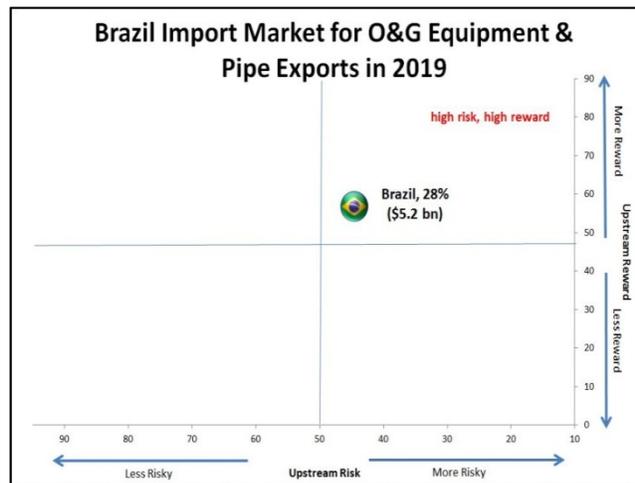


2016 Top Markets Report Upstream Oil and Gas Equipment Country Case Study

Brazil

Overall Rank: 7

Despite the low price of oil and other economic constraints, U.S. firms remain competitive in Brazil's O&G sector. The low international price of oil coupled with the Petrobras corruption scandal will drive significant reforms to Brazil's offshore sector and likely spur change in other policy areas, but the extent and breadth of the changes to the well-established O&G sector are still unclear. The situation in Brazil provides needed incentives to open up the country's O&G sector to greater private sector participation and more favorable and stable fiscal terms for exploration and production, as well as changes to trade barriers, such as local content requirements. Successful resolution to the corruption issues will require that Petrobras revisit some of its equipment and service contracts, which may provide new opportunities for U.S. suppliers.



Background

In 2014, Brazil was the world's ninth largest oil producer and South America's second largest oil producer. In 2015, Brazil produced 2.44 mbpd in 2014, 92 percent of which came from very deep, offshore resources. The development of deepwater and, especially, 'pre-salt' resources have driven dramatic increases in Brazil's production, with pre-salt production now making up about a quarter of overall production and increasing to 52 percent by 2018.¹ Due to the decrease in global oil prices and the Petrobras corruption scandal, production targets

for Brazil have declined from 4.0 mbpd to 3.7 mbpd by 2020.

Market Analysis

Brazil was the sixth largest destination of U.S. O&G equipment exports, totaling \$739 million, or roughly 3 percent of exports, in 2015. Although these exports have declined from a peak of over \$1.5 billion in 2011, we anticipate U.S. exports will reach similar levels again by 2019, when Brazil will represent about 5 percent of U.S. exports of O&G equipment. In 2015, approximately half of U.S.

exports to Brazil were parts for sinking and boring equipment and machinery/mechanical appliances. Of Brazil's approximately \$3.5 billion in O&G field equipment imports in 2014, China was the largest source at 21 percent, followed by the United States, Germany and Japan at 20, 12 and 9 percent market share, respectively. Brazil's major imports included parts for derricks, lifting and handling machinery and offshore vessels, comprising 38 percent of its overall imports.

Policy Context: Challenges and Opportunities

Despite the current economic outlook and low price of oil, long-term growth in the O&G sector remains strong because of proved below ground resources, a developed and sophisticated O&G sector and a diversified economy. The start of 2016 is defined by contractions in Brazil's O&G sector as the government looks to restore confidence and prioritize greater efficiency and profitability ahead of politics. The current low price of oil has put pressure on government agencies to reduce or eliminate LCRs and improve the fiscal terms for new bid rounds. At the same time, the corruption scandal that is gripping Petrobras and the federal government has also shaken investor confidence, forcing senior management to decrease investments for 2016 in an effort to restore financial stability. Combined with increasing inflation, a depreciating currency and a weak macroeconomic outlook, 2016 is expected to be a difficult year for the Brazilian O&G sector.

