The mining industry in Iran

A U G U S T  2 0 1 5
Executive summary

- The resources sector of Iran has long been focussed on the oil & gas sector, with little attention given to its mineral wealth.
- Iran in fact holds 7% of the total world’s minerals, the biggest global zinc reserves, some of the biggest copper deposits and is a very significant supplier of iron ore and chromite globally. There are approximately 5,000 mines in operation in Iran, with 12 metals and 36 non-metal ores currently being exploited.
- The potential is huge for investors and mining companies -
- Currently, 90% of the country’s mines are in state hands (predominantly through Iranian Mines and Mining Industries Development and Renovation Organisation (IMIDRO)) but the government publicly stated in 2015 its intentions to further develop the sector through private and foreign investment - in particular copper, iron ore and aluminium.
- In 2013, 340Mt of minerals were extracted, making it one of the leading mineral producers in the Middle East.
- Iran is one the 15 most mineral rich countries in the world, with mining products representing >30% of the country’s non-oil exports, employing >100,000 people directly and up to half a million indirectly.
- However due to political instability and the effect of the UN imposing sanctions, virtually all international mining companies and investors have pulled out of the country.
- The existing public enterprises and large state-owned market players are no longer the most efficient way of running the economy and that Iran believes a wide-ranging reform is necessary for its economy in to attract foreign investment.
- This is particularly poignant at present given the substantial drop in government oil revenues in the last 6 months.
- By the end of the current Five-Year Development Plan (FYDP), which began in 2010, the government expects to boost the mining sector’s contribution to GDP to 4% as well as total mineral production to 500 million tons. With 12% of the Persian Gulf region’s aluminium reserves, the implementation of development projects could boost production to 1.5 million tons by 2025 and turn Iran into one of the top 10 producers in the world.
- Some big investment proposals have already been floated such as a US$3bn investment proposition by National Aluminium Company of India (one of the largest trading partners of the country).
- In June 2015, the Iran Mines & Mining Industries Summit was held in Tehran where 284 domestic companies attended and over 200 mineral projects ready for investment were presented.
- This was seen as the beginning of Iran’s drive to open its doors to foreign investment into its mining industry.
Iran Overview

Mining Resources and Production Overview

Specific Mineral Summaries

The Effect of Sanctions
Iran Overview

Location

- Bordered by Armenia, Azerbaijan, Kazakstan, Russia, Turkmenistan, Afghanistan, Pakistan, Turkey and Iraq
- 2nd largest nation in the Middle East and 18th largest in the world
- Home to one of the world’s oldest civilisations - the Proto-Elamite and Elamite Kingdom, 3200–2800 BC
- Reached pinnacle of power during the Achaemenid Empire, the largest the world has ever seen. The empire collapsed in 330 BC following conquests of Alexander the Great
- Is a founding member of the UN, ECO, NAM OIC and OPEC
- It has a unique political system which combines elements of parliamentary democracy with a theocratic government owned by the country’s clergy
- Has a strong labour force with >55% skilled workers

Quick facts (2014)

<table>
<thead>
<tr>
<th>Capital</th>
<th>Tehran</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government type</td>
<td>Theocratic Republic</td>
</tr>
<tr>
<td>Currency</td>
<td>Iranian Rial (1USD:29,832 IRR)</td>
</tr>
<tr>
<td>Religion</td>
<td>Shia Muslim (95%)</td>
</tr>
<tr>
<td>Language</td>
<td>Persian/Farsi</td>
</tr>
<tr>
<td>Nominal GDP</td>
<td>US$ 404.1bn</td>
</tr>
<tr>
<td>GDP (PPP)</td>
<td>US$ 1,334 bn</td>
</tr>
<tr>
<td>Total Debt / GDP</td>
<td>11.4%</td>
</tr>
<tr>
<td>Inflation</td>
<td>15.8%</td>
</tr>
<tr>
<td>GDP Growth</td>
<td>3.0%</td>
</tr>
<tr>
<td>Population</td>
<td>81.82mm</td>
</tr>
</tbody>
</table>

Summary

- Iran is a country of vast wealth

![Map of Iran](image1.jpg)
![Oil well](image2.jpg)
![Iranian skyline](image3.jpg)
![Museum](image4.jpg)
Economic overview - political world relations has impacted heavily but this is improving

