Qatar Petroleum
Developing Qatar’s Energy Resources for the World

Qatar Petroleum (QP), formerly Qatar General Petroleum Corporation, is a state-owned corporation established by Emiri Decree No. 10 in 1974. It is responsible for all phases of the oil and gas industry in the State of Qatar.

QP’s strategy of conducting hydrocarbon exploration and new projects is through Exploration and Production Sharing Agreements (EPSA) and Development and Production Sharing Agreements (DPSA) in partnership with major international oil and gas companies.

The principal activities of QP and its subsidiaries and joint ventures cover the exploration, drilling and production operations, transport, storage, marketing and sale of crude oil, as well as natural gas liquids, liquefied natural gas, refined products, petrochemicals and fertilisers.

QP’s operations and activities are conducted at various onshore locations, including Doha, Dukhan and the Mesaieed and Ras Laffan industrial cities, as well as at offshore areas, including Halul Island, offshore production stations, drilling platforms and the North Field.

Human Resources & Services
The QP Administration Directorate strives to provide quality service in Human Resources Management, Qatariization, Training, Medical, and General Services to support QP’s comprehensive operations.

A high priority is to achieve QP’s strategic objectives by attracting qualified employees, utilizing their competencies through a performance-driven culture, retaining their services, and training and developing them in the latest technologies, best practices and business challenges.

QP is spearheading the energy and industry sector’s Strategic Qatarization Plan to maximize the preparation and employment of Qatari nationals.

The high quality medical and welfare services provided to employees and their eligible dependents reflect QP’s concern for the human aspect of the industry.

Health, Safety & Environment
QP is committed to the health and safety of its employees, contractors, visitors and the local communities where it operates. From drilling to construction, operations to decommissioning, QP’s HSE policy forms an integral part of the company’s daily business and long-term planning. Education, promotion and training programs help to ensure that each and every employee is committed to safe operations and environmental protection. QP sponsors and promotes a number of activities and outreach...
QP makes every effort to comply with all applicable HSE standards and legislations in both international and state-ratified conventions and protocols, with the ultimate goal of ensuring the safety of its employees, the general public and the environment.

QP is committed to the protection and conservation of the natural environment, local communities, employees and the general public in all areas of its operations.

**Oil & Gas Fields and Operation Areas**

**Onshore Fields**
QP produces crude oil, condensate, natural gas liquids, associated gas, and non-associated gas from its onshore fields in Dukhan. Dukhan crude is of high quality, and the first shipment of oil was transported from Dukhan on December 31, 1949 through the Mesaieed port terminal.

Dukhan City is located 84 kilometers west of Doha, and it accommodates oil and gas facilities, housing, medical, recreational and educational institutions and related services.

Projects completed over the past 10 years in Dukhan include the Arab D gas recycling plant and related facilities, Dukhan gas lift project, Dukhan consolidated facilities upgrade project, Dukhan operations management building, QP support facilities area, staff housing projects, training center and laboratories that have raised the production capacity of onshore oil to better meet QP’s operational needs and community requirements.

**Offshore Fields**
High-quality crude oil and associated gas are produced from the offshore Maydan Mahzam and Bul Hanine fields, which began production in 1965 and 1972, respectively.

**Exploration, Appraisal and Development Operations**
During the last 20 years, QP has signed several EPSAs and DPSAs with the following major international oil and gas companies: Elf Aquitaine/Total, Anadarko Qatar, Maersk Oil Qatar, Occidental Petroleum Qatar, Qatar Petroleum Development, Talisman Energy Qatar, Wintershall Consortium, GDF Suez, China National Offshore Oil Corp. (CNOOC) and Shell.

These agreements have boosted Qatar’s oil and gas reserves through new discoveries and the development of existing fields. Some of the fields which were discovered and/or developed through these agreements are Idd El Shargi Dome (North & South), Al Shaheen Field, Al Khaleej Field, Al Rayyan Field, Al Karkara and A Structure.
North Field
The North Field, which covers an area of 6,000 square kilometers and has a total recoverable gas of 900 trillion standard cubic feet, is considered to be the largest single non-associated gas reservoir in the world. The utilization of this field’s massive reserves has become a primary national goal to continue the development and prosperity process in the country.

Al-Khaleej Gas (AKG) Project
This project is between QP and ExxonMobil to develop reserves from the North Field under a DPSA. The two AKG phases, AKG-1 and AKG-2, have a total combined production capacity of 2 billion cubic feet per day (bcf/d) of clean-burning natural gas, making this project one of the largest sources of gas for domestic supply and power generation in the State of Qatar. The project also produces condensate, ethane, liquefied petroleum gas (LPG) and sulfur, while ethane and condensate are allocated to local industries and petrochemical plants.

