الهيئة الاتحادية
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FEDERAL COMPETITIVENESS
AND STATISTICS AUTHORITY

United Arab Emirates

Policy in Action

Fujairah - A Global Player in the Oil Industry

Fast-Forwarding the Nation

Issue 9 | 2016

Federal Authority | هيئة اتحادية

Policy in Action Series

The Policy in Action Series is published by the Federal Competitiveness and Statistics Authority (FCSA). The series is intended to raise public awareness and stimulate discussion on key areas of competitiveness & policy work related to the United Arab Emirates (UAE).

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ISBN 978–9948–419–65–5
Published in 2016
Dubai - United Arab emirates

Fujairah: Competing in Oil without Oil Reserves

Executive Summary

The discovery of hydrocarbon reserves in 1958 brought tremendous prosperity for the United Arab Emirates (UAE) making it a central player in the global energy market. Oil reserves in the country are concentrated in the emirate of Abu Dhabi, whereas emirate of Fujairah which occupies the majority of the Eastern Seaboard of the UAE, has no oil reserves of its own. With a GDP of US$371.4 billion, and a per capita GDP of US$37,678[1], the country is among the wealthiest in the world. Yet, not all of its wealth is hydrocarbon based. UAE's non-oil economy represents 83.8% of its GDP[2], reflecting the diversification of the economy that is driven by policies to fortify UAE's position as a knowledge and innovation-driven economy.

This article explores the story of Fujairah, a bunkering port, which has emerged as second largest port in the world for bunkering terminals, after Singapore and ahead of Rotterdam.[3] It stands as a vivid example of the UAE's strategy to successfully diversify its economy. The paper explores how, despite having no oil reserves of its own, through a unique mix of geography, strategic vision and investment, Fujairah has carved out a globally competitive position in the oil value chain. Through its focus initially on bunkering and in more recent years, providing value added services for the oil sector at the Fujairah Port, the emirate has carved out a competitive advantage in a highly competitive port landscape. Today, the Port of Fujairah services 100,000 ships per year and brings in revenue AED 14.7 billion per year (approx. US$4 billion)[4]. With future plans for expansion the outlook is to strengthen Fujairah as a global hub for trade in crude oil and oil products.

Background

The only emirate south of the Strait of Hormuz, Fujairah connects the UAE to the Sea of Oman and the Indian Ocean. Fujairah sits at the chokepoint of the Strait where vessels transiting through it account for nearly 40% of world's seaborne, traded oil.[5] In the early years of UAE's development, Fujairah became the logical location for a number of strategic federal enterprises including power plants, desalination plants, a water pipeline and a large grain reserve storage. A port was envisaged as an important addition to take the emirate to the next level of competitiveness. Through the vision and the support of the late His Highness Sheikh Zayed bin Sultan Al Nahyan Founder and President of the UAE, construction of a port at Fujairah commenced in 1978 as part of the economic development of the UAE. The port officially began operations in 1982, under the patronage of His Highness Sheikh Hamad bin Mohammed Al Sharqi, Ruler of Fujairah and Member of the Supreme Council. As part of the port's operations the Marine Department developed an anchorage enabling ships to anchor there and facilitate the supply of marine products and services.

[1] IMF World Economic Outlook Database, April 2016
[2] Emirates Competitiveness Council
[3] Fujairah Port Statistics, 2016
[4] Ashley Bhan, Fujairah Stands Firm, Bunkerworld (2015)
[4] Petromedia, Bunker Bulletin Vol. 17
[5] Ashley Bhan, Fujairah Stands Firm, Bunkerworld (2015)

Turning a Geographic Advantage into a Competitive Advantage

Bunkering operations at the Fujairah port were precipitated in part by the events of the Iran-Iraq crises. In the early 1980s, during the Iran-Iraq war tankers[6] had long wait times to clear the Strait of Hormuz, controlled by Iran. These extended delays of tankers created congestion of vessels close to the borders of Fujairah. The restrictions on transiting the Straits of Hormuz during this period meant that long convoys were created. The deep and safe waters off Fujairah proved to be the ideal location for gathering vessels, prior to entering the Gulf. Fujairah's location on major shipping routes and about 70 nautical miles from one of the key international shipping routes for tankers, meant that it could provide ships with fuel for their onward journeys as well as oil storage services, effectively enabling tankers to load without necessarily entering the strategically sensitive strait.[7] Tanker operators loading at Fujairah would also save their vessels sailing hours by avoiding the strait.

