

MODULE VI

POLITICAL AND SOCIAL ASPECTS

MINING INTEGRATION - KEY ISSUES AND CHALLENGES

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ARGENTINE ECONOMIC SCENARIO

Structural Economic Reforms
Legislation (1989-1991- 1993)

- Convertibility
- Privatization Process
- Markets Liberalization



CHILEAN ECONOMIC SCENARIO



Structural Economic Reforms

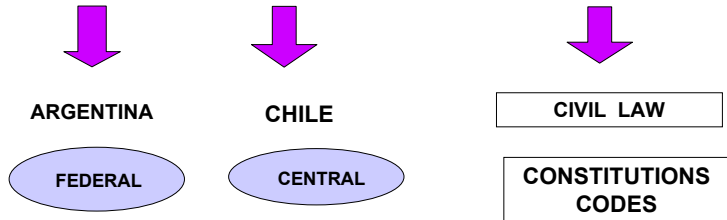
- Privatizations
- Trade Liberalization



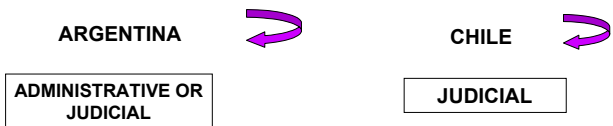
ARGENTINA - CHILE

FORMS OF GOVERNMENT

MINING LEGAL SYSTEM



ENFORCEMENT AUTHORITIES



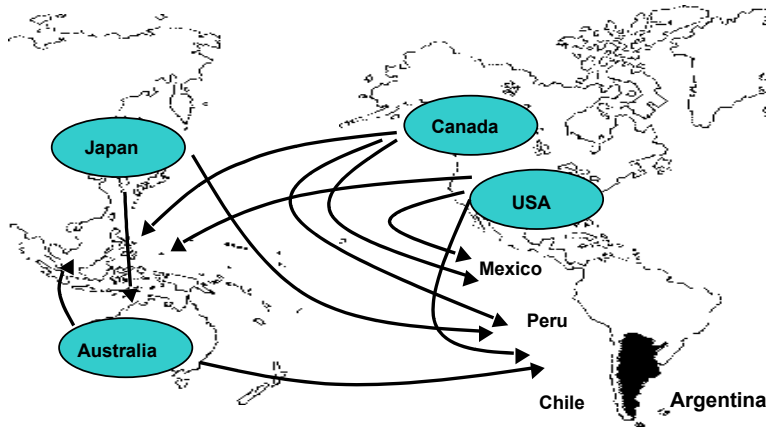
ARGENTINE MINING LEGAL FRAMEWORK



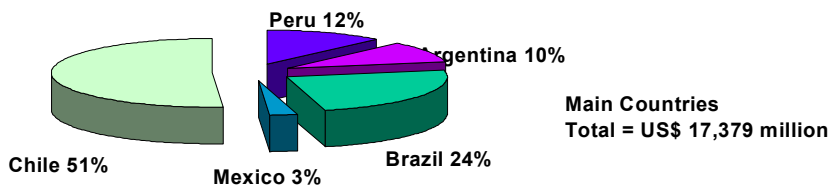
LEGAL FRAMEWORK FOR THE MINING ACTIVITY

<p>Mining Investments Law # 24,196</p> <ul style="list-style-type: none"> • Fiscal Stability For 30 Years • Maximum Royalties 3% Pithead Value • Income tax deductions • Exemption from import duties for capital goods, spare parts and supplies 	<p>Vat Financing Law # 24,402</p> <ul style="list-style-type: none"> • Purchase or final import of capital goods • Investments made in infrastructure works • Advance repayment for new mining projects
<p>Mining Rearrangement Law # 22,224</p> <ul style="list-style-type: none"> • Systematic geological mapping • Federal mining council-advisory board • Geological chart advisory committee 	<p>Mining Update Law # 24,498</p> <ul style="list-style-type: none"> • Removal of archaic institutions • Aerial research • Nuclear minerals become concessionable
<p>Mining Federal Agreement Law # 24,228</p> <ul style="list-style-type: none"> • Investments promotion • Harmonization of mining procedures • Optimization of resources 	<p>Environmental Protection Law # 24,585</p> <ul style="list-style-type: none"> • national legislation with provincial • enforcement authority • balance between mining production and environment • assistance to small scale mining companies
<p>Complementary Laws</p> <p>National Bank Of Geological Information. Law N° 24,466: It centralises the Public Geological information of the Country at the Mining Secretariat</p> <p>National Bank of Mining Information. Law N° 24,695: Human Resources and equipment information bank at the Mining Secretariat</p> <p>Bicameral Commission. Law N° 24.227: Commission made up for 4 Senators and 4 Representatives</p>	