Since January 2016, Petrobras has begun to shore up its finances by decreasing investments, selling assets and shutting in wells. Corruption charges regarding foreign companies and alleged bribes to Petrobras, coupled with the low price of oil, have placed pressure on Petrobras to pursue a more conservative course toward new investments.

Despite the company's financial woes, ongoing corruption investigations and a 40 percent decreased 5-year investment plan, Petrobras will remain one of the largest investors in the world and is expected to invest \$19 to \$20 billion in 2016. The low price of oil had prompted Petrobras to shut-in some 22 of its more capital intensive wells and announce its intention to sell \$15.1 billion worth of its assets. At the time of this writing, Petrobras is expected to announce reductions totaling \$16 billion per year as part of its investment plan for 2016 to

2020. Petrobras is also in the process of reviewing its critical goods and services demand for the next five years. U.S. companies can look forward to opportunities of exporting services to support Petrobras shut-ins, as well as purchasing assets that the company is looking to sell. Recent press announcements noted Petrobras' plans to sell gas pipelines, gas-fired power plants and some LNG terminals, which could increase planned divestments to about \$50 billion.

The financial terms included in the latest bid round for O&G project blocks reduced investor interest in the Brazilian O&G sector, but it is unclear what the government will do to increase private sector interest. In October 2015, the government held its 13th licensing round for 266 blocks, most of which were onshore but also included offshore blocks and three blocks in the 'pre-salt' Campos Basin. The round did not meet expectations as only 37 of the blocks were awarded, most of which were in already developed formations, and included no deepwater blocks. Further, no major IOCs submitted bids, a sign that the price of oil was too low to justify the financial terms offered. While the Brazilian regulator, Agencia Nacional do Petroleo, Gas Natural e Biocombustiveis (ANP), did slightly alter the exploratory requirements of the licensing terms, the financial commitments remained unchanged. Considering the lack of interest in the 13th bid round, ANP will need to critically review why there were so few bids and how the next bid round could be altered to attract private sector interest.

Recent amendments to the existing LCR policy will improve opportunities for U.S. equipment manufacturers and service suppliers. In January 2016, Brazil introduced a new program that offers concessionaires credits that can be applied toward satisfying LCRs in exchange for stimulating the Brazilian O&G supply chain through investment and other activities.ⁱⁱ This change will make it easier for O&G companies operating in Brazil to meet high LCRs. In addition, ANP has proposed a resolution that seeks to mitigate distortions caused by price changes that occur throughout the life of a project that can affect the ability of concessionaires to satisfy LCRs.ⁱⁱⁱ Changes to Brazil's LCR policy will also support greater profitability of Petrobras, as it would also have greater access to lower-cost equipment and services. Currently, exploration phase activities require that between 37 and 85 percent of goods

and services are local and that development phase activities must use between 55 and 80 percent Brazilian content.^{iv}

U.S. exporters will find commercial opportunities to supply drilling rigs, flow measurement equipment, mobile well test plants, pig valves, pig launchers, chokes, electrical panels, completion tools and well abandonment expertise.

ⁱ <http://www.petrobras.com.br/en/our-activities/performance-areas/oil-and-gas-exploration-and-production/pre-salt/>

ⁱⁱ Law 8637/January 15,2016 (Art. 2:II); Found at: http://www.planalto.gov.br/ccivil_03/_Ato2015-2018/2016/Decreto/D8637.htm

ⁱⁱⁱ Aviso de Consulta Pública e Audiência Pública No. 25/2015; Found at: <http://www.anp.gov.br/?pg=79510&m=&t1=&t2=&t3=&t4=&ar=&ps=&1456505303855>

^{iv} Concessions Contract (Round 13), Clause 20; Found at: http://www.brazil-rounds.gov.br/arquivos/Edital_R13/contrato_R13_BE_PosRD09122015.pdf