Angola - Oil and Gas

Take advantage of our market research to plan your expansion into the Angola's Oil and Gas market. This guide includes information on:

- Current market needs and trends
- The competitive landscape,
- Best prospects for U.S. exporters,
- Market entry strategies,
- The regulatory environment,
- Technical barriers to trade, and more.

Explore Oil and Gas export opportunities and the regulatory environment in the Angola.

Executive Summary

Angola is the second largest oil producing country in Sub-Saharan Africa and an OPEC member with output of approximately 1.55 million barrels of oil per day (bpd) and an estimated 17.904,5 million cubic feet of natural gas production. The country holds 9 billion barrels of proven oil resources and 11 trillion cubic feet of proven natural gas reserves, which represents great potential to foster economic development and significant business opportunities.

The oil industry in Angola is dominated by the upstream sector – exploration and production of offshore crude oil and natural gas. Almost 75 percent of the present oil production comes from offshore fields.

The Government of Angola introduced legal reforms, restructured the state oil company Sonangol, and created the National Agency for Petroleum and Gas in response to stalled investments in 2014 as oil prices dropped significantly and foreign currencies remained limited. The intent is for the sector to become more attractive to investments and contribute to the sustainability and growth of the oil industry in Angola.

Although the country is a leading producer in the region, it currently imports 80 percent of its demand for refined petroleum products, including gasoline, diesel, aviation fuel, Jet B for gas turbines, oil fuel, asphalt and lubricants. Only 20 percent of refined products is sourced locally.

The refining of crude oil and distribution of refined oil remains well below domestic demand. To reduce the country's dependence on imported refined petroleum, the Government of Angola has plans for the construction of national refineries.

Current Market Needs

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Oil Exploration and Production: The untapped oil and gas reserves in the Congo, Kwanza, Benguela and in the Namibe basins offer exploration and production opportunities in both offshore and onshore fields.

Substantial business development efforts have focused on Angola's pre-salt fields. Several pre-salt offshore blocks were licensed to international oil companies including Cobalt, ConocoPhillips and Vaalco. The high cost of pre-salt exploration discouraged the development of pre-salt fields. Recent legal reforms take into consideration new fiscal incentives to promote operational efficiency in mature and in marginal fields.

Presidential Decree No. 91/18, passed on April 10, 2018, provides a pathway for the dismantling of abandoned wells and the decommissioning of oil and gas facilities, in accordance with Quality Health Safety and Environment (QHSE) industry best practices. This Presidential Decree urges operators to submit an approved abandonment and dismantling of operations plan at the end of oil wells' economic lives for review to the Concessionaire, in this case the National Agency for Petroleum, Gas and Biofuels.

Gas Exploration and Production: The natural gas industry in Angola requires significant investment to capture its full economic potential. The majority of the country's natural gas production is associated gas, which was flared and until 2013. Given Angola's considerable natural gas potential, the government developed a structured regulatory and business framework to encourage non- associated gas projects and limited the reinjection of associated gas into oil fields to increase oil recoveries. Some non-associated gas was explored in blocks 1, 2, 20 and 21, but operations stalled due to high investment costs and

unclear legal and regulatory framework for monetization and commercialization.

The Government wants to maximize the value of the Angolan oil and gas industry so that it transitions from a solely oil industry to an integrated oil and gas industry. Presidential Decree No. 7/18 of May 18, 2018 released the Natural Gas Law, which is the first law enacted to regulate natural gas exploration, production, monetization and commercialization. The new gas law provides more attractive tax rates. Gas production tax is 5 percent (compared to 10 percent for oil). Gas income tax is 25 percent (same as for oil) for associated gas and 15 percent for non-associated gas when proven reserves are lower than 2 trillion cubic feet.

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Oil Refineries: Angola has one refinery in Luanda with 65,000 barrels per day production capacity and a topping unit in Cabinda with 16,000 barrels per day production capacity. The Luanda refinery operates below capacity and only processes 45,000 barrels per day and needs upgrades of new technology and modernization of operations. The Malongo Refinery in Cabinda also needs revamping.

To increase refinery capacity in the country and local supply of hydrocarbons, additional proposals of conventional refinery projects include the continuity of the \$8 billion Lobito petroleum refinery in Benguela province with a production capacity of 200,000 barrels per day of light and high-quality petroleum products; a \$12 billion Namibe petrochemical refinery in Namibe province with a 400,000 barrels per day production capacity, and other viable Modular refinery projects.

Engine Lubricants: Angola's single blending unit is owned and operated by Sonangol and supplies the market with mineral and synthetic lubricant oils and greases well below market demand. Base oils and additives are imported from overseas suppliers.

