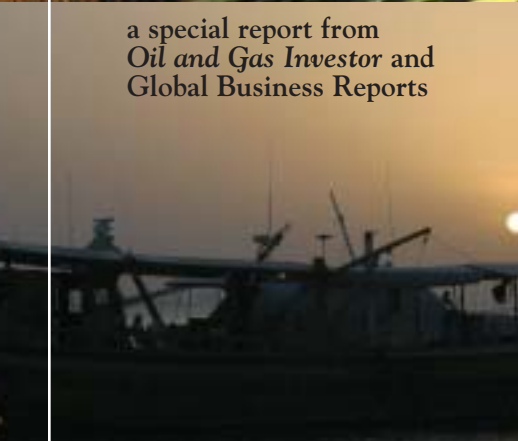


Energy Opportunities In Qatar



a special report from
Oil and Gas Investor and
Global Business Reports



Big Power in a Small Package

By any standards, the state of Qatar is small. With a population barely over 800,000 and a land area (11,430 square kilometers) roughly three times smaller than Belgium, this barren, sandy peninsula jutting out like a raised thumb into the Persian Gulf, north of Saudi Arabia, would still be hidden in the shadows of anonymity if it were not for its immense hydrocarbon reserves.

Despite its reduced size and ungrateful topography, Qatar is currently making a big splash due to a combination of easily accessible gas reservoirs and visionary leadership. This young nation is rubbing shoulders with the big boys of the hydrocarbon world and this has bought a taste for ambition.

Qatar became independent on September 1, 1971, following a period of British protectorate status that began in 1916, after the Ottomans pulled out. The ruling family that was officially put in place by the Anglo-Ottoman agreement of 1913 (but had ruled virtually since the mid-1800s) remained in power and Sheikh Khalifa bin Hamad Al-Thani became Qatar's first emir in the newly formed independent emirate.

Qatar's economic tradition was built on trade and a prosperous, albeit rather primitive, pearling industry. The discovery of oil in the early 1940s revolutionized this and in parallel with the changes occurring in the whole region, the bulk of national income quickly became dependent on the extraction of hydrocarbons.

Oil revenues provided for a solid power base, particularly after 1973's first major world oil crisis, and this should have led Qatar on the path to increasing development as this newfound prosperity spurred immigration and substantial social progress. However, the region was still young and far from stable. Border disputes with both its neighbors, the island of Bahrain to the west and Saudi Arabia to the south, were minor issues in comparison with the threat that Iran posed to stability in the Gulf States in the aftermath of the 1979 revolution.

Partly out of concern for their safety and partly to coordinate trade and economic development efforts, Qatar

joined Kuwait, Bahrain, Saudi Arabia, Oman and the United Arab Emirates in forming the Gulf Cooperation Council (GCC) in 1981.

Though Qatar was slowly finding its place in the world, development was being gravely hampered by the continuous diversion of the country's oil revenues into the personal coffers of the ruling emir. In a move to change this, the current emir, Sheikh Hamad bin Khalifa Al-Thani, took over the reins of power from his father in a bloodless overthrow in 1995 that won the support of the ruling family, the Qatari armed forces and Qatar's international allies,



This special report was prepared by London-based Global Business Reports, after meeting with several Qatari oil and gas players. It covers development of this country that is blessed with abundant hydrocarbon resources and how it intends to capitalize on this underground wealth. Authors are Ayse Hazir, project and marketing coordinator (ayse@gbreports.com), and Guillaume De Bassompierre, oil and gas reporter, Global Business Reports (guillaume@gbreports.com).

Cover photo of the Ras Laffan LNG plant courtesy of RasGas.

Oil and Gas Investor • September 2004



Pure Energy

from Qatar to the World



RasGas The Power of the Drop www.rasgas.com



A serene desert covers a wealth of hydrocarbon assets. (Photo courtesy Guillaume de Bassompierre.)

spearheaded by the U.S.

The threat of a counter-coup was short-lived as father and son were reconciled the following year, with Sheikh Khalifa bin Hamad Al-Thani officially withdrawing his claim to the throne and conceding the leadership of Qatar formally to his heir.

As shown by the quick progress achieved by Qatar in the past decade, the change of power proved to be the breakthrough that was to firmly establish this tiny nation on the path to sustainable growth, development and rapid social and political progress. Indeed, Qatar is now often hailed as a model within the region for the way it has been able to balance a conservative traditional heritage with substantial liberalization of society in political, social and economic terms.

At the same time, the challenge posed by the country's heavy reliance on hydrocarbon resources seems to also have been confronted and transformed into a locomotive for diversification

into industry and services, while a highly prioritized focus on education ensures that all this wealth will not be put to waste.

The following report will attempt to analyze in detail what kind of opportunities this modernized, dynamic Qatar offers and how its oil sector, gas sector, the related downstream industries and services are structured and where they are headed in the future. Quite logically, one of the major

Much of Qatar's bright future now relies on the success it has had in securing long-term outlet markets for gas.

focuses will therefore be the famed North Field, whose 6,000-square-kilometer surface area containing reserves estimated in excess of 900 trillion cubic feet of gas, make it the largest single concentration of natural gas on the planet.