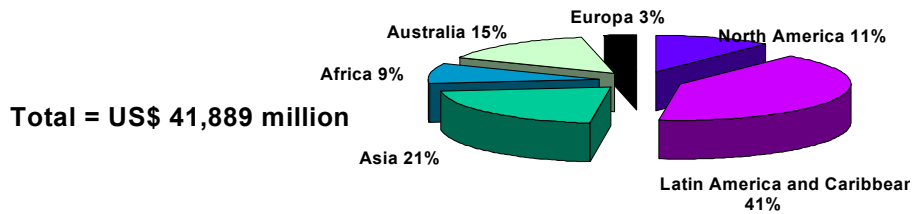
MINING INVESTMENT FLOW



MINING INVESTMENT IN LATIN AMERICA 1990 - 1997



WORLD INVESTMENT 1998 – 2007



Source: M.E. GROUP

MINING SCENARIO: ARGENTINA / CHILE

Top countries with potential geological mining resources

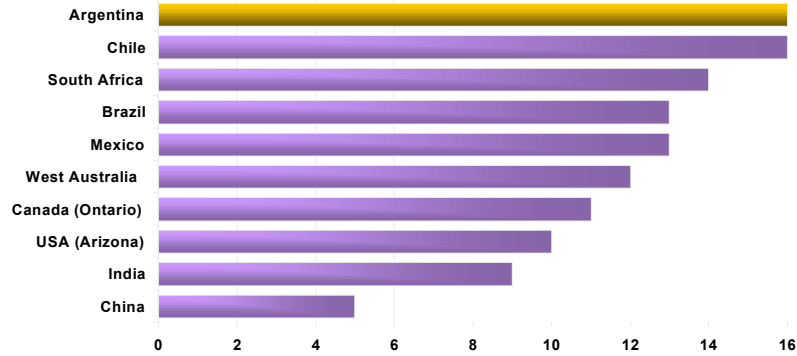
- Fifth place Chile
- Sixth place Argentina

Emerging country ranking 1999

- Top of the list Chile
- Fourth place Argentina

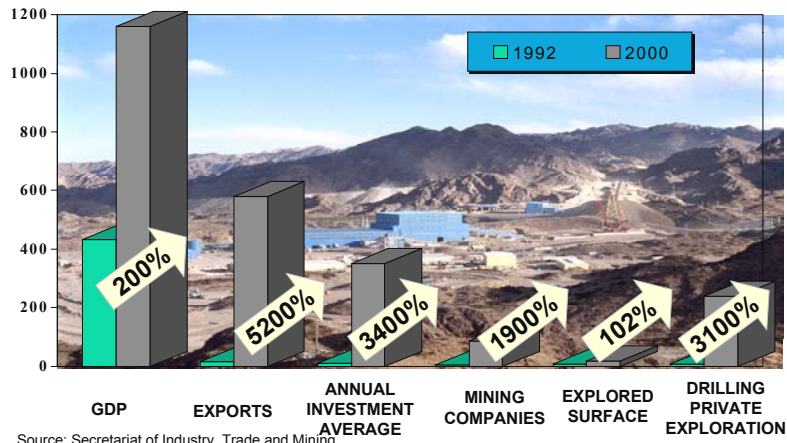
Source: Mining Journal

COPPER MINE - COMPARATIVE STUDY



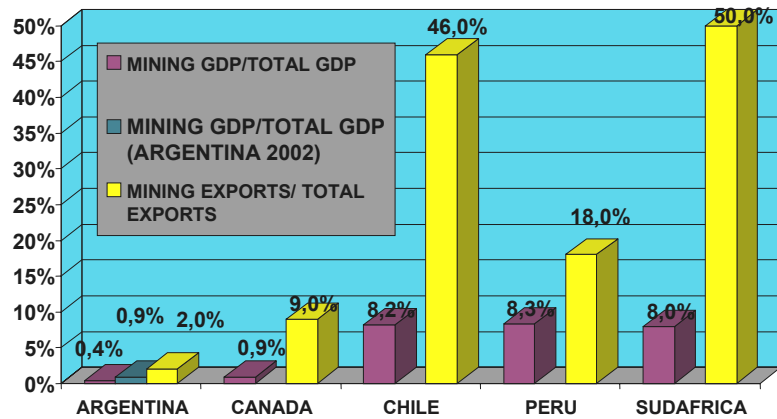
Source: Institute for Global Resources Policy and Management
Colorado School of Mines

