

Oil & Gas Profile¹ - Embassy of Canada to Algeria

1. SECTOR OVERVIEW

Algeria, a country of 40 million, is the largest and one of the wealthiest countries in Africa. It remains politically stable. The Algerian economy is heavily reliant on hydrocarbon revenues, and the sector is the backbone of the Algerian economy, accounting for roughly 60% of budget revenues, nearly 30% of GDP, and over 97% of export earnings.

Algeria is a key exporter of oil and natural gas, a member of the Organization of the Petroleum Exporting Countries (OPEC), and the Gas Exporting Countries Forum (GECF).

Hydrocarbon reserves

According to BP statistical review of World Energy, Algeria's current hydrocarbon reserves are estimated around 4.2 billion Tons of Oil Equivalent (TOE). Proven oil reserves stand at 12.2 billion barrels with natural gas reserves of 4.3 trillion cubic metres (tcm). Most proved oil reserves are in the country's oldest and largest oil field, Hassi Messaoud, in the eastern part of the country. Hassi Messaoud is estimated to hold 3.9 billion barrels (Bb) of proved and probable recoverable reserves, followed by the Hassi R'Mel Field (3.7 Bbl) and the Ourhoud Field (1.9 Bbbl). On top of this, Algeria is estimated to have the third largest shale reserves in the world – over 20 trillion cubic meters (tcm) of technically recoverable shale gas and 5.7 Bb of shale oil.

Algeria has more than 1,200 km of coastline on the Mediterranean Sea where oil and gas offshore basins cover an area of 93,500 sq km. According to Sonatrach, a first seismic survey revealed promising results. The overall area of the coastal strip to be opened for exploration is estimated at 5,000 sq km.

In 2018, Sonatrach signed an agreement with the two majors ENI and Total for offshore exploration in eastern coast between Bejaia and Skikda provinces, this will enable to assess Algeria's offshore potential.

According to Algeria's National Oil Company, Sonatrach, about two-thirds of Algerian territory remains unexplored or largely underexplored. Most of these areas are in the north, the deep south and offshore.

¹ The Government of Canada has prepared this report based on primary and secondary sources of information. Readers should take note that the Government of Canada does not guarantee the accuracy of any of the information contained in this report, nor does it necessarily endorse the organizations listed herein. Readers should independently verify the accuracy and reliability of the information.

Hydrocarbon production

Algeria is an important gas producer and a key supplier to Europe. Production of 130 billion cubic metres (bcm) per year makes Algeria the 10th largest gas producer. According to the Ministry of Energy, Algeria exported 97 bcm of natural gas in 2018. Most of this volume was exported through cross-border gas pipelines. Two southern European countries (Italy and Spain) accounted for two-thirds of these exports.

According to BP statistical review of World Energy, Algeria is a mid-level oil producer with 12.2 billion barrels of proven oil reserves. In 2018, Algeria produced 1.5 million barrels per day (mb/d) of a crude oil brand known as the 'Sahara blend' – roughly equivalent to 1.7% of global oil production making it the 18th largest producer in the world and the 3rd largest in Africa. Overall production levels have fallen from 1.9-2.0 mb/d in the mid-2000s mainly due to repeated delays in new production and infrastructure projects. Whilst Algeria is still comfortably a net exporter, increased domestic demand (0.4mb/d) is reducing export volumes further.

Unconventional hydrocarbons production is yet to begin. In 2014, Equinor, Algeria's National Oil Company Sonatrach and Shell were awarded the unconventional liquid-rich gas Timissit licence in the Berkine Basin in south-eastern Algeria. At the end of 2014, Sonatrach undertook the first exploratory shale gas drilling in Algeria's south-western region of In Salah. This first drilling for unconventional gas led to strong protests by the local communities concerned about the environmental implications of such operations.

Hydrocarbon infrastructure

- 21 oil pipelines with a length of 10 000 km
- 18 gas pipelines with a length of 11 000 km
- 3 international pipelines (57 BCM/year)
- Liquefaction : 56 MM m³ /year (25,2 MM Tons/year)
- 37 industrial centers (123 Processing facilities)
- 12 docked loading stations and 5 offshore loading stations of oil (2 in Arzew, 2 in Skikda and one in Bejaia)

Key players

- The National Oil Company is Sonatrach: It is the largest company in Africa. Sonatrach is an integrated oil and gas company that operates in four main fields: Upstream, Downstream, Pipeline Transportation and Marketing. Sonatrach owns roughly 80 percent of total hydrocarbon production in Algeria, while International Oil Companies (IOCs) account for the remaining 20 percent.
- The Ministry of Energy: It oversees all activities related to the oil and gas industry and electricity in Algeria.

- The Algerian Hydrocarbon Regulatory Authority, ARH: it ensures that all Oil & Gas activities and equipment complies with ARH technical and environmental requirements.
- The National Agency for Hydrocarbon Resources Valorization, ALNAFT: It is responsible for the promotion of hydrocarbon upstream investments, delivery of prospection authorizations, launch of exploration and exploitation bid rounds, allocation of research and exploitation perimeters, conclusion of research and exploitation contracts, monitoring and control of the signed contracts, approval of field development plans and hydrocarbon tax collection.

