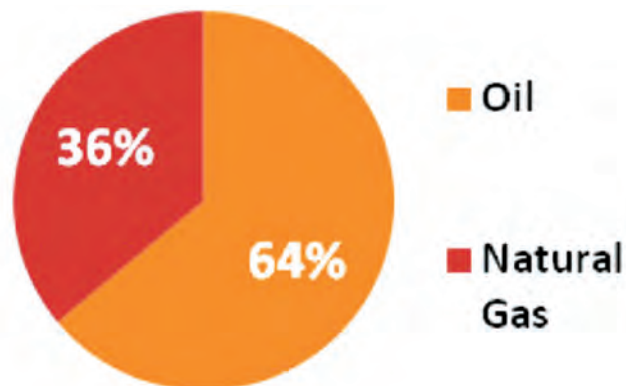


Figure 3: % breakdown of hydrocarbon resources in UAE

Table 5: United Arab Emirate: Oil Production, Reserves and Capacity and Exports 1998-2008 (in thousand barrels/day)

Source: BP Statistical Review of World Energy, 2009

Thousand barrels daily*	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Refining Capacity	235	290	440	674	711	645	620	620	620	625	673
Production	2643	2511	2626	2534	2324	2611	2656	2753	2971	2925	2980
Reserves (bn barrels)	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8

Source: BP Statistical Review of World Energy, 2009

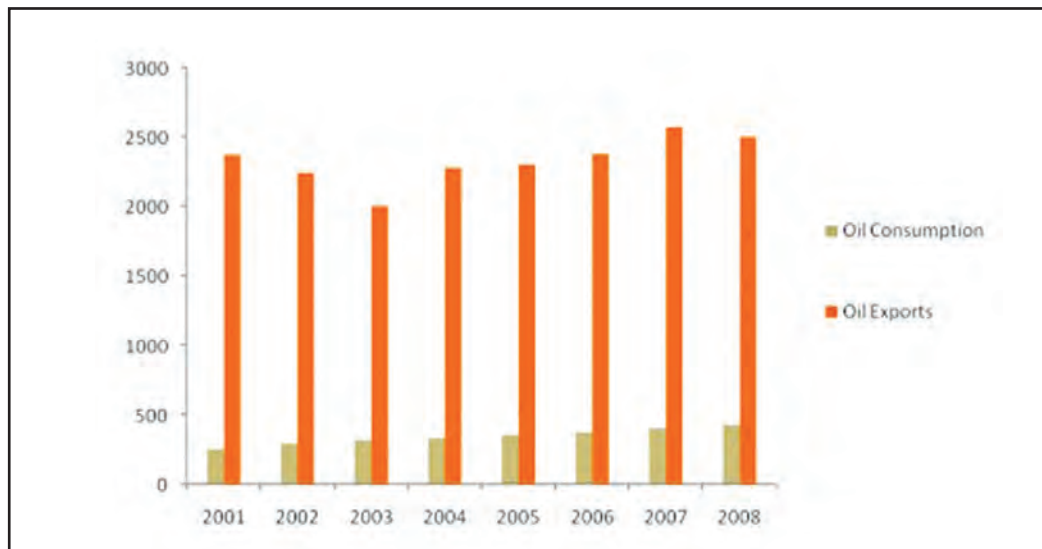


Figure 4: Consumption and Exports of Oil in UAE (2001-08) (in thousand barrels/day)

Source: BP Statistical Review of World Energy, 2009

UAE has maintained its strong hold in oil exports capitalizing on its huge reserves. Increasing industrialization, inflow of industries, increase in automotive traffic etc has led to increase in internal consumption of oil as well. Oil consumption has grown at a CAGR of 8% from 2001 to 2008. Growth in exports has been more or less constant and there has seen a steady increase of 1 - 2 % year on year where 2003 and 2006 saw high increases of 14% and 8% respectively. Financial crisis in 2008 led to decline in oil prices and had an adverse impact on the exports resulting in a decline.