ARGENTINE MINING INDICATORS - 1992-2000



Source: Secretariat of Industry, Trade and Mining

MINING ECONOMY STRUCTURE - COMPARATIVE CHART

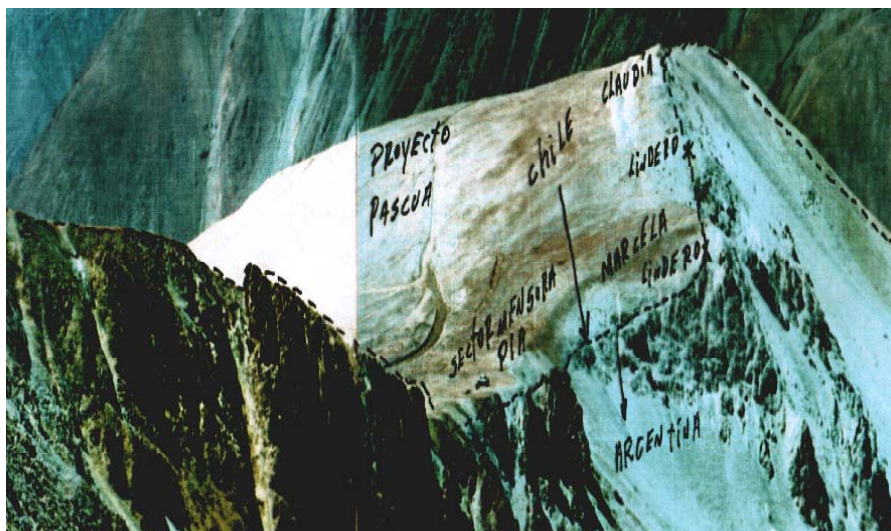


Source: Secretariat of Industry, Trade and Mining

MINING INTEGRATION AND COMPLEMENTATION TREATY BETWEEN THE REPUBLIC OF ARGENTINA AND THE REPUBLIC OF CHILE

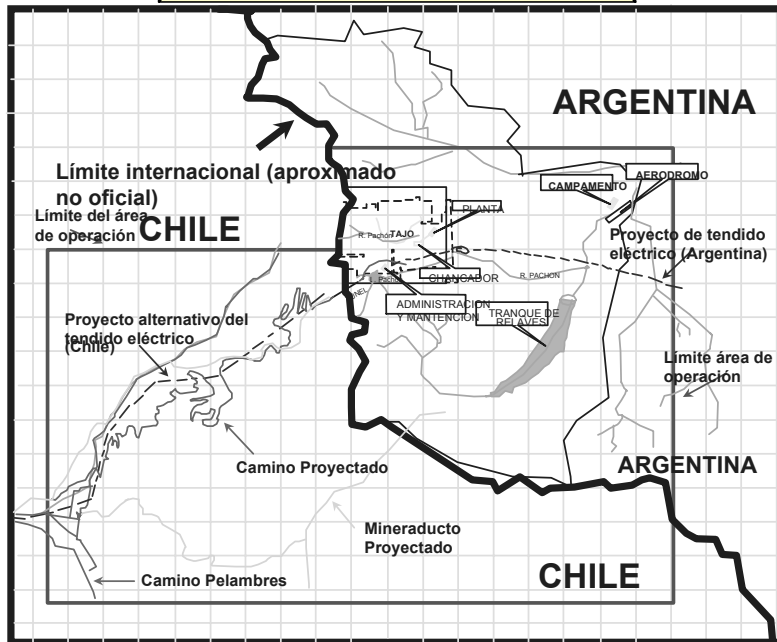
Santiago de Chile 08-01-1855	FRIENDSHIP, TRADE AND NAVIGATION TREATY
Vatican City 11 -29-1984	PEACE AND FRIENDSHIP TREATY. Goals: Economic Cooperation and Physical Integration. Initiative to explore natural resources.
Buenos Aires 08- 02-1991	ECONOMIC COMPLEMENTATION AGREEMENT N° 16. Settlement of 23 border disputes between Chile and Argentina. Goal: To promote complementation and coordination to achieve mining development.
Santiago de Chile –B.A. 08-1991 – 01-1997	BILATERAL NEGOTIATIONS. Goals: Mining Treaty and Specific Mining Protocols.
Santiago de Chile 01-1997	SIGNATURE OF THE PROTOCOLS PACHÓN and PASCUA-LAMA
Chile – Argentina 12-1997	SIGNED by the Presidents of Argentina and Chile. The respective Bills approving the Treaty were sent to both Parliaments.
Santiago de Chile 12- 29-1997	The Electrical interconnection and electric energy supply PROTOCOL was signed between Argentina and Chile.
Buenos Aires 11- 24-1999	The Argentine Senate PASSED the Bill approving the Mining Treaty.
Santiago de Chile 01- 18- 2000	The House of Representatives of the Republic of Chile PASSED the Bill approving the Mining Treaty.
Santiago de Chile 01- 18- 2000	Argentine enactment of the Mining Treaty by Law N°25,243.
Santiago de Chile 04-2000	The Bill is presented to the Chilean Senate for enactment.