2. MARKET AND SECTOR CHALLENGES

Legislation

The government is keen to relaunch international investments. Among the measures and efforts undertaken recently in this respect is the review of the country's oil and gas legislation. In December 2019, Algeria published its new hydrocarbons law allowing shale resources development and providing for tax incentives with three types of contracts in exploration and production activities: a production sharing contract (PSC), a participation contract and a service contract. More details on the new hydrocarbons law can be provided upon request.

This confirms the return to the successful PSC system that existed in the previous Law of 1986 that resulted in large hydrocarbon discoveries and the successful development of the Berkine hydrocarbon basin in the 1990s.

The National Agency for Hydrocarbon Resources Valorization, ALNAFT, will publish an international hydrocarbons exploration bid round. However, interested oil companies can discuss possible exploration opportunities directly with ALANFT and without waiting for bid rounds. A detailed presentation on ALNAFT and its Exploration & Production opportunities can be provided upon request.

Opportunities

In 2018, Sonatrach unveiled a new vision and strategy, SH2030, that lays down ambitious objectives. For exploration and production segment, Sonatrach is planning to double the annual output of new discoveries from 50 to 100 million tons of oil equivalent. It is also aiming to increase the production rate of existing fields, optimize well performance by 2022, and deploy relevant enhanced oil recovery technologies to ensure an additional 2 million tons of oil equivalent by 2040.

Sonatrach is seeking to be a responsible company concerning the protection of environment. It aims to reduce its environmental footprint by adopting new technologies to reduce oil spills and treat soil & water contaminations. In Sonatrach's 2030 strategy, the company is looking to bring associated gas flaring levels to less than 1% of its hydrocarbons production.

As part of its modernization strategy, Sonatrach is looking to use digital technologies to improve efficacy, reduce costs and optimise output.

Procurement

Government institutions and state-owned companies including Sonatrach buy foreign-made goods and services by way of competitive or restricted tenders. Most government contracts are awarded through a two-step tender process: first, technical bids are reviewed to ensure compliance with tender requirements and to evaluate competing specifications, and then financial bids are reviewed. Competitors are sometimes short-listed after the technical offers are opened, and sometimes companies are pre-qualified for large tenders, particularly in oil and gas development. All energy and energy-related tenders are available on Baosem (www.baosem.com/en/). This requires a subscription.

Competition

Many IOCs operate in Algeria including BP, ENI, Equinor, Shell, Total, Repsol, CEPESA, Enel and Petroceltic. All IOCs operate in the form of Joint Ventures with Sonatrach, which holds 51% shares in most of the fields developed in partnership with foreign investors.

Many foreign oil services, EPC, drilling and equipment companies operate in Algeria: Schlumberger, Halliburton, Baker Hughes, KCA Deutag, Nabors, FMC Technologies, JGC, Petrofac, SAIPEM, etc. Most of these companies have presence (offices) in the market to be close to their clients.

Many Algerian state-owned oil service companies are very active in the market: Algerian Well Service Company ENSP, Algerian drilling Company ENAFOR, National Company of Geophysics ENAFOR, Industrial Installations Engineering and Construction ENGTP and the Drilling & Workover Company ENTP.

Keep in mind

Algeria is not a market for quick sales. Investing time and effort in building relationships and understanding the country's tendering system is key to the success of Canadian companies. Frequent visits to the market and face-to-face meetings can make a real difference for the success of Canadian companies. Algeria is always seeking to diversify its partners and suppliers – there is always room for Canadian companies.

Key energy events in Algeria

- **North Africa Petroleum Exhibition & Conference (NAPEC):** It is an annual event gathering all national and international key energy stakeholders operating in Algeria. It is the largest energy event in North Africa

3. SUB-SECTORS

- Exploration:
 - Geological & Geophysical studies
- Production:
 - Reservoir studies and reservoir management technologies - Enhanced Oil Recovery (EOR)
 - Delineation and development of existing discoveries
- Oil services:
 - Rig and well service technologies
 - Pipeline inspection and maintenance technologies
- Drilling technologies:
 - Fracking
- Clean technologies:
 - Solid waste management
 - Water treatment
 - Gas flaring reduction technologies
- Oil and Gas digital technologies:
 - Field Management & Information System

Canadian Embassy, Algeria

Nasreddine Gouami

Trade Commissioner

Email : nasreddine.gouami@international.gc.ca

Internet : <http://www.infoexport.gc.ca/dz>

Useful Internet Sites

- Ministry of Energy: www.energy.gov.dz
- National Agency for Hydrocarbon Resources Valorization, ALNAFT www.alnaft.gov.dz
- Hydrocarbons Regulatory Authority, ARH www.arh.gov.dz
- National Oil Company, Sonatrach www.sonatrach.com
- Energy Tenders, Baosem www.baosem.com
- North Africa Petroleum Exhibition & Conference, NAPEC www.napec-dz.com
- Guide to Investing in Algeria <https://home.kpmg/dz/fr/home/events/2019/05/guide-investir-en-algerie-20170.html>

Author's Name: Nasreddine Gouami