With dwindling oil reserves, how this gas reservoir is exploited, industrially and commercially, will play a major part in Qatar's hydrocarbon industry and economy in the years to come. Much of Qatar's bright future now relies on the success it has had in securing long-term outlet markets for gas, hand-in-hand with the international players.

Another portion of the country's income will be derived from the role of its petrochemical industries, also in joint-venture agreements with world-class companies. And finally, we will look at the Qatari service sectors and financial institutions whose growth has been fueled by the underground bonanza. □

Sowing the Seeds of Success



Three decades of commitment to our customers are now bearing fruit. QAFCO high quality Ammonia and Urea are increasingly helping countries improve agricultural yields, contributing to higher standards of living around the world.

We're also most proud of our certification to ISO 9001:2000.

This rigorous independent audit confirms that the management systems of our plants and production facilities meet the world's highest recognised standards of quality, safety and environment protection.



QAFCO

**Largest
Quality
Urea
Producer**

QATAR FERTILISER COMPANY (S.A.Q.)

MAIN OFFICE

P O Box 50001, Mesaieed, Qatar
Tel. +974 47797779, Fax +974 4770347
Telex 4215 QAFCO DH
Website: www.qafco.com

MARKETING DEPARTMENT

Al Bida Tower, Al Bida, Doha, Qatar
Tel. +974 4358686, Fax +974 4358484
Telex 4948 QAFCO DH



Floating on Gas



Offshore Qatari wealth, extracted by RasGas. (Photo courtesy RasGas.)

Talk of Qatar's oil should not make readers oblivious to the fact that we have not really begun to analyze the hydrocarbons in the peninsula until we have mentioned natural gas. Proven gas reserves in the North Field alone currently stand at more than 900 trillion cubic feet, making it by far the largest single gas reservoir in the world and placing Qatar in third place in terms of gas-reserve rankings (behind Russia and Iran).

With oil fields projected to be mostly depleted by 2023, investments aimed at dwindling oil field recovery and further discovery pale in comparison to the investment hopes that the Qatari government places in the country's gas potential being the locomotive for its economy in the future. The government is therefore developing efforts to exploit its vast reserves to the maximum, in all possible directions.

Though the so-called North Field's potential has been known since 1971, it was not until the 1990s that this immense gas reservoir started to be exploited. Gas was not then as strategic an asset as it is now, and furthermore, oil was producing lucrative national income in any case.

Thus, in the early 1970s, Qatar flared about 80% of the 16.8 million cubic meters of gas produced daily in association with crude oil extraction. It was only later in that decade that the country made progress in using its gas resources, as despite several setbacks, the proportion flared fell dramatically.

This paved the way for the development of a natural gas industry that kicked into high gear with the establishment of the Qatar Liquefied Gas Company Ltd. (QatarGas) in 1984 as a joint venture of QP (65%), TotalFinaElf (10%), ExxonMobil (10%) and Mitsui and Marubeni (7.5% each). This venture aimed to market and export liquefied natural gas (LNG) from the North Field.

A second company was formed with similar objectives in 1993, Ras Laffan LNG Co. (RasGas). Its major shareholders

DOHA BANK
FIRST WITH SO MANY FIRSTS

- ...with Mobile Branch
- ...with SMS Banking
- ...with Phone Banking
- ...with W@P Banking
- ...with Invest Service (SMS based stock alerts)
- ...with Indian Equity Service
- ...with Home Banking
- ...with Bilingual Website
- ...with Foreign Currency Expensing ATM
- ...with ISO799 Certification

بنك الدوحة
DOHA BANK There's so much to look forward to.
www.dohaibank.com.qa

are QP (63%), ExxonMobil (25%), Korean Kogas and two Japanese partners. In 1996 and 1999 respectively, these two consortiums delivered their first shipments of LNG to East Asian markets. By then, Japan and Korea were already major consumers and possessed a mature distribution network that made them prime initial targets for Qatari exports. This also explained the presence of shareholders from these countries in the QatarGas and RasGas ventures as the commercial strategic partners.

Radical changes in the LNG markets in recent years have allowed for tremendous expansion plans for both companies and for Qatar. Jerry Wolahan, managing director of RasGas, says, "If the initial target was the Asia-Pacific market and this remained a steady customer, when demand went up in the U.S. and Europe, Qatar started to center its strategy on these markets. We want to be diversified as a supplier in all demand areas.

"Five years ago, we were not quite sure we could be competitive in the U.S., since at that time, gas was being sold at US\$2 per cubic meter."

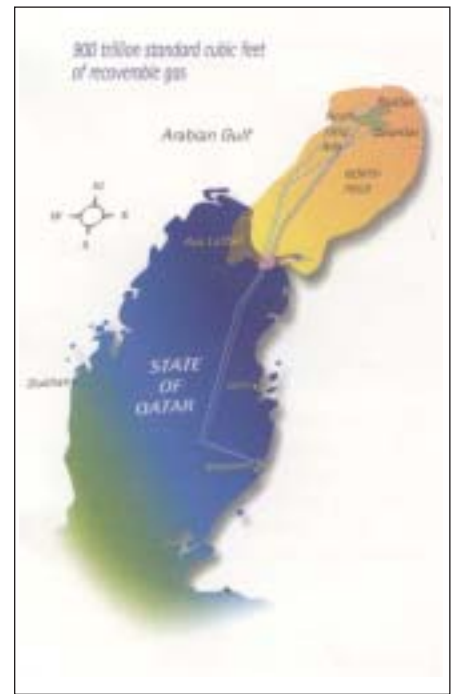
Large sales did not happen in the U.S. and European markets where an occasional spot cargo was delivered but

nothing more. Instead the emerging markets of Taiwan and India were acquired in long-term sales agreements. Then, the picture changed.