1: What is Bunkering?

The term 'bunkering' generally refers to the storage of petroleum product in tanks as well as the act of and the business of refueling ships and tankers. Etymologically, the word stems from the past when ships ran on steam produced by coal that was stored in containers called 'bunkers'. Bunkering operations are located at seaports, and include a) the storage of (bunker) fuels for ships and b) the provision of the fuel to vessels. Bunkering also refers to the logistics of loading fuel and distributing it among the bunkers (on-board fuel tanks) on the ship.[8] Storage of bunker fuel can be both onshore as well as floating - provided through vessels ("supply boats").

All ships require bunkering, and it constitutes a significant cost for ships. Ports that offer competitive prices for bunkering are attractive for vessels. According to the International Energy Agency, the global bunker market is distributed as follows: Europe 34%, Asia 31%, America 22%, Middle East 8% and Africa 5%.[9]

Though not a bunkering port at the time of the conflict, the leadership was fast to recognize the competitive advantage that Fujairah offered. They embraced the opportunity to develop an industry around providing bunkering services - for tankers to refuel and store oil. Service companies, including bunkering companies also saw opportunity and found an enabling commercial environment in the emirate, conducive to the setting up of businesses, introducing supply boats, and providing services. From a situation created by adversity, a commercial opportunity presented itself was developed, outliving the international problems that caused them.

[6] A tanker is a vessel designed to transport liquids or gases in bulk, including oil and gas.

[7] Its position outside the strait is strategic because the Strait of Hormuz constitutes a physical bottleneck for ship traffic. At only 37km wide the strait allows for only two lanes for oil tankers entering and exiting the Gulf ports. This translates to an average of 30 vessels an hour that transit the straits.

[8] Manaadiar, Hariesh. "What is Bunker and Bunkering". Shipping and Freight Resource. Puthan House. Retrieved 27 June 2016.

[9] International Energy Agency, 2014

With a long-term view, Fujairah's government invested in developing the emirate as a globally competitive bunkering hub. Initial investments in the creation of the bunkering facilities immediately distinguished Fujairah as a regional benchmark. This public sector support was crucial, given the capital intensity of port development. In keeping with the national approach to invest in world-class infrastructure-led development, Fujairah set about developing a state-of-the-art bunkering facility to establish itself as a premier location for oil storage. This meant upgrading the port's infrastructure to include berths for more and larger vessels to dock at the port, and a significant increase in storage capacity for fuel.

The model for the port operations selected was a "common-user" port model. (See Box 2). To ensure that the emirate maintained an edge and operated as an industry, an oil industrial zone was set up in Fujairah. In March 2011, the Fujairah Oil Industry Zone (FOIZ) was established by an Emiri decree to strengthen the role of the private sector and provide support to companies, research centers and technological development in the field of petroleum industry.

2: The Common-User Port Model

The Fujairah Oil Tanker Terminals (FOTT) in the Port of Fujairah has a globally competitive edge as it operates what is referred to as a 'common user model' based on the concept of a matrix manifold. All 14 oil companies in the Fujairah terminal are interconnected via the matrix manifold. There are 12 tank terminal operators that provide sea front facilities for import and export of their cargoes through nine operational berths. This means that common matrix model is that vessels can easily load or discharge cargo to any terminal while alongside any berth, with no shifting of the vessel required. Additionally, the berth accommodates a range of oil products. This results in cargo transfers from one terminal to another at nominal transfer charges. This communal matrix model stands in contrast to many other ports in the world where vessels need to move to different berths depending on the service they required. This well networked communal-based facility offers oil traders significant flexibility, and is an important competitive feature of the Fujairah port.

