# Market Prospects



# A country abundantly rich in natural resources

The mining and energy sectors are crucial to the reconstruction and rehabilitation of Afghanistan, yet they remain virtually absent of foreign investment due to historic state control of natural resources. Today, many mining resources remain under the control of failed state-owned enterprises (SOE's). Other mining activities are conducted on a small-scale, mostly illegal, basis. Because small-scale mining has continued over the years unregulated and with outdated methods, it has had severe consequences for the environment and threatens the quality of existing mineral reserves. Experience in other countries shows that private operators are, for the most part, more effective in the exploitation and exploration of natural resources and mining.

# Currently more than 1,400 mineral deposits in Afghanistan

Afghanistan is a country abundantly rich in natural resources. There are currently more than 1,400 mineral deposits that have been identified including energy minerals such as oil, gas and coal and other metallic and non-precious minerals such as lead, cement-grade limestone, gemstones, copper, iron, gold, salt, and industrial minerals (for use in the glass, ceramic, construction, chemical and fertilizer industries). Known precious and semi-precious stones include emerald, jade, amethyst, alabaster, beryl, lapis lazuli, tourmaline, ruby, quartz, and sapphire. Afghanistan's iron and copper deposits are of world-class quality and its famous blue lapis lazuli mines are reported to date back to 5,000 B.C., which might arguably make these mines among the oldest in the world.

The hydrocarbons (petroleum and natural gas) industry provides great investment potential for Afghanistan, both financially and as a means for energy production. Recent findings in March 2006 indicate that the Afghan-Tajik and Amu Darya Basins contain 18 times the oil and triple the natural gas reserves previously determined. In response to this promising news, President Karzai stated, "Knowing more about our country's petroleum resources will enable us to take steps to develop our energy potential, which is crucial for our country's growth."

The Government of Afghanistan ratified the **Minerals Law** in 2005 and is presently working to ratify the **Hydrocarbons Law** (2006), which will govern the natural gas and petroleum industries in the energy sector. These two laws are major initial steps in addressing how to create a regulatory framework for the development of these sectors and, most importantly, enable a suitable environment to attract and retain private investment.

The development of the mining and energy sectors has clear benefits to the economy of Afghanistan and provides first-mover advantages to investors. Development of these sectors would decrease Afghanistan's reliance on foreign energy imports, create government revenue from natural resource discoveries, stimulate employment, provide tax revenues to local and central governments, and discourage imports of certain mineral resources since many of these can be produced locally. The construction sector is currently the largest beneficiary of this advantage because of the availability of local raw materials such as limestone, sand and gravel.

#### **Substantial Growth Potential**

At present, the minerals industry comprises around one percent of Afghanistan's GNP. This percentage is not at all indicative of the potential value of Afghanistan's mineral wealth. Afghanistan possesses an abundance of mineral resources including rare metals, oil, natural gas, precious and semi-precious stones, industrial minerals and precious metals. These mineral resources are largely undeveloped and the potential to discover new and larger mineral reserves in Afghanistan is enormous. Investment, particularly from overseas, would provide the expertise, capital and technology essential to the development of this sector.

The mining and energy sectors can play a key role in Afghanistan's post-war reconstruction. The World Bank estimates that the annual value of Afghanistan's minerals reserves could reach US \$253 million up from the current value of US \$60 million if the Government of Afghanistan enacts the necessary reforms. This would require approximately US \$100 million in public investment and around US \$360 million in private sector investment. The annual economic benefits streams would include the creation of nearly 6,000 jobs, US \$17 million in taxes and royalties, and US \$100 million in value added activities.

