



COMMITTEE FOR MINERAL RESERVES
INTERNATIONAL REPORTING STANDARDS



The relationship between the Committee for Mineral Reserves International Reporting Standards (CRIRSCO) Template 2013 and the United Nations

Framework Classification (UNFC 2009)
South African Representative, CRIRSCO
Moscow May 30 2017



- Objective of CRIRSCO
- CRIRSCO Members
- International Reporting Template
- UNFC 2009
- Mapping UNFC 2009 Template/PRMS

To promote best practice in the international public reporting of Mineral Exploration Results, Mineral Resources and Mineral Reserves.

CRIRSCO is an international advisory body without legal authority, relying on its constituent members to ensure regulatory and disciplinary oversight at a national level.

It recognises the truly global nature of the minerals industry and the agreed need for international consensus on reporting standards.

10 CRIRSCO Members

Australasia:	JORC
Brazil:	CBRR Guide
Canada:	CIM
Chile:	COMISIÓN MINERA DE CHILE
Europe:	PERC
Kazakhstan:	KAZRC
Mongolia	MRC
Russia	NAEN
South Africa:	SAMREC
United States:	SME Guide

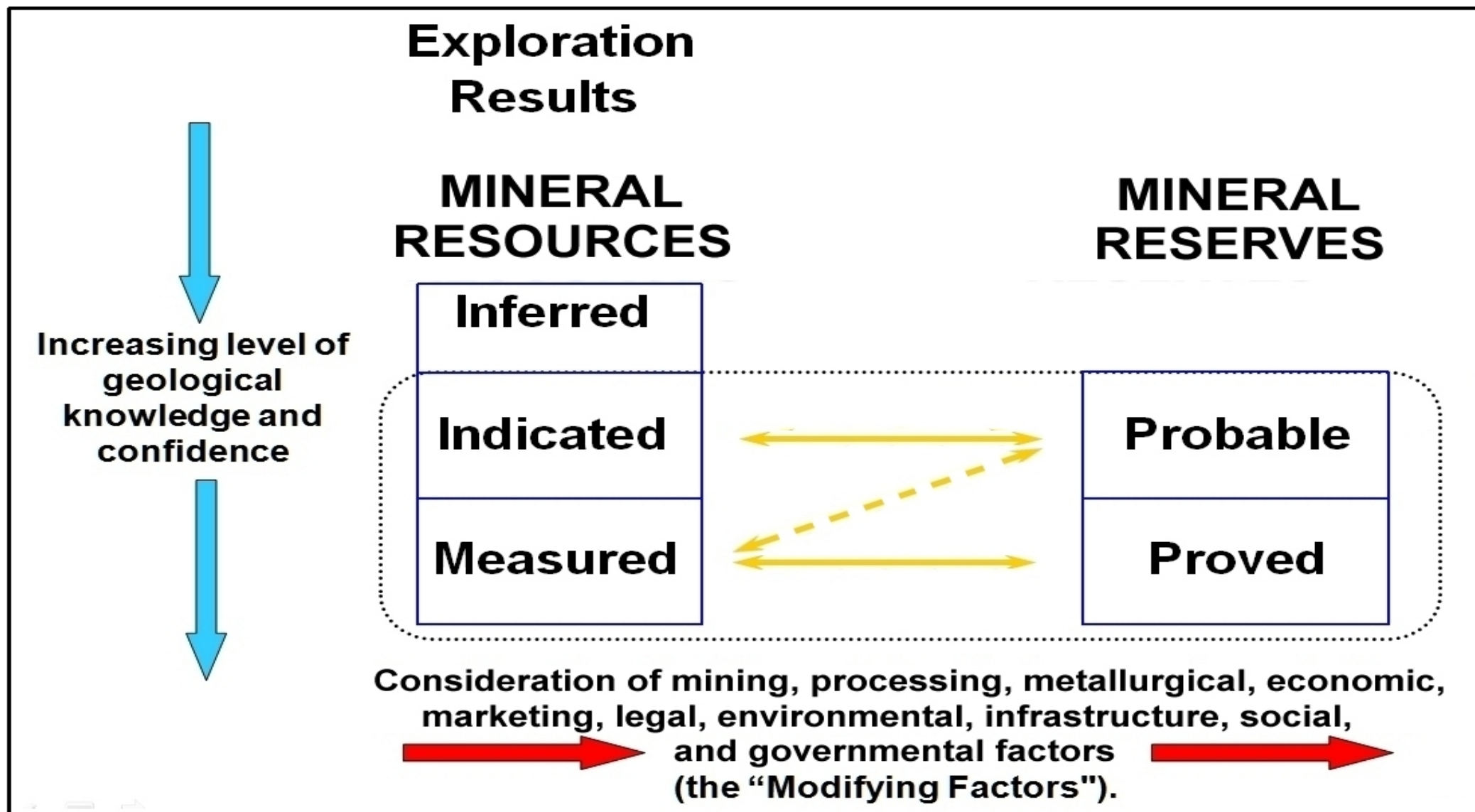
INTERNATIONAL REPORTING TEMPLATE

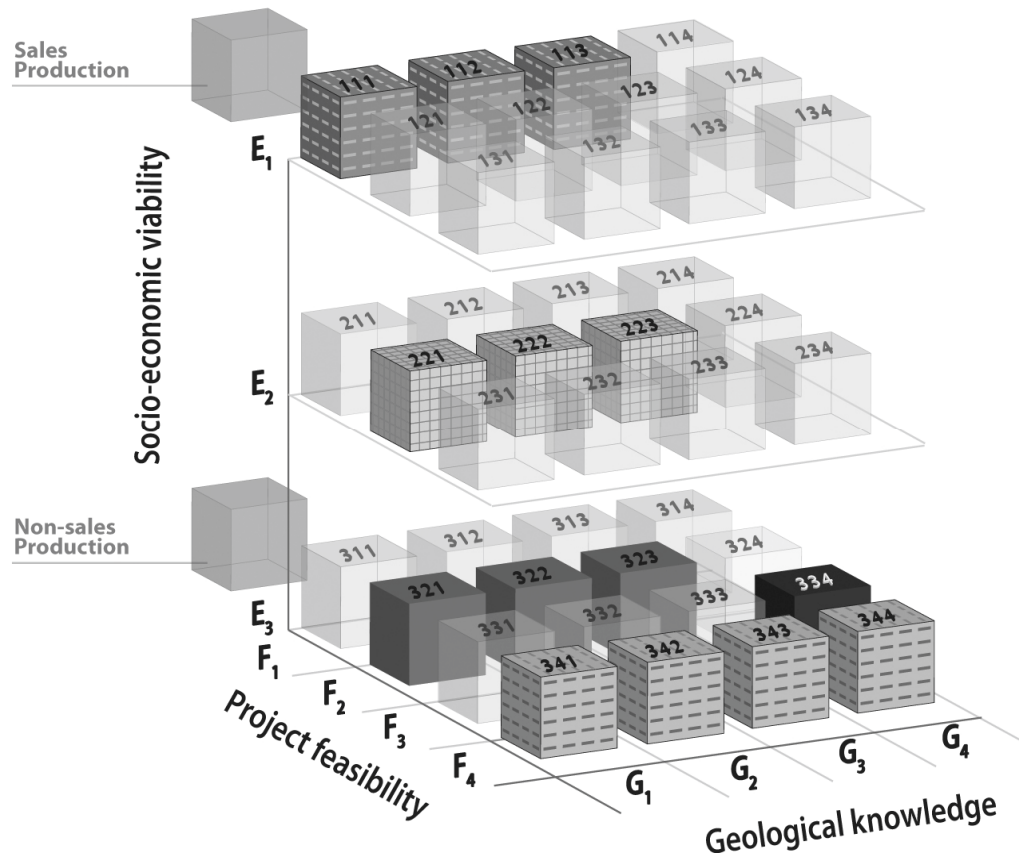
for the public reporting of

EXPLORATION RESULTS, MINERAL RESOURCES
AND MINERAL RESERVES

NOVEMBER 2013

- Advisory only
- National Standards/Codes take precedence
- Model for development of new codes