I. Transformation from a General Port to a Bunkering Port

Bunker development begun with significant investment in hard infrastructure. Initially bunkering was carried out entirely from floating storage facilities at the anchorage, later complemented by land based storage. In short order there was growing demand for the bunkering services provided by Fujairah, and the government allocated greater resources to transform the port's infrastructure. In time the port evolved into a fully-fledged bunkering port. Vessels could now come to this centrally located port to refuel, and take advantage of the oil storage facility that the port offered. The government of Fujairah provided on-going investment in the ports infrastructure including high capacity oil terminals and other infrastructure in parallel with the growth in oil storage at the port, and the support at the policy level to ensure the port's competitiveness.

The government of Fujairah developed strong partnerships with the private sector for developing its port operations. It also adopted a competitive position from the get go by ensuring that companies issued with bunker licenses were sufficiently well-known to provide credibility and integrity to the Fujairah bunkering market in terms of quality, quantity and service. This early adoption of best practices provided the initial recognition of the port as a credible, safe and reliable one.

3: The UAE's World Class Infrastructure

The UAE has world-class infrastructure as reflected in a series of rankings and indicators of the Global Competitiveness Report (GCR) 2016 published by the World Economic Forum:

It ranks 16th overall for competitiveness out of 138 countries, 4th in Quality of Infrastructure and 3rd in Quality of Ports Infrastructure.

II. Breaking into a Mature Port Industry

When Fujairah entered the port industry, the fact of its geographic location and proximity to other markets was not sufficient to make it a competitive port. Bunker costs constitute a considerable expense to container shipping lines and they have a significant impact on the selection of a particular port by shipping lines. As part of its oil strategy Fujairah sought excellence in its bunkering services and its pricing strategy. Beyond pricing, by the time the Fujairah Port entered operations, ports around the world were already competitive. The global port sector had transformed drastically over the past several decades. Up until the first half of the 20th century, ports tended to be instruments of state or colonial powers and port access was regarded as a means to control markets.

Competition between ports was minimal and port-related costs were relatively insignificant in comparison to the high cost of ocean transport and inland transport. As a result, ports had little incentive to improve their efficiency.[10]

Ports competitiveness was increasingly being determined based on complex factors including pricing, efficiency, services offered, and accessibility to markets, in addition to connectivity and integration in the global distribution network. Moreover, the ports needed to not only be efficient in themselves, but efficient and cost-effective in the context of the overall logistics chain of shipping lines, in order to be more attractive than alternative chains.[11] Other factors important for shipping lines are port tariffs, supply waiting time service quality, prices and port security.[12] To be competitive, Fujairah had to out-compete other service providers.

In addition to the physical infrastructure, a robust commercial policy framework (soft infrastructure) had to be put in place to facilitate the port's business operations. This included regulations, legislation, policies and procedures related to port dues, tariffs licenses to service ships and concessions to allow for foreign investment in shipping in the port sector.[13] The port continues to work on reforms, eliminate barriers, and increase the overall efficiency of its processes and its business-operating environment.

4: UAE's Business Enabling Environment

Fujairah's focus on the business environment is commensurate with the national-level drive to make the UAE one of the world's most business-friendly environment. This is reflected in relevant rankings and indicators of the World Bank's Doing Business Report 2015-2016:[14]

Overall the UAE ranks 31st for Ease of Doing Business out of 189 countries. It ranks 2nd globally in Dealing With Construction Permits, and 4th internationally for Getting Electricity, both out of 189 countries.