MINING PROTOCOLS



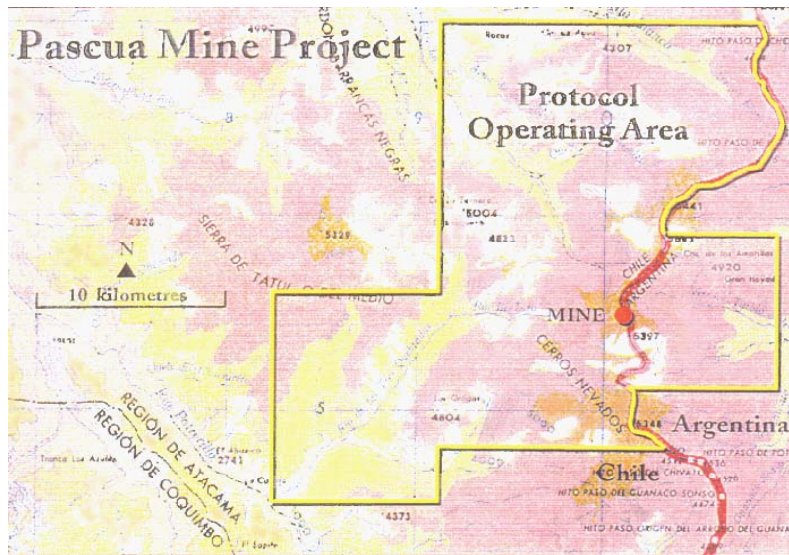


**MINING PROTOCOL
PASCUA- LAMA**

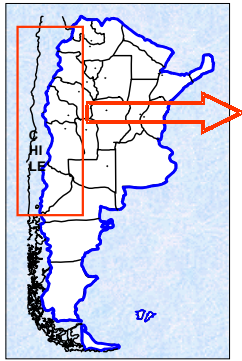


**MINING PROTOCOL
"EL PACHON"**

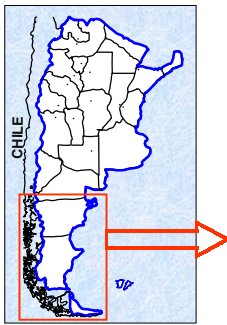
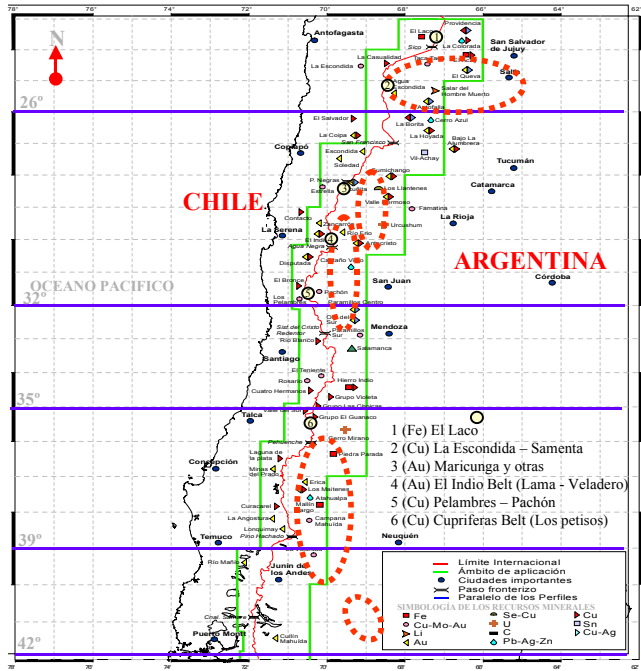
PASCUA-LAMA PROJECT