#### **Economic Indicators**

GDP (excluding opium) forecast 2006: 8,500 million USD Real GDP growth rate; forecast 2006: 12% GDP per capita; forecast 2006: 340 USD Area in square kilometres: 652,000 Number of current available mineral deposits: more than 1,400 Current annual value of used mineral reserves: 60 million USD Estimated annual value of usable mineral reserves (next years): appr. 250 million USD Required public investments in mineral reserves (next years): appr. 100 million USD Estimated private investment in mineral reserves (next years): appr. 360 million USD

Sources: International Monetary Fund, Government of Afghanistan, and World Bank Group/Multilateral Investment Guarantee Agency (MIGA)

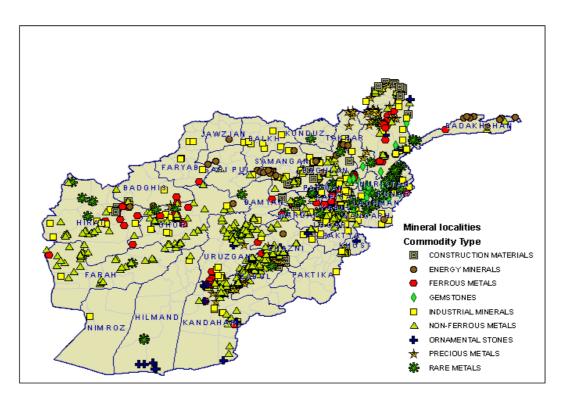
The minerals sector has great potential in the mid to long-term. There are vast areas where the potential for minerals is unknown and investment in exploration is a good short-term opportunity for mining investors to ensure long-term profits from exploitation and extraction. Mining companies report an average initial investment of US \$122,500 with average annual sales of US \$11,000.

Despite the potential for growth in mining and energy, investors are still expected to have concerns. Of particular importance to investors in this sector are the following criteria:

- Mining legislation, which includes clarity of ownership and terms of operations
- Clear criteria for granting private mining rights and title
- Competitive and transparent taxation system that adheres to international standards and best practices
- Security and political stability
- Mining potential and geological research and information to support these claims

Mining is considered a 'high-risk' industry and has a finite life, which means that companies will only have a limited number of years to explore and develop mineral reserves, as well as ensure a competitive return on their investment.

# Mineral occurrences in Afghanistan



Source: Natural Resources Maps, Afghan Geological Survey

# Surveying Mineral Resources in Afghanistan

The mapping of Afghanistan's natural resources began in the 1960s and 70s. It was primarily taken over by Soviet and Afghan geologists, but then abandoned over the decades of conflict that ensued thereafter. Given the country's abundance of natural resources, there is presently renewed interest in the area.

The Government of Afghanistan, in collaboration with the Afghan Geological Survey and community, realizes that a crucial step in assessing investment potential in mining and energy is gathering reliable information for investors. Since 2002, experts from the British and U.S. Geological Surveys have been building local capacity to initiate new research in this area and provide the most accurate and updated information to the public.

An ongoing part of this process is to create an updated comprehensive written and mapped inventory of Afghanistan's known mineral resources. Updated mineral resource maps and the use of modern exploration equipment and methods will likely contribute to the rapid discovery of new mineral reserves in the country. The newly rehabilitated Afghan Geological Survey is also working to assist the government in identifying new areas of minerals exploration, as well as to advise on land use and environmental protection.

#### **Construction Materials**

Afghanistan's material deposits of marble, sand, gravel, clay, and limestone places it at a comparative advantage for supplying local raw materials to the construction sector. Sand and gravel are currently the most commonly exploited minerals and demand for these aggregates will continue with planned infrastructure projects such as major highways. The demand for clay to produce fired bricks is enormous, and Afghanistan's large coal reserves assist in the industrial manufacture of these goods. Limestone is another essential construction mineral in high demand and reserves in Badakhshan are estimated to be several hundred million cubic meters total.

The construction sector has attracted foreign entrepreneurs from around the world and will likely to continue to generate high growth and profits as the reconstruction process continues.

#### Average cost structure of a construction material/mining company

Total property cost	58%
Annualized construction cost	26%
Total utility cost	12%
Total labor cost	4%

This shows the average cost structure for investments from investor's perspective.

Source: Multilateral Investment Guarantee Agency (MIGA)

#### Marble

Afghan marble is good quality and in high demand. There are currently 35 types of marble in Afghanistan and 40 different colours. World marble imports are estimated at US \$2.5 billion and there is a huge market potential for finished Afghan marble in the Gulf. With sufficient investment in knowledge and equipment, the marble industry in Afghanistan has the potential to be a major supplier in the region.