Liquefied Natural Gas: Angola currently produces limited quantities of marketed natural gas. The LNG plant in Soyo, in the north of Angola is a storage and gas processing facility that requires continued supply of natural gas to maximize and monetize its full installation capacity. The Soyo LNG plant is projected to receive 1 billion cubic feet per day of associated natural gas and has a processing capacity of 5.2 million tons per year of liquified natural gas products. The LNG plant was established as a consortium with an initial investment of US\$10 billion. Consortium ownership is distributed among the members - Sonangol (22.8 percent), Chevron

(36 percent), BP (13.6 percent), Total (13.6 percent) and ENI (13.6 percent). It started production in 2013 and initial export shipments went to Brazil, China and South Korea, but the US market did not materialize due to increased domestic US production of natural gas.

The plant has plans for 360,000 cubic meters (cm) of full containment for LNG, LPG and condensate storage, and a loading jetty sized to accommodate ships up to 210 cm. The project is expected to facilitate continued offshore oil development while reducing gas reinjection into oil fields and greenhouse gas emissions in Angola, as well as supply the Angolan market with up to 125 million standard cubic feet per day for local consumption.

Associated natural gas is sourced from oil fields within blocks 0, 1, 2, 14, 15, 17 and 18, by consortium operators – Sonangol, Chevron, BP, Total and ENI - and is transported to the plant through pipelines built under the Congo River. The Government is encouraging operators to increase feedstock of the LNG plant.

Recent Market Trends

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Angola was greatly impacted by the sharp drop in oil prices, which resulted in the decrease in production levels and in economic recession. Many oil field projects stalled or were abandoned, and many contractors or operators downsized or withdrew.

The severe economic setback that started in 2014 resulted in significant federal budget cuts, currency devaluations and high inflation levels – 27 percent in 2017. Newer exploration and production projects are in-line as the industry is restructuring to attract new investments. The current and ongoing economic and legal reforms are aimed at spurring outputs to compensate for the anticipated decline of current production levels by 2020. With an anticipated recovery of oil prices.

Presidential Order 290/17 of October 13, 2017 created a technical task force composed of major international oil companies to address critical issues impeding competitiveness in the oil and gas sector. This Presidential task force reviewed, developed and reformed the investment law, the concessions' award and management process, the marginal field development, the field abandonment process, the

natural gas law and projects in development areas. The result was the enactment of two new laws, three amended Presidential Decrees, the creation of the National Agency for Petroleum, Gas and Biofuels and the "regeneration" (restructuring) of Sonangol.

Sonangol, the Angolan National Oil Company, is a sprawling conglomerate with participation in various sectors of the economy, stakes in many joint ventures and partnerships in Angola and abroad. Its regeneration program focuses on the divestment of most of its business units and subsidiaries to focus on its core business of the oil and gas industry value chain. Hence, this will allow the company to place primary emphasis on exploration and production where 75 percent of the government's revenue is generated.

The idea behind Sonangol's regeneration program is to clearly separate the state's role from Sonangol's corporate role, making the company impartial to the private sector's major investment decisions, thus contributing to the improvement of Angola's oil and gas sector. At the same time, Sonangol would benefit from being more efficient, competitive and profitable.

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Sonangol is giving up its monopoly of the distribution of refined hydrocarbons to allow entry of new players like TOTAL and expand the network of gas stations throughout the country. Sonangol also blends automotive lubricant oils and grease for Toyota Motors in addition to its own brands

Best Prospects for U.S. Exporters

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Opportunities for U.S. companies include gas infrastructure equipment: Floating storage regasification units (FSRU), Floating liquefied natural gas (FLNG), gas plants, mooring/gas terminals, pipelines, infrastructure development for gas to power, technology for gas flare capture.

Additional best prospects for U.S. companies include technologies and services to discover, extract and transport crude and natural gas.

Exploration and production equipment and services:

- Deep and ultra-deep technologies such as ships and floating vessels
- Technologies for production optimization and efficient operational costs
- Environmental protection and monitoring technologies: ocean pollution remediation products
- Seismic data reporting and releasing
- Operations risk insurance

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Some projects that offer procurement opportunities for U.S. companies are refinery design, construction, installation and operation, ranging from modular (10,000 barrels bpd) to conventional (100,000 -150,000 bpd) and petrochemicals (400,000 -650,000 bpd).

Best prospects for U.S. companies include technologies and services to design, operate and manage, refining units.

Refining equipment and services:

- Technologies to upgrade refineries
- Technologies to operate refineries
- Services and equipment for refinery construction
- Transportation of gas (pipelines, vessels) to the ALNG plant in Soyo.
- Production units for lubricants
- Base oils
- Additives
- Lubricant oils and grease

Market Entry

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The Angolan government requires oil exploration companies to increasingly work with Angola-based companies in their operations. Guided by Executive Order 127/03 of November 25, 2003, oil companies must use Angolan suppliers for services and equipment of low and medium technical levels. While legally required for over a

decade, the Angolan Government has increased enforcement of this localization requirement to encourage development of Angolan company participation as distributors and value-added service providers. The government does not currently require local content manufacturing, though several companies have initiated limited local manufacturing.