[10] Port Reform Tool Kit, Evolution of Ports in a Competitive World, http://www.ppiaf.org/sites/ppiaf.org/files/documents/toolkits/Portoolkit/Toolkit/module2/index.html

[11] Manuel Acosta, Daniel Coronado, M Del Mar Cerban, Bunkering competition and competitiveness at the ports of Gibraltar Strait, Journal of Transport Geography, 19 (2011) 911-916

[12] Manuel Acosta, Daniel Coronado, M Del Mar Cerban, Bunkering competition and competitiveness at the ports of Gibraltar Strait, Journal of Transport Geography, 19 (2011) 911-916

[13] Manuel Acosta, Daniel Coronado, M Del Mar Cerban, Bunkering competition and competitiveness at the ports of Gibraltar Strait, Journal of Transport Geography, 19 (2011) 911-916

[14] "World Bank Doing Business Report 2015-2016"

III. Value-Added Services

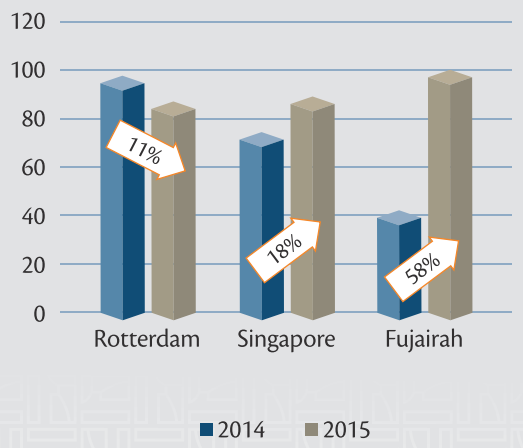
In light of the competitiveness of the port sector, in addition to the steady growth in the port's size, and bunkering capacity, the Fujairah port sought to transform itself into a global hub. As a matter of strategic development policy, the Port of Fujairah encouraged the development of various value-added services to complement its bunkering services, and offer specialized capabilities to add value to cargos that are stored and handled in the port. This has been an important feature in the port's competitive strategy, as tankers waiting to be refueled and/or trading in oil can access a variety of services at the port such as chandelling (ship supplies), crew changes, ship repair, container maintenance, marine appraisals, insurance claims inspections, medical facilities, and banking - making the port a particularly desirable location for ships. This approach effectively transitioned the port from exclusive reliance on bunkering to a more diversified strategy of port competitiveness. Today Fujairah's Port is internationally recognized as a 'one-stop-shop' for marine logistics, and a major international oil supply and trading hub.

IV. The Development of Oil Trading at the Port

Early on, ships at the port began ship-to-ship trading - buying and selling off oil products at the Fujairah anchorage. In due course, the anchorage was recognized as a location where elementary trading could take place and the practice gained traction. Significant levels of oil trading developed, as more land based oil storage facilities became available and more companies entered the market. Engagement with, and growth in the trading and supply of petroleum product has inevitably led to a demand for an enhanced involvement with crude oil. The oil trading in turn led to a demand for additional berth space in order for tankers to be serviced.

Today, Fujairah's oil port, which operates as Fujairah Oil Tanker Terminals (FOTTs) currently has a total of seven berths that handle oil. To meet the rising demand for berth space, the port increased from 370 meters of berths in the 1980s to 6,160 meters of berths in 2015 along with an increased throughput for crude oil in comparison with global ports in the same year, (See figure 1) with yet more planned (See Box 5).

Figure 1: Crude oil throughput in millions metric tons[15]



[15] Fujairah, Thanks but no Tanks! – M.Malek Azizeh, Commercial Director – Fujairah Oil Terminal FZC (FOT)

5: Increase in the Port of Fujairah Berth Capacity 2006-2015[16]

Year	Project	Draft	Length	Total Berths Length
2006	Oil Terminal 1 (Berths 1, 2 & 3)	15	840 m	2710 meters
2009	South Break Water Berths (5 berths)	15	1020 m	3730 meters
2010	Oil Terminal 2 (Berths 4, 5, 6 & 7)	15	1500 m	5230 meters
2015	Oil Terminal 2 (Berths 8 & 9)	18	930 m	6160 meters

V. Addition of Storage

In response to demand, Fujairah added over 1.9 million m3 of new private storage capacity for petroleum products, in 2014. Port statistics reveal total storage capacity connected to the port reached over 7.5 million m3 by the end of 2015.[17] This bunkering capacity further strengthening Fujairah as a world leader in bunkering-storage of oil and fuel for the transportation of vessels. Currently, the port features 14 oil companies and 17 others that are bunker suppliers. (See box 6)