Overview

- The Iranian economy possesses significant agricultural, industrial and service sectors however inefficiencies in this sectors have led to the State’s over-reliance on oil and gas exports
- Distortions - including inflation, price controls, subsidies, and a poor banking system weigh down the economy, undermining the potential for private-sector-led growth
- Inflation has come down sharply from ~40% in June 2013 to 15.5% in April 2015. The Central Bank’s aim is to reduce inflation to single figures by March 2017. Curbing inflation has been the Central Bank’s most recent highest priority
- Private sector activity includes small-scale workshops, farming, some manufacturing, and services, in addition to medium-scale construction, cement production, mining, and metalworking
- The expansion of international sanctions in 2012 on Iran’s Central Bank and oil exports, significantly reduced Iran’s oil revenue, forced government spending cuts, and sparked a sharp currency depreciation. Iran’s economy contracted for the first time in two decades during both 2012 and 2013, and grew only slightly 2014
- Scaling back sanctions in 2015 will mean that Iran can return to its integration into the global economic community and can reap benefits from foreign capital markets
- The state is also pushing for greater privatisation in efforts to reduce the size of the government, and is keen to attract foreign investment
- In April, a senior economic official announced that the value of foreign investment in Iran has experienced a remarkable growth of 100 percent in the last Iranian year (ended March 20, 2014).
- 800 foreign investors have entered into Iran in the last few months
Political overview

History

- Following the Islamic revolution in 1979 and the overthrow of the Shah Mohammad-Reza Pahlavi, Iran transformed from a constitutional monarchy to a theocratic government.
- The new theocratic regime led by Ayatollah Ruhollah Khomeini adhered strictly to the sharia doctrine and began re-establishing institutions along these lines.
- Khomeini was succeeded by Ali Khamenei who continued with his model of government till present.

Government

- **Supreme Leader**: currently held by Ayatollah Ali Khamenei, is the most senior position in government. The Supreme Leader has final say on all matters and has a network of representatives in all departments. Although given such authority the Supreme Leader tends to a more passive role acting as a mystical advisor.
- **President**: currently held by Hassan Rouhani, the president is the second highest ranking official in Iran, however, his power is trimmed back by the constitution, which subordinates the entire executive branch to the Supreme Leader. The president is responsible for day-to-day activities such as setting economic policies and representing the state overseas.
- **Parliament**: The Iranian Parliament is a unicameral legislative body whose 290 members are publicly elected every four years. It drafts legislation, ratifies international treaties, and approves the country's budget. The parliament is still kept in check however by the Council of Guardians.
- **Assembly of Experts**: The Assembly of Experts, which meets for one week every year, consists of 86 "virtuous and learned" clerics. Members of the Assembly of Experts in turn elect the Supreme Leader from within their own ranks and periodically reconfirm him.
- **Council of Guardians**: Twelve jurists comprise the Council of Guardians who are vested with the authority to interpret the constitution and determines if the laws passed by Parliament are in line with sharia (Islamic law). This means that the council has effective veto power over Parliament.

Neighbour relations

- **Saudi Arabia**: Iran’s strained relationship with Saudi Arabia has included disputes over interpretation of Islam, aspirations for regional hegemony and oil export policy. The recent Yemen crisis has exacerbated this relationship.
- **Iraq**: The two countries’ relations were particularly tense during the Ba’athist regime. This culminated in the 1979 Iran-Iraq war over border disputes. Following the fall of Saddam Hussein’s government, relations have improved particularly due to the Shi’a dominated government.
- **Afghanistan/Pakistan**: Iran has an economic partnership with Pakistan however Iran has been cautious politically due to Pakistan’s warm relations with the USA and Saudi Arabia. However, Iran has fostered its relationship and has aided Afghanistan by housing many of its refugees and supporting its government.
Iran Overview

Mining Resources and Production Overview

Specific Mineral Summaries

The Effect of Sanctions

Other Considerations
Iran - Resource Overview

Facts

- There are 68 types of mineral, with an estimated value of $700 billion.
- Total proven reserves of metallic and non-metallic deposits are estimated at 55 billion tons.
- Iran's deposits that are largely underdeveloped include zinc (world's largest), copper (world's ninth largest - revised from second largest in 2010), iron (world's ninth largest), uranium (world's tenth largest) and lead (world's eleventh largest).
- Iran with roughly 1% of the world's population holds more than 7% of the world's total mineral reserves.

