



COMMITTEE FOR MINERAL RESERVES  
INTERNATIONAL REPORTING STANDARDS



# **CRIRSCO**

**ANNUAL MEETING 2015**  
Brasilia, BRASIL, november 2015

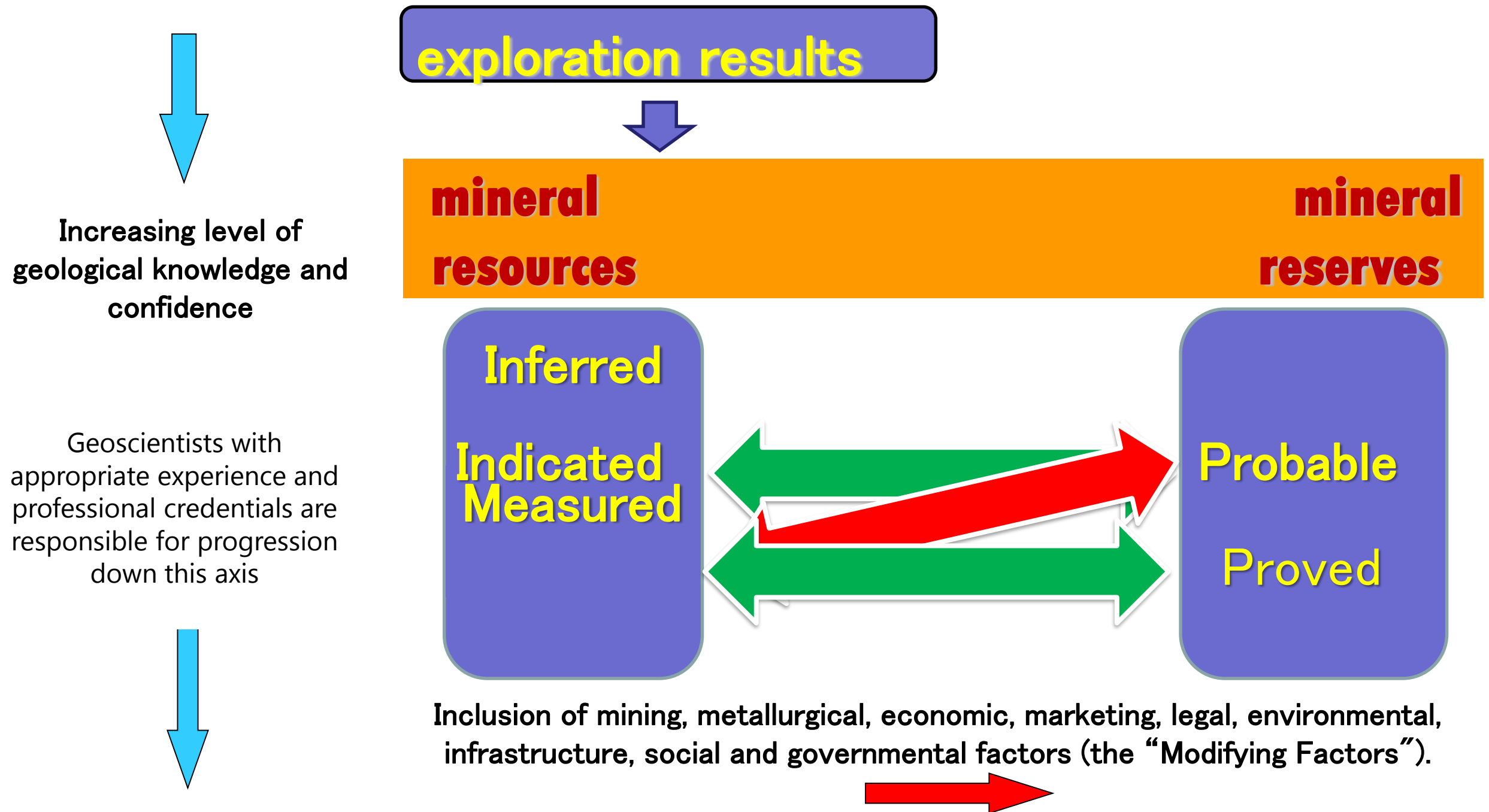
**Edmundo TULCANAZA**

- **MINERAL ASSETS** development requires today technological innovation, rationale mine extraction, financial profitability, social acceptance, and environmental protection. For an industry affected by different sources of uncertainties mine development is a real challenge.
- **MINERAL ASSETS** are now of interest of everybody: government and their regulators, companies and their investors, communities and their workers. Everybody wants true information on the potential of these assets, their vulnerabilities, risks, and opportunities,
- **MINERAL ASSETS** need - as a result of the above - technical competence and ethical responsibility. Technical competence to decipher and solve uncertainties. Ethical responsibility to report with a clear, transparent, and reliable competence.