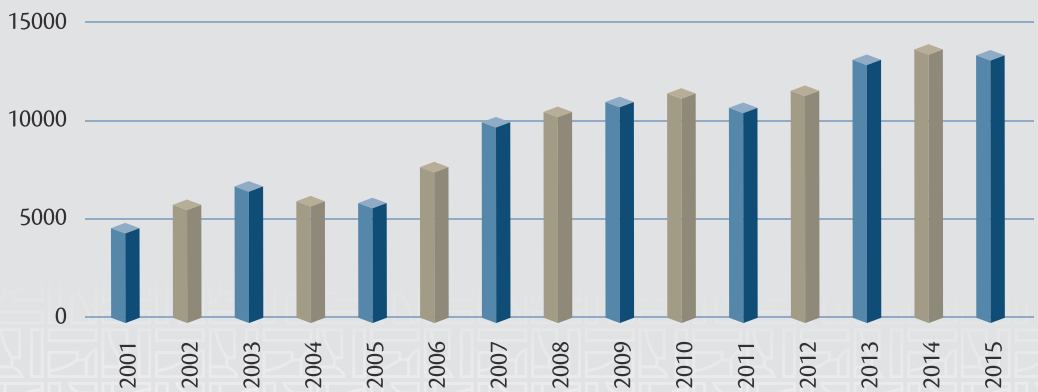
6: Oil Companies & Bunker Suppliers in Fujairah[18]

Oil Trading Companies	Bunker Suppliers
1. Aegean Oil Terminal Fujairah 2. Emarat 3. Enoc Lubricant (ELOMP) 4. ENOC Horizon Terminal 5. Ecomar 6. Fujairah Oil Terminal 7. Gulf Petrochem 8. GPS Chemoil 9. IL & FS Prime Terminal 10. Middle East Tanking Solution 11. Socar Aurora Fujairah Terminal 12. Vopack Horizon Fujairah Terminal 13. VTTI Fujairah 14. Al Brooge Terminal Fujairah	1. Aegean Oil Terminal Fujairah 2. Gulf Petrol 3. Akron 4. Oil Marketing 5. Aegean Bunkering 6. VTTI Fujairah Terminals 7. Fairdeal 8. BP Middle East 9. Royal Bunkering 10. Pearl Marine 11. Apsco 12. Fujairah Bunkering FZE 13. Middle East Gulf Bunkers 14. GP Bunkering FZE 15. Petrochina International 16. Al Shareq Al Matawaset (Middle East) Co. Ltd 17. A.B.C. Bunkering Company LLC

[16] Port of Fujairah Paper-Government of Fujairah
[17] The figure does not include storage from Abu Dhabi's Crude Oil Pipeline (ADCOP), which provides roughly 1.2 million m3 of space
[18] Port of Fujairah Data

Today, the anchorage handles 13,734 vessel calls, and provides 430 services through 105 supply boats. (See Fig 2 below). In 2011, 17 million barrels per day transited the shipping lane, according to the Energy Information Administration. The oil carried by those tankers accounted for nearly 40% of global seaborne, traded oil.[19] Today, Fujairah Port services 100,000 ships per year and brings in revenue AED 14.7 billion per year[20] (approx. US$4 billion).

Figure 2: Vessels Called Fujairah Offshore Anchorage Area (FOAA) – 2000 - 2015[21]



VI. Leveraging Fujairah's Strategic Importance

Fujairah's strategic importance was greatly leveraged when in 2008 the government of the UAE commissioned the construction of the Abu Dhabi Crude Oil Pipeline (ADCOP)[22] which allows the UAE's premium crude to be exported without entering the geopolitically sensitive Strait of Hormuz. (See Fig 3 map showing ADCOP)[23] [24]. The 48" diameter pipeline is able to transport oil from Habshan, the current collection point of Abu Dhabi's onshore crude oil production, to the port of Fujairah, covering a distance approximately 400km, at a rate of 1.5 million barrels per day (bpd), with capacity to reach 1.8 million bpd - or about 70% of UAE's typical crude oil export.[25] The pipeline is significant in safeguarding global oil supplies from potential regional conflicts.