IMIDRO, KGK-Co

Iran's global production ranking

Mining Belt Areas

<table>
<thead>
<tr>
<th>Belt</th>
<th>Commodity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malayer-Isfahan</td>
<td>Lead-Zinc</td>
</tr>
<tr>
<td>Kerman</td>
<td>Copper</td>
</tr>
<tr>
<td>Esfandagheh-Faryab</td>
<td>Chromite</td>
</tr>
<tr>
<td>Khash-Nehbandan</td>
<td>Chromium, copper, manganese</td>
</tr>
<tr>
<td>Qom-Naein</td>
<td>Manganese, barite, copper</td>
</tr>
<tr>
<td>Kavir-Sabzevar</td>
<td>Copper, chromium, gold, iron</td>
</tr>
<tr>
<td>Taknar</td>
<td>Copper, gold, arsenic</td>
</tr>
<tr>
<td>Tarom-Hashtjin</td>
<td>Copper, iron, lead, zinc, gold</td>
</tr>
<tr>
<td>Maku-Khoi-Urumiyeh</td>
<td>Gold, mercury, copper, chromium, iron</td>
</tr>
</tbody>
</table>

Mottra Capital
Iran- Production Overview

Summary

- Metals and minerals contribute a mere 1.2% to the country’s GDP, despite Iran being the 15th most mineral rich country
- Before sanctions Iran exported to 159 countries including China, India, Iraq, the United Arab Emirates and Afghanistan
- In 2005, there were 3125 operating mines; out of which, 2747 were private run and 378 were public. As of 2010, there are 5574 mines being exploited in all 30 provinces. The rate of extraction was approximately 217.5 million. There are over 500,000 individuals employed in the mining sector
- The mining and manufacturing sector, accounted for an additional 14.2% of GDP

Iran's Reserves and Resources

The Economic Geology of Iran
Mineral economic geology of Iran- the focus has been on hydrocarbons

Opportunity untapped by the international community

- Iran is one of the most gifted countries in the world from a mining perspective
- Proven & Probable reserves of metallic and non-metallic deposits are >55Bt, with 62 known types of mineral deposits and >5,500 known ore deposits and indications, a number which are inactive or not yet developed
- The mining sector is expected to play a pivotal role in Iran’s economy but because of the dominance of the oil sector, the share of mining has been reduced to a negligible figure, especially since sanctions have limited any form of international funding to allow international mining giants to pro-actively invest in Iran
- In particular, Iran’s mineral wealth is focussed in Zinc, Iron ore, Copper, Chromite, Aluminium, Cement, Limestone and is the highest ranking in globally production of Turquoise
- From 1997 to 2001, the share of mining (as a percentage of GDP, based on current prices) remained around 0.66%, whereas the figures based on the fixed prices of 1990 have grown from 0.97% to 1.25%. This is due to the lower growth of prices in the mining sector as compared to the general mining sector
- Given the natural riches of Iran, mining’s mere 1% share of GDP cannot be considered as appropriate and offers immense opportunity for growth and reveals the potential demand for investment in the sector
- Restrictions exerted by the constitution of the country on investment by foreign financial institutions have formed the major obstacle
- Over 200 iron ore deposits (Reserves of >4.5Bt grading 45-60% ~3% of global reserves, 45 manganese ore deposits (e.g. Robat Karim >300Mt Mn) and 500 ore deposits of copper are known.
- Presently there are 10 active copper mines in Iran whose reserves amount to 3Bt of ore, containing 30Mt Cu comprising 9% of the world’s known copper reserves. Total estimated value of US$700bn
- The systematic geological study of Iran only started in the 1960s after the geological survey of Iran was established. There are 6 distinct phases of mineralisation in Iran from the Early Cambrian to the Quaternary
- 2014 was an especially tough year for the mining sector as prices of iron ore, copper and chromite experienced sharp declines. Annual extraction fell by 5% to 400Mt from 420Mt a year earlier. Target for current Iranian year is 450Mt (Financial Tribune, July 2015)
Iran Overview

Mining Resources and Production Overview

Specific Mineral Summaries

The Effect of Sanctions
Zinc

Overview

- Iran has the world’s largest zinc reserves
- With approximately 11 million tonnes of zinc metal constituent and 5 million tonnes of lead metal constituent, Iran has just below 5% of the world’s metal constituent reserves.
- Iran’s Zinc smelters are operating at less then 40% of their total capacity estimated to be 450 ktpa for zinc ingots and 420 ktpa for lead ingots.

