VENEZUELA

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For more than three years, since the election of Hugo Chavez as president of Venezuela, the prevailing assumption of the government has been one where a major political transformation is necessary before economic and social progress can be achieved. The Bolivarian Revolution Transition, as the government calls it, should then lead to equilibrium in the country's economic, social, political, territorial and international objectives.

In spite of this belief, by the end of 2001 the government had encountered a substantial portion of Venezuelans becoming more and more disenchanted with the so-called transition and beginning to demand a resolution of their economic and social problems, mainly lowering unemployment, providing better social services and diminishing common crime.

The customary way of running the Venezuelan economy has not changed significantly this past year; in other words, economic performance is mainly dependent on oil revenues and how the government spends this income.

The economic recovery in 2001 was far below that previously forecast. Despite having enjoyed high international oil prices the economic boost has been meagre and below expectations. (Oil represents more than 30% of the country's GDP and Venezuela is one of the largest petroleum-exporting countries in the world.)

Regardless of this boom in oil revenues, only grew 2.7% on 2001, compared with the estimated growth of between 3.6% and 3.8%. According to the government, inflation has been kept at 12.7% and foreign investment was slightly higher than in 2000, at around US$983.8 million, most of it going to the oil and communication sectors.

In short, to describe briefly the political scenario in Venezuela during the past year, it is appropriate to quote a famous foreign correspondent: "The more revolutions occur, the less things change".

Mining Overview

For many years Venezuela's mineral wealth has been considered to be varied and abundant. Because of its geological characteristics, Venezuela covers an area of less than one million square kilometers but its geological characteristics are such that it possesses the three-macro provinces that distinguish the planet's geological history (Precambrian shield, complex geotectonics and sedimentary river basins). As a result, the country holds almost every type of mineral.

Despite this privileged geological position, during 2001 the Venezuelan mining industry was not immune to the often volatile local political scene, and to the global economic downturn that unfolded after the tragic events of September 11. To confront this difficult scenario, the focus of the mining industry in Venezuela during 2001 has been one of trying to optimise managerial performance in order to stabilise prices, to work continuously in trying to lower production costs and to apply new technologies in order to be more competitive.

As a result of this shift in focus, the mining industry maintained a slow but sustainable relative growth in 2001, particularly in sub sectors such as coal mining, coke and cement production. There has also been an effort to try to stabilise the production of iron ore. Likewise, bauxite and alumina production experienced a relative recuperation in their sector. As in previous years, the industrial minerals sector, although working below its potential capacity, endured low but sustainable growth. Finally, 2001 marked the beginning of nickel production in Venezuela.

Legislation

It is worth noting that after more than a decade attempting to change mining legislation in Venezuela, the Mining Law Regulations, which complete the new Mining Law of 1999, were published and came into force on March 9, 2001. This accomplishment could be seen as a positive sign since it may imply that the government is finally trying to devote more time to promote this sector of the economy. Nevertheless, there are some who consider that the new Law and its Regulations, far from promoting the sector, discourage both foreign and local investment. At any rate, it is perhaps due to these two opposing views that since June 2001 plans have been underway to reform this law, which, despite being long overdue, is not quite ready to be drilled into the economy.

In addition to this, there appears to be concern in certain sectors of the mining industry regarding the accelerated presidential approval of more than 45 laws towards the end of 2001. Of these, the Land Law has been under the spotlight since a few have interpreted it as a nuisance on private property. Consequently, owners of land containing minerals have voiced their concern regarding this law and how it will impact negatively on the development of their resources.

Exploration Activity

The following summarises exploration activities during 2001:

- Detailed studies on commercial silica sand deposits were performed by the private sector in the Monte Carmelo, Trujillo State area.
- Chemical grade limestone deposits were studied and located in the Maracas area at El Tocuyo, Lara State.
- The National Institute for Geology and Mining (Ingeomin) located new areas possessing refractory grade chromite in the zone of El Rodeo, Falcon State.
- Ingeomin also continued studies under contract with Pequiven (Petrochemical Industry of Venezuela), to detail further their phosphate deposits located in Riecito, Falcon State.
- The private sector evaluated an important graphite deposit in the area of Osumita, Cojedes State.
- Further exploration activities were carried out by the private sector to quantify the deposits of commercial limestone, magnesite, feldspar and ball clays in Cojedes State.
- Corpocentro evaluated various deposits of commercial diatomite located in the region of San Joaquin, Carabobo State.
- Fonder (a development corporation for Guarico State) made a detailed inventory of all the minerals located in that state.
- The private sector also explored and delimited high-quality silica sand deposits located in the zone of San Juan de Guaribe, Guarico State.
- Corpocentro carried out detailed geological studies on various deposits of industrial limestone, sand and gravel in the area of Salmeron and Cholondron, Miranda State.
- The private sector (mainly cement producers) widely explored for limestone, sand and gravel deposits in most of Venezuela. Exploration activity was also carried out for commercial deposits of ornamental stones and granites in Bolivar State.
- Ingeomin continued with the development of a detailed study in order to locate a barite deposit in Aragua State.
- The private and public sector continued with gold and diamond exploration of their mining concessions.