Generic, Principle based
3 Axis

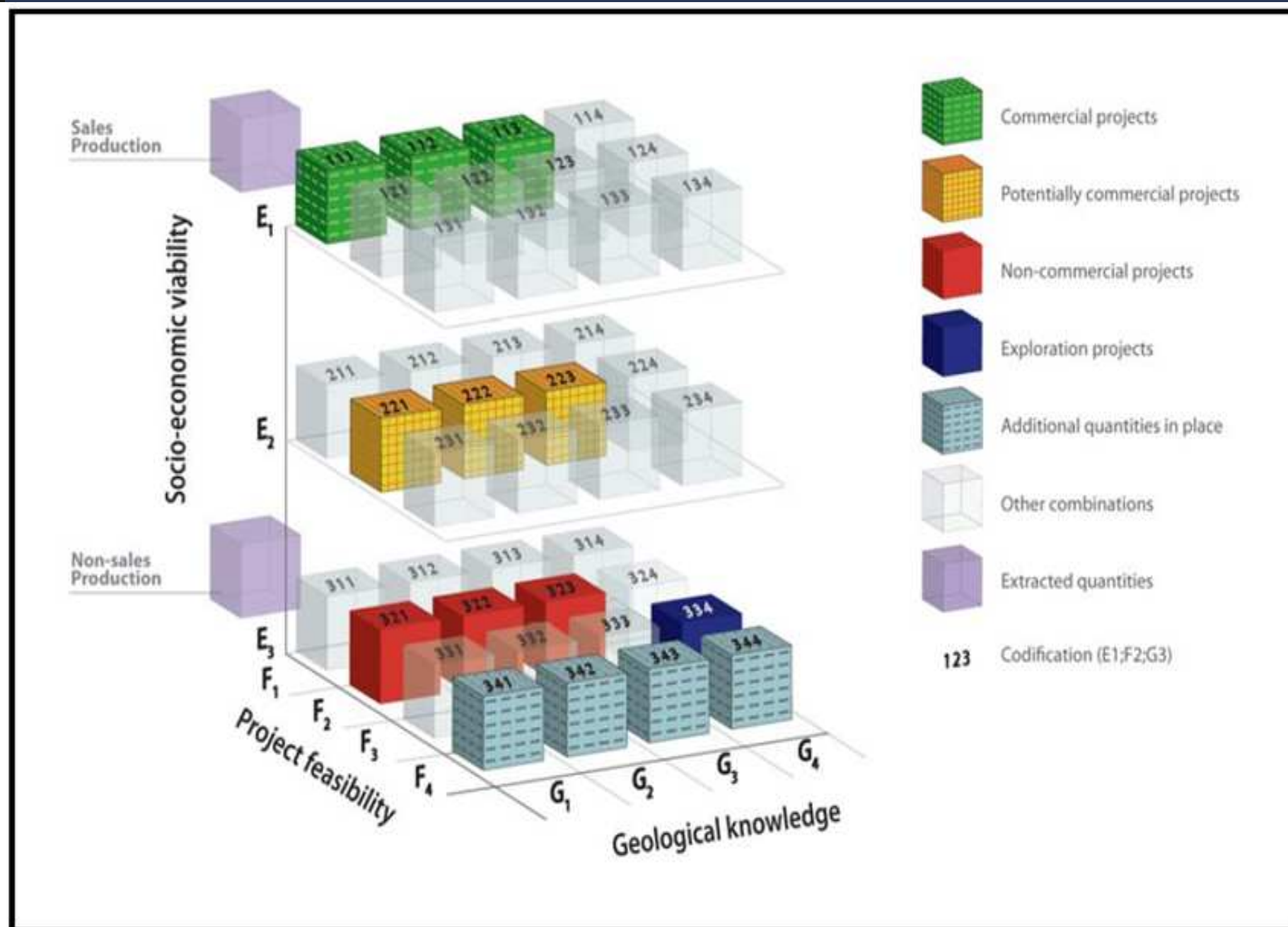
Economic and Social,

Feasibility,