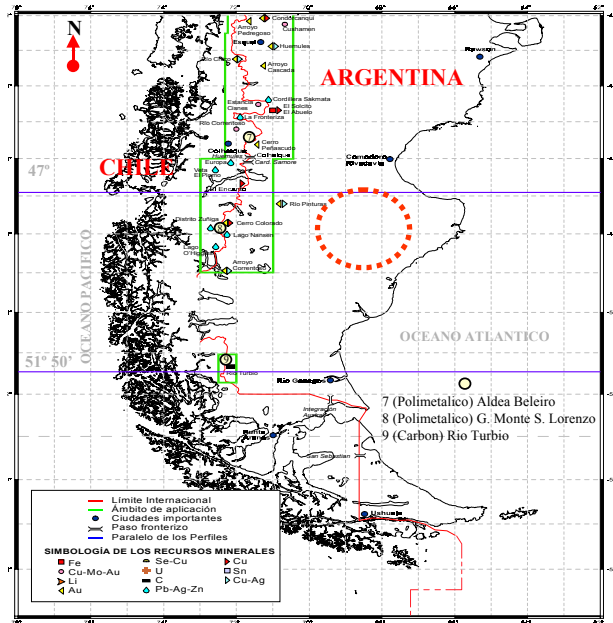
MINING TREATY - TERRITORIAL SCOPE



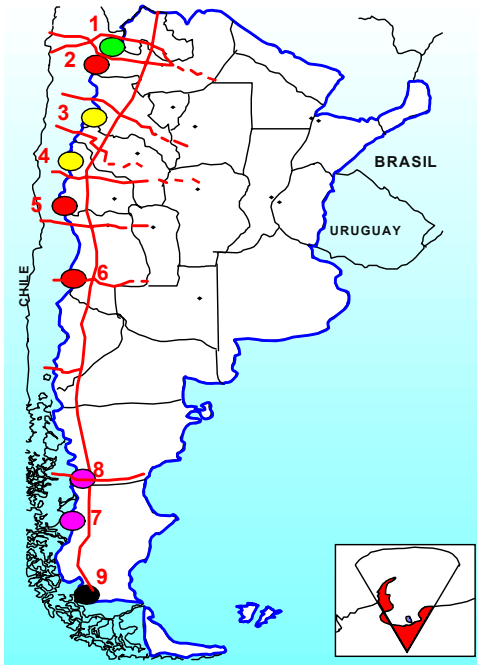
NORTH ZONE



SOUTH ZONE



ARGENTINE-CHILEAN MINING REGIONS



LEGEND

- 1- Fe: El Laco
- 2- Cu: La Escondida - Samenta
- 3- Au: Faja de Maricunga (Valle Ancho, F.La Vicuña)
- 4- Au: Faja de El Indio (Lama, Veladero, Etc.)
- 5- Cu: Pelambres - Pachón
- 6- Cu: Faja Cuprífera (Los Petisos)
- 7- Polimetálicos: Grupo Monte S. Lorenzo
- 8- Polimetálicos: Aldea Beleiro
- 9- Coal: Río Turbio