Production

Although it is difficult at times to estimate the mineral production of Venezuela, in part because of the existence of illegal mining operations, remote locations and archaic forms of communication, the following summarises the main activity in 2001.

Alumina: Some 1.8 Mt were produced of which 527,000 t were exported. Over 80% of the alumina production is consumed locally for the production of about 500,000 t/y of aluminium. It is expected that this sector will maintain the same production levels for the year 2002. During 2001, Bauxilum signed a US$260 million contract with Pechiney of France for the latter to continue with the expansion project to increase production capacity at the alumina refinery to 2.0 Mt/y.

Fused alumina: CE-Minerals has a plant that produced about 400,000 t of this product during the year.

Bauxite: Production rose from 4.3 Mt in 2000 to 4.6 Mt in 2001. Most of it is consumed locally, leaving only small quantities for export. It is expected that production may rise to 5.1 Mt in 2002. Currently, work is being carried out to optimise the handling of the mineral at Los Pijiguaos mine, where the intention is to increase production capacity to 6.0 Mt/y by the end of 2003.

Iron Ore: Production reached a respectable 16.7 Mt of which approximately 9 Mt were exported. Increasing domestic demand has been restricting Venezuela's iron-ore exports, but last year domestic demand decreased. Nevertheless, recently iron has been transformed by local plants into briquettes and pellets, giving its final products an important added value. These plants operated at less than half of their production capacity during 2001 because of the harsh recession experienced by the steel and metal industries. Last year, the production of iron pellets was close to 4.3 Mt of which about 400,000 t were exported. The plants that process iron ore in order to make briquettes and pellets are: Sidor, Posven, Comsigua, Orinoco Iron, Opco, Toppca and Sidetur (Sivensa).

Also in 2001, CVG-Ferrominera Orinoco contracted the services of a Spanish-Canadian consortium called Met Chem-Duro Felguera to begin work on the construction of an iron-ore concentration plant, with an initial investment of US$200 million. The plant will process and convert 12 million Mt/y of low-grade iron ore into 8.0 Mt of high grade iron concentrate (more than 68% Fe).

Gold: This mineral continues to be the most controversial owing to the often discretional and indistinctive local considerations that can affect commercial production. Total output in 2001 is estimated at 9,100 kg.

There are currently 296 mining concessions officially registered with the Ministry of Energy and Mines, destined for exploration and subsequent exploitation, and 60 more concessions for exploiting gold, diamonds and other metals. Las Cristinas has been on hold as a mining project after Placer Dome decided early last year to sell its 70% stake to a Canadian company named Vanessa Ventures Ltd, and its government partner CVG, refusing to accept the sale, rescinded the work contract. A possible option to resolve this situation, appears to be working out a deal to join the adjacent Las Brisas gold mine to Las Cristinas to make it the second largest gold project in the continent. The company Gold Reserve, which holds the mining rights to Las Brisas, continued with exploration developments throughout the year.

Another important gold mine, La Camorra, owned by Hecla, produced over 4,000 kg of gold last year, and CVG-Minerven imporved its production by reaching 2,800 kg for 2001. The state-owned company also signed an agreement with a Chinese corporation, Shandong Gold, to develop and exploit the Sosa Mendez mine. CVG-Minerven is also waiting to select a contractor to operate the development of its Block B concession, which includes the mines of: Laguna, Chile, Santa

Rita, Panama and others already exploited. Bema Gold sold its shares in Lo Increible mine to Crystallex; this Canadian company continues to operate its Albino and Tomy gold properties, and its Revemin alluvial gold-processing plant in El Callao.

Nickel: Last year marked the beginning of operations for the Loma de Niquel ferronickel mine and plant. Its most important shareholder and operator is UK-based Anglo-American. Ore processing capacity stands at around 1.2 Mt/y, to yield 70,000 t of concentrated ferronickel pellets. In 2001 the company produced and exported 27,033 t of ferronickel. It is expected that production will increase progressively until it reaches its maximum capacity in around two years. The total investment in this project has been around US$548 million.