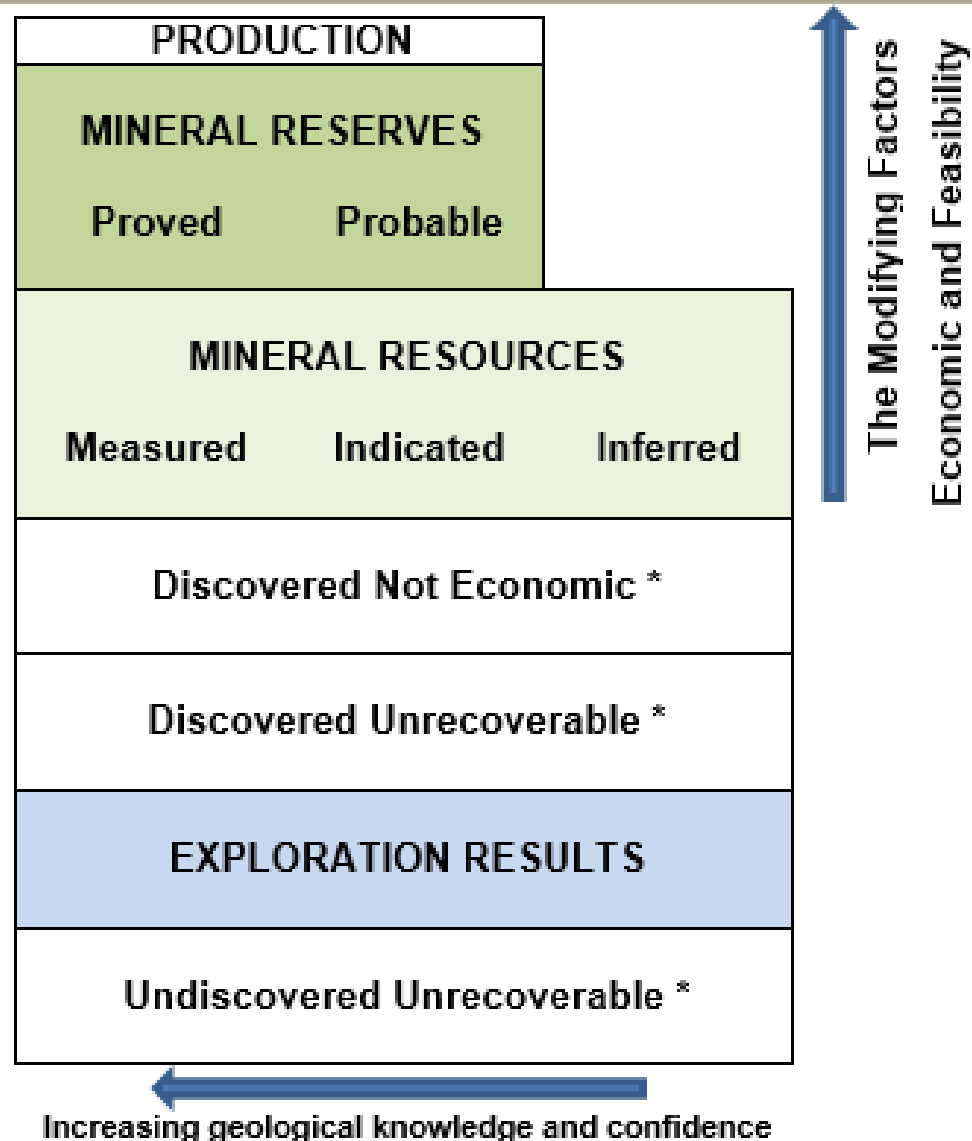
Geological

Numerical code

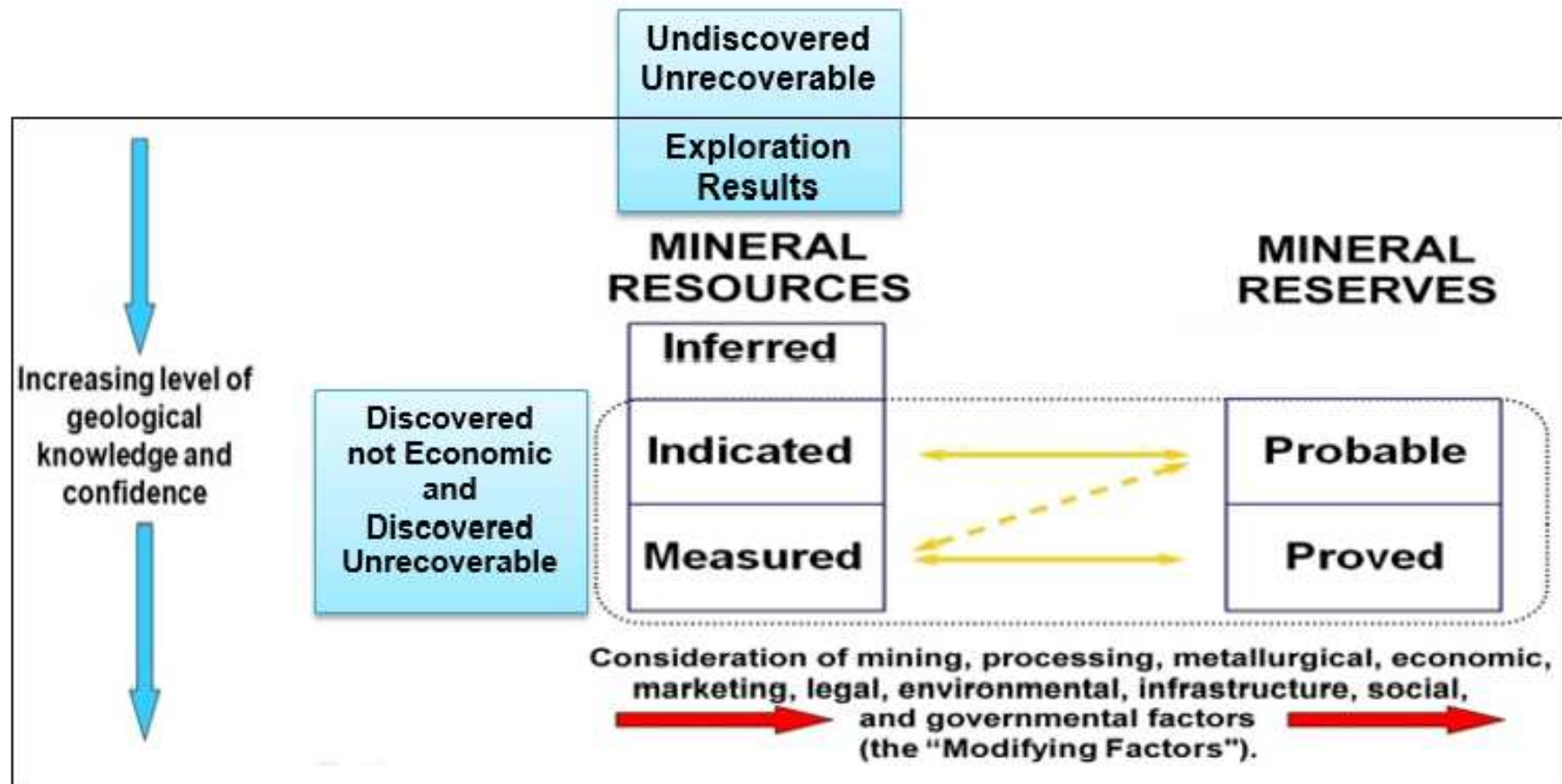
Applied directly or as harmonizing tool



Re-Oriented Figure Showing the CRIRSCO Categories (Shaded) and Additional Categories in Other Systems