Table 6: United Arab Emirate: Oil Production, Reserves 1998-2008 (bn cubic m³)

Billion cubic metres	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Production	37.1	38.5	38.4	44.9	43.4	44.8	46.3	47.8	49.0	50.4	50.2
Reserves	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.44	6.43

Source: BP Statistical Review of World Energy, 2009

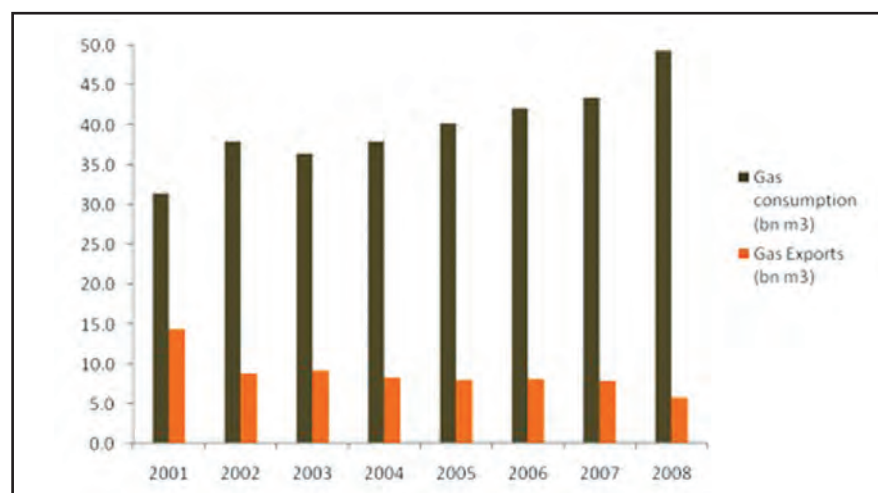


Figure 5: Consumption and Exports for Natural Gas in UAE (2001-08) (Bn cubic m³)

Source: BP Statistical Review of World Energy, 2009

UAE does not have huge gas reserves hence the exports of gas are less than consumption. Most of the gas produced is natural and is used mainly for internal consumption. Internal consumption has increased at a CAGR of 9% from 2001 to 2008. Increasing industrialization, population and building construction sector are the key drivers for this growth. Exports have decreased mainly due to increase in internal consumption and extreme competition which UAE faces with Qatar and Iran.

UAE continues to identify new projects in the upstream oil and gas sector which aims to boost 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.

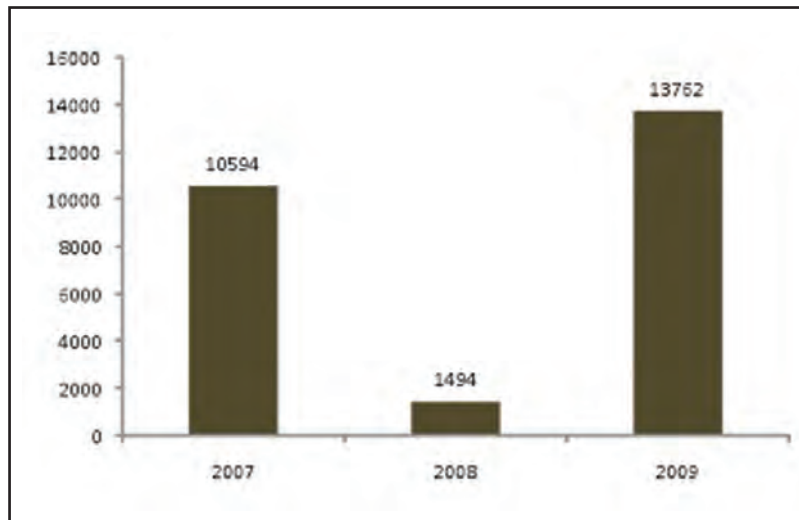


Figure 6: Construction project awarded in Oil and Gas sector in UAE mn\$ (2005-10)

Source: VME Database

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. UAE has invested roughly \$7 billion in upstream production infrastructure since 2004 and anticipates investing some \$43 billion more in the coming years. The major projects ongoing in the Oil and Gas sector are Bourouge complex expansion projects which are ongoing in different phases with huge project. Most of the projects involve expansion in processing facilities eg. Habshan Gas Complex Expansion valued at \$1000 mn. At the same time, UAE will invest more than \$6 billion to expand its domestic refining capacity, which will significantly expand its ability to export refined products.

