Renewable energy projects: hedging your bets from a knowledge risk

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Even though the renewable energy sector has incredible growth potential, it still faces unprecedented challenges as a result of being directly or indirectly exposed.

A common feature of investor loans to independent power producers (IPPs) is that they contain terms and conditions requiring them to hedge all (or the majority) of their market risks. This includes interest rate, foreign exchange and commodity (fuel or coal) price risks.

Getting the accounting model right

Hedging these risks is traditionally achieved through the use of derivative contracts. The rationale behind these hedging strategies is to protect IPPs in the face of unexpected economic changes and market volatility.

For example, foreign exchange rate movements can put substantial pressure on IPPs particularly where a project is committed to and asset and commodity purchase prices are denominated in US dollars, while having to sell power in the local currency.

Due to the specialised nature of trading derivatives and implementing hedging strategies, IPPs are exposed to operational risks, as well as valuation and accounting challenges, as the trading of derivatives do not form part of their core business.

However, getting the accounting right in the pre- and post-PPA phases is particularly important for IPPs as lenders rely on the underlying accounting information contained in the financial models that potential IPPs submit, to secure funding for these projects.

The feedback from lenders is that potential IPPs should be investing more time and effort in getting the accounting right, in particular in the financial models they develop. If the accounting principles are over-simplified or incorrect, this has a direct impact on the projected internal rate of return (IRR) calculated by the models. If the lenders can't rely on the projected IRR, it will restrict their appetite for lending.

Volatility in earnings

IPPs need to take into account the potential volatility in earnings that can be expected even when the IPP may have effectively hedged its relevant market risks. This is as a consequence of the mixed measurement model for accounting purposes, under international financial reporting standards (IFRS), which require the measurement of financial assets and financial liabilities on different bases.

Underlying exposures, or hedged items (such as future capital expenditure commitments or loan liabilities), are for accounting purposes either not immediately recognised or, at minimum, only recognised on a conventional accrual basis.

The derivative, or hedging instruments, entered into to hedge these exposures (such as interest rate swaps, FECs or commodity forwards) are, however, required to be regularly fair-valued through the income statement/profit or loss and therefore immediately reflect the full impact of market movements.

These timing differences between the hedged item's and hedging instrument's accounting measurement basis will eliminate over the lifetime of the hedge, however, for financial reporting purposes, a mismatch will be reported until maturity is reached.

Consider the example of an IPP that is required to import various capital equipment for construction purposes, priced in foreign currency as part of its project. Due to foreign exchange volatility the IPP is often required to hedge its foreign exchange risk using a forward exchange contract (FEC). From an earnings perspective, the IPP will experience volatility in its reported IFRS earnings due to fair value movements on the derivative.

However, as the foreign exchange risk of the probable forecast purchase of equipment is "off balance sheet", an accounting mismatch arises until the equipment is actually delivered and recognised for accounting purposes. This mismatch results in earnings volatility even though from an economic perspective the IPP is perfectly hedged.

Hedge accounting

Hedge accounting is the only solution to address these accounting timing differences. Under hedge accounting, an entity could selectively measure assets, liabilities and firm commitments on a basis different from that usually stipulated in the accounting standards (IFRS), or could defer the recognition of gains or losses on derivatives in equity. This removes the volatility in earnings and ensures the financial information reflects the results of the hedging decision which management has taken.

It is only possible to apply hedge accounting when certain IFRS technical documentation and effectiveness testing requirements are met. While seemingly onerous and slightly technical, most of the requirements would ordinarily be considered by organisations entering into hedging programmes, however, these are often not formally documented. They include:

- Formal designation and written documentation at the inception of the hedge, explaining amongst other things, the entity's risk management objective and strategy for undertaking the hedge and the details of the hedged item and hedging instrument.

- Demonstration that the effectiveness of the hedging relationship can be measured reliably.

- Reasoning that the hedge is expected to be highly effective in achieving fair value or cash flow offsets in accordance with the original documented risk management strategy.

- Developing a hedge effectiveness testing methodology whereby the hedge is assessed and determined to be highly effective on an ongoing basis throughout the hedge relationship.

- For a cash flow hedge of a forecast transaction, the transaction is highly probable and creates an exposure to variability in cash flows that could ultimately affect profit or loss.

If hedge accounting is not applied or achieved, the accounting results for an organisation may not reflect the result of the economic hedges transacted in their financial statements, thereby triggering significant volatility in their earnings.

While the current hedge accounting principles provides an effective solution for IPPs embarking on hedging strategies, they will have to be cognisant of the strict requirements in order to correctly apply it. This requires specialist accounting and valuation skills.

Hedge accounting principles are undergoing further changes under IFRS 9 which has an effective date for implementation set at 1 January 2018. This new standard broadens the application of possible hedge accounting strategies and promotes a more principles based approach which is aligned to an entity’s risk management practices.

Conclusion

IPPs are being required to manage their market risks through derivative hedging strategies. These strategies open them up to various operational, accounting and valuation challenges which they are not adequately resourced or equipped to manage. With the current volatility in financial markets these entities also face significant volatility in earnings if they are unable to apply hedge accounting.

To face this challenge, IPPs need to obtain a practical understanding of these demands to ensure that they manage their risks effectively and provide financial reporting that appropriately reflects this.

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