Diamonds: Production surpassed 150,000 ct and is expected to reach higher levels in 2002. Towards the end of 2001, MEM granted a mining concession for a large kimberlitic deposit to a company named Consorcio Toco-Tec in the region of Guaniamo, State of Bolivar. Plans for this project are to invest around US$800 million to produce some 7,000 ct/y within about three years.

Coal and Coke: Venezuela possesses coal resources in excess of 8,700 Mt. Currently, there are 34 registered and updated coal-mining concessions allocated by the Ministry of Energy and Mines (MEM) and production exceeded 8.0 Mt in 2001, all destined for export. For the past ten years this is the mining sub sector that has had very sustained and progressive growth in its production levels. Moreover, expansion projects in this sector are under way in order to reach annual production of 20 Mt within five years. Washington Group (WG) still runs and operates the Paso del Diablo mine owned by Carbones del Guasare, producing 7.0 Mt during 2001. WG has also signed a contract to run and operate another coal mine, Mina Norte, the property of Carbones de La Guajira, which is currently producing over 1.2 Mt/y.

Preliminary work for the development of a new coal mining project called COSILA is expected to begin this year. It will produce 2.0 Mt/y and will also be located in the Guasare region. In November 2001, the Ministry of Energy and Mines (MEM) auctioned a block of coal mining concessions named Cerro Pelao and Pedregal located in the State of Falcon. Although official results have not been made public, it is very likely that the MEM will declare the bidding process unsatisfactory and negotiate directly with one of the companies interested in the development of these mines. Coke production for 2001 surpassed 2.5 Mt and is expected to reach 4.0 Mt by the year 2004. The coke is produced mainly during oil refining.

Cement: Production was around 12 Mt with more than 50% directed to the export markets. To the US alone, there were 2.3 Mt of this product exported last year with a value of around US$100 million. Other markets for export were Europe, the Caribbean and South America. Cement production is divided among 11 plants owned by groups such as La Farge, Cemex, Holderbank and Cemento Andino.

Clays: Some 2.5 Mt/y is consumed by local industries, especially those concerned with ceramic tiles, sanitary ware, roof tiles, bricks (with more than 60 producers) and the construction of infrastructure. Smaller quantities are consumed by local artists who make pieces of art for export.

Dolomite: Production was maintained at around 250,000 t, about the same quantity that was imported.

Feldspar: Based on consumption patterns production almost reached 300,000 t during 2001. There are plans by a consortium named Molisanca/Amerifel to double its production capacity in the next two years in order to fulfill the needs of a sizable and growing ceramic tile industry. More than 50% of the ceramic tiles made in Venezuela are for export to international markets.

Granite: Produced mainly in the States of Bolivar and Cojedes, production was around 510,000 t.

Gypsum: Production is estimated at 50,000 t.

Limestone: It is one of the most abundant of the industrial minerals in Venezuela, with production reaching levels of over 25 Mt/y. It is mainly being exploited and used as a basic raw material in the production of cement. Likewise, it is vastly consumed by the construction industry as an aggregate and for the elaboration of pre-mix concrete. Users also include the agricultural and smelting industries.

Phosphate: Production was around 400,000 t, and was used locally in the fabrication of phosphoric acid, explosives, fertilisers and animal food products.

Quartz: Production was around 120,000 t.

Sand and gravel: Annual production is estimated at 7.0 Mt, most of it going to the construction industry in general.

Silica: The 2001 production for this mineral was 340,000 t, most of it consumed by the glass-manufacturing industry that maintained a production capacity of approximately 2,600 t/d of glass.

Sulphur: Production was around 350,000 t, most of it produced in the course of oil refining.

Mining Conferences and Events
Expomineria 2001 (Caracas, July 2001)

VII Mining Workshop (Caracas, July 2001)

II Regional Mining Congress (Valencia, May 2001).

Ingeomin Exploration Seminar (Caracas, August 2001)

Regional Mining Workshop (Merida, December 2001)

Mineral Production
(Mt except where stated)

Minerals	2000	2001
Alumina	1.7	1.8
Bauxite	4.3	4.6
Cement	9.0	12.0
Clays	2.2	2.5
Coal	7.8	8.0
Coke	2.3	2.5
Diamonds (ct)	109,597	150,000
Dolomite	0.22	0.25
Feldspar	0.14	0.30
Fused Alumina	N/A	0.4
Gold (t)	7.3	9.1
Granite	0.58	0.51
Gypsum	0.25	0.50
Iron Ore	17.4	16.7
Limestone	11.3	25.0
Nickel (t)	3,200	27,033
Phosphate	0.39	0.40
Quartz (t)	101,000	120,000
Sand and Gravel	3.1	7.0
Silica (t)	331,000	340,000
Sulphur (t)	N/A	350,000