Refined Oil products domestic	2004	2005	2006	2007	Jan-Jun 2008
In thousands of metric tonnes					
Gasoline	1214.8	1278.5	1434.2	1781.5	957.2
Kerosene	1055.2	1216.7	1392.4	1634.9	862.9
Gas oil	1511.9	1594.0	1831.0	2254.7	1395.0
Fuel oil	93.0	109.6	266.6	218.7	23.0

Table 1: United Arab Emirates, Refined Oil products Domestic Consumption in (000s metric tons), 2004-08

Source: ADNOC, IMF

1/ calculated as the average of gasoline 91, 95 and 99 octane

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 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.

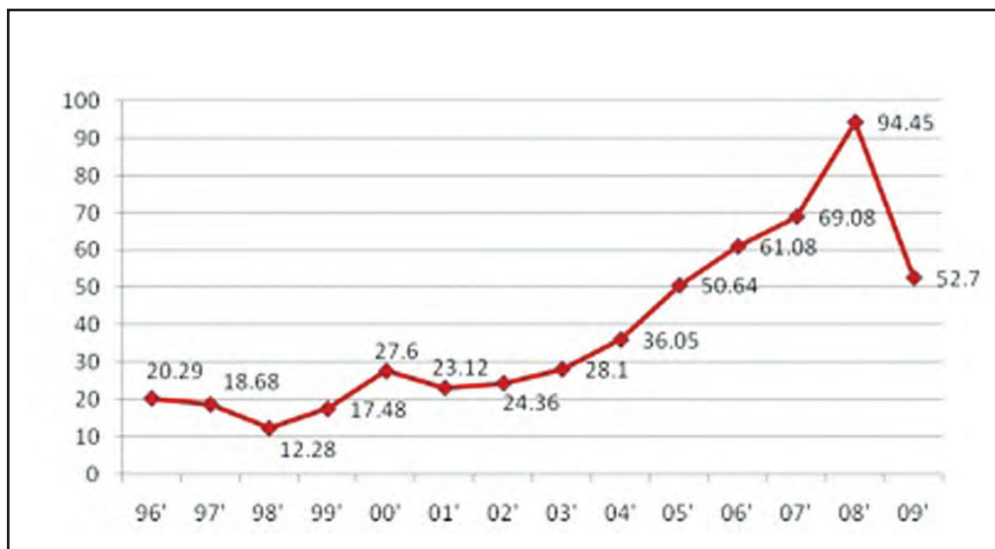
2.2 PRICES

From 2002 to mid-2008, crude oil prices have been increasing. Prices as measured by OPEC's reference basket, increased at a rate of 23.1% Compound Annual Growth Rate (CAGR) during the period. The average annual price increased from US\$24.36/b in 2002 to US\$94.45/b for 2008. Prices almost tripled in the last 6 years due to continued strong demand coming from emerging economies.

In addition to geopolitics, the main factors behind the upward trend were US dollar weakness which encouraged inflows of new money into the crude futures market, persistent refinery outages, and weather-related supply disruptions.

On the back of strong demand from emerging economies, geo political tensions and supply disruptions; oil prices touched record levels, when it reached \$147.27 per barrel in July 2008. Strong demand from the BRIC (Brazil, Russia, India & China) nations and strengthened industrial activities in the Middle East and Western countries provided solid support to the prices.