[19] Port of Fujairah Statistics
[20] Ashley Bhan, Fujairah Stands Firm, Bunkerworld (2015) ; Petromedia, Bunker Bulletin Vol. 17
[21] Ashley Bhan, Fujairah Stands Firm, Bunkerworld (2015)
[22] The pipeline is built by Abu Dhabi based International Petroleum Investment Company (IPIC) and operated by Abu Dhabi National Oil Company's (Adnoc) onshore unit, Abu Dhabi Company for Onshore Oil Operations (Adco).
[23] Samantha Cacnio, Embracing Change: Fujairah's Evolving Landscape, Bunkerworld,
[24] About 20% of the world's oil is transported through the Strait of Hormuz
[25] Lynda Davies, Port of Fujairah: Set for Further Growth, Tank Storage Edition, March/April 2014

To serve the pipeline, an export terminal has been constructed. It is made up of eight crude oil storage tanks each with a capacity of 1 million barrels, expandable to 12 million barrels in total. Tankers are loaded at the new Very Large Crude Carrier (VLCC) loading facility.

Figure 3: Abu Dhabi Crude Oil Pipeline (ADCOP)[26]

VII. Competitiveness in a Volatile, Global Energy Market

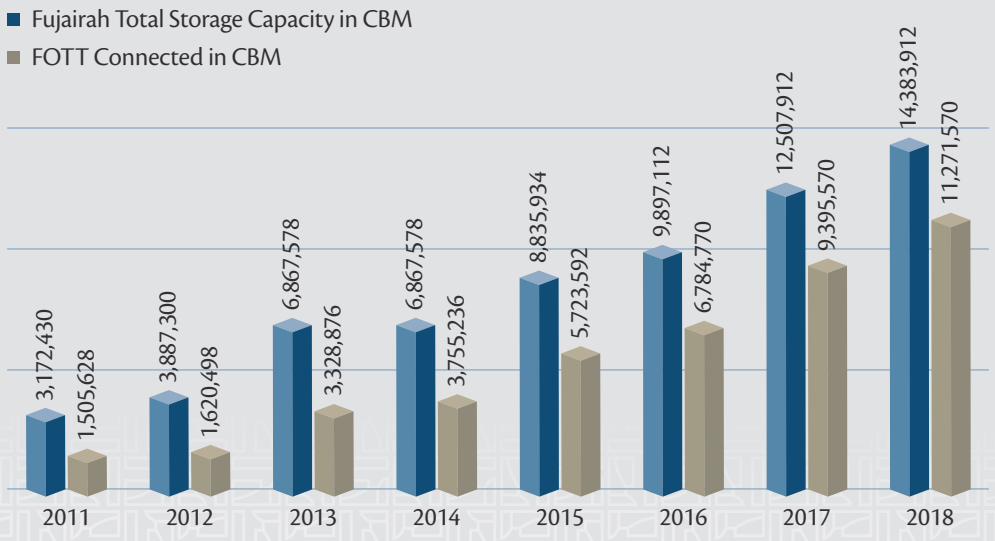
The North American innovation in the hydraulic fracturing of tight oil reservoirs, has dramatically altered the energy landscape. This has significantly affected oil prices across the world, bringing the prices to lows not seen since the 1970s creating an uncertain market for oil supply and demand and inevitably having a knock-on effect for the bunkering industry. Bunkering is affected by this oil market environment in which there is a delicate balance between prices, the marginal cost per barrel and future supplies. The uncertain energy outlook has triggered the cancelation of many projects globally, jeopardizing much-needed investment in oil infrastructure, including bunkering. Yet, analysts suggest that the current low cost, and over supplied oil market could be turned around within the next few years and that it is critical to ensure investment in future capacity and infrastructure in place to meet rising demand.[27]

[26] Photocredit: BNC Network
[27] Rystad Energy

Added to the uncertainty of the global context is the fact of the rising regional competition that is fast becoming an important reality of the Middle East and is transforming maritime landscape. The ports of Sohar and Duqm in neighboring Oman have significant port development projects underway.

