Impairment and valuation considerations relating to oil and gas assets

Presentation by:

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Presentation agenda

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Introduction

IAS 36 defines an impairment loss as ‘the amount by which the carrying amount of an asset or a cash-generating unit exceeds its recoverable amount’.

Impairment of O&G assets therefore involves derecognition of a minerals or oil and gas property because it no longer meets the definition of an asset or the recognition criteria—for example, when the legal rights to a property expire or no further work will be carried out on the property.

Introduction

Impairment requirement is particularly important for mining entities that have decided to recognise all exploration and evaluation expenditure as an asset.

There is a risk that O&G companies might be carrying significant amounts on the balance sheet in respect of projects for which the outcome is highly uncertain.

Once an impairment trigger has been identified, the impairment assessment is performed in accordance with IAS 36

Impairment of O&G assets

IFRS 6 introduces an alternative impairment-testing regime for recognized exploration and evaluation assets that differs from the requirements set out in IAS 36 Impairment.

IFRS 6 requires a mining entity to assess exploration and evaluation assets for impairment only when facts and circumstances suggest that the carrying amount of an asset may exceed its recoverable amount.

Indicators of impairment – IFRS 6

Impairment indicators in O&G

1) the entity's right to explore the area has already expired or will expire in the near future with no expectation of renewal;

2) no further exploration or evaluation expenditure in the area is planned or budgeted;

Indicators of impairment – IFRS 6

Impairment indicators in O&G

3) no commercially viable deposits have been discovered, and the decision has been made to discontinue exploration or evaluation in the area; and

4) sufficient work has been performed to indicate that the carrying amount of the expenditure carried forward as an asset will not be fully recovered, even though a viable mine has been discovered.

Indicators of impairment – IFRS 6

IFRS 6 provides that, although development is likely, if the costs capitalized as exploration and evaluation assets exceed the amounts that are likely to be recovered, then impairment is assessed.

Impairment losses are taken to profit or loss – may be reversed

US GAAP provisions on impairment

Successful-Efforts Method

- Exploration and production (E&P) companies that use the successful-efforts method apply the guidance in ASC 932 (Extractive activities) and ASC 360 (property, plant and equipment) to account for the impairment of their O&G assets.

- Such guidance addresses:
  - ✓ the timing of impairment testing and impairment indicators,
  - ✓ measurement of an impairment loss,
  - ✓ the level at which an impairment is assessed, and
  - ✓ recognition of an impairment loss.

Successful-Efforts Method – cont'd

Timing of Impairment Testing and Impairment Indicators

- An E&P company determines impairment when events or circumstances indicate that the carrying value of the company's O&G properties may not be recoverable.
- Proved properties in an asset group should be tested for recoverability **whenever events or changes in circumstances** indicate that the asset group's carrying amount may not be recoverable.
- Companies perform an annual impairment assessment upon receiving their annual reserve report by preparing a cash flow analysis as the necessary information becomes readily available.
- E&P companies should assess unproved properties **at least annually** to determine whether they have been impaired based on the "sufficient progress" criteria.

Successful-Efforts Method – cont'd

Measurement of Impairment Loss

- A company that applies the successful-efforts method uses a two-step process:
  - Under step 1, the company compares the asset group's undiscounted cash flows with the asset group's carrying value. The carrying amount of the asset group is not recoverable if it exceeds the sum of the undiscounted cash flows. If Step 1 fails, the company moves to step 2
  - Step 2- compares the asset group's fair value with its carrying amount. An impairment loss would be recorded and measured as the amount by which the asset group's carrying amount exceeds its fair value.

Successful-Efforts Method – cont'd

Level at Which Impairment Is Assessed

- Proved properties must be grouped at the lowest level for which there are identifiable cash flows that are largely independent of the cash flows of other groups of assets. Typically, impairment is performed on a field-by-field basis.

- Unproved properties should be assessed on a property-by-property basis or, if acquisition costs are not significant, by an appropriate grouping.

Full-cost method

Timing of Impairment Testing and Impairment Indicators

- Under the full-cost method, a full-cost ceiling test must be performed on proved properties each reporting period.

- Unproved properties must be assessed periodically (at least annually) for inclusion in the full-cost pool, subject to amortization.

Full-cost method

Measurement of Impairment Loss

The full-cost accounting approach requires a write-down of the full-cost asset pool when net unamortized cost less related deferred income taxes exceeds:

1) the discounted cash flows from proved properties,
2) the cost of unproved properties not included in the costs being amortized, and
3) the cost of unproved properties included in the costs being amortized.

The write-down would be reduced by the income tax effects related to the difference between the book basis and the tax basis of the properties involved.

Full-cost method

Level at Which Impairment Is Assessed

Companies that apply the full-cost method generally establish cost centers on a country- by-country basis and assess impairment at the cost-center level.

Valuation approaches

- ***Income approach*** — Under this approach, valuation techniques are used to convert future amounts (e.g., cash flows or earnings) to a single present amount (discounted). The measurement is based on the value indicated by current market expectations about those future amounts.

- ***Market approach*** — This approach requires entities to consider prices and other relevant information in market transactions that involve identical or comparable assets or liabilities, including a business. Valuation techniques commonly used under the market approach include the guideline public company method and the guideline transaction method.

Valuation approaches

- ***Asset approach*** — Under this approach, which is also known as the cost approach, the value of a business, business ownership interest, or tangible or intangible asset is estimated by determining the sum required to replace the investment or asset with another of equivalent utility (sometimes described as future service capability).

Valuation approaches

Key Assumptions Under the Income Approach

- Assumptions that companies should consider incorporating in the DCF model include those related to
  - ✓ cash flow projections- based on production profile,
  - ✓ pricing and price differentials- forward strip pricing as determined by the New York Mercantile Exchange (NYMEX) or other pricing benchmarks (e.g., Brent)
  - ✓ discount rate- WACC, pre-tax or after-tax etc.
  - ✓ risk factors (unproved reserves have risk factor since they are inherently more uncertain than proved reserves), and
  - ✓ the tax effect- use of pre-tax or after-tax inputs (cash flows)

Valuation approaches

Key Assumptions Under the Market Approach

- As they would under the income approach, E&P companies should apply the market participant concept when determining the fair value of their O&G assets under the market approach. For example:
  - ✓ discount rates should be estimated from the standpoint of other buyers and sellers.
  - ✓ On fair value, the company should ensure that it is considering the same factors and assumptions that the market participant would take into account.

Interactive Session

Contacts

Thank you

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