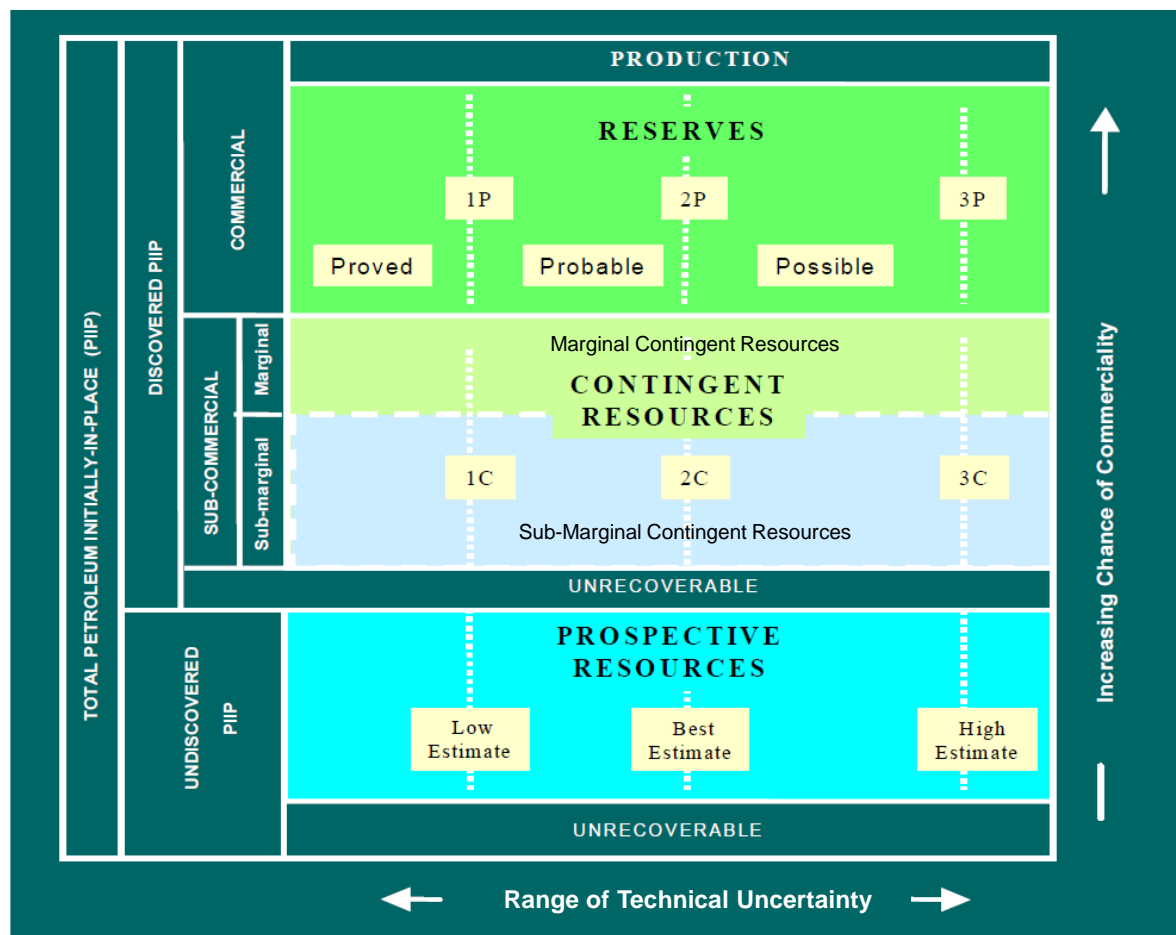


*Not part of the Template but may be used for internal project management

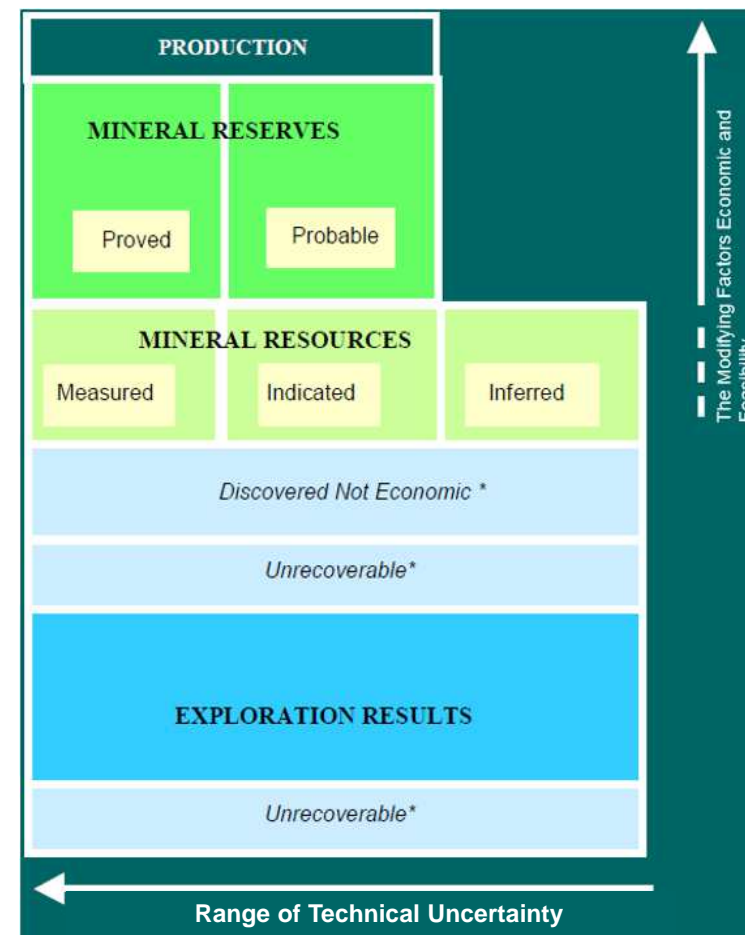


Comparison of the Petroleum Resource Management System (PRMS) and the CRIRSCO Template