Mine information

- Two important mines in Iran are:
  - Mahdi-Abad, which has 75 million tonnes of ore @ 6% Zn and 2.7% Pb
  - Angouran mine, which has 16 million tonnes of ore @ 26% Zn and 6% Pb
- The largest or most profitable producers of zinc and lead in Iran are:
  - Iran Zinc Mines Development Group (largest producer),
  - Bama Mining & Industrial Co.,
  - Bafgh Mines Co.
  - Kalsimin Co. (the largest zinc producer in the Middle East)

Map of key mines

Zinc production

<table>
<thead>
<tr>
<th>Year</th>
<th>Production (kt)</th>
</tr>
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<tbody>
<tr>
<td>2008</td>
<td>65</td>
</tr>
<tr>
<td>2009</td>
<td>75</td>
</tr>
<tr>
<td>2010</td>
<td>80</td>
</tr>
<tr>
<td>2011</td>
<td>105</td>
</tr>
<tr>
<td>2012</td>
<td>105</td>
</tr>
<tr>
<td>2013</td>
<td>134</td>
</tr>
</tbody>
</table>

Geological Survey of Iran, Iran Mining
Iron

Overview

- In 2014, Iran produced 45 Mt of iron ore, making it the 9th largest ore and 14th largest steel producer in the world.
- There are over 200 ore deposits, indications or anomalies of ore in Iran, whose reserves total 4.5 billion tons of iron ore.
  - The average grade of iron in these reserves varies from 45-60% Fe
  - Iran accounts for roughly 2.7-3% of the world’s total iron reserves, but contributes only 1% to total production
- Iran plans to develop a domestic iron steel industry:
  - Planning to more than triple steel capacity within the next 10 years to support expected increase within local demand.
  - Tumbling exports to China due to strong international competition: From No.4 supplier of iron ore to China last year, exporting 20Mt, Iran forecasts exports to sharply decrease to 5-7Mt in 2018.

Mine information

- 4.1 billion tons, or 90% of Iran’s iron deposits are situated in the three provinces of Khafr, Bafq and Sirjan
- The Gol Gohar iron ore mine in Kerman Province in south-eastern Iran and the Chadormalu iron ore mine in Central Iran, the two largest iron ore mines in Iran, combined produce about 80% of the country’s produce
- Mobarakeh Steel Co. is the leader in mining industry, with a retail value share of 18% as of 2014, followed by Golgohar Mining & Industrial Co. with a share of 13% market share. Mobarakeh Steel Co. also leads the market for iron ore production in the country, with a 41.6% market share, and the steel market with a 48.1% retail value share. Retail sales of mining products are forecasted to grow by 19.7% by 2020

Iron production

Map of major mines

The Economic Geology of Iran, USGS, Mordor Intelligence

Geological Survey of Iran, Iran Mining
Copper

Overview

- Copper is the second most profitable mineral in Iran’s mining industry
- Iran is located on the world’s largest copper belt, which stretches from the northwest Iran, southeast into Pakistan
- Iran accounts for approximately 2,600 million tons of copper reserves, or about 4% of the world’s total (17th largest reserve globally)
- Copper ore production in Iran accounts for 75% of the total production in the Middle East

Mine information

- There are currently 19 active copper mines with 15Mt of annual extraction. The biggest copper mines are the Sarcheshmeh (Kerman province), Meidouk (Kerman province) and Songoon copper mines (Ahar province)
- The mines at Sarcheshmeh contain the world’s second largest lode of copper ore (5% of the world’s total)
- National Iranian Copper Industries Company (NICICO) is one of the largest companies listed on the Tehran Stock Exchange and was the largest non-oil exporter in Iran in 2010 with exports worth $1.3 billion

Copper production

Map of key mines

GeoSurvey of Iran, Iran Mining
Gold

Overview

- Iran hosts the largest gold reserves in the Middle East
- Large gold production increase plan: The government has announced an expected increase from 100kozpa to >320kozpa by 2017
- Great exploration upside:
  - Gold seen as a top priority mineral for exploration
  - Probable gold reserves of 12Moz does not reflect true potential
  - At least 14 gold zones in the country
  - Implementation of development plans in order to expand extraction in depleted mines in the Mouteh complex

Mine information

- 24 mines across the country (15 operating)
- In Nov 2014, Iran opened a new gold processing plant (the biggest in the Middle East) at the Zareh Shuran mine in the West Azerbaijan province to boost production from 30kozpa to >200kozpa
- In August 2015, Iran publicly announced that it had identified 1,200 prospective gold-bearing sites which it hoped to pursue with foreign direct investment

Gold output production

- USGS, Financial Tribune

Map of probable gold deposits

The Economic Geology of Iran, Iran Daily

Geological Survey of Iran, Iran Mining
An industry dominated by the government

**Mining Industry**

- The government owns 90% of all mines and related large industries in Iran, and is seeking foreign investment to develop the mining sector.
- The majority of non-petroleum mineral companies are controlled by one of 30 companies administered by Mines and Metals MMM.
- These companies include the below mentioned parastatals as well as joint-stock companies, partially nationalized companies of which the government owns a majority share.
- Private companies come in two types mines, operated by cooperatives and foundations called Bonyads (which play a major role in Iran’s non-petroleum economy and control an estimated 20% of Iran’s GDP, channelling revenues to groups supporting the Islamic Republic) and mines operated by companies or leased to private operators. The majority of these private companies are foundations.
- The government has been privatizing smaller mines and related commercial operations, but has thus far excluded major mines and operations. However, it privatized 40 mineral companies under control of MIM as a part of the Third Development Plan period.