In 2005, the Afghan marble industry produced approximately 720 thousand feet of marbles tiles. This industry has vast potential for growth and development and it is estimated that production volume in 2006 will reach up to 1 million feet.

Currently, Afghanistan exports raw marble that is primarily processed and reexported from Pakistan. This fails to maximize the potential value of the marble, which would capture higher export prices if cut into slabs and polished. Presently, there is no equipment in the country that can cut slabs to international standards and outdated processing methods and machinery leads to a high degree of wastage, in some cases as high as 80%. Additionally, the use of explosives in marble quarries, which is dangerous for labourers and crushes the stone into less valuable smaller pieces, wastes around 25% of the total value of production.

Since Afghanistan has not yet developed a strong export market for marble, it has a first mover advantage for investors and high potential for growth given regional and global demand.

### Current market prices for marble products in Afghanistan

Item name	Size	Price (Afs)
Kabul Green	one foot	70
Kabul Green	half foot	25
Kabul Black	one foot	80
Kabul Black	half foot	25
Kabul Pink	one foot	75
Afghan White	one foot	100
Afghan White	half foot	45
Afghan Black	one foot	115
Afghan Tiger	one foot	100
Afghan Tiger	half foot	35

Source: USAID/DAI, Marble Sub Sector Production and Market Analysis, July 2005

### Copper

The regional demand for copper is growing rapidly, particularly in China and India. Afghanistan is positioned to meet this demand if the proper investments are made for the development and exploitation of its copper reserves. There are also investment opportunities for copper smelting facilities, which would reduce the volume and cost of transportation to domestic and regional markets.

Afghanistan has sizeable reserves of copper that extend located in the Kabul-Loghar province. The three major reserves that have been identified are Jawkhar, Darband and Aynak, but there are around 300 known deposits in the country. Exploration has not been conducted for some 30 years and is vital to demarcate new deposits. The Aynak copper deposit in Loghar has a declared estimated reserve of 240 million tons of superior quality copper. If developed properly, could produce annually US \$100 million, with US \$15 million in taxes and royalties and US \$56 million in value added. With this potential, Aynak is expected to attract interest from major international mining companies.

#### Gold

There is significant potential for gold exploration throughout Afghanistan. Gold is an excellent opportunity for investors because it has a high unit price and a relatively low capital cost for development. Afghanistan's major gold deposits are located in the northern provinces of Ghazni, Badakshan and Takhar and utilized mainly by artisanal miners. The Zarkashan and Samty deposits are best known, with the latter having an estimated supply of 20 to 25 tons.

Afghanistan's gold deposits are fairly unexplored since the Soviet withdrawal and require further investigation.

#### Iron Ore

Afghanistan has major iron ore deposits located primarily between Herat and the Panjsher valley. The most famous deposit is Hajigak in Bamyan Province, which is the largest reserve in the Middle East, containing 110 million tons total of high-grade iron. There are also occurrences in Badakhshan and Baghlan provinces. Since Afghanistan's iron ore deposits have not been reviewed for over thirty years, they require further exploration and assessment.

Afghanistan's iron deposits have great potential given the practical use of iron in heavy industry and there exists a growing demand for the resource in China and Southeast Asia. A profitable value added activity would be to combine iron mining with steel production facilities for local and international markets.

#### Salt

Afghanistan has at least 13 large known salt deposits in the Herat and Balakh provinces, but the majority of salt is still imported from Iran and Pakistan. Afghans have a very high salt consumption and consume an average of two kilograms of salt per person per year, which equates to an estimated US \$21.6 million annually.

Salt mining requires minimal investment and would be a profitable opportunity for investors. Locally produced salt would also provide good health benefits to Afghans if iodine were added.

#### **Precious and Semi-precious Stone Industry**

Afghanistan is blessed to have some of the most plentiful reserves of gem and semiprecious stones in the world, including emeralds, rubies, tourmaline, lapis lazuli, kunzite and aquamarines. Small-scale miners dominate the gemstone industry and good quality stones have a high demand, both for the domestic handicrafts industry and export markets. The total annual value of exported gemstones is approximately US \$2.8 million, though most of these are exported illegally.

