

Resource Codification, Valuation Standards, and Sustainable Development

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UNECE's Ad Hoc Group of Experts
on Harmonization of Reserves and Resources Terminology,
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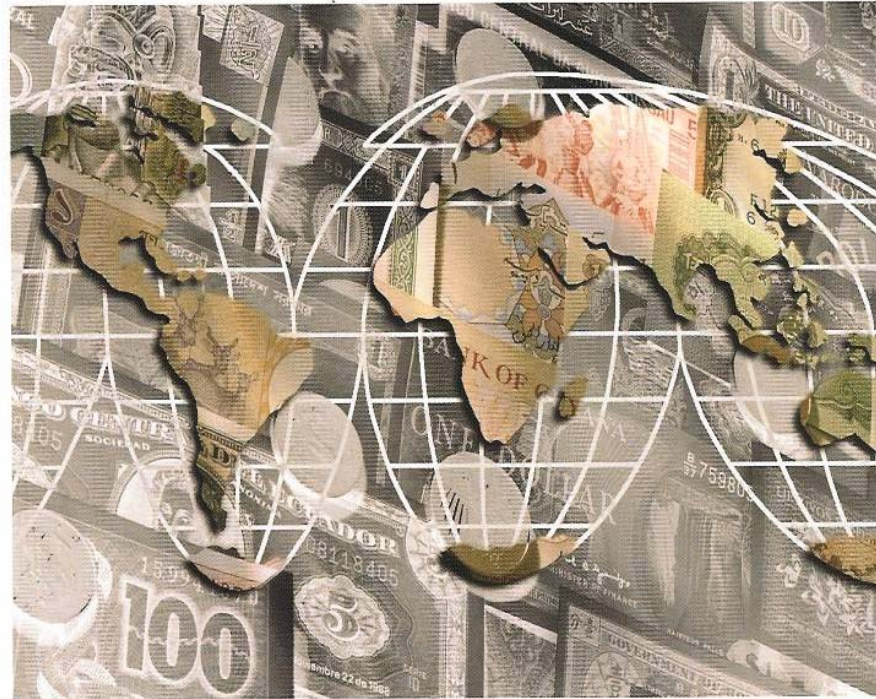


International Valuation Standards Committee (IVSC)

- A UN NGO member
- The little sister of the International Accounting Standards Board (IASB)
- Publishes the International Valuation Standards (IVS) for global use
- The IVS is recognised as the valuation standards for reporting under the International Financial Reporting Standards (IFRSs)
- The IVS is translated into many languages and is adopted into the laws and regulations of many countries



International Valuation Standards Seventh Edition 2005



International
Valuation Standards
Committee



IVS 2005 Edition

- Contains Extractive Industries (minerals and petroleum) specific valuation standards for the first time
- 459 pages. USD50 (includes international delivery)
- Standards for all asset types
 - Particularly real property and business
 - Also other tangible and intangible assets
 - For all value types
 - Particularly market value and fair value
 - For all uses
 - Particularly financial reporting
 - Contains IFRS specific instructions



Major Reserve-Resource Classification Systems

- SPE/WPC/AAPG for petroleum
- CRIRSCO-based for minerals
 - JORC, Australasia
 - CIM, Canada
 - SAMREC, South Africa
 - IMM *et al*, Europe
- Russian for petroleum
- Russian for minerals
- UNFC for petroleum and minerals



Other Resource Classification Systems

- Between 100 and 200
- Near as many systems as there are countries



Uniform Classification and Standards – Why Needed Globally

- Globalization has brought cross-border transactions, operations, reporting, and need for cross-border comparability
- Uniform Classification and Standards needed globally for:
 - International operations by companies
 - International investment
 - International securities selling and trading
 - International lending
 - International banking
 - International insurance
 - International aid programs
 - International consulting and worker mobility



Who Wants Uniform Global Standards?

- Companies
- Investors
- Lenders
- Regulators
- National and International Planners



Who Does Not Want Uniform Global Standards?

- Those scared of change
- Those who view the standards as being imposed without allowing them adequate input
- Those who benefit from the inefficiencies of artificial barriers



Resource Classification – Goals in Financial Reporting

Distill for the reader the combined outcome of analysis of important factors about the company's deposits or fields:

- Geological knowledge and potential
- Economic – product market knowledge and potential
- Engineering limitations – extraction, processing, metallurgical
- Other restrictive factors – governmental, environmental, legal, and social



UN Framework Classification

- Advantages
 - Combines Petroleum with Minerals in one system
 - Globally derived with input from many cultures
 - Designed for multiple uses
 - Stock market reporting
 - Includes national planning level data
 - Compatible with the other major systems
 - 3 dimensions
 - Conveys more information than 2 dimensions
 - Numerical classification to alleviate language problems
- Disadvantages
 - 3 dimensions
 - May seem more complicated than 2 dimensions
 - Not designed specifically for stock market reporting
 - Not presently accepted by the major stock markets



Reporting for Major Stock Markets

- Petroleum – USA
 - SEC Rule SX
 - Proved Reserves only
- Minerals
 - Canada, Australia, South Africa, England
 - Proved and Probable Reserves
 - Measured, Indicated, and Inferred Resources
 - USA
 - Industry Guide 7 – Proved and Probable Reserves only
- International Financial Reporting Standards
 - Not yet determined



National Asset/Public Sector Accounts

UNFC versatile for monitoring resource assets for public entity and national planning purposes:

