

ANALYSIS OF A MINING DEVELOPMENT IN BAJA CALIFORNIA SUR, MEXICO: THE LOS CARDONES MINING PROJECT –
Prepared by CSRM University of Queensland, Australia

EXECUTIVE SUMMARY: According to the recently study by the Center for Social Responsibility in Mining (CSR) of the University of Queensland in Australia, the Los Cardones mining project has a very low potential to bring economic, social or environmental benefits to Baja California Sur.

The Los Cardones open pit metallic mining project has a very low capacity to connect with the overall economic synergy of the region. The relatively small economic contribution that the project would make is not enough to validate the problems this type of mining would bring to the region and could cause negative microeconomic impacts in the tourism/service sector, the primary economic driver of Baja California Sur.

The potential benefits of Los Cardones do not justify the social, economic and environmental risks that Baja California will have to assume. This is especially important in a context where mitigation and compensation measures are not clear for the population, interested groups and local communities.

1. The Project: The study evaluates how the Los Cardones project will contribute to the development vision that the society of Baja California Sur has constructed over the past several decades. The open pit metallic mining project described in the Los Cardones Environmental Impact Study will occupy 543 hectares, and include two massive open pits from which 173 million tones of material will be extracted, 135 million tons of which will be placed in material banks of waste rock and 38 million tons of the contaminated processes material will fill a massive tailings pond.

Additionally, the project intends to construct a desalination plant on the Pacific coast near Las Playitas that will extract 7500 m³ of water per day, which will be pumped via an aqueduct 36 kilometers up to the mining site located in the buffer zone of the fragile Sierra de La Laguna Biosphere reserve.

The report stresses that the proposed Los Cardones open pit metallic mining project would require extractive processes and mining techniques that are very different from the historic underground metallic mines in Baja California Sur. This project would be a serious departure from the regional development model that is based in tourism. This begs the question, “what will this type of mining contribute to Baja California Sur and what is the significance of this contribution?”

2. Tourism and services sector as socioeconomic drivers of BCS: Baja California Sur has a dynamic economy that, in spite of recent worldwide economic turndown, has grown 1.4 times in the past seven years from USD\$5.968 million to \$8.463 million. 76% of this growth has been in the tourism/service sector.

Four points must be considered when evaluating the unique economic features of this state:

First, the majority of the population of Baja California Sur (72.4%) works in the service sector: tourism, hotels, travel, commerce, transportation, real estate and related services. If the energy and construction sectors are included, this percentage rises to 80% of the population. This sector is the state's primary employment creator and fuels the states growing economy.

Secondly, different areas that make up the service sector are interconnected and therefore produce a balanced growth pattern. That is to say that the general population has benefited from an overall growth in prosperity.

The **third** unique feature of the Baja California Sur economy is that the different economic activities complement one another, which explains the general synergistic growth experienced in the state. Tourism supports hotels, which in turn support taxi drivers, restaurants, real estate developers, architects, builders, laborers, commercial businesses, etc., so if the tourism and hotel industry grows, then the rest of the economy grows in a similar and compatible way.

Finally, in the last 8 to 10 years the tourism sector in BCS has become in an important pillar of socioeconomic development at local level, and also at national level where BCS is contributing significantly to a balanced growth of México revitalizing the traditional tourism industry. Currently, the economic activity of the BCS tourism sector is the fourth most important in terms of Mexico's GDP after Jalisco, Quintana Roo and Distrito Federal.

The undeniable importance of tourism and the service sector for the socioeconomic progress of BCS and its future economic stability makes it vital that the government, civil society and interested groups protect it from potential adverse impacts.

3. Indirect economic contribution of Los Cardones activity, are at best marginally related to the rest of the Baja California Sur economy, which is inter-connected and complementary. The incompatibility of the Los Cardones project with the rest of the economy could have a negative effect on the local economy. An analysis of the indirect economic GDP contribution of the mine to the local economy is only USD\$15 million per year. The overall potential microeconomic impact of the Los Cardones project would be equivalent of just 1.8 percent of the state's total economic activity; which means that this project will have no significant local economic impact.