With a long-term view, Fujairah is continuing to build its capacity and investing in its future growth. The port plans to strengthen its bunkering operations and to develop Fujairah as a global hub for both oil and oil product.[28] Alongside plans to develop the port as an oil export point, the Fujairah bunkering hub is expanding its overall land-based bunker storage capacity, in partnership privately owned terminals. The additional storage facilities scheduled will include capacity for 12 million oil barrels and three single point mooring buoys for deep-water tank loading. (See fig 4 below). According to the Port Authority, between 2011-2018 it will have added close to 11.6 million m3 of new privately owned storage space. Storage additions will come from companies including: Vopak Horizon, Gulf Petrochem FZC and GPS-Chemoil and others[29] (See Box 7).

Figure 4: The Growing Storage Capacity at the Fujairah Port [30]



[28] Petroleum products are materials derived from crude oil and are complex mixtures. The majority of petroleum is converted to petroleum products, which includes several classes of fuels including gasoline, jet fuel, diesel fuel, heating oil, as well as asphalt, tar, paraffin wax, lubricating and other heavy oils. Refineries also produce other chemicals, some of which are used in chemical processes to produce plastics and other useful materials.

[29] Ashley Bhan, Fujairah Stands Firm, Bunkerworld (2015)

[30] Fujairah Oil Tanker Terminals (FOTT), Endress+Hauser

7: Growth in Storage Capacity

Vopak Horizon Fujairah is currently the hub's largest bulk liquid storage provider. Since it began operations ten years ago, the Vopak Horizon Fujairah terminal has seen its capacity grew from 500,000 m3 to around 1.5 million m3 today. Chemoil and its joint venture partners Gulf Petrol Supplies (GPS) provide another 86,000 m3 of land-based storage. The first phase of the GPS-Chemoil terminal began operations in February 2008 with Chemoil projecting a capacity of at least 326,000 m3. A new entrant to the market, the United Arab Emirates- based Gulf Petrochem FZC is thought to have a lease of 200,000 m2 of land near Fujairah port as a site for a new oil storage terminal. Gulf Petrochem, founded in 1998, is headquartered in the neighboring emirate of Sharjah. It has a range of interests that include petroleum product trading and oil storage. It already operates a 42,000 m3 storage facility in Sharjah port.

The expansion includes augmenting the capacity to its berths - completing a further 1,500 meters of oil berth, to complement the 840 meters already in operation, with more berths being considered. Additionally, a Very Large Crude Carrier (VLCC) berth (approximately 27 meters) has been added to allow the servicing of oversize vessels. Also part of the Master Plan for expansion is the Fujairah Refinery - a grassroots refinery complex is currently underway and anticipated for completion in 2018. The refinery located close to ADCOP, will be designed to process a mixture of UAE and regional crude oils. With a processing capacity of about 200,000 barrel per day (bpd), it will produce a range of distillates (which may include gasoline, fuel oil, gas and diesel oils, jet fuel as well as marine bunker fuels), primarily for the northern emirates of the UAE, for export and for bunker fuel to meet the high demand in Fujairah.

VIII. Competitivenss through Diverisfication Along the Energy Value Chain

With a view to long-term sustainability and diversification, Fujairah continues to diversify investment and capacity in refining oil, chemical storage and biofuels as well as diversifying its operations along the energy value chain, expanding its services into providing Liquefied Natural Gas (LNG).[31] Emirates LNG is a joint venture between Mubadala Petroleum and International Petroleum Investment Company (IPIC) and was formed to secure additional gas supplies to meet energy demands for the UAE's growing economy. The Emirates LNG project will develop a new LNG regasification facility in Fujairah. Once complete, Emirates LNG will commence the import of LNG cargos from the international market and the facility will be capable of supplying 1.2 billion cubic feet/day of clean, efficient natural gas, to markets. In the second phase, the port plans on installing LNG bunkering. This represents a diversification in the energy portfolio in which storage is currently mainly focused on crude and refined oil products.