Halul Island
Halul Island is a storage and exportation center for Qatar’s marine crude oil. This tiny, hilly island, with an area of 1.5 square kilometers, lies approximately 96 kilometers to the northeast of Doha. It boasts of 11 large crude oil storage tanks with a capacity of 5 million barrels. The island also encompasses pumping facilities, power generators, desalination plants, a heliport and a harbor suitable for supply boats that support operations. It is also fully equipped with community facilities for almost 1,000 employees of QP and its contractors.

Industrial Cities
Mesaieed Industrial City (MIC)
The approximately 100-square-kilometer Mesaieed Industrial City (MIC) is located about 40 kilometers south of Doha. Since 1996, QP has established the MIC Directorate as a “one-stop shop” to manage, operate and develop the city.

MIC currently operates a fully-serviced, 24-hour ISPS-certified port, which is handling a variety of export/import activities. In addition to the oil receiving terminal and export facilities, the industrial area in MIC accommodates an oil refinery, a fertiliser complex, a number of other petrochemical complexes, a natural gas liquid plant, large metallurgical industries (steel and aluminium) and many other downstream activities (chemical, engineering, plastic, etc.).

Furthermore, a separate light industries zone exists for support industries, which continue to be upgraded. MIC also provides its community area with the most updated healthcare, educational, commercial and recreational facilities.
The Government of Qatar, through the Ministry of Energy & Industry, provides various incentives to encourage local and international investments in MIC.

**Ras Laffan Industrial City (RLIC)**

QP manages and operates the 294-square-kilometer Ras Laffan Industrial City (RLIC), which is located 80 kilometers northeast of Doha. The development of the North Field has resulted in the construction of the city and a 56-square-kilometer modern port with a capacity to export 77 million tons per annum (mmt/a) of liquefied natural gas (LNG) and other hydrocarbon products. RLIC has undergone major expansion and development of multi-phase projects. The Ras Laffan Port is now considered the world's largest LNG export facility.

On 13 December 2010, RLIC and the State of Qatar realized the vision of H.H. the Emir, Sheikh Hamad Bin Khalifa Al-Thani, to reach an LNG production capacity of 77 mmt/a, confirming the country's position as the world's leading producer of LNG.

**Refined Products**

**QP Refinery**

The QP Refinery started as a small topping plant in 1958 and has grown over the years into a giant refinery organization. It has successfully made the State of Qatar self-sufficient and export-oriented in refined oil and petroleum products, with its designed capacity of 137,000 barrels per day (b/d) of refined products for domestic use as well as for export.

**Laffan Refinery**

Laffan Refinery is a joint venture with international majors and is one of the largest condensate refineries in the world. It started production in late 2009 and is operated by Qatargas Operating Company Limited (Qatargas). The 146,000 b/d refinery processes field condensate from Qatargas, RasGas and Al-Khaleej Gas to produce naphtha, jet fuel, gas oil and LPG.

**Gas-to- Liquids Projects**

**Oryx GTL Limited**

The Oryx GTL plant in RLIC is a joint venture project of QP with Sasol. It started production in 2006 with a designed capacity of 32,400 (b/d) (naphtha, diesel and LPG). A debottlenecking project was initiated in 2010 with an objective to increase the production capacity by up to 10%.

**Pearl GTL**

A joint venture of QP and Shell, Pearl GTL will produce 140,000 b/d of gas-to-liquids (GTL) products. The project is being implemented in two phases, with the first phase of approximately 70,000 b/d coming on stream during the second quarter of 2011.

**Natural Gas Liquids (NGL)**

QP Gas Operations under the Operations Directorate is responsible for managing the complete value chain for non-associated gas production, associated gas and natural gas liquids (NGL) processing, local transmission and distribution and export of liquefied petroleum gas (LPG) and condensates.

The NGL complex in Mesaieed comprises four major plants and two facilities for gas and NGL processing, treatment, storage and export. The four NGL plants produce propane, butane and condensate, which are mainly produced for export. The two facilities comprise a tank farm for the storage of LPG and condensates, and an NGL jetty for the export of LPG and condensates.

**Liquefied Natural Gas (LNG) and Pipelines**

**Qatargas Operating Company Limited (Qatargas)**

Qatargas was formed to operate the LNG processing, storage and loading facilities owned by Qatargas 1, Qatargas 2, Qatargas 3, Qatargas 4 and a condensate refinery owned by Laffan Refinery. Various expansion projects under Qatargas made considerable progress in 2010 towards achieving Qatar’s vision to export 77 mmt/a of LNG.

Qatargas 1 was established in 1984 to develop and process natural gas from Qatar’s North Field to produce LNG for export. It started production from three LNG trains with a total designed capacity of 6 mmt/a. The production capacity has been increased to about 10 mmt/a via debottlenecking the plant and its related facilities.
With the establishment of Qatargas 2, 3 and 4, which have added four new mega-trains with a designed capacity of 7.8 mmt/a per train, Qatargas' total LNG production capacity reached 41 mmt/a in December 2010. International oil & gas companies are the joint venture partners in these LNG companies.

