



A SUSTAINABLE
MINING IN THE
CENTRAL PART
OF CHILE:
Scenarios towards
2035

SCENARIO
PLANNING
INITIATIVE

Executive summary

The Scenario Planning initiative "A sustainable mining in the central part of Chile: Scenarios towards 2035" was

jointly developed by the Ministry of Mining in Chile, CORFO (Chilean Agency for Economic and Regional Growth) and SONAMI (Chilean Mining Association) during the second half of 2014. The objective of the initiative was to collectively reflect among representatives of the government, the mining industry, and experts from academia and NGOs on the possible future development of sustainable mining in the central regions of Chile. The scenarios here presented should help the country to adopt several paths and decisions to ensure that sustainable mining in the central area becomes a strong leverage for development.

It is a complex issue due to the strong territorial competition in the central area. As of today, 60 % of the population lives in the central part of Chile, while activities such as agriculture and winemaking are also developed here, plus there is limited access to resources like energy and water. However, this area also has a significant mining potential: In the central area of Chile, considered from the IV to the VI regions, we can currently find 50 % of the country's future copper resources.

Scenario Planning is a methodology widely used worldwide in organizations, institutions and governments to identify different scenarios for long-term planning in order to better manage resources, opportunities and risks. Scenarios are qualitative descriptions of possible futures and are, above all, an opportunity to engage in a strategic, enriching conversation that involves multiple stakeholders. For the development of this initiative, a wide working group was established comprising representatives and experts from the public and private sector, and the civil society (government, academia, NGOs, think tanks, trade associations and companies, etc.).

As part of the process of *Scenario Planning* it is necessary to identify trends (factors having a certain development) and uncertainties (uncertain factors) on the long term. Throughout this whole process, 100 trends and uncertainties were identified, which were then grouped into those having greater impact on sustainable mining in the central zone of Chile to 2035. Out of them, two (2) strategic uncertainties were chosen – trust and governance in Chile; and world copper market – which then form the axes for defining the four future scenarios.



PHOTO: COLLAHUASI

The four scenarios described in this report help identify which are the strategic challenges for a sustainable mining in the central part of Chile, or at least help start a discussion around the topic. The *Scenario Planning* process will help Chile to move towards the desired scenarios for 2035.

Based on the two strategic uncertainties, the following four scenarios unfold:



Toll road describes a situation in 2035 in which there is a strong world copper market and high trust and governance in the Chilean society.

Country road describes a situation in 2035 where there is a weak world copper market and high trust and governance in the Chilean society.

Desert path describes a situation in 2035 with a weak copper market in the world and weak confidence and governance in the Chilean society.

Traffic jam describes a situation in 2035 in which there is a strong world demand of copper and weak confidence and governance in the Chilean society.

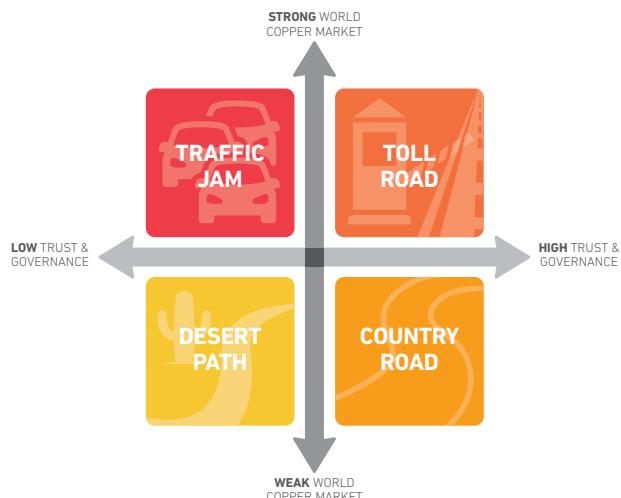


Figure 1. The four scenarios

Each scenario describes a future with different indicators, where Chile develops according to the possibilities linked to the global economic market condition, but above all according to the country's level of social development and the strength and legitimacy of its political institutions and governance processes. The scenarios help visualizing the public and institutional development policies to be implemented in order to generate trust and enhance competitiveness, and thus secure new mining investments. Also important is the need to consolidate a growth model that is sustainable and inclusive, and that guarantees the active participation of communities and stakeholders. This participation should be based on a platform of dialogue and active trust, which allows creating a virtuous relationship with the socio-economic progress of the country on the long term.