"What happened in the U.S. was that the amount of gas produced lessened at the same time that LNG supply grew; and the same thing happened in Europe," Wolahan says. "The North Sea production was slowing down and Russia, which has a lot of gas but has to deliver it through pipelines, could not supply demand with its infrastructure. So, the market concept changed and we started seeing markets requesting ever-higher LNG volumes by cargo."

This of course, provided a blessed opening for Qatari exporters RasGas and QatarGas into markets with high and increasing consumption of natural gas. Wolahan expects that in 2010, the U.S. will need imports of 45 million tons of LNG and that the market is going to change tremendously because of Europe and the U.S.

Indeed, the use of gas is definitely on the rise, as it is increasingly seen as an environmentally sound resource by the world's energy markets. The portion of gas used in electricity production, for example is expected to grow from 15%



Qatar flared most of the gas it produced with oil in the early 1970s.

now to 24% by 2010.

These new openings have nurtured understandable and growing ambition in both of Qatar's LNG principle exporters.

Gulf Drilling International
GDI
 International

A National Drilling Operator at the Measure of Qatar's Ambitions

Gulf Drilling International, the new joint venture between Qatar Petroleum and international partner Japan Drilling Company, combines the best of two worlds' local and regional expertise with technologically advanced drilling know-how.

GDI, which commenced operations in June, 2004, is poised to contribute actively in the development of Qatar and the Region's hydrocarbon resources and opportunities.

Gulf Drilling International
 Address: P.O.Box: 9072 Doha - Qatar
 Tel: +974-4378777 Fax: +974- 4434788 E-mail: gdi@gulldrilling.net

Faisal Al Suwaidi, vice chairman and managing director of QatarGas, expects changes in world markets in the future that have implications for his company and RasGas. "We don't see supply or demand as bottlenecks anymore, especially with this urgent demand in the U.S. and U.K. Our vision at QatarGas is to be the No. 1 worldwide LNG producer by 2010."

In terms of sheer production, QatarGas' plan is to move from 10 million tons per year to 41 million by 2014, further illustrating the enormous scope of expansion projects.

Al Suwaidi says, "(While QatarGas) started with about US\$4 billion in projects, now with our actual expansion plans, projects amount to US\$20 billion a year."

One of the infrastructures being built consists of two large trains earmarked for sales to the U.K. in a US\$11-billion project, which would allow upstream development with a dedicated area for production in the North Field.

Called QatarGas II, it is planned to come onstream in 2007. The other is called QatarGas III and it will be another LNG train but for the U.S., and it will be a one-train operation.

RasGas has an expansion project of its own called RasGas II involving the construction of two new LNG plants that should start producing later this year and in early 2005, bringing total capacity to 16 million metric tons per annum.

Of course, aside from the obvious financial implications, the size of these projects also involves a major technological push. Al Suwaidi explains, "We have to make sure that we push technology enough to keep pace with our requirements. Although it came late in the LNG industry, this little country, through its aggressive approach, pushes technology every time we do a project."

For example, when QatarGas' first three trains were built, in 1996, their initial capacity was 2 million tons each. "One and a half years later, we built two trains at our sister company RasGas and those were 3.3 million tons each. In both of these instances, they were the largest ever built before.

"When we built the two trains for RasGas II, those were for 4.8 million tons each. There are no other trains built of this size. And now, our next train will be 7.8 million tons."

These numbers of course require huge gas reserves and, were it not for the availability of a reservoir as unique

"Our vision at QatarGas is to be the No. 1 worldwide LNG producer by 2010."

***Faisal Al Suwaidi,
QatarGas***

as the North Field, none of these technological developments would be possible. "To secure 7.8 million tons from a single field to produce that much LNG is a big challenge," says Al Suwaidi.

As both Qataris and foreign shareholders learn from these developments, they may create new standards across the world. Joint-venture partner Wayne Harms, president and general manager of ExxonMobil Qatar Inc., says, "We very much value the benefits of our partnerships with QP. We are here to help, to bring our technology, our expertise, whatever is necessary to make the joint ventures successful and, in doing so, we grow also."

The expansion project at RasGas II will take advantage of many synergies with the existing trains 1 and 2 facilities, resulting in lower expansion-project and capital costs and an increase in security of supply for the mutual benefit of all parties.

Examples of such synergies include facilities sharing in the utility areas, as well as sharing of existing storage and loading infrastructure. The expansion project will also take advantage of technological advances to further reduce costs and enhance operating performance.

The final argument in favor of expansion lies in the structure itself, as Wolahan explains, "(They) can share assets across RasGas I and RasGas II. We also operate as one total plant so we increase our reliability; if we have a problem with one part of the production facilities, we can always back it up with another part. So, it gives us an enormous amount of reliability, the more trains we have in the facility."

The excitement surrounding the two main players, RasGas and QatarGas, could easily overshadow other projects exploiting the North Field's reserves for

different purposes. There are several developments of interest that underline the willingness of the Qatari state to use gas in as many diverse forms as possible, both industrially and commercially.