Integration Paths

MAIN FEATURES

- ⇒ National treatment
- ⇒ Border facilitation
- ⇒ Specific additional protocols

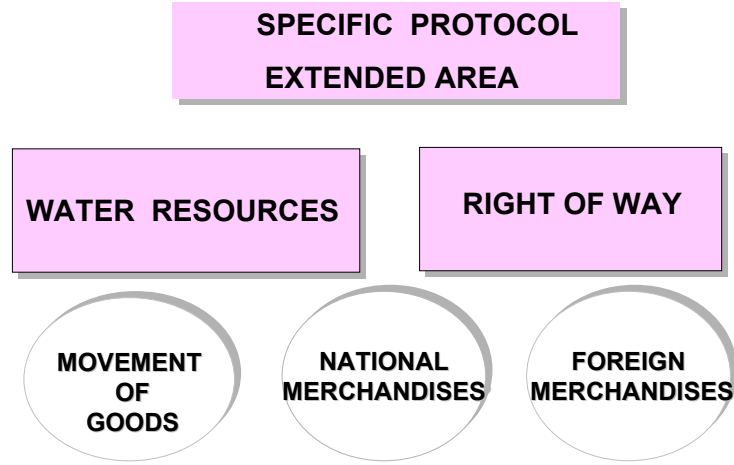
MINING INTEGRATION



Key Issues

- Easements
- Taxation
- Environment
- Labour
- Disputes

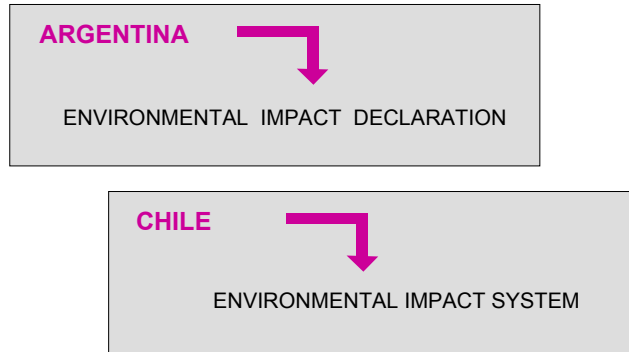
EASEMENTS



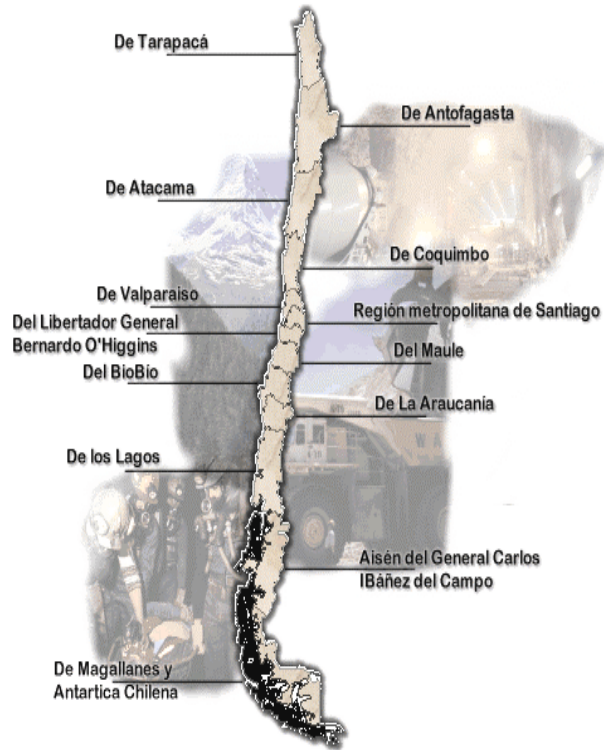
TAXES AND CUSTOMS



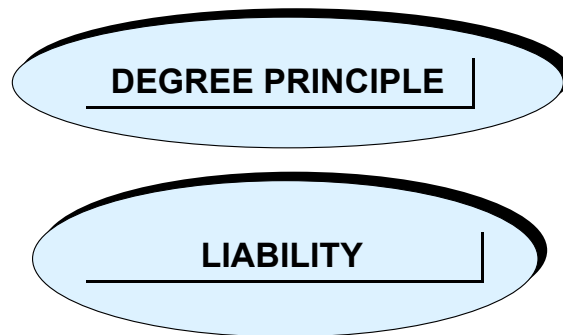
ENVIRONMENT



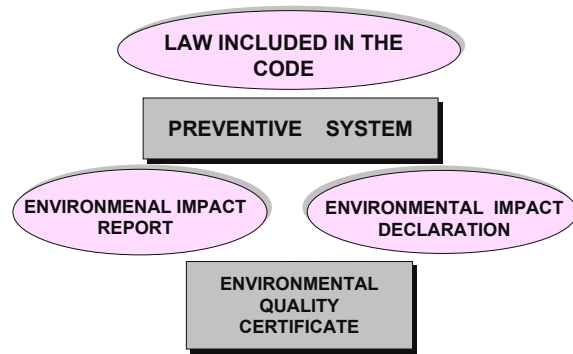
CHILEAN ENVIRONMENTAL LAW



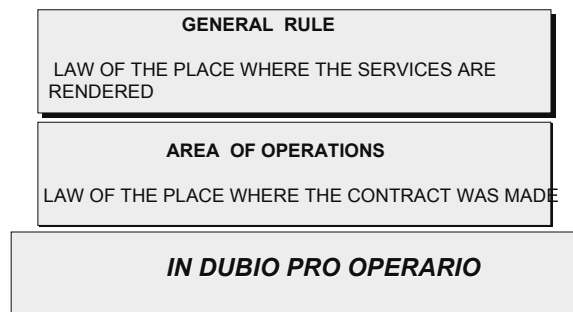
GENERAL ENVIRONMENTAL LAW



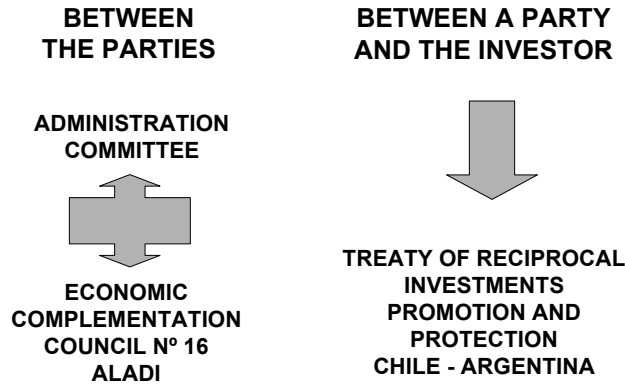
ARGENTINE ENVIRONMENTAL MINING LAW



LABOUR



DISPUTES



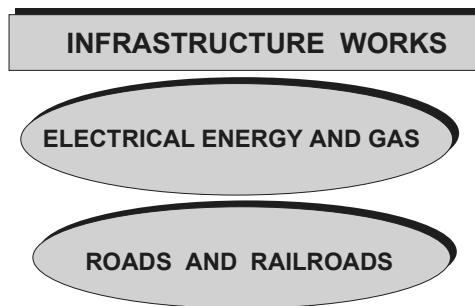
