

EXECUTIVE SUMMARY



Afghanistan has estimated reserves of 1,908 million barrels of crude oil, 59 trillion cm of natural gas and 667 million barrels of liquid gas. However, the country produces only 8,000 barrels of oil and 59 billion cm of gas per year. To compensate for this lack of domestic production, Afghanistan imported more than 4 million MTs of oil in 2014. Most of this oil was imported from Iran, Turkmenistan, and Uzbekistan

Global natural gas reserves amount to some 187.3 trillion cm, with the largest reserves being held in Russia (49 trillion), Iran (34 trillion), Qatar (25 trillion), and Turkmenistan (25 trillion). By contrast, Afghanistan holds an estimated 73.9 billion cm of gas reserves, placing the country 59th globally - between Sudan and Cuba. This values Afghanistan's reserves at almost \$7.0 billion at today's natural gas prices*.

Afghanistan 80th globally in terms of gas production (between Cameroon and Slovakia). At current production levels, the country's reserves will last for more than 500 years. The company only generated revenues of AFN345 million by selling to its main customers Kod-e-Barq Fertilizer Company, as well as local business and residents of Shebarghan city.

The Afghanistan natural gas sector's master plan outlined three main objectives: (1) to provide the fuel to develop domestic gas-fired power generation, (2) to position Afghanistan as strategic partner in regional energy trade, and (3) to provide funds from gas sector economic activities to use for national development. These objectives are to be achieved over various time frames. A recent report outlined a gas sector 2015-2035 strategy by discussing three implementation stages: (1) stage one: 2016-2020, (2) stage two: 2020-2027, and (3) stage three: 2028-2035.

Note: * Where one cubic meter of natural gas = 35,300 BTU and Henry Hub prices of \$2.658 per million BTUs * Even if reserves were found to be a lower 35 billion cm, reserves would still last for 238 years at current production levels

GLOBAL NATURAL GAS MARKETS

Prices at Henry Hub, the U.S. natural gas benchmark, is the global benchmark for natural gas prices. By 2020, when all current U.S. liquefaction projects are expected to be completed, the United States will account for almost one-fifth of global liquefaction capacity and will have the third-largest LNG export capacity in the world (after Qatar and Australia).



Almost 80% of U.S. LNG export volumes for projects currently under construction have been contracted on pricing terms directly linked to the Henry Hub price, or under a hybrid pricing mechanism with links to Henry Hub. The flexibility of destination clauses in U.S. LNG export contracts and the introduction of hub indexes are expected to promote greater liquidity in global LNG trading, shift pricing away from oil-based indexes, and contribute to the development of Asian regional trading hubs and pricing indexes.

In Europe, where natural gas is imported both by pipeline and as LNG, natural gas prices are either indexed to crude oil prices or based on the spot market. Although most of trade in Europe is based on long-term contracts, hub-based spot trading has increased significantly over the past decade. The primary benchmark prices for spot trading are the National Balancing Point (NBP) in the United Kingdom and the Title Transfer Facility (TTF) in the Netherlands. The NBP and TTF prices have a strong influence on hub prices in other European markets because of their liquidity and interconnectivity with continental Europe.

owever, in Asian markets, unlike those in the United States, natural gas prices typically reflect contracts that are indexed to prices for crude oil



or petroleum products. The declines in crude oil prices between August 2014 and January 2015 and low oil prices since then had a significant effect on Asian natural gas prices and markets. However, Asian countries are developing regional trading hubs to set natural gas prices that better reflect natural gas market dynamics. In 2014, almost 30% of global trade in LNG occurred on a short-term or spot basis. Asian countries accounted for three-quarters of that total and one-third of the global natural gas trade. From 2011 to 2014, high crude oil prices resulted in higher prices for LNG imports. In Asia, most natural gas is imported as LNG, with LNG prices traditionally indexed to crude oil on a long-term, contractual basis.

Currently there is no globally integrated market for natural gas, and pricing mechanisms vary by regional market. In most cases, internationally traded natural gas is indexed to crude oil prices, such as North Sea Brent or Japan customs-cleared crude (JCC), because of the liquidity and transparency of crude oil prices and the substitutability of natural gas and petroleum products in some markets. For example, some Asian countries have the option to burn either natural gas or petroleum for electricity generation.

ALL EXISTING GAS RESERVES OF AFGHANISTAN ARE LOCATED IN AMU DARYA BASIN



Afghanistan's gas sector began its development in the 1960s with the first discoveries of natural gas. All existing gas reserves are located in a number of gas fields in the Amu Darya Basin. They include the (1) Khoja Gogerdaq, (2) Jarquduk, (3) Yatimtaq, and the smaller (4) Shakarak field. In addition, there are several non-producing gas fields such as Jangalikolon, Juma, Bashikurd and Khoja Bolan. Other associated gas fields, such as the Angot field so far in the southern part of the Amu Darya basin, are more minor.

Afghanistan existing gas reserves all located at present in the Amu Darya Basin, there are other potential undiscovered gas resources in the Amu Darya and Afghan Tajik Basins. These are likely finds as the same fields on the Turkmen and Uzbek parts of these basins have found gas reserves. These resources include non-associated gas (gas fields) as well as associated gas in oil fields. Other potential potentially hydrocarbon basins exist in Afghanistan, the Kushka and the Tirpul Basins south of the Amu Darya Basin, the Helmund Basin and the Katawaz Basin to the East of Kabul.



AFGHANISTAN IMPORTS MOST OF ITS OIL FROM TURKMENISTAN, UZBEKISTAN AND RUSSIA. MOST OF THE IMPORTED OIL IS DIESEL AND PETROL



THE GOA COULD AUCTION OF 5 TO 10 COMPANIES FOR OIL DISTRIBUTION THROUGH AN OPEN TENDER PROCESS

WITH THE FOLLOWING STAGES		100 million (100 m	
Requirements	licenses will be offered via an open tender process with the following steps		
 ✓ Copies of certificate of registration ✓ Copies of tax clearance certificates ✓ A signed statement that the bidder have not been convicted of any criminal offence relating to professional conduct ✓ Company Profile and Strategic business plan ✓ Letter of bank guarantee ✓ minimum bids > \$1M 	 Step 1: pre-qualification Announcement of tender Receiving application documents for pre-qualification of tender Submission of bid securities by bidders such as cash, bank guarantee Evaluation of firm's documents Determining reasons to be qualified and disqualified evaluation result sent to procurement authority for approval Shortlisting pre-qualified candidates Inviting all pre-qualified bidders to submit bids Step 2: Invitation of bids Issuance of bid documents to bidders (without fee) Submission of bid securities by bidders such as cash, bank guarantee Submission of signed bid together with the a power of attorney and financial proposals. Opening of bids and Evaluation of bids by committee Approval of bid evaluation report by Award Authority 	to Step 3: Bid approval ✓ Invitation of expressions of interest ✓ Award of contract ✓ Payment of license fee ✓ Issuance of certificate by GoA	8



INVESTMENT PROPOSAL SUBMISSION PROCESS



Land Lease Agreement with MoMP, (2) Gas Sales Agreement with MoMP, and (3) Power Purchase Agreement with DABS.