One of the most notable of these other projects is the Dolphin project, which will connect Qatar to the United Arab Emirates through a natural gas pipeline grid. Initially, Qatar will sell around 222 billion meters per year of North Field natural gas to Abu Dhabi as of 2006 but this will grow substantially when Dubai and Oman are added later.

Another project worth mentioning, that will feed on an upstream development in the North Field, is the construction of a gas-to-liquids (GTL) plant in Ras Laffan as part of a joint agreement between Shell and QP. Its planned production objective of 140,000 barrels per day of GTL products—primarily naphtha and transport fuels (with a smaller quantity of normal paraffins and lubricant base oils)—could make this US\$5 billion investment the largest plant of its kind in the world.

A second GTL project, this one borne out of a joint venture agreement between QP and Sasol, is scheduled to start in 2005, producing 24,000 barrels per day of fuel, 9,000 per day of naphtha and 1,000 per day of liquefied petroleum gas for a total investment of about US\$800 million.

RasGas and QatarGas are also acting in concert in the construction of a helium purification and liquefaction plant that is expected to supply roughly 220 million cubic meters of liquid helium, or more than 10% of the world's total helium market.

On a final note, gas-feed from the North Field is also increasingly used for industrial petrochemical purposes.

In short, the coming onstream of the North Field in the last decade has provided Qatar with endless record-breaking possibilities to feed world markets with a series of technologically innovative applications of natural gas that is expected to assure its economic security for decades to come.

As with oil, the strategic emphasis placed by QP on the use of well-equilibrated joint ventures ensures that it will remain a pacesetter North Field provides many North Field provides many possibilities. Several new, larger LNG trains are under construction, and two gas-to-liquids plants and a helium liquefaction plant are also planned. □

Every Last Drop

Oil was discovered in Qatar in the Dukhan onshore field on the Gulf of Bahrain coast in 1939, and the first oil was exported in 1949. Offshore exploration began in 1952 and extraction began from the fields around Halul island, off the east coast of Doha, around the mid-1960s. In 1961, Qatar joined OPEC, gaining some leverage as far as oil-pricing policies were concerned, but also placing itself under the obligations and restrictions issued by the organization.

The offshore discoveries prompted a sharp increase in the nation's oil production until 1973, the year of the first world oil crisis, when Qatari oil production peaked at 570,000 barrels per day, enhanced by first production at the Bul Hanin offshore field that same year.

From there on, production has steadied at around 500,000 barrels per day before slowly declining. This decline was accentuated throughout the 1980s partly because of dwindling reserves and increasing difficulties of extraction and partly due to OPEC's limitations—even though these were bypassed in 1989 and 1990 to take advantage of the surge of international oil prices caused by the first Gulf War in Iraq.

Until a few years into Qatari independence, a consortium of international companies that had been granted long-term concessions carried out all petroleum exploration and extraction. Through two emiri decrees—in 1974 and 1977—this policy was reversed and all oil-related activities came under full national control with the establishment of the Qatar General Petroleum Corp. (QGPC), which subsequently changed its name to today's Qatar Petroleum (QP).

QGPC continued the exploitation of oil in principal fields already discovered where most easily extracted and, following the coup in 1995, it introduced a number of new policies aimed at increasing oil production, locating additional reserves before existing reserves become too expensive to recover, and investing in advanced oil-recovery systems to extend the life of existing fields.

In light of declining production during the past decade, this policy involved inviting technically skilled foreign oil companies into production-sharing agreements designed to encourage them to improve their recovery schemes and to explore for new oil deposits, both onshore and offshore, in several blocks earmarked for potential discoveries. International bidders were therefore signing two kinds of joint-venture agreements with the state-owned QGPC.

Exploration and production-sharing agreements (EPSA) involved prospecting in blocks suspected to contain oil reserves but previously untapped with an aim to exploit discoveries in the future. Development and production-sharing agreements (DPSA) were in fields either already in production or merely known to exist and that required capital or technological investment to come onstream at profitable rates.



Qatari oil production is becoming increasingly sophisticated.

Foreign investment in Qatar's oil industry was thus given a new boost and QP can now boast a sizable quantity of joint-venture agreements with a large number of the world's most renowned enterprises. Through these or on its own, the state-owned QP, chaired by Minister of Energy & Industry Abdullah bin Hamad Al-Attiyah, remains at the heart of every aspect of the oil industry in the country, whether exploring, drilling, extracting, transporting, storing, refining or even commercializing, which it does principally to Asian markets, with Japan currently the largest customer by far.

The same is true for downstream operations in the industrial sectors and for the extraction of associated and non-associated gas.

This being said, it can easily be argued that a large part of QP's success is owed to the associations it has developed, as foreigners themselves will confirm. Roger Myers, general manager for Canada-based Talisman Energy, says, "The way the minister has led the industry is indicative of a capacity to work with people and understanding how they work. The fact that they want to work with the foreign operators here is very important.

"In general, QP likes and wants the partnership concept; they want to be brought along and do not like to be treated in an 'us and them' fashion."