**Government Institutes**

- Ministry of Industry and Mines (MIM)
- Iranian Mines and Mining Industries Development and Renovation Organization (IMIDRO)
- National Iranian Copper Industries Co. (NICICO)
- National Iranian Steel Co. (NISCO)
- National Iranian Lead and Zinc Company (NILZCO)
- Al-Mahdi Aluminium Smelter Complex (NICICO)
- Iran Mines Export Development Co. (IMEDCO)
- Iran General Mine Company
- Iranian Aluminium Company (IRALCO)
- National Iranian Mining Exploration Company
Iran Overview

Mining Resources and Production Overview

Specific Mineral Summaries

The Effect of Sanctions
Overview of sanctions on Iran

The sanctions story

- Since 2005, Iran’s nuclear programme has caused much contention with the international community following quotes from Iran’s leaders of potentially using an atomic bomb against Iran’s enemies (particularly Israel) and refusal to suspend its uranium enrichment programme.
- This led the UN Security Council to impose sanctions on Iran which effectively isolated the country economically and politically from the western world— including the US, EU, Japan, Korea, Canada, Australia, Norway, Switzerland and others.
- U.S. sanctions initially targeted investments in oil, gas and petrochemicals, exports of refined petroleum products, and business dealings with the Iranian Revolutionary Guard Corps. This encompasses banking and insurance transactions (including with the Central Bank of Iran), shipping, web-hosting services for commercial endeavours, and domain name registration services.
- Iran’s Supreme Leader believes the real objective of sanctions is to “prevent Iran from reaching a prominent civilization status.”
- In July, Iran and 6 world powers concluded an agreement that will hopefully lift sanctions on Iran but place strict limits on its nuclear programme for more than a decade.
- Lifting of sanctions would allow Iran to recoup more than $100 billion in frozen oil profits. It would also reopen Iran’s ability to export oil to buyers worldwide and allow its banking system to do business with Europe.
- Additionally, the Central Bank will also be able to resume contacts with foreign banks and make international credit card transactions again.
- Both Iran’s Central Bank and the IMF expect that Iran’s economy would grow by 2-3% if a nuclear agreement was made and sanctions lifted. Some feel it could expand by up to 5-8% per annum.
- However the World Bank said in August 2015 that lifting sanctions in Iran may drag oil prices down by $10/bbl as production is lifted by 1mmbbl per day.
- On 12 August, Switzerland became the first country to lift sanctions against Iran.

Sanction’s effect on exports

Source: OPEC Annual Statistical Bulletin

The nuclear story

- The conditions on the nuclear sector for lifting of sanctions:
  - Iran will reduce its enrichment capacity by two-thirds. It will stop using its underground facility at Fordow for enriching uranium.
  - Iran’s stockpile of low enriched uranium will be reduced to 300kg, a 96% reduction. It will achieve this reduction either by diluting it or shipping it out of the country.
  - The core of the heavy water reactor in Arak will be removed, and it will be redesigned in such a way that it will not produce significant amounts of plutonium.
  - Iran will allow UN inspectors to enter sites, including military sites, when the inspectors have grounds to believe undeclared nuclear activity is being carried out there.
  - Once the International Atomic Energy Agency (IAEA) has verified that Iran has taken steps to shrink its programme, UN, US and EU sanctions will be lifted.
Sanctions removal: An Opportunity for the Mining Industry

Iran’s need for business and investment

- Sanctions have restricted Iran’s access to intermediate products needed for the oil and energy sectors, prompted many oil companies to withdraw from Iran, and limited the import technologies that improve production efficiency. The impact of the sanctions is estimated to have cost Iran $60bn annually in energy investment.

- For fear of losing access to larger Western markets, many international companies have also been reluctant to do business.

- In addition to restricting export markets, the sanctions have decreased income due to the increased cost of revenue reparation.

- While the mining sectors of Canada, Australia, the US and Chile account for around 1.3% of the national workforce, Iran’s accounts for merely 0.1%.

- Deputy minister of industries, mines and trade says the manufacturing and industrial sectors need at least 1,950 trillion rials (more than $67 billion) in funding.