There are several potential areas for investment in this industry. These include:

- The Panjsher valley, where emeralds are best known and the quality is comparable to the finest emerald mines in South America

  The current annual production of emeralds is estimated to be worth more than US \$9-12 million.
- Nuristan, where there are known deposits of kunzite, tourmaline, beryl, and aquamarine;

- Sar-e-Sang lapis lazuli mines located in northeast Afghanistan, where production and inventory are still strong;
- Jegdalek ruby mines near Jalalabad, where stones display a vivid range of red hues and deposits are expected to be large. The British Crown Jewels, namely the Black Prince's Ruby, are reported to contain stones from Jegdalek.

The vast majority of gemstones are currently cut and polished in Pakistan. A key value added activity for gemstones would be the establishment of cutting and polishing centers in major urban centers. Stone finishing could also be a good source of employment for Afghans.

#### **Privatization Projects**

There are opportunities for investment in state-owned enterprises slated for privatization. The following is a list of several projects underway:

**North Coal:** Currently operating and supplying the Ghuri Cement Enterprise and the region in general, with coal for electricity generation. There may be considerable reserves of good quality coal, which have to be confirmed.

**Power Construction:** Producer of transformers, electric networks and pylons for electric wires.

**New Energy:** Currently producing solar water heaters and cookers for the local market.

**Afghan Gas:** The Enterprise has estimated reserves of gas exceeding 100 billion m3 and is presently delivering gas to North Power & Fertilizer Enterprise and the cities of Shibarghan and Mazar-e-Sharif. New investments will be required to develop the Enterprise's potential.

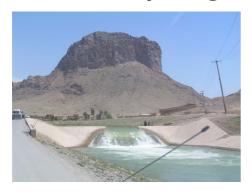
**North Coal:** Currently operating and supplying the Ghuri Cement Enterprise and the region in general, with coal for electricity generation. There may be considerable reserves of good quality coal, which have to be confirmed.

**Rokham Marble**: Marble processing facility heavily damaged in the war.



Global demand for natural resources and its expected benefits for Afghanistan's economy are the main drivers towards regional integration and will help the country to become a leading business hub for the region.

# Developing the



# **Energy Sector**

# Unmet demand for energy

The development of domestic energy, through electrical power generation, petroleum and natural gas drilling, and hydropower are vital components in Afghanistan's reconstruction. Domestic energy needs are currently reliant on energy sharing with Afghanistan's Central Asian neighbours, which is only a short-term solution given increased industrial and commercial demand. The Government of Afghanistan, with technical and financial assistance from the international donor community, is working to address the country's shortfall in domestic energy production. The following outlines some of the major areas for development, including power generation facilities and the development of fossil fuel supplies (namely coal and hydrocarbons).

#### **Power Generation**

Power and energy represent the largest existing infrastructural impediment in present-day Afghanistan. The Government and more specifically, the Ministry of Water and Power, is in the process of addressing these concerns and helping restructure the energy sector to include more private sector participation on the supply side, while strengthening their own regulatory role.

Afghanistan currently produces a domestic total power supply capacity of 454 MW. This supply comes from 11 installed hydropower plants and 4 diesel power plants in the country. Afghanistan imports a total of 64 MW from its neighbors, but this will likely increase to over 900 MW in the future, with increased hydropower energy from Tajikistan and thermal power imports from Turkmenistan and Uzbekistan. There are current plans to create 10 more domestic hydropower plants and an increase in capacity of an existing diesel power plant.

The Government of Afghanistan, with the financial support of the World Bank, is also restructuring the existing state owned power enterprise "DABM," which owns and operates all existing power plants, distribution systems and transmission lines in Afghanistan. The restructuring will focus on technical improvement, as well as institutional and administrative capacity building. With assistance from USAID, the Government is establishing a *Bilateral Cooperation Agreement for Power Trade* with Central Asian nations bordering Afghanistan. This will be an integral part of the North-East Transmission System (NETS). USAID is also assisting in the creation of future

power utility companies in Afghanistan that will revitalize the North-East and South-West Transmission Systems.