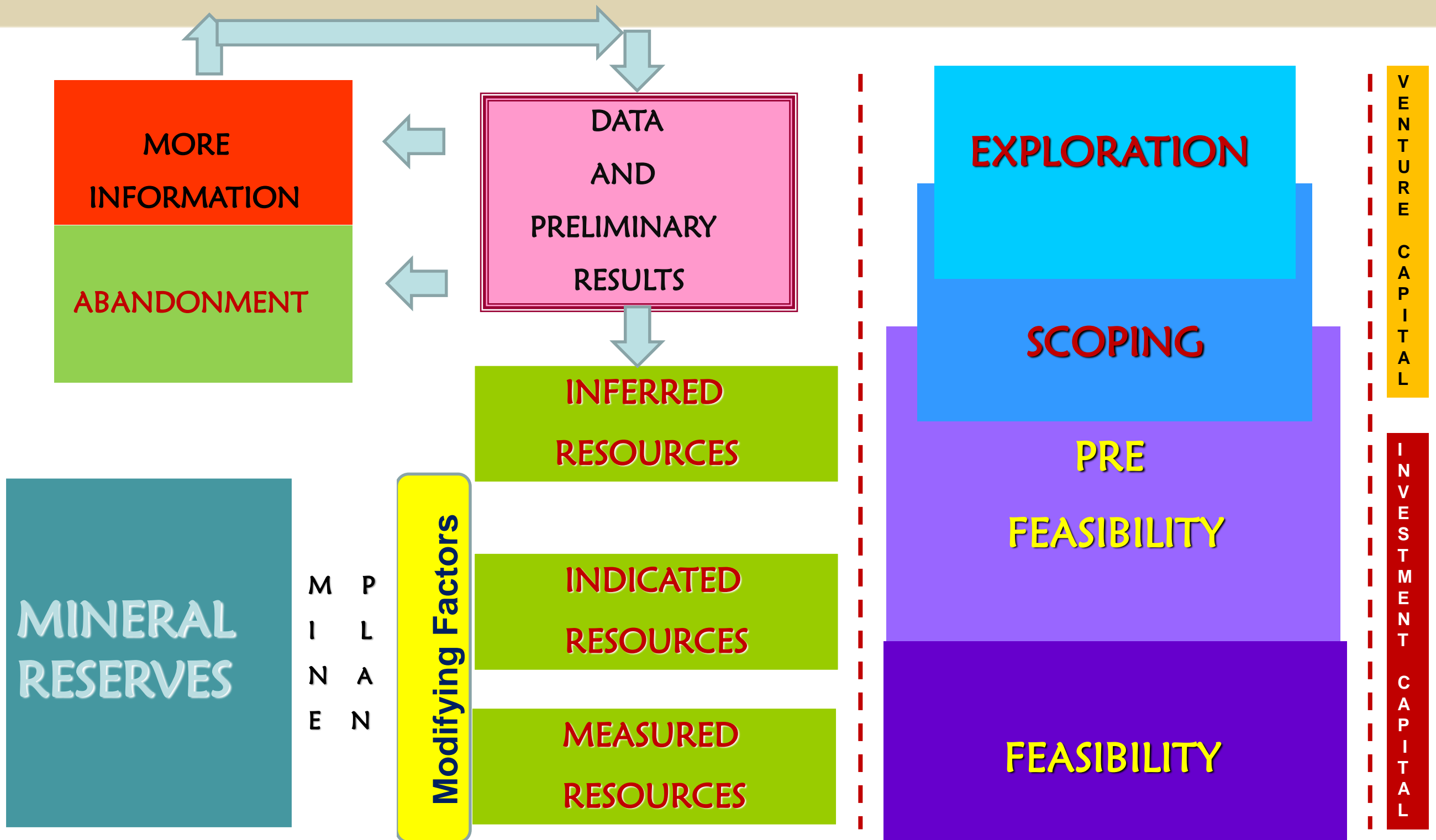
- **CRIRSCO** aims to lead these efforts for the benefits not only of the mining industry and companies but also to provide the required confidence to every group of stakeholders: government, regulators, financial entities, social communities, and mine workers.
- **CRIRSCO** is part of the mining industry and, as such, it works towards a better understanding of the challenges facing the industry to classify, estimate, and categorize mineral resources and reserves. These activities are crucial for setting up the attributes of a mineral deposit, to back up the economic value of mine assets, properties, and businesses, and to assure a rationale equilibrium between the population well-being and the social and environmental effects.