Currently, Qatar contains proven recoverable oil reserves estimated at 15.2 billion barrels with a capacity to produce

850,000 barrels per day though current OPEC quotas limit Qatari exports to 674,000 per day as of August 1, 2004. The target for the future has been set at 1 million barrels per day, and with a growth rate that reached 8.3% in 2003, this figure seems quite attainable.

Between 55% and 60% of this total is being extracted by QP as the lone operator in three fields. The main one is Dukhan, which comprises three reservoirs of crude oil with an API gravity of 40.9° and an average sulfur content of 1.2%.

Daily production from Dukhan is around 320,000 barrels, though there are plans to boost production further, partly through a scheme of powered water injection aimed at enhancing oil recovery and maintaining reservoir pressures. The other two fields QP operates alone are both offshore and significantly smaller fields. Maydan Mazham produces around 60,000 barrels per day—far lower than past peaks but on the way to a recovery that could take it back to a rate of 75,000 barrels per day by the end of this year.

Bul Hanine holds about 700 million barrels and development plans could bring its capacity to 100,000 barrels per day by the end of 2004.

“The fact that [the ministry wants] to work with the foreign operators here is very important.”

*Roger Myers,
Talisman Energy*

The remaining 45% to 40% are thus extracted in conjunction with a number of foreign oil companies that hold DPSAs: TotalFinaElf discovered the Al-Khalij Field in 1991 off Halul and after several upgrades is now expanding production capacity there to 80,000 barrels per day, up from the current 60,000. Occidental Petroleum operates both the North Dome (90,000 barrels a day) and South Dome (17,000) Idd El Shargi offshore fields, which are related; and the Japanese consortium Qatar Petroleum Development Co. operates the smaller

offshore oil deposits known as Al-Karkara and A-North which are to come onstream in 2005 with an initial output of 10,000 barrels per day.

As explained earlier, exploration is ongoing and thought to be quite promising. The only onshore EPSA is held by ChevronTexaco, which will survey virtually the whole Qatari peninsula except the area around Dukhan. However, several offshore blocks are currently being scanned.

Maersk operates already in the productive Al Shaheen offshore field, which should reach 200,000 barrels per day of output this year, and it signed an EPSA with QP in April for an extension of its actual Block 5 area.

Anadarko Petroleum Corp. is conducting seismic surveys in blocks 11 and 13 after successful findings have brought Block 12 (now known as Al Rayyan Field) into production. EnCana Corp. is currently evaluating entry into the second exploration phase on Block 2. And finally, fellow Canadian company Talisman Energy is engaged in a US\$16.5 million commitment over five years for the exploration of Block 10 and recently engaged in a 1,200-square-kilometer 3-D seismic program this summer. □



Contributing to Development

in the State of Qatar since 1965




The Oil and Gas Division of Almana Trading Company offers world class service in Qatar and its territorial waters to promote and assist:

- The business activities of foreign companies that are involved in various projects associated with the development of the State's energy resources.
- The introduction of foreign company products and services to the oil and gas industry (upstream / downstream), commercial and industrial infrastructure development sectors.
- Companies considering or entering into joint venture arrangements.






Almana Trading Company
 11. Floor, Almana Tower, Airport Road P.O.Box: 491 Doha - Qatar
 E-mail: almanaog@qatar.net.qa Website: www.almanagroup.com

Tel: +974 462 12 22 Fax: +974 462 24 20

Snowball Effects

As is to be expected, the positive aspects of activity generated by big-scale oil and gas projects has trickled down to virtually every sector of the Qatari economy and triggered an avalanche of opportunities and optimism that benefits local companies' growth and encourages foreign investment to pour in.

This is the case for sectors such as construction, infrastructure and utilities, which are booming in parallel to the country's hydrocarbon production, as well as for education, finance, services and trade where the impetus of the general economic expansion driven by revenues and investment in oil and gas is being felt in similar, albeit less direct, ways.

For example, it is hardly surprising that QP should wish to extend its activities to drilling as well. It entered a partnership in March with Japan Drilling Co. (JDC) to create Gulf Drilling International (GDI). Cooperation is its strategy of choice.

At the signing ceremony, Qatar's minister of energy and industry, Abdullah Bin Hamad Al-Attiyah, highlighted the benefits of such synergies. "The establishment of a national drilling company constitutes an important stage in contributing to the development of oil and gas in Qatar, supporting the local economy and creating employment opportunities for Qataris to work in the management and operations of an internationally recognized drilling company."

Abdul Jabbar A. Noor Saifaldeen, managing director of GDI, says, "We always intended to establish a national drilling company because of the amounts involved in drilling budgets for (national oil company Qatar Petroleum) and the objective to strategically secure drilling rigs.

"When it became clear that the forecast for the next 15 to 20 years was very healthy, we decided to go ahead and start looking for a suitable partner."

Drilling evidently is a very direct side-effect of enhanced activity in the hydrocarbons sector. And if this example still involves the large shadow of QP's presence, many a company dealing in products or service is reaping equal benefits under other forms of cooperation with local private businesses.

While some of the major service enterprises have managed to establish a presence here on their own, most foreign companies bent on laying their stone in the edifice of Qatar's hydrocarbons boom choose to associate themselves with a local representative agent. This formula allows foreign contractors or traders to have a shot at the juicy tenders that are streaming onto the Qatari market with relatively low risk.