Figure 2-4: Yearly OPEC Basket Price



Source: OPEC

Oil prices have plunged since striking record peaks, as a deteriorating global economy dented demand for energy. Buyer resistance at higher levels, prolonged weakness in the global financial markets and an expected increase in supply with the completion of ongoing oil & gas projects in the Middle East have kept a bearish tone over the energy markets. The steep drop in demand saw oil prices crash from record heights of almost \$150 barrels in 2008 to below \$40 barrel /day at the beginning of 2009.

Since then prices have risen back to around \$70/barrel after the OPEC producer group tightened supplies. Prices have also found support from investors betting demand could start to outpace supply growth in years to come. OPEC member countries have tried to cut as much as 4.2 million bpd of oil roughly 5 percent of world demand from the market since September 2009 in a bid to soak up excess supplies.

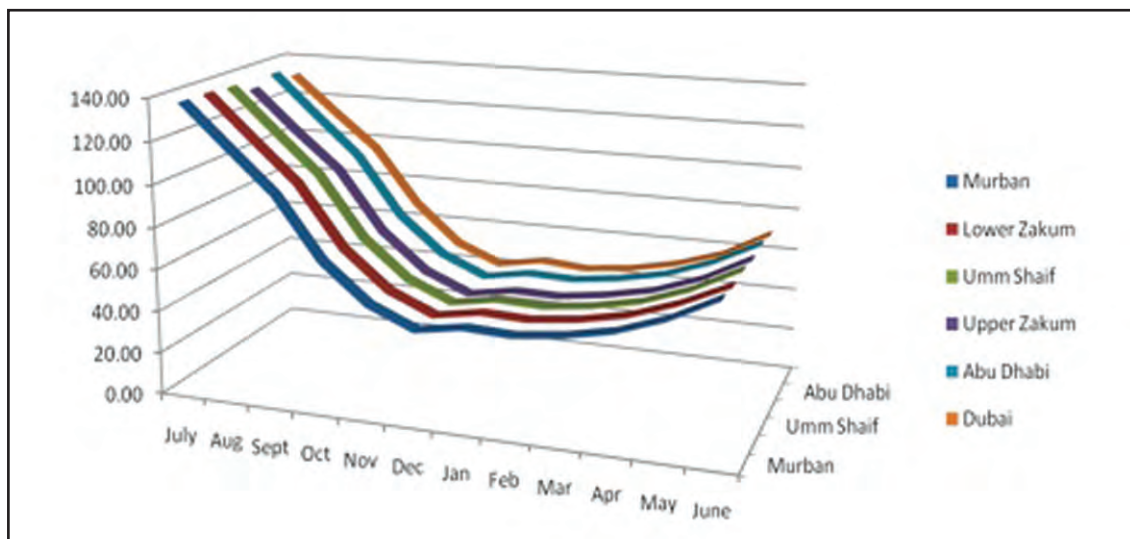
Figure 2-5: Monthly OPEC Basket Price



Source: OPEC

The OPEC Reference Basket averaged down by \$11.16 or 22.4% in December 2008 to settle at \$38.60/barrel, closing the month at \$35.58/barrel to average the year at \$94.45/barrel.

Figure 7: Retroactive Prices of Abu Dhabi and Dubai Crudes (\$/b)