Sanctions effect on mineral prices

- After sanctions, Iran experienced hyperinflation levels up to 40%.

- In 2012, several mining companies and the Ministry of Industries and Mines agreed to sell mineral products on the Iran Mercantile Exchange at prices determined by using the foreign currency room rate instead of the official exchange rate.

- The change resulted in a 15-20% decrease in the domestic prices of metal products and petrochemicals.

- Later that year the Government banned 55 exports, including several mineral products, in order to maintain a domestic supply.

Loss to the world

- According to the NIAC, sanctions cost the U.S $175bn in trade and 279,000 jobs

- Between 2010 and 2012, the sanctions cost the EU double that of the United States in trade revenue

- Germany, hit the hardest, lost $23.1-$73.0 billion between 2010-2012. Italy and France trailed with losses of $13.6-$42.8 billion and $10.9-$34.2 billion respectively
**Foreign direct investment**

- **2002**
  - Iranian dissident group Mujahadeen Khalq share documents revealing a clandestine nuclear program unknown to the United Nations. Iran signs an accord with Russia to speed up completion of Iranian nuclear power plants.

- **March 1995**
  - Clinton executive order prohibits any US trade with Iran incl. sanctions on foreign companies with investments in Iran and Libya.

- **February 2013**
  - New round of US sanctions which target buyers of Iranian crude oil. Any purchaser using USD must use a US bank account, preventing Iran from repatriating the funds.

- **March 2003**
  - US led coalition invades Iraq to disarm Iraq of weapons of mass destruction and remove Saddam Hussein from power.

- **2003**
  - Iran suspends nuclear program in response to US invasion of Iraq and allows International Atomic Energy Agency to inspect nuclear sites.

- **August 2005**
  - Previously unknown conservative mayor of Iran, Mahmoud Ahmadinejad, becomes president of Iran. Ahmadinejad cheers on Iran’s nuclear program and escalates tensions between Iran and the UN.

- **December 2006**
  - First full round of UN sanctions that banned Iran from investing in foreign uranium mines, enrichment plants and related technologies. UN also requires that cargo to and from Iran be searched for suspicious material.

- **June 2010**
  - UN approves new sanctions that banned Iran from investing in foreign uranium mines, enrichment plants and related technologies. UN also requires that cargo to and from Iran be searched for suspicious material.

- **May 2013**
  - US targets companies aiding Iran with harsh penalties, including asset freezes. US Senate introduced legislation that denied Iran access to $100bn of Iranian money.

- **2002**
  - GDP
  - FDI

**Source:** World Bank, Economist Intelligence Unit 2015, New York Times
Iran Overview
Mining Resources and Production Overview
Specific Mineral Summaries
The Effect of Sanctions
Additional Considerations
Supportive business location

Government Support

- Cession of land on a time base in the special zones
- Cession of mine royalty & extraction right as well as abandoning mine extraction of the mine
- Insurance coverage advantage in mine exploration, exploitation & mineral processing
- Infrastructure (energy and water) assistance in provision
- Provide support for utilizing National Development Fund facilities and /or support the projects to receive foreign & domestic facilities

**IMIDRO**

Comparative Advantages

Factor inputs in addition to an abundance of mineral resources:

- Low cost labour
- Experienced workers
- Tax holidays and exemptions for new mining investments:
  - Level of Exemption: 80-100%
  - Duration of Exemption: 4-20 years
- Large regional market
- Well-developed access to the Persian Gulf water ways
- Free trade areas to attract foreign investment

Foreign investment to state run mining company incentives

<table>
<thead>
<tr>
<th>Incentives</th>
<th>Mining Exploration</th>
<th>Mining Projects</th>
<th>Mining Industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long term contract for Exploration, Extraction, Processing, Marketing</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Support for allocation of loan from Iran Oil Fund for part of investment</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Required permits from Authority</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Long term contract for raw material supply</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Allocate Land in Special Economic Zone (Tax Free)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>To Provide infrastructures required in SEZ</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Reserve Sharing Contract after Exploration</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Possible IMIDRO participation as shareholder in JV company</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Exploration Risk Insurance by Government</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>FIPPA Coverage</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

**IMIDRO**

Future Plans and Expectations

- Iran plans to invest over $15bn in the mining sector as a part of the Sixth Development to compensate for the current low amount of production,
- $450 million will be invested in the solely into the field of mining exploration
- The deputy minister of industries, mines and trade, predicts that the industrial and mining sectors will experience 6% growth by the end of the current Iranian year (ending March 19, 2016)