For one, their investment will be limited until actual business is secure as there is no need to establish an office and have costly expatriate human resources just to fish out contracts. Also, the agent or partner representing their interests will have extended knowledge of local customs, a network of relationships within QP, its partners and different

ministries and even, in most cases, an intuitive knowledge of where the best opportunities will be in the future.

And another benefit, among several, is that the Qatari partner can also solve thorny issues such as managing the labor force that will need to be hired in the aftermath of obtaining any type of local contract.

There are many many such companies to be chosen from for those eager to participate in the opportunities that Qatar's development provides in sectors as varied as construction, utilities, infrastructure, industry, education or whatever else is closely or remotely affected by the boom in hydrocarbons. Which "sponsor" is best will depend on which niche is in question.

Companies like the Al Mana Group, the Al Dolaimi Group,



LNG train No. 3, en route to completion.



Local banking is keen on project development, says R. Seetharaman, acting general manager of Doha Bank.

the Al Jaber Group or Salam International to name but a few, are often large conglomerates of long-standing family tradition that spawn many trade arms and can thus effectively represent a large array of international companies in many sectors.

In most cases companies such as these that were previously centered on

trade, have now beefed up their construction activities and included an oil and gas contracting/servicing division that has often become their major focus. Though in some ways too general a statement to be applicable to all entities alike, Abu Issa, chairman and chief executive of Salam International, says, "Right now, we are mainly a contracting-basis company and we want to shift into a manufacturing base and participate in the industrial development of Qatar, which is basically related to oil and gas...."

"The construction boom will last another 10 years probably before it settles, but what will continue to develop steadily is the upstream and downstream energy-related industries."

To do that, Salam International has hired professionals with proven oil and gas backgrounds such as Marwan Taha, executive director.

"Our role here is to provide the local knowledge and expertise on the Qatari market to guide our international suppliers on how business is approached and to give them professional advice both commercially and technically," Taha says.

Saudi-based Arabian Construction

Engineering Co. (ACEC) concentrated at first on infrastructure and utility projects before representing foreign interests in sectors as varied as telecoms, shipping, travel services and control-system equipment. ACEC now concentrates on the oil and gas businesses, albeit with a heavy industrial focus.

Ghaleb Wasfi Shousha, ACEC managing director, says the constant search for business opportunities for the foreign majors ACEC represents is not a one-way avenue. As a facilitator of business for local customers, agent-type companies such as ACEC also spend time researching the globe to match whatever needs come up in the procurement process of their clients with the latest technology, thereby reversing the relationship.

Basically, he says, ACEC's goal is to shorten the distance between the supplier and the end user. In short, if the pool of companies whose interests ACEC represents in Qatar does not meet a particular requirement of a client, it will actively search worldwide for potential candidates to fill this gap. In the process, the client's need is met and a foreign company has received a business opportunity in Qatar.

GULF HELICOPTERS

Rising to New Heights

Gulf Helicopters Company is a wholly owned subsidiary of Qatar Petroleum and is committed to excellence and progressive expansion.

We have been providing safe and efficient helicopter services since 1970 to almost all the major Oil, Construction and Survey companies throughout the Middle East, India, and North Africa.

Gulf Helicopters Co.
 P.O. Box 811, Doha, Qatar Tel: +974 433 3885 Fax: +974 441 1004
 E-mail: mohd@gulfhelicopters.com Website: www.gulfhelicopters.com

ARABIAN CONSTRUCTION ENGINEERING COMPANY

Your Reliable Partner in Qatar

Growth with diversification and success with perseverance and dedication.

Qatar is the pearl of the Gulf and the most potential business in the world of Oil and Gas. Put your long strategy together with ACEC as your partner in Qatar to obtain maximum achievements and success.

Arabian Construction Engineering Company
 Address: P.O. Box: 1277 Doha Qatar
 Tel: +974 4414862 Fax: +974 4430112
 E-mail: acec1277@aol.com

The Al Mana Group also evolved from humble beginnings as a small trading house, and has a longer tradition of serving the oil and gas industry. One of the biggest and most diverse among similar groups—with business divisions including car rentals, computer services and shipping—Al Mana Group considers oil and gas one of its flagships and has grown through partnerships developed with foreign companies dealing either in construction, services or even in equipment products.

Salah Al-Baker, oil and gas director of the oil and gas group, says, “Through the representation of some of the biggest companies in the world, our group has been involved in some of the largest multibillion-dollar infrastructure projects undertaken in Qatar. A few of these projects that were completed recently will be the mainstay of this country’s economy for years to come.”

Meanwhile, Al Jaber Group created a subdivision, Al Jaber Engineering, with the aim of focusing on commercial, engineering and construction services related to the oil, gas and petrochemical sectors.

The Al Dolaimi Group’s case is a little different as it does no

representation work on behalf of foreign companies but more direct service business through its principal subsidiary, National Oil Well Maintenance Co. (NOWMCO), which boasts the greatest capacity related to oil wells, from cementing services to

coiled tubing or even engineering and laboratory work.

Its growth in Qatar soon served as a springboard for further expansion. “The successes of Qatar operations were soon extended to other countries in the region allowing the development of our



Besides oil and gas production, fishing is enjoyed offshore Qatar. (Photo courtesy Guillaume de Bassompierre.)



NOWMCO
National Oil Well Maintenance Co.



