

# Mining Equipment and Technology

COLOMBIA FACT SHEET

Since large scale mining operations began in Colombia during the 1980s, the government has been determined to expand the role of mining in the economy. Its aim was to promote more large scale, industrialised mining projects, with expanded foreign investment being used to increase growth rates and expand the market. The resulting increase in production has seen the percentage of mining related exports increase from 35% of total Colombian exports in 1995 to 55% in 2009. This has made mineral commodities the main driver of their economy, helping to sustain the country's recent economic growth. The main commodities produced in Colombia are crude oil, coal, nickel, gold, emeralds and materials for construction (such as limestone). As was the government's intention, foreign investment in the mining sector has increased, propelling the rapid growth in the market, so that in 2009, 76.9% of all Foreign Direct Investment in Colombia was targeted at the mining and the oil industries. The success of the mining industry has also opened opportunities for mining equipment companies, especially for those supplying technologically advanced products, well suited to their needs of increasing productivity, lowering costs and minimising environmental impact.

## Mining Industry

In terms of mineral production, Colombia rates among the top producer countries in the world, for its principal exports. The coal industry is now the fourth largest exporter in the world, with production of 72.3 million tonnes in 2009 (17% of Colombian exports). Nickel production was rated third in the world (51 thousand tonnes in 2009) while emerald production was number one (2.9 million carats in 2009). In addition, 2009 also saw the production of 47.8 tonnes of gold and 13.2 million tonnes of limestone for construction. Production has risen steadily, especially in coal, nickel and gold mining, thanks to large increases in foreign investment. This has been generated by the government's willingness to make the reforms necessary to facilitate business, and also their success in decreasing the decades old security threat. These achievements have given the industry the confidence to believe that investment will continue to expand into the future, thereby increasing both the industry's and the country's growth rate. In the next ten years it is hoped that investment will facilitate the following expansion activities:

- Continue growth in coal mining production (including new projects) – Hope to increase production up to 200 million tonnes by 2020. Estimated investment required: US\$12.5 billion.
- An expansion of gold mining production (including new projects) to utilise the country's estimated gold reserves of

more than 25 million ounces. Estimated investment: US\$5 billion.

- The expansion in the production of Colombia's basic metal reserves (including new projects). Estimated investment: US\$4.5 billion.
- To continue activities in exploration for metals throughout the country. Estimated investment: US\$2 billion.

Opportunities therefore exist for Australian mining companies to invest in these expansion projects, taking advantage of the expertise which Australian companies in this sector already possess. The entrenched presence in Colombia of Australian businesses, investing in exploration and production and the operation of mines illustrates the suitability of Australian mining practices to the region.

## Mining Equipment and Technology

The ever increasing size of the Colombian mining industry has opened numerous opportunities for companies supplying mining equipment and related products. The overwhelming majority of large scale mining operations in Colombia, including the coal deposits at Cerrejón and La Loma and the nickel deposit at Cerro Matoso are open pit, meaning that the bulk of equipment required needs to be of a heavy variety to suit this type of activity. The government, in recognising the industry's need for equipment to aid their expansion has approved the

elimination of import duties or Value Added Tax payments for equipment, spare parts and accessories destined for various mining activities (production, processing, transformation and transportation). This policy obviously benefits Australian companies operating in Colombia, as well as making Colombian importers more willing to import Australian equipment. This benefit is due to expire in October 2010, although it is hoped that the government will extend this measure upon its expiry. Key mining equipment requirements include:

- Rock drilling equipment, drill bits (including blast hole drills) and drilling machinery
- Excavators (both hydraulic and electric) and backhoes
- Off-road hauling trucks
- Bulldozers
- Shovel loaders
- Boring machinery, and
- Corresponding replacement parts

Mining operators in Colombia are mindful of the need to acquire the latest, most technologically advanced equipment and related products and services to boost productivity, lower costs, minimise their environmental impact and assist compliance with government regulations regarding occupational health and safety, etc. Opportunities therefore exist for any equipment, products or services that can help companies achieve these goals. Australian companies already in Colombia have noted successful outcomes in:

- Explosives
- Chemicals used in mineral processing, etc.
- Consultancy – including problem solving and OH+S
- Research and development

## Oil and Gas Industry

As the country's greatest export earner in 2009 (32% of exports) and also one of the greatest generators of foreign capital, the effect of the oil and gas industry on the Colombian economy is very high. Owing to the country's complex geology, decades of guerrilla warfare and the associated risk this brought across parts of the country, the nation's true oil and gas reserves have not been accurately measured. It has been estimated that the country has potential oil reserves of 47 trillion barrels of oil underground, but the estimate for known reserves is just over 1.5 trillion barrels of oil and 7.3 tera cubic feet of gas. To help administer these reserves, in 2003 the Uribe government created the National Hydrocarbons Agency (ANH) whose key objective is to seek the bringing in of both public and private capital for exploration and production that ensures the greatest possible benefit for the citizens of Colombia. From its inception, until September 2009, ANH had signed 225 Exploration and Production (E&P) Contracts and 78 Technical Evaluation Contracts (evaluates the hydrocarbon potential of an area). This year saw the release of further E&P contracts in

this sector. Although competition for these contracts is fierce, the opportunities available for Australian companies are considerable. Best practice for interested Australian companies would be to source a reliable local partner. The basic rules for E&P Contracts are:

- Six year exploration period, with option of additional period upon expiry.
- Twenty four year production period, with option of extension if contract requirements successfully met.
- The contract model for royalties/ taxes is one of the most attractive in the world, ensuring greater flexibility and profitable conditions.
- Oil industry best practices must be followed, including lowering costs and minimising risk.