Financial Tribune

*Doing business in Iran 2015 Arjomandi Arif*
## Key issues in Iran

<table>
<thead>
<tr>
<th>Concerns</th>
<th>Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Legal</strong></td>
<td></td>
</tr>
<tr>
<td>✗ National rather than international courts are often viewed as the final decision maker between foreigners and the government</td>
<td>✓ FIPPA to increase support of foreign investors and to equate rights and treatment between foreign and local investors</td>
</tr>
<tr>
<td>✗ Corruption</td>
<td></td>
</tr>
<tr>
<td><strong>Security</strong></td>
<td></td>
</tr>
<tr>
<td>✗ Risk of war and political turmoil</td>
<td>✓ US led coalition providing training and funding to Iraqi military to ensure safety</td>
</tr>
<tr>
<td>✗ Insecurity and sectarianism</td>
<td></td>
</tr>
<tr>
<td><strong>Operational</strong></td>
<td></td>
</tr>
<tr>
<td>✗ Exchange rate risk: a highly fluctuating exchange rate causing instability, insecurity and inflation</td>
<td>✓ Better monitoring of price changes to better react to inflation</td>
</tr>
<tr>
<td><strong>Contractual</strong></td>
<td></td>
</tr>
<tr>
<td>✗ The government encourages investment instead of protecting it</td>
<td>✓ FIPPA granting protection coverage to all foreign investment schemes</td>
</tr>
<tr>
<td>✗ The government, and particularly the IRGC has the ability to expropriate foreign investments or cancel contracts for national security</td>
<td></td>
</tr>
<tr>
<td><strong>Governmental</strong></td>
<td></td>
</tr>
<tr>
<td>✗ Inefficient and bloated bureaucracy</td>
<td>✓ New PM</td>
</tr>
<tr>
<td><strong>Political</strong></td>
<td></td>
</tr>
<tr>
<td>✗ Complex political structure</td>
<td></td>
</tr>
<tr>
<td>✗ Risk that the government reneges on its nuclear agreements</td>
<td>✓ A meticulous agreement that allows for intrusive nuclear-inspection to discourage reneging on agreements</td>
</tr>
<tr>
<td>✗ Deteriorating situation between Shia-Muslim Iran and Sunni Arab Neighbours</td>
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</tbody>
</table>
FIPPA Act

Foreign Investment Promotion and Protection Act (FIPPA) ratified in 2002 provides confidence and support to foreign investors. The features and advantages of FIPPA creates the opportunity for foreign investors to tap into Iran’s wealth and resources

**FIPPA features and advantages**

- No restrictions on percentage of foreign shareholding & ownership
- Registration of an Iranian company seeded with 100% foreign capital
- Full repatriation of principal capital, dividend and profits
- Equal rights and treatment as accorded to local investors
- Permission and opportunities to invest in all areas which are available to the private sector
- Granting protection coverage to all foreign investment schemes
- Prompt approval of the Foreign Investment Application
Mining concession regime

- The main body of the Iranian government in charge of the regulation and implementation of policies applicable to industrial and mining sector is the Ministry of Industries and Mines of Iran. The ministry is responsible for the regulation of strategies for industrial and mining developments by developing plans and policies for the sectors. They provide supervision in addition to improving and enhancing the efficiency and productivity of the industry. The ministry also supports the promotion of export of industrial and mining products as well as in the improvement of management and productivity. The organ is also responsible for the issuance of licenses related to production and exploitation of mines.

  - **Article 5:** Exploration of mineral deposits may be undertaken by the public, cooperative or private sectors, including natural and juridical persons. The ministry of mines and metals is also obliged to explore the mineral deposits of the country, either directly or through subsidiary organizations, companies and units, or by employing competent and qualified natural and juridical persons.

  - **Article 6:** Exploration of mineral deposits shall be undertaken after the exploration license is issued by the ministry of metals and minerals. The procedures of obtaining such license, exploration criteria, period of validity of the license, assignment of the appending rights of such license, and any other appropriate issues shall be stipulated in the executive by-laws in accordance to the provisions of this act.

  - **Article 7:** The ministry of mines and metals is obliged to issue the discovery certificate in the name of the exploration license holder following investigation and confirmation of exploration works. The type or types of mineral substances explored, the quality, quantity, limits, area and cost of exploration activities must be stated in the discovery certificate. This certificate shall be assignable to third parties within a one year period as of the date of issue, subjected to the approval of the ministry of mines and metals.

  - **Article 8:** Holders of discovery certificate may apply for the exploitation license of the reserves they explored, to the ministry of mines and metals within one year following issuance of the discovery certificate. Non submission of the said application within the respite provided, shall result in the lapse of the said right of priority.