National Oil Well Maintenance Co.
NOWMCO, P.O. Box 586, Doha - Qatar

Tel: +974 4677001/2/3/4/5 **Fax:** +974 4672098 / 4677008
E-mail: nowmcoqatar@al-dolaimi.com **Web:** www.nowmco.com

Our Services Include

- | | |
|----------------------|---------------------|
| Coiled Tubing | Laboratory |
| Stimulation | Hydrojetting |
| Cementing | Engineering |
| Nitrogen | Consultancy |
| Helium | |



expertise with the challenge posed by regional variations,” says president and chief executive Abdul Aziz Al-Dolaimi.

“The remote locations of Iran, Saudi Arabia and Indonesia were tackled successfully and operational decisions had to be made proactively. This developed the self-reliance of our personnel and prepared us for further expansion.”

But the snowball effect does not stop there, as Qatar diversifies its economy through the filter of oil and gas-generated businesses. QP’s Gulf Helicopters, which was born from the need to serve Qatar’s offshore platforms, has grown to be an international transport company. It built on the success of its local operations, on the expertise it accumulated and the networks it created with international clients operating in Qatar and elsewhere, and took advantage of its mother company’s backing to establish operations in several international locations servicing oil wells.

Mohamed Al Mohannadi, Gulf Helicopters general manager, says, “Originally a two-helicopter fleet, we are now a 22-helicopter fleet operating in Doha and Halul Island but more significantly with a presence in Iran

and India on long-term contracts and we have also worked from time to time in places like Oman, Saudi Arabia and Yemen.

“Some of our customers who are working in Doha requested that we go to Libya and work with them there.” The company is studying that possibility along with another—to expand to Mauritania.

Also a QP offshoot, Qatar Expo has grown horizontally on the Qatari market rather than internationally. An exhibits and fairs organizer was born from showcasing the natural gas potential of the tiny peninsula. Now promoting the fifth Doha International Oil & Gas Exhibition—alongside QP’s Doha Conference on Natural Gas at the end of February 2005—it has also grown to organize fairs in totally unrelated sectors such as home furniture, decoration, construction and automobiles.

Another example of how oil and gas have been a locomotive of development for Qatar is the advent of the financial sector whose sophistication now almost equals that of neighboring Gulf countries. Its recent growth allows for a much more diverse backbone to finance projects of international magnitude through the

domestic finance market and is starting to open doors for regional consolidation as well.

The country’s banking system is maturing, meanwhile. R. Seetharaman, acting general manager of Doha Bank, says, “Essentially our focus is towards various oil and gas projects where we have syndication opportunities to start with, and then start getting into the aggregation parts of commercial banking.

“The idea is to build the relationship with the syndication on a pure project-financing basis and then evolve towards overall commercial services for the clients we served.”

The bank, through this initial contact strategy, then hopes to incorporate local clients in its customer base and offer a fuller range of services, such as payment of wages, credit cards for executives and daily accounts.

All in all, Qatar’s efforts to steer its whole economy in the wake of the development of its hydrocarbon resources have proven to create a wide and increasingly varied dynamism in several sectors and also to generate a wealth of business opportunities that should secure an unending flow of foreign direct investment for decades to come. □

We are working closely with our partners to play an expanding role in promoting continued social, economic and environmental programs in Qatar, for generations to come.

نعمل جنباً إلى جنب مع شركائنا لتفعيل دورنا في برامج التطوير الاجتماعي والاقتصادي والبيئي في دولة قطر لتبثدو أثرها إلى الأجيال القادمة

ExxonMobil أكسون موبيل

Making Oil Go Further

All the effort Qatar has put into developing its oil and gas sectors has not steered it away from diversification via channeling petrol dollars into balanced economic development. The country's vision has it multiplying ways to convert natural-resource revenues into solid, sustainable growth, and the vision includes the downstream industrial sector in which investments and projects have been nearly equally forthcoming.

The oldest of these industries is the Qatar Fertilizer Co. (QAFCO), which was founded in 1969. Incidentally, it was also national petroleum company Qatar Petroleum's (QP) first joint venture; it held 75% and Norsk Hydro held 25%. Despite some nominal changes, QP's shares have been transferred to an industrial holding company called Industries Qatar (IQ) and Norsk Hydro's shares have been transferred to the spin-off of its fertilizer division, the newly formed Yara International.

The partnership has lived on to bring QAFCO to technological heights and commercial success, suggesting again that association with leaders in their respective fields is an invaluable strategy. During the past 25 years, the fertilizer company has not ceased to grow. In April of this year, it inaugurated its fourth train after successive growth steps in 1973, 1979 and 1997, bringing its yearly production to 2.8 million tons of urea and 2 million tons of ammonia.

These figures make it the largest producer of urea in the world from a single site and one of the world's leading exporters. Its markets total 35 countries, though its focus remains South and East Asia.

Khalifa Al Sowaidi, managing director of QAFCO, says, "Making ammonia and urea is another way of transporting



Ahmed Al-Emadi, deputy general manager of Q-Chem, which is a partner in the world's largest ethane cracker, and has a capacity of 1.3 million metric tons of ethylene production per year. (Photo courtesy Guillaume de Bassompierre.)

gas that can lead to effective diversification. To transport gas and to liquefy it is expensive. To take gas near the source and transform it into urea—which is bulk—and send it on a bulk ship to the end-user is the right way to produce a competitive income."