- **CRIRSCO** is the international committee set up by Australia, Brazil, Canada, Chile, European Union, Mongolia, Russia, South Africa and the United States dedicated to qualify mining professionals – as Competent Persons – to support a clear, transparent, and well-conceived guides and standards for the information and reporting of mineral resources and reserves.
- **CRIRSCO** has established an exhaustive and detailed series of important issues and topics to report and inform on mineral resources and mineral reserves. By doing this, CRIRSCO standards help to increase the technical content of a report, create an increasing value of the mine property, and better support mine sustainability.

- **CRIRSCO TEMPLATE** *is the document that encapsulates the key concepts, principles, and contents involved in the activities recommended by the CRIRSCO codes and adopted world-wide for market-related reporting, financial related- purposes, and – in some cases – due to enforced government instructions.*
- **CRIRSCO TEMPLATE** *in addition to providing exhaustive recommendations on how to report and inform mineral assets the Template explicitly recognizes the technical studies associated with these activities making unequivocal the phases of Scoping, Pre Feasibility, and Feasibility, and the conversion of mineral resources into mineral reserves.*









## CRIRSCO TEMPLATE

*sets minimum standards for public reporting of Exploration Results, Mineral Resources and Mineral Reserve*

*provides a mandatory system for classification of tonnage/grade estimates according to geological confidence and technical/economic considerations.*

*establishes definitions for mineral resource and ore reserve classes that are compatible with international agreements*

*requires Public Reports to be based on work undertaken by a Competent Person; describes the qualifications and type of experience required to be a Competent Person*

*provides extensive guidelines on the criteria to be considered when preparing reports on Exploration Results, Mineral Resources and Mineral Reserves*

## CRIRSCO TEMPLATE

***DOES NOT*** regulate procedures and methodologies used by Competent Persons to estimate and classify Mineral Resources and Ore Reserve