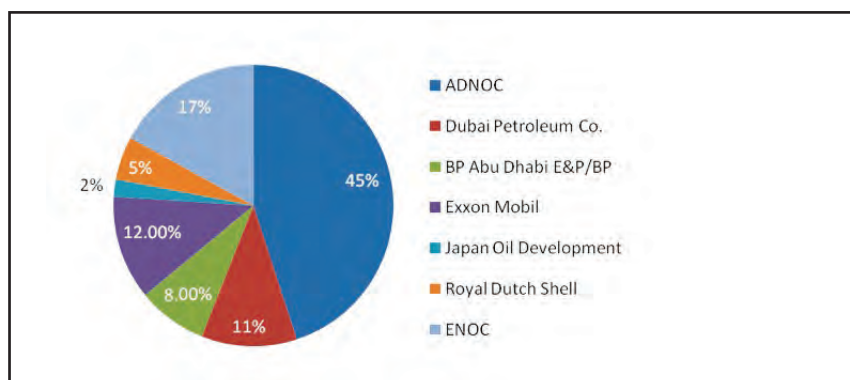
Reflecting the recovery in oil prices on the world market, ADNOC raised its selling prices by \$10.40-11.80/b which are the biggest increases introduced since the peak reached in July 2008. The price of its reference crude, Murban which had already gone up by \$8/b in May has now been raised by \$11.50/b to \$71.65/b for June, bringing it up to the highest level since last September 9 (\$98.05/b). At the same time Lower Zakum has gone up by \$10.40/b to \$70.50/b and is now lagging behind Umm Shaif which has been increased by \$11.55/b to \$71.55/b. As for Upper Zakum, it has been raised by \$11.80/b to \$69.90/b.

At the end of June the emirate of Dubai announced that it was to start expressing the monthly official selling price (OSP) of its crude price as a differential in relation to the settlement price of the DME Oman Crude Oil Futures contract on the Dubai Mercantile exchange. The price of Murban in June represents a premium of \$2.24/b over the average price of Dubai crude, which has been raised in May from \$69.41/b to \$57.4/b.

2.3 COMPETITIVE OVERVIEW

Under the UAE's constitution, each emirate controls its own oil production and resource development. Dubai Petroleum Company (DPC) is the main upstream operator in Dubai. The state owned Dubai Natural Gas Company (DUGAS) is responsible for processing natural gas produced in Dubai's offshore oil fields as well as the gas pipes from Sharjah. The second main producer is Abu Dhabi Marine Operating Company (ADMA-OPCO).

Figure 8: Percentage share of Key Upstream players



Source: VME Analysis

ADNOC is the leading company in UAE producing maximum oil in the region based out of Abu Dhabi giving it its oil rich status. ADNOC has a range of almost 14 companies refining oil and manufacturing petroleum products under it. Players like Enoc, Japan Oil, Exxon Mobil as fast growing companies which are making their mark in manufacturing quality products and increasing the exports of the country.

This system is capable of supplying more than 300 million cubic feet of gas per day and has the capacity to meet all customers' needs well into the 21st century.

Key Oil and Gas Producers in UAE

Company	Activities	No. of employees	Year established	Ownership structure	Production/fleet
ADNOC	Exploration and production of crude oil and natural gas; refining, marketing, supply and transportation, and the manufacture of petrochemicals.	Group-15000	1971	Wholly owned Abu Dhabi Government owned company	2.7 million barrels of oil a day
Takreer	Refining of crude oil and condensate, supply of petroleum products and production of granulated sulfur.	1,800 Company, 150 Headquarters	1999	public joint-stock company	485,000 barrels of refined products per day
ADCO	Production of oil; onshore exploration and oil wells drilling services.	3500	1978	ADNOC- 60%, BP- 9.5%, Shell- 9.5%, TOTAL- 9.5%, ExxonMobil-4.75%, Mobil- 4.75%, Parttex- 2%	0.8 million barrels of oil per day
ADGAS	Activities include turning gas, extracted from Abu Dhabi's offshore field crude oil, into a new source of marketable energy.	1500 Company, 400 Headquarters	1973	ADNOC-70%, Mitsui & Co., LTD. Japan 15%, BP (UK), 10%, TOTAL(FRANCE)- 5%	8 million tons of gas per year
Abu Dhabi Marine Operating Company (ADMA-OPCO)	Oil and gas production from two major fields Umm Shaif and Zakum.	2369 Company, 2125 Headquarters	1977	ADNOC-60%, BP 14.67%, TOTAL- 13.33%, JODCO- 12%	600,000 barrels of Oil per day
IRSHAD	Provides services such as pilotage, berthing / unberthing of oil and gas tankers, loading / unloading of oil products, diving, navigating support, and maintenance.	686	1979	ADNOC-60% and Land Marine National Contracting Company (LAMNALCO)- 40%	3.5 million barrels of oil per day (fleet of 36 vessels)
Dolphin Energy	Production and processing of natural gas	150	1999	Mubadala Development Company- 51%, TOTAL 24.5% and Occidental Petroleum- 24.5%	2 billion cubic feet of natural gas per day