Today, Fujairah is situated at heart of the new South energy corridor at the head of an integrated infrastructure opening up the East of Suez region to Asia. As such it is competitively positioned as a gateway for the Gulf States a gateway to lucrative Asian markets, and has put in place the foundations to respond to the changing energy landscape of the region, and remain globally competitive.

[31] LNG or liquefied natural gas is natural gas, which has temporarily been converted into a liquid form. This is done to save space—610 cubic feet of natural gas can be converted into a single cubic foot of LNG, making it easier to store and transport. A refrigeration process is used to condense natural gas into LNG by cooling it to a temperature of minus 260 degrees Fahrenheit. This refrigeration process is usually accompanied by treatments that remove water, carbon dioxide, hydrogen sulfide and other impurities. To maintain this low temperature during storage and transport, LNG must be placed into cryogenic tanks - heavily insulated tanks equipped with refrigeration units. When a shipment of LNG reaches its destination or when LNG is being removed from storage it must be re-gasified. This is done by heating the LNG and allowing it to evaporate back into natural gas. Regasification is usually done at a facility where the gas can be placed into storage or directly into a pipeline for transport. (Source: geology.com)

XI. Conclusion

The emirate of Fujairah has emerged world leader as the world's second largest bunkering port and major logistics hub owes a great deal to the emirate's competitive approach. It stands as an excellent example of how foresight, appropriate government support and strategic investment to leverage a geographic advantage can result in an industry becoming globally competitive. Fujairah's leadership had the foresight to see an opportunity to diversify general port operations into a bunkering port that would take the emirate to the next level of competitiveness, effectively making a major mark for the UAE on the global stage. Key elements of the success of this intervention were the ability of government to identify the resource, one that may potentially have been overlooked. Another feature of its successes was the leadership of both the federal-level and emirate-level vision and leadership to support this vision to create a highly capital-intensive new industry through investment and on-going support. By perceiving and satisfying the need of customers - vessels transiting through the Strait - helped the Port of Fujairah diversify its operations and to specialize and reach world competitiveness. This competitiveness was further solidified through partnerships with world-leading companies for port and bunkering operations. Done correctly, economic policies can be highly effecting in supporting the development of globally leading industries.

A nation's competitive advantage in a global marketplace is underpinned by the ability to effectively manage and utilize resources in efficient and sustainable ways. As powerfully demonstrated by case of Fujairah not having a particular resource (oil) does not mean that you cannot participate in the value chain of that resource. On the contrary, by being able to access that resource, and by being creative, allows for the development of an industry around it.

Furthermore, the Port of Fujairah innovates continuously to upgrade its service lines to stay and lead in the game. To keep pace with global and regional competition in the maritime landscape, Fujairah continues to innovate and diversify its approach to port services, to continually create services that meet the needs of the world market, based not solely on price competitiveness, but on adding value. These innovations not only enable the Port of Fujairah to maintain an edge in an increasingly competitive environment, but the advances contribute to the diversification of UAE's economy and prosperity of the country.

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Acknowledgements: ECC gratefully acknowledges the contributions of the individuals from the Government of Fujairah, and the Fujairah Port who gave generously of their valuable time and expertise, in particular, Dr. Salem Khalil, Technical Advisor to the Government of Fujairah. Our appreciation also to Capt. Mousa Murad, General Manager, Port of Fujairah, Capt. Salem Al Hamoudi, Deputy Terminal Manager, and John Mittelstien, of the Port of Fujairah, and their respective teams. We are also grateful to Mike Peters at Shell and Jens Winkelmann, Managing Director at Endress+Hauser (UAE) for the interviews they provided and the insights that they shared. Valuable editorial support was provided by the ECC staff: Hanan Ahli [Director of Competitiveness Culture Department].

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