***DOES NOT*** regulate companies' internal criteria for the classification or internal reporting systems

***DOES NOT*** deal with breaches of the Code by companies.

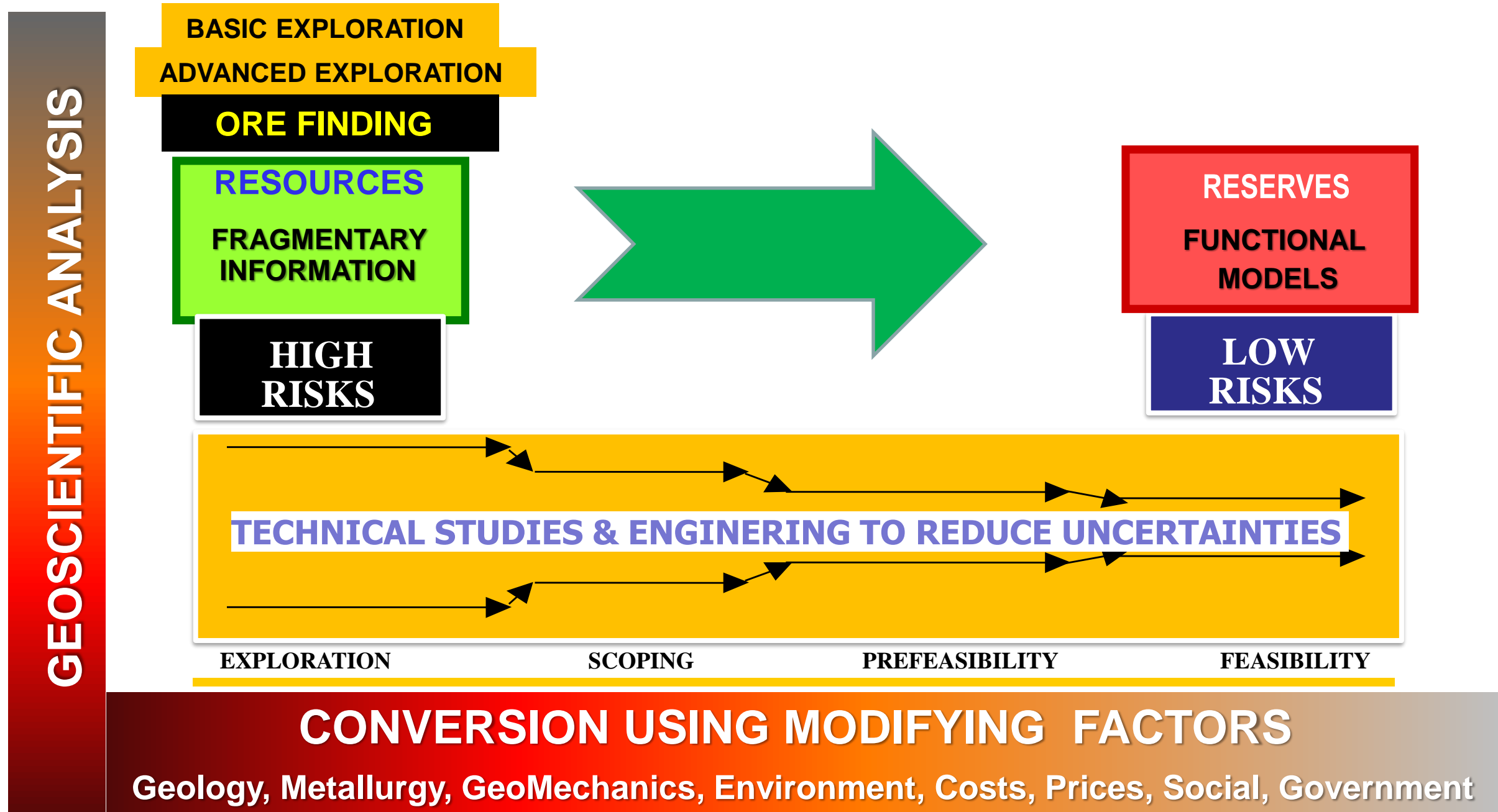
***DOES NOT*** deal with breaches by individuals. These are dealt with under the code of ethics of the relevant professional association.