ADMINISTRATION COMMITTEE

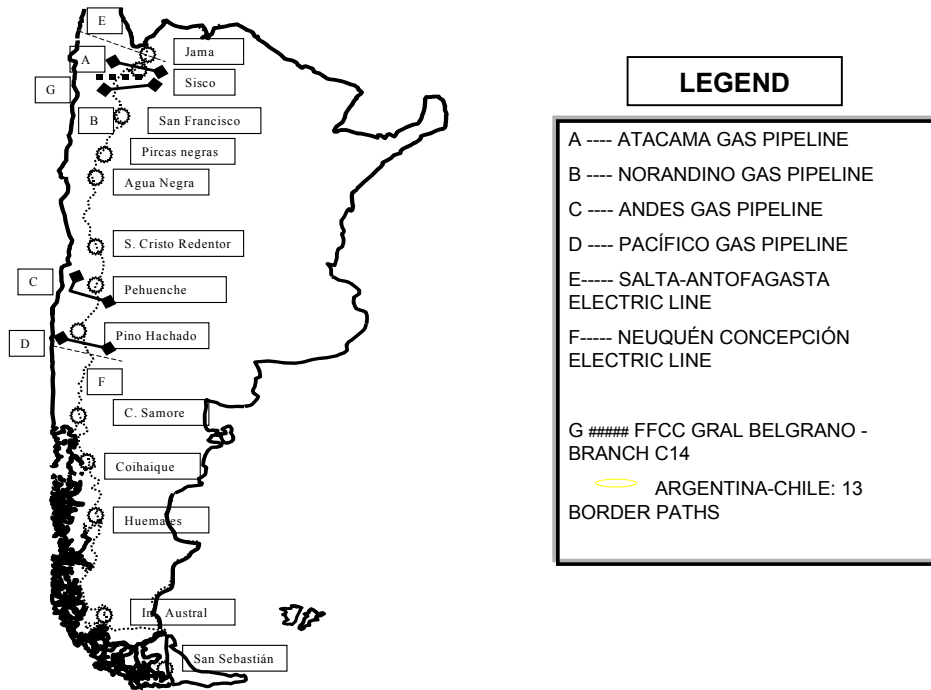


COMPLEMENTARY PROTOCOL

- STATEMENT INCLUDING MEDIUM AND SMALL SCALE MINING COMPANIES
- STATEMENT ON WATER RESOURCES
- SPECIAL ADVISORY COMMITTEE

INFRASTRUCTURE INTEGRATION





RESULTS



PASCUA-LAMA MINE PROJECT

Projection

GOLD	1 MILLION OZ	
SIVER	36 MILLION OZ	
CASH COST	FIRST FIVE YEARS	\$60 per oz
	LIFE OF MINE	\$ 100 per oz
CONSTRUCTION COST		\$ 970 MILLION
PRODUCTION START - UP: 2003		

LABOUR FORCE

**500 WORKERS
AT THE PROTOCOL AREA**

**END OF 2000
700 WORKERS**

Regional Integration	→	Growing reserves Rising production Lowng costs
WITHOUT MINING INTEGRATION	MINING INTEGRATION	
125 \$/oz.	60 \$/oz.	90-100 \$/oz.