Petroleum (SPE/WPOC/AAPG/SPEE 2007)



Minerals (CRIRSCO 2013)



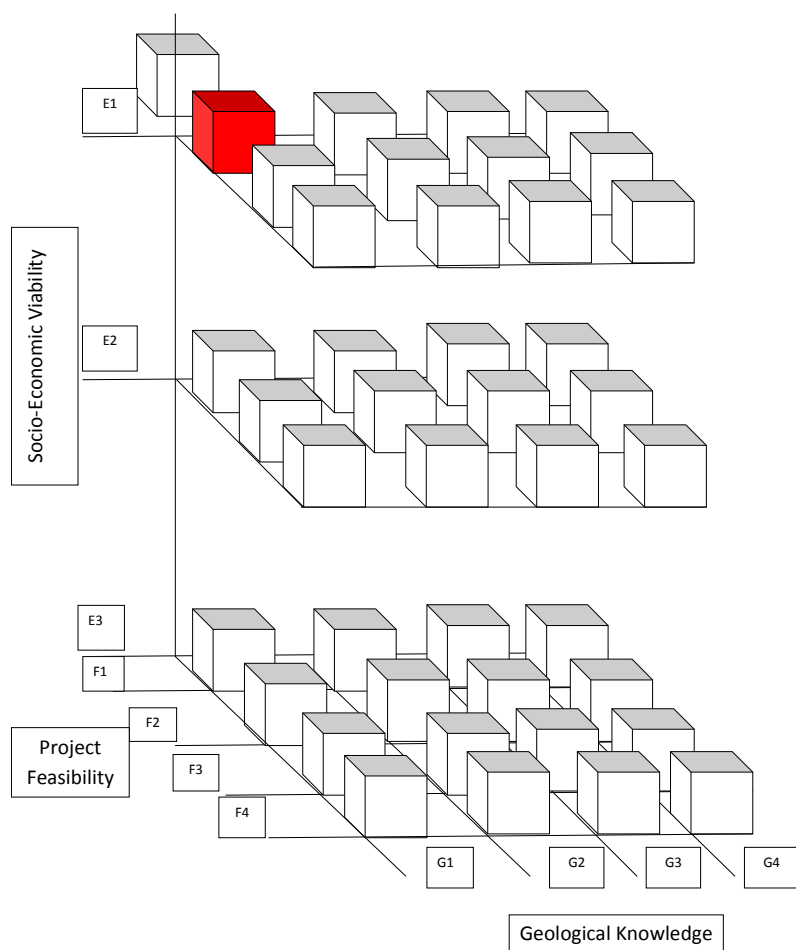
*Not part of the Template but may be used for internal project management

- Need for management of inventory
 - Company level
 - Country level
 - Global level
- Definitions must be consistent

- Corporate mineral inventory management
 - exploration target definition
 - development options
 - purchase price accounting

Total commodity initially in place	Production	Sales Production			
		Non-sales Production			
		Class	Categories		
			E	F	G
	Future recovery by commercial development projects of mining operations	Mineral Reserves	1	1	1,2
	Potential future recovery by contingent development projects or mining operations	Mineral Resources	2	2	1,2,3
		Discovered Not Economic	3	2	1,2,3
	Discovered Unrecoverable		3	4	1,2,3
	Potential future recovery by successful exploration activities	Exploration Results	3	3	4
	Undiscovered Unrecoverable		3	4	4

CRIRSCO Template		UNFC-2009 “minimum” Categories			UNFC-2009 Class
Mineral Reserve	Proved	E1	F1	G1	Commercial Projects
	Probable			G2	
Mineral Resource	Measured	E2	F2	G1	Potentially Commercial Projects
	Indicated			G2	
	Inferred			G3	
Exploration Results		E3	F3	G4	Exploration Projects



UNFC (2009)

E1; F1; G1

111

- Generic classification system applicable to Fossil Energy and Mineral Reserves and Nuclear fuels;
- Provides a single framework on which to build international energy and mineral studies;
- Allows for non-economic mineralisation
- Now applicable to renewable energy

Important tool for harmonized generic terminology at a level suitable for global communication



ALL SLIDES

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