## Oil and Gas Technology and Equipment

As with the mining industry, the rapid increase in oil and gas production has created a need for related equipment, spare parts and advanced technologies. Best prospects in this sector include:

- Seismic data collection and analysis services
- Improved analytical seismic computer codes
- Drilling equipment (including directional drilling and platforms)
- Drilling fluids
- Muds, and
- Wellhead equipment

The government initiative (mentioned under mining equipment) eliminating import taxes, also applies for equipment, spare parts and accessories destined for various oil and gas activities (exploration, production, transportation and refining). Once again this programme is due to expire in October 2010. For Australian companies seeking entry, competitive factors include price, quality and technical support and spare parts availability.

## Barriers

For mining and oil and gas equipment, the market is dominated by the United States. For open pit mining equipment, the market share of US built machinery is sixty percent, while for oil and gas related equipment and spare parts it is twenty-seven percent. The reasons for this dominance revolve around the advantages that the US has in satisfying the Colombian demands on pricing, quality and technical support and spare parts availability. There are also other factors, such as many Colombian engineers have studied in the US and are familiar with US technology, and that the large mining companies operating in Colombia are well known buyers of US equipment and technology. Opportunities for Australian companies can therefore be expected to be limited in these fields. Best prospects for success include: contracts for new advanced technologies with major mining companies to supply, all or

part of their worldwide operations; licensing local companies to produce your product; or setting up an office, in country to manufacture your product with local parts.

The geographic distance and travel and freight time of Colombia from Australia means that problems may arise regarding issues particularly important to Colombians, such as face to face contact, spare parts availability and reliable after sales service. This may automatically put Australian companies at a disadvantage compared to their competitors. This difficulty in providing these services has been nominated by a majority of surveyed companies as the main identifiable barrier for trade with Colombia.

Although Colombia has simplified and lowered its import tariffs, and the duty levels of most products in this sector range between five and twenty percent, they have also signed a large number of integration agreements with neighbouring countries. This has created a complex system of tariffs that are applied according to the different treaties. It therefore becomes essential for Australian companies to seek the advice of representatives with extensive local knowledge before entry.

Language has been nominated by many surveyed companies as a difficult barrier to overcome. This extends, not only to initial negotiations but also for the provision of after sales technical assistance.

### Best Advice

A majority of surveyed Australian companies note the benefit, upon initial market entry attempts in Colombia, of attending local trade shows or missions, as part of a group delegation with other mining sector firms.

On initial entry into Colombia, Australian mining companies are advised to seek out a reliable joint venture partner or third party for best results. If successful, then the choice can be made as to whether it is viable to set up a new entity in country or to stay in the joint venture.

For companies attempting to sell mining or oil and gas related equipment, technology and related products, it must be noted that Colombians prefer to purchase through local agents and distributors to ensure spare parts availability and maintenance support.

All negotiations in Colombia are required to be undertaken in Spanish. Even though the level of English proficiency is improving, sound business practice requires that Spanish speakers should always be present during negotiations.

It must be noted that all business dealings in Colombia (as with other countries in Latin America) take a long time. Before entering Colombia you must be prepared to be there for the long haul and to spend considerable time in country building a relationship of trust with the companies/ government agencies

you are negotiating with. It may take a considerable amount of time and money before you begin to reap the rewards of your labour. Once they like and trust you business is assured. For mining sector companies this involves demonstrating a commitment to Colombia and the region in general. Australian companies already present in Colombia have spoken of initiatives such as funding projects at local schools, etc. to prove to them that your company's intentions are genuine, and aimed towards the mutual benefit of everybody involved.

The Colombian market is process driven, meaning that your company must follow the designated procedure to the letter and not attempt shortcuts. The only thing that trying to circumvent the process will achieve is make business take longer.

As noted, for the awarding of E&P Contracts in the oil and gas sector, minimising risk plays an integral part of best industry practice. Once operations begin, this factor must be adhered to, as the Colombian government has control of the tenement and therefore has the ability to remove you due to serious breaches at anytime.

It is also advisable to acquire sound legal representation and advice before entering Colombia. Colombia has many complicated legal requirements and regulations for foreign companies that only lawyers with sufficient knowledge of the country will be able to fulfil correctly. They will also be able to build you knowledge of the local market and how it operates. For mining sector companies selling new, advanced technologies, legal representatives, with sound local knowledge will also be able to advise you on the best way of protecting your intellectual property.