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
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

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 enhance 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