MINING INTEGRATION

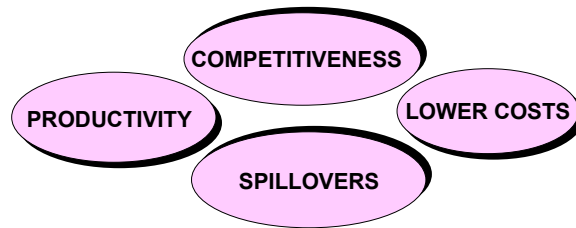


CHALLENGES

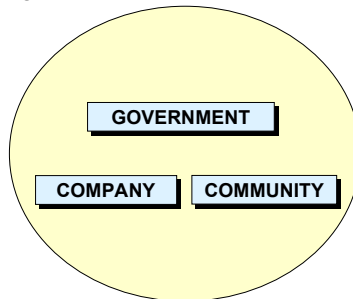
REGIONAL SUSTAINABLE DEVELOPMENT



REGIONAL SUSTAINABLE DEVELOPMENT



REGIONAL SUSTAINABLE DEVELOPMENT



MINING CLOSURE

The driving juridical reform mentioned, could not ignore the environmental effects that mining activity produces, bringing in a Clause in the Mining Code that controls the managing and environmental budgets on which mine operators should agree with the competent public authority by means of the presentation of a Report of Environmental Impact and the consecutive Statement of Environmental Impact.

In the first place it should be pointed out that the Article 249 of the Mining Code (t.o.) treats the mining closure as another activity, when it prescribes. "The activities which are included in this present section are: a) prospecting, exploration, working, development,

preparation, extraction and storage of mineral substances included in this Mining Code, including all the activities assigned to mining closure; b)..."

Having the legislator's decision to grant the mining closure the character of "activity" it is important to define, if being an activity, it will be right to establish in the development of the mining project, the beginning of the mining closure as a step in the project, so as to fulfill law rules when it orders as a previous assumption at the beginning of the activity, the pronouncement of the Statement on Environmental Impact.

We believe that an expressed conclusion, may be too formal, regardless that a specific case should be solved on the basis of the above mentioned doctrine, meanwhile a harmonic and integrative interpretation of the law and its institutes leads us to a solution that conciliates with its essentially warning nature.

As a result the DIA updating (should be settled to the full extent of a biannual way) in those mining projects where exploitation is developed per decades, will allow the mine operator, as well as the application authority, to foresee step by step, the environmental consequences that were produced and the way in which they can be corrected so that when its exploitation finishes and facing the necessity of its probable closure, the future steps to formalize it will be expressed in a short way. This provision has to do with the planning, in the correct way and time, of a proper environmental managing.

If the deposit operator fully answers the environmental requirements, developing an environmental managing plan where the measures and preventing actions are introduced in organized stages together with the mitigation of possible impacts and the process to be used in the rehabilitation, restauration, and recomposition of the altered environment, also managing in this way his environmental managenmt in agreement with the fundamental law and its complementary rule, under control and checking of the authority of application, the mining closure will produce judicial effects with relevant economic repercussion planned on the activity and its residual consequences.

We shoul obviously highlight that if the proposer and the applied authority do not answer to the established environmental managing assumptions, the previous and posterior closure mining actions will then have accumulative effect actions of rehabilitation, recomposition, and restauration of the passive environmental.

When we cite the economic repercussion and its residual consequences, we referred to the patrimonial capacity of the company to answer after the mining closure. It should be specially taken into account the risk that may be produced by the insolvency and /or mistake of the company facing an eventual environmental damage that should be redressed by the company. In this hypothesis, the state, on legal guardianship of the judicial asset may be submitted to take mitigation, rehabilitation, recomposition measures among others with attribution to public funds.

We conclude that considering the incipient development on the mining activity in our country, it seems inopportune to state the subject we are on. Nevertheless, if we focus it from our point of view and if we take as a reference the warning nature of the environmental management that was carried out, we consider the mining closure as a task that should be performed from the beginning of the project and that is implicit in each of its different stages.