Investment possibilities in the power sector include the creation and development of local utility companies, the construction and maintenance of electrical systems, and the development of generation systems (electrical, wind and solar).

# **Fuel Supply**

The main fossil fuel resources in Afghanistan include coal, natural gas, and petroleum. Investments in these areas have not been made for many years and the industry was at a virtual standstill until recently. In oil and gas, old technologies and low-cost approaches to developing the sector failed to provide the industries with arrangements to support the demands of an open market economy in Afghanistan. With today's steadily increasing demand for energy domestically and regionally, development of the sector is critical.

Afghanistan is strategically positioned to provide a route for hydrocarbons from Central Asia to the Arabian Sea. This role was most apparent in plans to utilize Afghanistan as a transit route for the construction of a pipeline from Turkmenistan through Afghanistan to natural gas markets in Pakistan. This pipeline was proposed in the late 1990s by the U.S. Unocal Corporation, in cooperation with the Central Asia Gas Pipeline Consortium, but at present no decisions have been made on which companies will take over and implement this project. In the future, the probable discovery of new hydrocarbon reserves will likely provide greater interest in similar high profile pipeline construction projects.

#### Coal

Afghanistan uses coal primarily for domestic heating/energy during the winter months and for electricity generation and industrial uses. Coal reserves are estimated to be nearly 70 million tons and are primarily located in the north of the country between Herat and Badakhshan. It is estimated that Afghanistan currently produces around 120,000-140,000 metric tons of coal annually. The Ministry of Mines and Industry approximates that the country requires a domestic consumption of 500,000 tons per year, which could easily double to over 1 million tons. It is predicted that if the cement and thermal power industries are further developed, several million tons of coal could be utilized in these two areas alone.

The price of coal has increased considerably in the past several years, from around US \$12/ton to US \$60-80/ton on the Kabul market. This is mainly due to demand for fired bricks to be used in construction projects. The estimated total value of coal production in Afghanistan is US \$10 million annually. With adequate government regulation, the restoration of existing coal mines including machinery replacement, and an influx of private investment, this value could easily increase several fold annually.

# Hydrocarbons

Afghanistan's main energy resource is natural gas. These deposits are located in the Gelmend, Kundar-Urgun, Tirpul and Karakum and Afghan-Tajik basins. Historically, these reserves were exported to the former USSR and Soviet-controlled Central Asia. As of 1985, the largest discoveries were the Khoja-Gugerdag and Djarkuduk gas fields, and the Kashkari oilfields.

In March 2006, scientists from the U.S. Geological Survey and the Ministry of Mines and Industry released new findings that indicate that the Afghan-Tajik and Amu Darya Basins contain 18 times the oil and triple the natural gas reserves previously determined. The Afghan-Tajik basin was found to have around 1.6 billion barrels of oil and 15.7 trillion cubic feet of natural gas has been discovered in the Amu Darya basin. Previous exploration studies by Soviet and Afghan scientists estimated Afghanistan's total oil reserves at 88 million barrels and natural gas reserves at 5 trillion cubic feet.

The area covered by the study was only roughly one-sixth the size of the two basins, which cover nearly 200,000 miles total. Given these findings and the relatively small area covered in total, further discovery of resources using modern exploration techniques is probable. With these new discoveries and renewed interest in the sector, competition among multinational hydrocarbon companies is expected to be fierce in the coming years.

Since Northern Afghanistan is a prime area for hydrocarbon exploration, the Asian Development Bank has pledged US \$24.5 million to rework gas wells and refurbish pipelines in the north. ADB is also working to develop a gas strategy and gas regulatory secretariat.

