



Cerro Verde

CERRO VERDE EXPANSION



Cerro Verde is tripling its extraction and processing of sulfide ore, an estimated \$4.6 billion project, with a projected increase in annual production of approximately 600 million pounds of copper and 15 million pounds of molybdenum. Additionally, the life of the leaching facilities will be extended to approximately 2025. Once completed, the new concentrating facilities at Cerro Verde will be one of the largest copper concentrating complexes in the world.

With the expansion, the Cerro Verde operation will produce approximately 1.0 billion pounds of copper and 23 million pounds of molybdenum per year, which would place the company in the top five copper producers in the world. The expansion provides a significant positive economic impact to the Arequipa region and Peru, including increased employment opportunities, business opportunities with local suppliers of products and services to the mining operations and revenues to the governments and local communities. A key component to the Cerro Verde expansion is the financing and construction of a wastewater collection and treatment facility that will provide the increased water requirements for the new operations, while significantly improving the water quality in the Chili River, benefitting more than 1 million people in Arequipa.

CERRO VERDE

- Sociedad Minera Cerro Verde (SMCV) is majority owned and operated by Freeport-McMoRan, a leading international natural resource company. The remaining shareholders are Sumitomo, Buenaventura and other minority shareholders whose shares are publicly traded on the Lima Stock Exchange.
- In 2014, Cerro Verde produced 500 million pounds of copper and 11 million pounds of molybdenum, generating approximately \$1.5 billion in revenues from its mining operations.
- In the first half of 2015, SMCV had more than 4,000 direct employees and 3,500 contractors, on average, supporting the operations.
- SMCV's economic impact and social investment:
 - In 2014, Cerro Verde's operations and investments generated a total impact of \$4.13 billion, equal to 2% of the Peruvian national GDP.
 - Cerro Verde impacts Arequipa through direct transfers to local and regional governments. In 2014, the company paid \$275 million in taxes. Additionally, Cerro Verde contributed \$110 million from the canon in the same period. This amount is primarily directed to development projects in transportation and infrastructure, planning and management, culture and sports, as well as health and education.
 - Between 2007 and 2011, Cerro Verde contributed \$153 million in Voluntary Social Contributions to the Cerro Verde Association, which is administered by a board made up of community, government and company representatives with the goal to support health, education and nutrition, as well as infrastructure initiatives in the local area.
 - Additionally, Cerro Verde contributed \$120 million for the design, construction and commissioning of a water treatment system to help address the need for clean water for 700 thousand people living in the city of Arequipa.



CERRO VERDE EXPANSION PROJECT

- Significant reserve additions in recent years at SMCV and expectations for positive markets for the Company's products in the long term, have provided opportunities to expand significantly the existing facility's capacity. The SMCV expansion targets an extension of the leaching facilities until 2025 and an increase in concentrator throughput from 120,000 to 360,000 metric tons per day, making Cerro Verde one of the largest copper concentrating complexes in the world.
- Recoverable copper reserves in sulfide ore (processed in the concentrator) as of December 31, 2014 amounted to 26.8 billion pounds. With the expansion, the mine life for the sulfide ore is 30 years (2045). SMCV continues to conduct exploration at Cerro Verde to further expand ore reserves.
- Recoverable copper reserves in leach ore (processed through the SX-EW plant) as of December 31, 2014 amounted to 1.0 billion pounds with a life of approximately 10 years (2025).
- First concentrate production from the new concentrator began in September 2015.

ECONOMIC IMPACT OF CERRO VERDE EXPANSION PROJECT

- SMCV is adding approximately 2,000 employees to operate the expanded operations.
- The construction of the expansion project is estimated to add, directly and indirectly, \$5.4 billion to the Peru economy, including \$3.4 billion to the economy of Arequipa. At peak levels, more than 21,500 contracted employees worked for the construction.
- The annual direct and indirect economic impact of the expansion project is estimated to be \$420 million to Peru's economy, including \$275 million to Arequipa.

WATER

- As is the case in all copper mining operations, SMCV requires water in its processing facilities: in the concentrator to produce copper and molybdenum concentrates and in the copper leaching/SX-EW processing facilities to produce cathode copper. Water is also used to control dust and maintain air quality around mining operations.
- Water for Cerro Verde's current processing operations comes from renewable sources through the regulated Chili River system, which is formed by a series of storage reservoirs on the Chili River watershed. The Pillones and Bamputañe reservoirs, constructed with the company's participation, collect water from seasonal precipitation and regulate its distribution during the dry season.
- Cerro Verde is a zero-discharge facility and recycles the water used in its processes.
- SMCV agreed with the Regional Government of Arequipa, the National Government, SEDAPAR and other local institutions to finance the engineering and construction of a wastewater treatment plant for Arequipa to be operated by SEDAPAR. The plant is being built in the Enlozada Gorge in the district of Uchumayo and will cost approximately \$400 million, paid by Cerro Verde.
- Cerro Verde will use up to an annual average of 1 cubic meter per second of the treated wastewater, for the additional water requirements of the expansion. The remainder of the treated water will be returned to the Chili River.
- The plant will improve the quality of water in the Chili River, positively impacting tourism, agriculture and, most importantly, the health of the local population.