For service and equipment provider companies, basic activities are restricted to Angolan companies. For more complex work, a partnership with an Angolan entity is required for international companies to qualify as an Angolan company. Only in the case of the most complex work are international companies able to provide services directly to the petroleum industry in Angola. Approval from the National Agency for Petroleum and Gas and a license issued by the Ministry of Mineral Resources and Petroleum are required to operate in the Angolan oil and gas market.

Depending on the capital investment and expertise involved, U.S. equipment and service providers to oil exploration companies can establish direct operations in Angola, sell highly technical solutions directly, or work through local Angolan distribution and service partners. Those companies seeking Angolan partners can benefit from oil exploration companies' supplier development efforts and work with the US Commercial Service Angola in identifying and qualifying Angolan agents and distribution partners.

Ministry of Mineral Resources and Petroleum Executive Order 127/03 from November 26, 2003 establishes the following categories of company ownership for petroleum industry contracting of goods and services:

- Exclusive Regime for Angolan Companies activities not requiring heavy capital investment and with non-specialized know-how (for example: supply of technical materials, pressure testing, general equipment maintenance).
- Semi-Competitive Regime activities with a reasonable level of capital investment and higher level of know-how, though not specialized. In this case foreign companies would be permitted through association with an Angolan company (for example: geographic survey and data processing, production testing, laboratory analysis, specialized consulting, drilling production materials and equipment, well cleaning and maintenance).

• Competitive Regime – activities with heavy capital investment and a higher level of specialized know-how, may be considered for foreign participation without Angolan company partnership, though local partnership is not excluded.

Regulations / Registration Process

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According to Presidential Decree N. 49/19 of February 6, 2019, petroleum operations (prospecting, exploration, appraisal, development and production of crude oil, natural gas and biofuels) can only be exercised under a license awarded by the National Agency for Petroleum, Gas and Biofuels. The National Agency for Petroleum, Gas and Biofuels is responsible for regulating exploration and production activities and is the national grantee of concessions.

Petroleum exploration and production activities are governed by the following laws and Presidential Decrees:

- Petroleum Activity Law No. 10/04 of November 12, 2004 and Presidential Decree 211/15 of December 2, 2015 is the main legal instrument covering the rules to access and conduct petroleum activities in
- Angola.
- Petroleum Taxation Law No. 13/04 of December 24, 2004 provides the taxation framework applicable to
- petroleum activities (taxes, rates, deductions).
- Petroleum Customs Law No. 11/04 of November 12, 2004 is the legal instrument covering the customs regime and incentives specifically applicable to the sector.
- Angolan Oil and Gas Foreign Exchange Law for the Oil Industry No. 2/2012 of January 13, 2012 determines a specific foreign exchange regime applicable to the payment of goods, services and capital operations related to the petroleum sector.
- Presidential Decree 211/15 of December 2, 2015 establishes the framework for the activities involved in the exploration of development areas.
- Ministry of Petroleum Order No. 127/03 of November 25, 2003 on Local Content Regulations covers the rules applicable to the supply and provision of petroleum related goods and services.

- Presidential Decree 190/12 of August 24, 2012 establishes a waste management policy that requires oil companies to ensure environmental protection in their operations by meeting zero operational
- discharge levels.
- Decree 38/09 of August 14, 2009 establishes the rules and procedures to be followed in oil operations (including upstream oil prospecting, research, evaluation, development and production activities), in
- accordance with the principles of safety, hygiene and health, based on Angolan laws, as well as the
- commonly accepted practices within the oil industry.

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Downstream activities are governed by the Executive Decree No. 51/19 of February 6, 2019. The Regulatory Institute of Petroleum Derivatives (IRDP) awards licenses and supervises operations, the marketing and the distribution of derivatives products and services.

Procurement & Tenders

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The new Petroleum and Gas Agency will assume the functions of the grantee of concessions (until recently Sonangol was the sole entity authorized to grant concessions); manage the country's oil and gas concessions; conduct bids for new oil and gas licensing; regulate and design policies under the auspices of the Ministry of Mineral Resources and Petroleum; manage production-sharing agreements; and represent the state in the sharing of profits from oil and gas concessions.

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Executive Decree No. 51/19 of February 6, 2019 created the Regulatory Institute for Petroleum Derivatives (IRDP), which coordinates all mid and downstream activities in Angola. The Institute has the mission to control pricing, inspect the quality of hydrocarbons, and regulate operations, including, the mapping and network expansion of gas stations. The Institute will award licenses under the auspices of the Ministry of Mineral Resources and Petroleum.

Getting Paid / Trade Finance

Payment of services provided locally is to be paid in the local currency, Kwanza. Products supplied from abroad can be paid-for overseas if the invoice receives approval from the Angola's Central Bank BNA.

Tripartite payments are also permitted, in which 30% of the service is paid locally and 70% is paid abroad. The parties need to justify why the resource was outsourced and imported and not sourced locally.