Existing natural gas pipelines in Afghanistan are as follows (as provided by the Ministry of Mines and Industry):

- From Jarquduk to Khwoja Gogerdak (40 km)
- From Acha to Acha City (10 km)
- From Sheberghan to Jarquduk (13 km)
- From Khwoja Gogerdak to Cleft (100 km)
- From Khwoja Gogerdak to Fertilizer Company (89.1 km)
- From Yatimtaq to Jarqo Doq (28 km)
- From Acha Roundabout to Mazar-e-Sharif (63 km)

Notably, Afghanistan also has some 1.5 million tons of barytes, an industrial mineral used as a weighting agent in the manufacture of oil well drilling. This deposit will play a strong support role in the development of the hydrocarbons industry in Afghanistan and other Central Asian countries.



Afghanistan's main energy resource is natural gas.

# Main Energy Infrastructure at a Glance

#### Oil

Angot Oilfield	Produces a small quantity of crude oil; located in Sar-i-Pol province.
	Primitive retorts used at the field and near Sheberghan to refine
	produced oil.

#### Natural Gas

Sheberghan	The Djarquduk, Khowaja Gogerak, and Yatimtaq natural gas fields are
Area Gas	all located within 20 miles of Sheberghan.
Fields	
Pipeline to	A pipeline connects these natural gas fields to Mazar-e-Sharif. Limited
Mazar-i-Sharif	amounts of gas currently is supplied to a 48-MW power plant near
	Mazar-e-Sharif (which is operating at less than one-third full capacity) and for the 100,000 mt/y fertilizer plant, which is partially operational.
Local pipelines	Small-diameter pipelines supply gas to the Khwaja Gogerdak and
	Djarquduk gas fields with Sheberghan and nearby villages.

# Electricity

Kajaki Dam	Located in Helmand province near Kandahar; transmission lines to Kandahar repaired in early 2002, after being damaged by airstrikes in November 2001. Upgrading and expansion program is underway.
Mahipar Dam	Installed capacity of 66 MW. Near Kabul. Operational only two to three months out of the year (springtime) but currently lacking adequate water.
Naghlu Dam	Installed capacity of 100 MW. Operational. Provides most of the electricity used in Kabul.
Darunta Dam	Installed capacity of 11 MW. Operational. In Nangarhar province near Jalalabad.
Sarobi Dam	Installed capacity of 22 MW.
Dahla Dam	Kandahar province. Operational.
Mazar-e- Sharif Power Plant	Small natural gas-fired power plant near Mazar-e-Sharif, partially operational at under 30 MW.

Source: Energy Information Administration (EIA) on Afghanistan, <u>Afghanistan Fact Sheet: Energy Overview</u>

# Machinery

Domestic production of machinery related to the mining and energy sector presents yet another opportunity for investors. All mining equipment in Afghanistan is currently imported from abroad, or from the Soviet era. In the long term, the manufacture of local machinery will be profitable to the mining and energy industries and the establishment of repair centers for technical support will be crucial.

# Government



# Role

# Creating a suitable environment for investors

The Government of Afghanistan realizes that the development of mineral resources will mean creating an enabling environment for attracting investment. As this industry is at the beginning of its development process, the Ministry of Mines and Industry has not yet issued any private licenses or permits for minerals extraction or exploration. Gas exploration is operating under similar conditions, but this is likely to change with the recent discoveries of large gas and oil reserves in the Afghan-Tajik and Amu Darya Basins. The following details show the existing regulatory and legal framework for the mining and energy industries in Afghanistan.

# Mining

The Government of Afghanistan faces many challenges in re-establishing control over the mining sector, but is aware the longer the mining industry goes unregulated, the more threatened Afghanistan's natural reserves become. As a result, the responsible Ministry is working with the Geologic Surveys and donor community to develop a strategy that will encourage private sector development in mining. Some of the major functions and responsibilities include, but are not limited to:

- Development of infrastructure for mining;
- Administration of mineral rights and concessions;
- Control and regulation of industry (this would include measures to reduce smuggling and encourage official channels for trading in precious and semiprecious minerals);
- Assistance to environmental permitting of operations; and
- Creation of an Inventory of Mineral Activities currently conducted by the State.

# Legal Framework: Mining

Competitive mining legislation is a key component in creating a suitable environment for investment. Experience in other countries has shown that a strong regulatory framework can successfully attract and retain investment and achieve sustainable growth.