Each reader will have their own opinion on what is the most likely scenario, or the most desirable, based on their own expectations, beliefs, orientations or organizational perspective. What is undeniable is that there is a need to head towards a future that enables us to face any of these scenarios.

The magnitude of the challenges of a sustainable mining in the central part of Chile requires a commitment from all involved parties. It demands a solid leadership to unite forces and appropriate skills, and analysis and understanding depth, in order to find the right direction, decisions, actions and specific resources to make possible the desired future. This process of Scenario Planning is only a first step on that journey. The working groups that participated in the process of Scenario Planning produced different ideas – or enablers – that constitute a further step in the broader discussion that it is now going on in various union, sector and government platforms.

Is it possible to reconcile the mining growth in areas where other activities and land uses coexist, so that mining can continue to contribute to the development of Chile? This bears important challenges, not only for the mining industry but also for the country, which we address in this report.

How could sustainable mining in the central part of Chile look like in 2035?

THE TOPIC

CHILE PRODUCES
MORE THAN
30%
OF THE COPPER
IN THE WORLD

50%
OF THE CHILEAN
MINING RESOURCES
ARE LOCATED IN
THE CENTRAL PART
OF CHILE

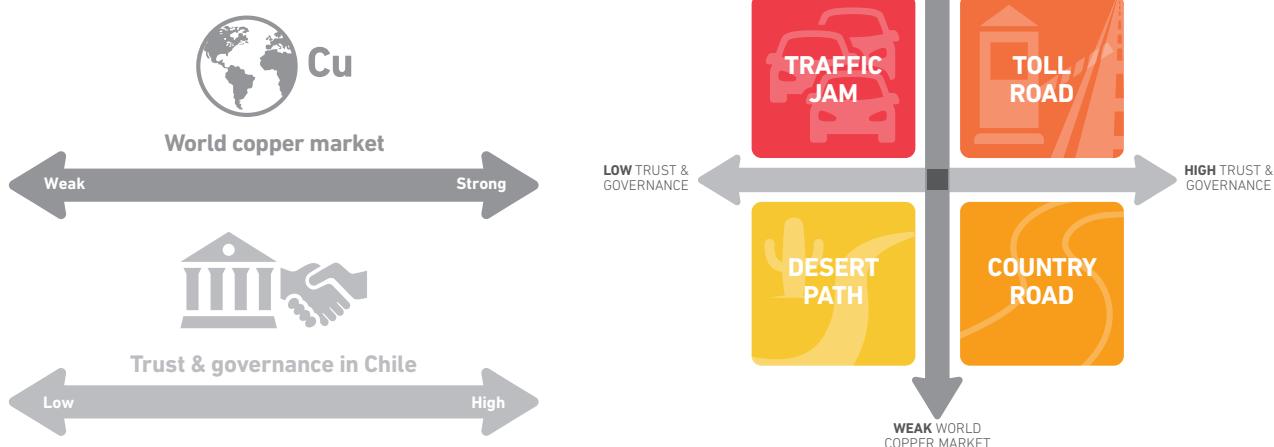


28%
OF THE WORLDS
FUTURE MINING
RESOURCES ARE
FOUND IN CHILE

60%
OF THE CHILEAN
POPULATION LIVES
IN THE CENTRAL
PART OF CHILE

TRENDS & UNCERTAINTIES

STRATEGIC UNCERTAINTIES



HOW TO TRAVEL THE FUTURE

STRATEGIC LONG TERM PLAN. VISION 2035.



Enablers

1 INSTITUTIONAL

DIALOGUE PLATFORM, ROLE OF THE
MINISTRY, VISIBILIZATION OF MINING

2 TERRITORIAL PLANNING

WATER ENERGY

3 INNOVATION/ COMPETITIVENESS

LEADERSHIP EDUCATION
TRANSPARENCY
COMMUNICATION

4

ECONOMY
DIVERSIFICATION