  - **Article 9:** Exploitation of mineral deposits shall require exploitation license from the ministry of mines and metals. The said license shall be issued on the basis of the mine identification documents and the exploitation, duly approved by the said ministry.

  - **Article 10:** Holders of mineral deposits exploitation licenses consists of:

    - Holders of discovery certificates, within the respite provided in Article 8
      - Processing plants producing mineral substances with added value up to the stage of producing industrial raw materials, from unclaimed mines, as long as they continue production
      - Industrial units consuming mineral substances from unclaimed mines, as long as they continue production
      - Applicants specialist in mining or geology or there is at least one of the said specialists, of unclaimed mines as long as they fulfill the aforesaid condition
    - The subsidiaries and affiliated units or companies of ministry of mines and metals, upon expediency, the aforesaid units and companies may undertake exploitation of mineral deposits utilizing the services of qualified natural and juridical persons or in partnership therewith
    - Mining cooperative companies comprising of mine employees
**Selected investment opportunities**

<table>
<thead>
<tr>
<th>Project title</th>
<th>Project objectives</th>
<th>Investment required (US$mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Copper</strong></td>
<td></td>
<td></td>
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<tr>
<td>Taft Copper mine plan</td>
<td>Equipping and exploiting Taft Mines with a capacity of 7Mt sulphur soil</td>
<td>403</td>
</tr>
<tr>
<td>Darreh Zaar copper conc. plant</td>
<td>Production of 100ktpa Cu conc @ 26% Cu</td>
<td>283</td>
</tr>
<tr>
<td>Nochun copper conc. plant</td>
<td>Production of 100ktpa Cu-Mo conc @ 26% Cu</td>
<td>472</td>
</tr>
<tr>
<td>Phase 3 Sarcheshmeh Copper</td>
<td>Increase annual capacity to 379t @ 26% Cu and boost Mo prod to 4,100tpa</td>
<td>525</td>
</tr>
<tr>
<td>Dareh Alo Copper conc. plant</td>
<td>100ktpa Cu conc @ 26%, 7Mt sulphur soil product, leaching plant with 5ktpa Cu cathode</td>
<td>373</td>
</tr>
<tr>
<td>Sarcheshmeh Copper- acid development and smelting</td>
<td>Changing smelting technology from reverb to flash for 280ktpa anodic Cu from conc and 1Mtpa sulphuric acid</td>
<td>740</td>
</tr>
<tr>
<td>Khatoon Abad smelting and sulphuric acid plant</td>
<td>Increase production of anode from concentrate to 200ktpa and produce 750ktpa sulphuric acid</td>
<td>458</td>
</tr>
<tr>
<td>Songon smelting and sulphuric acid plant</td>
<td>Annual production of 200ktpa anode from conc and 750ktpa sulphuric acid</td>
<td>532</td>
</tr>
<tr>
<td><strong>Steel / Iron</strong></td>
<td></td>
<td></td>
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<tr>
<td>Gol-e-Gohar- Steel Project</td>
<td>Set up steel plant with 1.6mtpa</td>
<td>911</td>
</tr>
<tr>
<td>Steel casting machine No. 5 in Mobarakeh Steel Co.</td>
<td>Slab production</td>
<td>128</td>
</tr>
<tr>
<td>Sangan pelletizing plant</td>
<td>5Mtpa iron ore pellet production</td>
<td>358</td>
</tr>
<tr>
<td><strong>Alumimum / Alumina</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persian Gulf’s Alumina Project</td>
<td>Production of 1.6Mtpa alumina</td>
<td>886</td>
</tr>
<tr>
<td>South Aluminium Project</td>
<td>Production of 276ktpa Al ingots</td>
<td>1,180</td>
</tr>
<tr>
<td><strong>Coal</strong></td>
<td></td>
<td></td>
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<tr>
<td>Khomrood Coal Mine</td>
<td>Annual prod of 750ktpa raw coal (400ktpa conc)</td>
<td>113</td>
</tr>
<tr>
<td>Savad Koh’s coke plant</td>
<td>Annual prod of 300ktpa metallurgical coke</td>
<td>104</td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kerman combined cycle power plant</td>
<td>500MW per annum</td>
<td>378</td>
</tr>
<tr>
<td>Nama gas power plant</td>
<td>500MW per annum</td>
<td>173</td>
</tr>
<tr>
<td>Khuzestan steel power plant</td>
<td>500Mw per annum</td>
<td>399</td>
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</tbody>
</table>