RasGas Company Limited (RasGas)
RasGas is the operator of all RasGas projects and is owned by QP and ExxonMobil. Since its creation in 1993, RasGas has developed world-class facilities for the extraction, storage, processing and export of LNG, and it has entered into long-term agreements to supply LNG to customers in Korea, India, Italy, Spain, Belgium, Taiwan, and the Americas. Based in Ras Laffan Industrial City, RasGas currently has seven LNG trains in operation with a total production capacity of approximately 36.3 mmt/a of LNG.

RasGas has emerged as a leading player in the global natural gas industry by supplying LNG to an international portfolio of customers via a fleet of long-term chartered LNG tankers and by initiating technology-led projects such as the production and sale of helium.

Pipeline Gas Projects (Dolphin Project)
Since July 2007, the Dolphin Gas Project has been producing, processing and supplying substantial quantities of natural gas from offshore Qatar to the United Arab Emirates. Production reached the maximum authorized throughput of 2 bcf/d in February 2008.

Another sales gas project is currently in the EPC stage to supply gas to local industries and power stations.

Petrochemicals & Fertilisers
Qatar Fertiliser Company (QAFCO)
QAFCO’s total production capacity is 2.2 metric tons per annum (mt/a) of ammonia and 3 mt/a of urea, making QAFCO the world’s largest single-site producer of urea.

Once operational in 2011, QAFCO-5 will add around 4,400 tons per day (t/d) of ammonia and 3,850 t/d of urea to QAFCO’s production capacity, increasing its annual production to 3.8 mt/a of ammonia and 4.3 mt/a of urea. The QAFCO-6 project, which is expected to be completed...
in the third quarter of 2012, will further increase the company’s annual production capacity of urea to 5.6 mt/a.

Qatar Petrochemical Company (QAPCO)
QAPCO’s facilities consist of an ethylene plant producing 720,000 t/a, two plants producing 400,000 t/a of low density polyethylene (LDPE), a sulfur plant, as well as self-sufficient utilities plants and other offsite and auxiliary facilities.

Qatar Fuel Additives Company (QAFAC)
QAFAC produces and supplies methanol and methyl tertiary butyl ether (MTBE) to the local, regional and international markets. Its methanol plant is designed to produce 982,350 t/a, of which 750,000 tons is earmarked for export. The balance is used as feedstock for the MTBE plant, which is designed to produce 610,000 t/a.

Qatar Vinyl Company (QVC)
QVC produces 180,000 t/a of ethylene dichloride, 350,000 t/a of vinyl chloride monomer (VCM) and 360,000 t/a of caustic soda.

Qatar Chemical Company (Q-Chem)
Q-Chem’s world-class petrochemical plant produces 453,000 t/a of high density polyethylene (HDPE) and 47,000 t/a of 1-hexene (alpha olefin) using proprietary technologies developed by Chevron Philips Chemical Company.

Q-Chem 2
Q-Chem 2 is a joint venture to produce 350,000 t/a of HDPE and 345,000 t/a of normal alpha olefins (NAO). It is the first-ever facility in the Middle East to produce NAO, which are used in the making of a wide range of common household products and consumer goods.

Qatofin
Qatofin is a joint venture with the capacity to produce 450,000 t/a of linear low density polyethylene (LLDPE). During its first year of commercial operation in 2010, Qatofin produced only 254,000 tons of LLDPE owing to a decreased supply of ethylene feedstock from the Ras Laffan Olefins Company (RLOC) plant.

Qatar Melamine Company
Opened in October 2010 with a production capacity of 60,000 t/a, the plant is the largest melamine plant in the Middle East and one of the largest melamine plants in the world. The project will add extra value to the urea produced by QAFCO and boost QAFCO’s profitability.

Ras Laffan Olefins Company (RLOC)
Ras Laffan Olefins Company is a joint venture to produce 1.3 mt/a of ethylene, a production capacity that will eventually be increased to 1.6 mt/a.

Other Project

Qatar Aluminium (Qatalum)
Qatalum is a joint venture between QP and Hydro Aluminium AS. The smelter was officially opened in early 2010, with an initial capacity of 570,000 t/a of primary aluminium. The project, which is located in Mesaieed Industrial City, is the largest initial phase greenfield aluminium smelter ever built.

Future & Ongoing Projects

Barzan Gas Project
The Barzan Gas Project will develop approximately 1.9 bcfd of North Field wellhead gas and produce 1.4 bcfd of sales gas for the domestic market (power generation) in addition to associated condensate ethane, LPG and sulfur. The project is currently targeted for start up by the third quarter of 2014.

Petrochemical Project
QP signed a Memorandum of Understanding (MOU) with Shell in December 2010 to jointly develop a world-class petrochemical complex in Ras Laffan Industrial City. The scope under consideration would include a mono-ethylene glycol plant with a production capacity of up to 1.5 million tons per annum using Shell’s proprietary OMEGA (Only MEG Advantaged) technology. The plant will also produce other olefin derivatives to yield over 2 million tons of finished products.