The primary benefit a mining project brings to a region is realized when the mining company invests in local goods

and services which generate an economic chain linking the mining sector to other productive sectors. However, since BCS is not a mining region and the majority of the population is not connected to mining activities in the region, there are very few companies able to competitively provide the goods, services and technology for an open pit metallic mining project of this magnitude. It is because of this that the state is not in a position to benefit fully from the boom that metallic mining can provide in a fully developed mining state that is focused on mining and providing services to the extractive industry. And that the relatively few short--- term local jobs -----300 direct on site jobs and 400 indirect jobs in La Paz ----- do not warrant the possible negative implications for the tourism/service sector. Especially, when there are no guarantees from the mining project that these jobs will be contracted locally.

If the proposed mining project is approved, it would create a precedent for other projects still in the exploration phase and the cumulative impacts coupled with future competition for the scarce local resources, such as water and energy, creates the possibility that Baja California Sur will become a mining state.

The southern part of Baja California Sur has a tourism vocation not a mining vocation. What does this mean for the long --term economy? The fundamental difference between a hotel and a mine is the long --term regional commitment. The Los Cardones mining project will only be operational for 10 years; once the project is completed the company will take all of the profits and move on, leaving the area with no further investment and powerful environmental liabilities. A hotel will invest for the long--term and as the business prospers, they tend to reinvest in the area improving their installations and often expand into other businesses. Additionally, most of the profits will remain in the state, while most mining profits are taken out of the area and frequently out of the nation.

4. A comparative analysis of socioeconomic progress between BCS and other mining states in Mexico.

The CSRM study compared BCS to the six most important mining states in Mexico --Chihuahua, Coahuila, Durango, San Luis Potosí, Sonora and Zacatecas -- to determine the benefits of large -- scale metallic mining. They found that Baja California Sur is one of the fastest growing populations in the nation, which means that people prefer living in the state considering its personal and professional opportunities. The state has the lowest poverty levels, highest life expectancy, the highest education levels, the greatest number of doctors and nurses and that even though they are the smallest mining producers in the nation, the quality of life is higher in BCS than any of the mining states.

Conversely, the state of Zacatecas where the economy is almost 30% mining, registered the highest poverty levels and the lowest quality of life.

5. Analysis of environmental studies of Los Cardones. The CSRM report also found the Los Cardones

Environmental Impact statement to be superficial, confusing and lacking in--depth analysis. CSRM reports that the scrutiny of the social impacts of the mining project is deficient; completely failing to properly analyze the effect the mining project will have on local communities such as health, security, housing, public services and human development. Additionally, they fault the study with giving incorrect information regarding the long -- term impacts of arsenic contamination while they also minimize the truly noxious composition of the tailings pond.

Furthermore, CSRM points out that the Environmental Study does not adequately analyze the potential damages the desalination plant will produce in the Las Playitas aquifer, the danger the residues from the plant pose to regional fishing, whale migration and coastal turtle hatcheries, including species that are on the endangered species list.

6. Social License to Operate. The CSRM report points out that Los Cardones has failed to receive the social license of the civil society in Baja California Sur. A “social license to operate” is a standard best practice in the mining sector worldwide. CSRM shows that except for some of the 800 to 1000 people living in El Triunfo and San Antonio, most of the population in southern Baja California Sur do not see the mine as an opportunity but rather as a threat to their livelihood and resources. More importantly, there is the general perception that the economy of Baja California Sur has superior alternative economic opportunities that are incompatible with open pit metallic mining. The information analyzed does not provide sufficient evidence of engagement between the project and the communities in the area of influence of the project.

7. Conclusion

In conclusion, the Center for Social Responsibility in Mining from the University of Queensland in Australia has determined that the Los Cardones mining project has a very low potential to bring economic, social or environmental benefits to Baja California Sur. The Los Cardones open pit metallic mining project has a very low capacity to connect with the overall economic synergy of the region. The relatively small economic contribution that the project would make is not enough to validate the problems this type of mining would bring to the region and could cause negative microeconomic impacts in the tourism/service sector, the primary economic driver of Baja California Sur. The potential benefits of Los Cardones do not justify the social, economic and environmental risks that Baja California will have to assume. This is especially important in a context where mitigation and compensation measures are not clear for the population, interested groups and local communities.