ZADCO	Developing and operating the Upper Zakum Field	3000	1977	ADNOC-60%, Axon mobil- 28%, Jodco-12%	520000 barrels of oil per day
National Drilling company	Offers efficient drilling and well maintenance services	3250	1972		3.5 million barrels of oil per day
GASCO	Converts the previously flared oil by-products into different marketable forms of clean energy.	3000	1978	ADNOC- 68%, SHELL-15%, TOTAL 15%, Partex- 2%	20,000 tons of natural gas liquids per day
Ruwais fertilizer industries	Production and distribution of ammonia, urea and other compounded fertilizers.	400	1980	ADNOC-66.67%,TOTAL-33.33 %	1310 metric tons of ammonia per day
ENOC	Engaged in crude production, LPG processing and other petroleum products and services	5000	1993	Wholly owned by Dubai Government	120,000 barrels of oil per day
EPPCO	convenience retailer and marketer of petroleum and related products and services	3500, Group 4000		ENOC-60%, Caltex-40%	170 Gas stations in UAE
Emirate	Storage, handling, servicing, distribution and marketing of refined petroleum products	1,600	1981	Wholly owned by Dubai Government	NA
Shell UAE	Finding and producing oil and gas in Abu Dhabi, processing and transport of natural gas, developing power plants, marketing gas and electricity, Providing business and operational consultancy	500	1982	Wholly owned by Royal Dutch Shell Group	NA
ESNAAD	Services company catering to the oil and gas industry	1000, Company, 60 Headquarters	2002	Wholly owned subsidiary of ADNOC	NA
ADNATCO	Owns and operates a fleet of crude / products tankers, a molten sulphur carrier, and RoRo vessels.	60 (Group).	1975	Wholly owned subsidiary of ADNOC.	6 vessels
NGSCO National gas shipping company Ltd.	Deals with shipping requirements for the export facilities and transport of Liquefied Gas products and Sulphur produced in Abu Dhabi	24 Company, 250 Group	1993	ADNOC- 70%, Mitsui and Co. Ltd. -15%, British Petroleum- 10%, TOTAL- 5%	7 tankers.
ADNOC distribution	Storage, handling, distribution and marketing of refined petroleum products	6000 Company, 450 Headquarters	1973	100% owned by ADNOC	NA
Borouge	Provides a range of differentiated products for high-value infrastructure application	700	1998	ADNOC-60%, Borealis-40%	600,000 tonnes of polyethylene per year,

2.3.1 Key Players

2.3.1.1 Abu Dhabi National Oil Company (ADNOC)

- Abu Dhabi National Oil Company (ADNOC) was established in 1971, to operate in all areas of the oil and gas industry and since then has steadily broadened its activity establishing companies and subsidiaries and creating an integrated oil and gas industry in Abu Dhabi. Today, the company manages and oversees oil production of more than 2.7 million barrels a day which ranks it among the top ten oil and gas companies in the world.
- The Supreme Petroleum Council (SPC), chaired by H.H. Sheikh Khalifa Bin Zayed Al-Nahyan, President of the UAE and Ruler of Abu Dhabi, formulates and oversees the implementation of Abu Dhabi petroleum policies.
- Over the past three decades, ADNOC has expanded its business activities, enhanced its competitive position and managed to become one of the world's leading oil companies with substantial business interests in upstream and downstream activities, including transportation, shipping, marketing and distribution.
- ADNOC's efforts in the exploration and production field have concentrated on assessing undiscovered reserves and optimizing hydrocarbon recovery by improving the reservoir management.
- ADNOC has 14 subsidiary companies working in the various fields of the oil, gas and petrochemical industry as well as crude oil and gas transport and services. They include ADCO, ADMA-OPCO, GASCO, ADGAS, ZADCO, TAKREER, NDC, ESNAAD, IRSHAD, FERTIL, BOROUGE, ADNATCO, NGSCO, and ADNOC- Distribution.