Article 1 of the new Minerals Law, passed in July 2005, states that "All naturally occurring Mineral Substances and all Artificial Deposits of Mineral Substances on or

under the territory of Afghanistan or in its water systems are the exclusive property of the State." The Article also endows the State, most specifically the Ministry of Mines and Industries, as the only legal entity permitted to grant authorization "by any Person other than the State" to Mineral Rights.

# **Eligibility for Mining**

Those individuals eligible to obtain Mineral Rights include "any legal entity organized or incorporated under the laws of Afghanistan" or "any legal entity organized or incorporated under foreign law that is legally entitled to reside or do business in Afghanistan." However, such persons are required by law to establish an administrative presence in Afghanistan or appoint an Agent duly responsible for reporting to the appropriate governmental authorities.

Key administrative provisions of the **Minerals Law** are as follows:

- The administration of tenders for Mineral Rights;
- Eligibility criteria to obtain Mineral Rights;
- The establishment of a Mining Cadastre to process applications for Mineral Rights;
- The establishment of a Mining Inspectorate to enforce compliance and conduct inspections;
- The establishment of an Environmental Protection Department to enforce regulations concerning environmental and social protection with regard to Mineral Activities;
- The establishment of the Geological Survey to conduct research activities and studies.

Key implementation provisions of the **Minerals Law** (critical to Investor rights and responsibilities) include:

- Description and differentiation between different types of permits (Exploration Licenses, Exploitation Licenses, Quarry Exploration Authorization, Quarry Exploitation Authorization, Artisanal Exploitation Authorization, and Authorization for Construction of Infrastructure);
- Duration, surface area and obligations provisions of various permits;
- Description of Surface Rights Fees for various permits;
- Article 19 states that a Person may hold one or more Licenses and/or Authorizations simultaneously;
- Perimeter of Mining Operations and occupation of land;
- Permit/License Renewal Procedures;
- Transferability of Title (ability of Holder to transfer Mineral Right to a third party or inheritance provisions);
- Withdrawal or Termination of Mineral Right;
- Sale of Minerals and Mineral Substances;
- Protection of Investments (state guarantees, foreign exchange rights and import/export provisions);
- Assurances of protection against financial consequences of legislation which becomes effective after the issuance of the Mineral Right;

- Detail of Penalty provisions enforced by the Mining Inspectorate;
- Health and safety provisions (Holders of Mineral Rights are required by law to publish a Health and Safety Plan to the Mining Inspectorate);
- Environmental Impact Statement (required by law for Holders of the Exploitation License or Quarry Exploitation Authorization); and
- Arbitration and dispute resolution.

# Taxation and Mineral Royalties

The Minerals Law grants authority to the Ministry of Finance for collection of application taxes and customs laws. Moreover, the Holders of Mineral Rights are "entitled to the rights and privileges available to Investors under the Investment Law."

The collection of Mineral Royalties falls under the jurisdiction of the Ministry of Mines and Industries and Holders subject to such royalties are legally bound to submit quarterly operations reports to the Mining Inspectorate. Royalties differ for various minerals and these rates can be obtained from the Ministry.

# Legal Framework: Hydrocarbons

The Government of Afghanistan is currently working within the Ministry of Mines and Industry to ratify the drafted **Hydrocarbons (Petroleum and Gas) Law (2006)**. Similar to *Article 1* of the Minerals Law, the **Hydrocarbons Law** declares all petroleum and gas located on the territory of the State exclusive property of the State. The State designates the Ministry of Mines and Industry as the appropriate authority to grant petroleum and gas operations licenses.

Some of the major administrative functions and responsibilities of the Ministry in this respect will include:

- Organize bidding rounds;
- Divide territory into exploration 'blocks' to invite bidding;
- Creation of an Inter-Ministerial Committee to approve and evaluate bidding procedures for hydrocarbons contracts;
- Register all hydrocarbons operations (an office specifically for this purpose will be established in the MMI);
- Delineate areas closed to or prohibited from hydrocarbons activities;
- Supervise contract implementation;
- Fix surface rentals;
- Authorize inspection of operations at any time;
- Terminate contracts in conjunction with the Inter-Ministerial Committee;
- Determine percentage of minerals royalties and collection procedures;
- Propose regulations; and
- Issue reports of financial revenues.