- Useful sustainable development planning tool
 - Monitor a complete range of classifications
 - Aids determining where to focus financial and human endeavours
 - Develop deposits where derive greatest economic and social benefit, while balancing efficient use, long-term resource allocation, and environmental factors



Private Sector

- Financial markets allocate monetary funds to where economic efficiencies are greatest
- They direct funds to where social, environmental, and legal issues are minimal
 - Maximize the ratio of benefit to risk
- Through aiding this process, information conveyed by the UNFC will enhance sustainable development



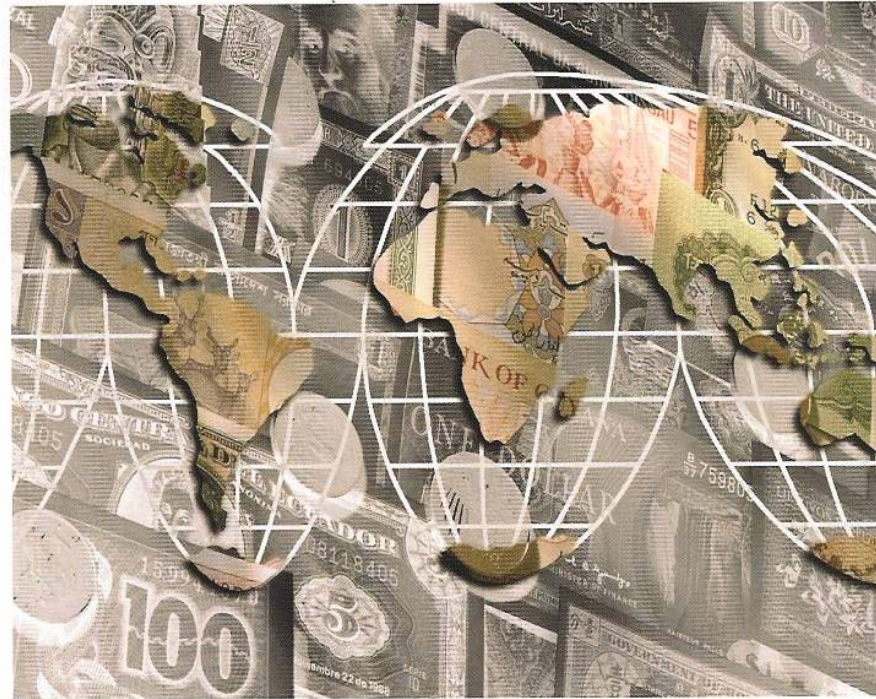
Need for a Global Extractive Industries Valuation Standard

- Minerals and petroleum companies work internationally
- Minerals and petroleum valuers work internationally
- Companies report internationally to:
 - Securities markets
 - Investors
 - Lenders
- Investors and lenders compare projects internationally
- 190+ countries need standards
- Required to support current value accounting for the extractive industries in the IFRS



International Valuation Standards Seventh Edition

2005



International
Valuation Standards
Committee



International Valuation Standards

Extractive Industries (minerals and petroleum) valuation standards included in IVS 2005 edition:

- Abide by the Generally Accepted Valuation Principles
 - The standards draw upon the entire IVS
- Designed for valuation of reserves, resources, and exploration properties
- Designed for valuation of mineral and petroleum related real property, plant and equipment, financial and intangible assets



International Valuation Standards

- Designed for a wide variety of uses of valuation reports
 - By owners, lenders, investors, regulators
 - Contains supplemental instructions for valuations used in financial reporting
- A Technical Paper of supplemental guidelines is being developed by the IVSC's Extractive Industries Task Force



International Valuation Standards

- Mineral and petroleum valuations rely on reserve and resource estimates
- Classifications referenced by the IVS are:
 - SPE/WPC/AAPG, CRIRSCO, and UNFC
 - The IVS excludes UNFC G4 from its Mineral and Petroleum Resource definitions
- Market valuation reports have the most comprehensive valuation standards



Sustainable Development

– UNFC

- Selection of resources for exploration and development based on their economic efficiency
 - Should account for geological, engineering, environmental, legal, social, and governmental factors
 - The UNFC does this
- The UNFC aids governments and companies to select deposits/fields suitable for development on a uniform basis of measurement
 - Market forces are measured by economic factors



Sustainable Development

– IVS

- Provides uniform valuation principles for international use
- Determination of deposit value assists in the efficient allocation of money, labour, and energy
 - Development of deposits of greatest value first is generally the most efficient (least wasteful) use of money, labour, and energy.



Sustainable Development – Financial Reporting to Stock Markets

- Efficient financial markets will allocate money for development to the most economically desirable projects
- Financial reporting based on the IVS with the UNFC will help this efficiency
- Companies sell or trade assets on which they don't have the ability to obtain an adequate return on asset value
 - The buyer aims for an adequate return



Sustainable Development – Government or Public Accounts

- Similar principles should be applied
- Classification should be based on geological, engineering, economic, and other factors as specified in the UNFC
- Deposit values should be determined by market value or fair value standards
 - Can be used to efficiently allocate money, labour and energy
 - Maintaining asset accounts recording market or fair values will help avoid poor or corrupt sale, lease, or trade decisions



Recommendation

- The IASB wants a classification system unifying minerals and petroleum
- It will choose either:
 - The UNFC
 - CRIRSCO + SPE/WPC/AAPG
 - US SEC's Industry Guide 7 + Rule SX
 - Develop its own
- Our industries ***must*** determine the outcome:
UNFC + CRIRSCO + SPE/WPC/AAPG