2.3.1.2 Emarat- Emirates General Petroleum Corporation

Founded by the federal government of the UAE in 1981, EMARAT markets and distributes petroleum products throughout the country. The firm is the dominant regional fuels distributor and is looking to expand into other downstream markets.

EMARAT operates a network of approximately 170 service stations as well as retailing aviation fuels and lubricants. Emarat's share of lubricants market is approximately 18% and its products are exported to Lebanon, Bahrain, Oman, Afghanistan, Jordan and Pakistan. Oil terminals with a combined storage capacity of 2.3 mm pounds are located in Jebel Ali, Dubai, Sharjah, Ras Al Khaimah and Fujairah.

EMARAT is a major supplier and distributor of both natural gas and liquefied petroleum gas.

Natural Gas: EMARAT owns and operates the largest natural gas transmission system in the Northern Emirates. This system consists of a compressor station and approximately 360Kms of underground pipe work, supplying 13 remote operated metering and pressure regulating stations.

This system is capable of supplying more than 300 million cubic feet of gas per day and has the capacity to meet all customers' needs well into the 21st century.

Liquefied Petroleum Gas (LPG): Emirate commissioned an LPG bottling plant at its facility in the Jebel Ali Free Zone. The current capacity is 40 tons per shift per day. Amounts of 25 lbs, 50 lbs and 100 lbs can be filled at an average of about 2000 cylinders in each shift. Storage tanks of 300 tonnes capacity have been installed, and provision has been made to store liquefied petroleum gas for bulk users, such as hotels and owners of residential property.

2.3.1.3 Emirates National Oil Company Limited (ENOC)

ENOC a wholly owned Dubai Government company is a global energy group operating 30 active subsidiaries and joint ventures. The division develops and distributes products locally and to a global market and also operates trading and bunkering services. The group's shipping, terminalling at Jebel Ali and Fujairah and operates an international fleet of oil and chemical tankers through its Gulf energy Maritime joint venture.

2.3.1.4 Dolphin Energy Ltd. (DEL)

Dolphin Energy's overall objective is to create long-term economic wealth for GCC citizens, far into the future.

- The overall investment in wells, sealines, processing plant, export pipeline and receiving facilities has made this one of the largest energy-related ventures ever undertaken in the Middle East.
- Dolphin Energy Limited of Abu Dhabi, UAE began gas production in July 2007. This unique strategic energy initiative involves production and processing of natural gas from Qatar's offshore North Field, and transportation of the processed gas by subsea pipeline to the UAE.

2.3.1.5 Other Multinational Players

BP has various interests in the UAE with its upstream assets concentrated largely in UAE. BP has stakes in ADMA-APCO (14.67%), ADCO (9.5%), ADGAS (10%) and Bunduq company (33.33%). ADMA-OPCO is the operation of the UMM Shaif and Zakum oilfields. ADOC present crude from the ASAB, Bab, Bu Hasa, Sahil and Shah oil fields and is partly owned by BP, Shell, Exxon Mobile and Total each with 10% share. The BP Sharjah business is the largest private producer, processor, and seller of natural gas in UAE in partnership with the Sharjah Government. It operates three gas fields, a processing plant, gas compression facilities and two liquid export terminals.

Total has been present in the UAE since 1939. The French firm has a 75% operating interest in Abu Dhabi. The French has a 75% operating interest in the Abu Al Bu Khoosh field and it holds 9.5% of the onshore producer ADCO which operates the Asab, Bab, Bu Hasa, Sahil and Shah oil fields the five major onshore fields in Abu Dhabi. In 2008, Total's production in the UAE was 243,000 boe/day.