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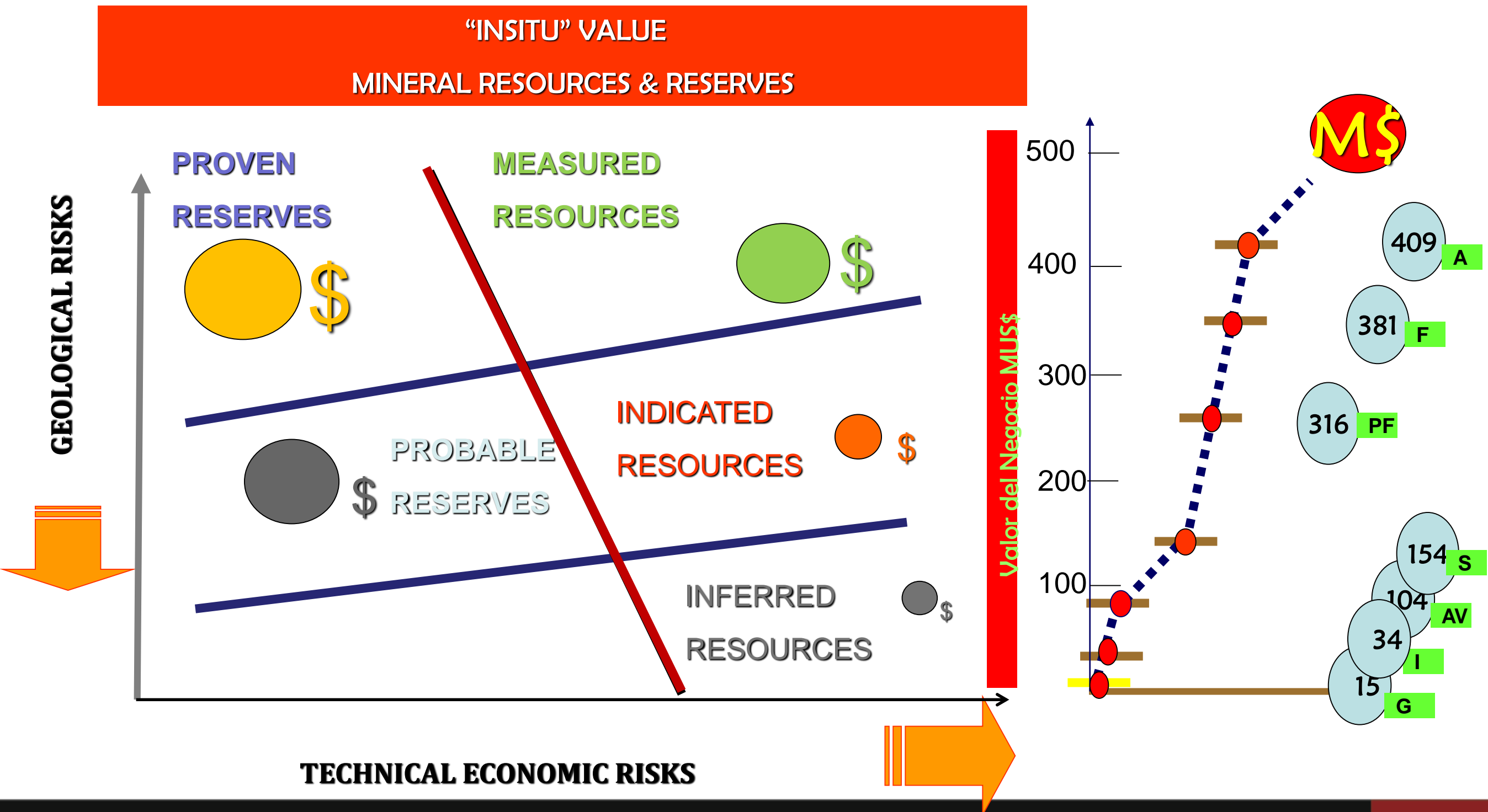
- **CRIRSCO TEMPLATE** *is recognized as the key international document representing the mining industry on issues relating to the classification and reporting of mineral assets by global organizations such as the International Accounting Standards Board (IASB), the United Nations Economic Commission for Europe (UNECE), the International Council on Mining and Metals (ICMM), the International Seabed Authority (ISA), the Society of Petroleum Engineers (SPE), the International Atomic Agency and the most active metal stock exchanges houses in the world.*
- **CRIRSCO TEMPLATE'S** *objectives to help sustain, validate, and back-up correctly mine studies, projects, and ventures with transparent and reliable information provide - as a result - a more credible, trustworthy, and totally sustainable mining industry.*

# THE INTERNATIONAL CRIRSCO TEMPLATE

CONVERSION from ORE FINDING to MINERAL RESOURCES to MINERAL RESERVES



The INTERNATIONAL CRIRSCO TEMPLATE: tool for INCREASING VALUE CREATION IN THE MINERALS INDUSTRY



*From exploration through mine closure standards for transparent, material, and reliable information will help the mining industry to become better supported, more efficient, less risky, and more valuable.*

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*Gracias!!*