# Eligibility for Hydrocarbons

Eligibility for hydrocarbons licenses has similar criteria as for mineral rights. Those individuals eligible to obtain petroleum and gas operations licenses include foreigners legally permitted to reside in Afghanistan and "any foreign legal entity established according to external law or is a collaborator and has the right to reside in Afghanistan legally and embark upon investment and trade." (Minerals Law, Article 4). Foreign persons are required by law to establish an administrative presence in Afghanistan or appoint an Agent duly responsible for reporting to the appropriate governmental authorities.

Other key provisions of the Hydrocarbons Law will include:

- An updated Petroleum and Gas Data Bank monitored by the Afghan Geological Survey;
- Differentiation between two types of hydrocarbons contracts: Exploration and Production Sharing and Services and Production Sharing;
- Tenure of contracts for Exploration (10 years, but with possibility of extension) and Production (25 years maximum from the date of discovery);
- Environment Protection and Management Plan (mandatory for contracts);
- Abandonment and Decommissioning Plan;
- Health and Safety Plan;
- Legal Provisions for Pipelines (including construction, use, and transportation terms);
- Payment of Royalty Fees as determined by the Inter-Ministerial Committee;
- Transfer of Foreign Exchange; and Dispute settlement.

# Challenges that can be mastered

While Afghanistan offers many profitable opportunities in energy and mining, formidable challenges remain. Some of these challenges include:

#### Transition to a market economy

Government control over mineral resources burdened the central government with subsidies for inefficient production at state owned mines and also resisted the adoption of new modern mining methods

#### Security

Ineffective government control over mineral rich areas; many mines are in rural areas out of central government control or located in unstable areas i.e. the border of Pakistan

#### Lack of infrastructure (power, water and transport)

Poor rural roads make shipping materials more expensive relative to other countries

### Obsolete mining practices

Methods dating back to the 1980s and before

#### Lack of investment in Modern Machinery

Replacement of outmoded machinery will increase start-up costs for investors; Up-to-date quarrying & processing technologies/facilities crucial

## Unexploded ordinance

Afghanistan remains one of the most heavily land-mined countries in the world and security precautions are essential for exploration

## Shortage of skilled workforce

The shortage of skilled labor will increase start-up costs for investors, as more expensive labor (engineers, managers and machinists) will have to be imported until local workers receive appropriate training

#### Landlocked Location

Cost of transport to markets higher

# Research & Technology

Efforts are underway, but geological clarity of reserves will be vital in directing investment

### ■ Legal & Regulatory Framework

Implementation of the new Minerals and Hydrocarbons Law will be a challenge capacity-wise for the Government

#### Access to Credit

Mining is high risk and capital-intensive; Lack of financing possibilities most detrimental to SME's (small and medium-sized enterprises)

Despite these challenges, progress is underway. The Government of Afghanistan has identified key state-owned enterprises for privatization (see paragraph before) and financial institutions are building capacity and working alongside investors to provide reliable credit facilities. Security and de-mining is gradually improving. Most importantly, the Afghan Government has begun establishing the appropriate legal framework for mining and energy through the Minerals and Hydrocarbons Laws, demonstrating its commitment to the development of these sectors. Lastly, the international community is making every effort to provide technical and financial expertise in these areas and is helping Afghanistan reconstruct the physical infrastructure that will be vital to sustaining investment in its mining and energy sectors.

#### **AISA Services**

The **Afghanistan Investment Support Agency (AISA)** stands ready to provide investors with assistance and only the most up-to-date information available on Afghanistan's investment opportunities. AISA encourages you to contact us with your questions and concerns at:

Office address: Opposite Ministry of Foreign Affairs, Kabul, Afghanistan Phone: (93) (0) 20-210 3404; Email: info@aisa.org.af or invest@aisa.org.af; www.aisa.org.af