US major **Conoco Philips** in July 2008 signed a landmark deal to develop sour gas reserves in the UAE. Conoco will hold a 40% stake in the project to develop the Shah field, with ADNOC unit GASCO holding the remaining 60. Conoco has been active in the Dubai upstream oil sector through the DPC JV but handed over all operations to the Dubai govt. in April 2007.

ExxonMobil has stakes in two upstream concessions in the UAE and is also a major supplier of lubricating oils in the emirates. It has a 9.5% stake in an onshore concession operated by ADCO which a 131,000 barrels/day of oil in 2007. The company is also working on the giant Upper Zakum field which has been in the production for years but Abu Dhabi wants Exxon Mobil to extend the life of the project as well as recovery rates.

Shell the regional headquarters for the upstream and oil products divisions are located in Dubai while the Abu Dhabi office is responsible for Shell's various investments in the emirates. Shell holds minority stake in two production JVs in Abu Dhabi including a 15% stake in GASCO and 9.5% of ADCO.

Dana Gas Private domestic gas company Dana Gas was awarded a 25 year license for the Western Offshore concession off Sharjah in March 2008. This is the company's first offshore upstream asset in the Middle East. The company plans to spend over US\$500 mn in 2008 on its projects in northern Iraq, Egypt and the UAE.

Occidental Petroleum acquired the rights to explore and develop two oil and gas fields Jarn Yaphour and Rahman in the emirate of Abu Dhabi. Occidental will operate and hold a 100% interest in hydrocarbons output from the fields.

Cosmo oil Japan's fourth largest Cosmo Oil was the first non western company to enter the UAE's energy market. It has now been operating in Abu Dhabi since 1967 and has formed a strong mutually beneficial relationship with the leaders of UAE. In January 2009 it was awarded a 20 year concession offshore Abu Dhabi. The contract prolongation may entail additional exploration rights.

3.5. FUTURE OUTLOOK OF UAE OIL AND GAS SECTOR

UAE with roughly 8% of the global resources and oil to last for 100 years is definitely at an enviable position. Given the high global demand for energy and supply and increased reliance of transportation sector on oil, economic growth will continue to be strong due to oil revenues.

UAE economy has been in a state of boom of the past eight years with the GDP recording double growth rates in each successive year. Despite largely successful efforts at economic diversification, nearly 40% of GDP is directly based on oil and gas output. A number of challenges face the UAE, some relating to the oil industry itself, and others concerning the economic management of the oil wealth. Aside from the need for a large capital infusion into the industry, UAE has the additional challenge of using the sector as a vehicle for increasing intraregional trade. The most important challenge, however, lies in designing appropriate macroeconomic policies to ensure that the oil wealth is managed effectively.

The oil market this year in 2009 has been strongly impacted by the financial crisis, global recession and resulting erosion in world oil demand. These factors have substantially magnified the uncertainties affecting the market and contributed significantly to volatility.

The UAE's anti-crisis stimulus measures as a percentage of (GDP) are the largest among global emerging markets and is set to boost liquidity. The UAE Central Bank has put in place two support packages worth Dh120 bn and has also guaranteed bank deposits and allowed lenders to perform dirham-dollar swaps. The Abu Dhabi Government pumped about Dh16 bn into a recapitalization exercise involving five banks. These measures constitute about 16% of the country's 2008 GDP.

Measures taken by bank, positive signs of economic recovery and the recent surge in oil prices due to OPEC production cuts has contributed to reviving investor confidence. This coupled with increased demand of oil and gas from developing economies is set to give an optimistic look to the UAE oil and gas sector. World oil consumption is expected to rise for the first time in two years in 2010 as a recovery in the global economy boosts demand. As one of the fastest growing economies in the world, the outlook for the UAE economy is very positive and this scenario is likely to continue in the foreseeable future.

4. CODE OF ETHICS

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