Also succeeding from its proximity to North Field's seemingly infinite gas reserves is QP-formed Qatar

Providing Health, Safety & Environmental Management Consulting

IEM International Environmental Management Ltd.

IEM is Working with Industry to Protect the Environment

www.iem-thai.com

Qatar Phone: +974 467 1129 Fax: +974 466 9319 e-mail: q2r@iem-thai.com	Thailand Phone: +662 636 6300 Fax: +662 636 6216 e-mail: thailand@iem-thai.com	Kuwait Phone: +965 243 3294 Fax: +965 358 6715 e-mail: kuwait@iem-thai.com	Cambodia Phone: +855 836 6300 Fax: +855 836 6216 e-mail: cambodia@iem-thai.com
--	--	--	--

Petrochemical Co. (QAPCO), a competitive player internationally in low-density polyethylene (LDPE) products. QP found a partner in France-based Atofina when it decided to create an industrial solution to use ethane feedstock borne out of its petroleum production in both associated and non-associated gas form.

QAPCO transforms the ethane gas into ethylene to then produce LDPE and solid sulfur as a byproduct of the process. QAPCO has actually grown so fast to such a critical size that nowadays it is importing some of its ethylene raw material while it waits for the mega-joint-investment project of building the world's largest ethane cracker—with a capacity of 1.3 million metric tons of ethylene production per year—to come online in 2008.

In the mean time, a combination of technology and size make QAPCO's polyethylene train one of the few units in the world with a very low-cost structure—actually, one of the lowest in terms of unit cost of production because through a single train QAPCO is able to produce very high volumes of polyethylene, according to Hamad Al-Mohannadi, vice chairman and general manager.

“Making ammonia and urea is another way of transporting gas....”

**Khalifa Al Sowaidi,
QAFCO**

Its first major integration investment, Qatar Vinyl Co. (QVC), which was developed jointly with its Atofina partner, QP and Norsk Hydro, started production of caustic soda, ethylene dichloride and vinyl chloride monomer in 2001. Other investment plans include the ethane cracker built with Atofina and Qatar Chemical Co. (Q-Chem) and its partners.

It will see QAPCO shed US\$850 million into a unit that will assure production and transport of ethylene for Q-Chem's operations, its own, QVC's and also for the operation of yet another project called Qatofin, a joint venture of Atofina, QAPCO and QP.

The Qatofin integrated derived plant will produce linear low-density polyethylene as soon as 2007. In the longer term, it is also rumored that plans for a PVC plant are in the pipeline.

Q-Chem was born officially in 1997 but its production of high-density polyethylene (HDPE), 1-Hexene and solid sulfur (byproduct) started in late 2002 after more than US\$1 billion in investment by the founding partners: QP and Chevron Phillips Chemical Co.

As with the industries described in this chapter, cost effectiveness achieved through size, competitiveness granted by the proximity of feedstock and energy sources, and technological innovation ensured by an alliance with a world leader in the field of petrochemicals have already virtually assured Q-Chem promising growth and an affirmed presence on world markets. Q-Chem is already looking ahead with its plans for joint investment with QAPCO in the ethane cracker facility.

Qatar has chosen a path of applying its oil and gas resources to strategic, complementary, orderly and synergistic enterprises with vertical with horizontal integration. □

We hold the key to all your Oil and Gas demands

- Oilfield Equipment Products & Services
- Chemical, Drilling, Production, Industrial Water Treatment
- Wireline & Subservice Equipment
- Instrumentation
- Piping, Casing & Fittings
- Safety & Survival Equipment
- Electrical Products



Your Partners in Oil & Gas Industries

Honeywell Total Plant Solutions, DCS 3000 Systems, Supervisory Control, Networking for the Oil & Gas Industry and Field Instruments

SIEMENS Siemens PSI (Energy Island) is a major O&G producing expertise designed and technologically advanced Industrial Turbine Drives



Steel Offshore Services. Largest Offshore Contractor offers Total Field Development Solutions, Offshore Pipe-Laying and Installations



Dräger Detectors, Tubes, SCBA, Portable Measuring Instruments for Gases, Respiratory Protective Masks & Filters

Control Products and Systems: Programmable Logic Controllers (PLC), Programming Support Tools, Machine Tools

Weatherford Specialized in: Lining Products & Services, Completion Services, Well Completion Services



Manufacturer of: Pipeline Pigs and Piping System, Hot Tapping Machines & Services, Globe Compression Services



Leading Manufacturer of Industrial Safety Items from Head to Toe, Protective Eyewear, Industrial Clothing and Hearing Protection

ONDEO Leading Supplier of Oilfield, Refinery, & Petrochemical Performance Chemicals

Isartener Canadian Manufacturer of Self-Contained Action Systems for Valves (Phase Controller)



Specialized in Controlled Salt Tensuring, In-Situ Machining, Pipe Cutting & Pepping, and Hot Tapping Services



Leading Manufacturer of maintenance free Perforated Respirators, Powered & Supplied Air Respirators, Hood & Face Protector

Salam Tower 15th Floor, Corniche West Bay Tel: 4836911 Fax: 4836967 P.O.Box: 22084, Doha Qatar E-mail: sales@salam-petrol.com