



EMK3 Risk Management - Hedging Module

Effectively manage hedging transactions and analyze their revenue impact

Crude Oil Natural Gas

Many E&P companies employ a hedging strategy to offset oil and gas price volatility. Closely managing your hedges is critical to ensuring they meet the overall pricing objective and ensuring they do not have an inadvertent negative impact. This is often a burdensome administrative process with information difficult to collect, analyze, and manage.

The **Hedging Module** is designed specifically to accommodate typical hedging activity by oil and gas producers. This module allows you to capture budget volume and budget price parameters and define hedging strategies. It includes full transaction support for Futures, Options, Swaps, and Collars. This module includes extensive reporting and analysis capabilities for calculating hedge volume and price, forecasted gain/loss, hedge positions, and more.

Key Features

- **Designed for Producers:** Unlike other hedging systems that target multiple industries, EMK3 has designed a system perfectly matched for oil and gas producers.
- **Full Transactional Support:** Full transaction support for Futures, Options, Swaps, and Collars (both 2-way and 3-way). Calculate either forecasted or actualized value for all transactions.
- **Document Approval Process:** Set up and manage a process for reviewing and approving hedging transactions, including automatically notifying each approver and recording their approval (digital signature).
- **Capture Budgets Parameters:** Captures budget volume and budget price parameters.
- **Assess Hedging Performance:** Assess hedging performance by comparing actual hedges to strategies and budgets.
- **Graphical Analysis:** With dashboard technology, visually and interactively evaluate hedging results.
- **Supports Crystal Reports:** Supports Crystal Reports as the reporting engine, offering a powerful and flexible reporting solution.
- **Generate Reports:** Historical Gain/Loss, Hedging Positions, Budget Price, Hedging Forecast, Hedging Volume, Hedging Price, and more.

Fig. 1 – Hedging Dashboard

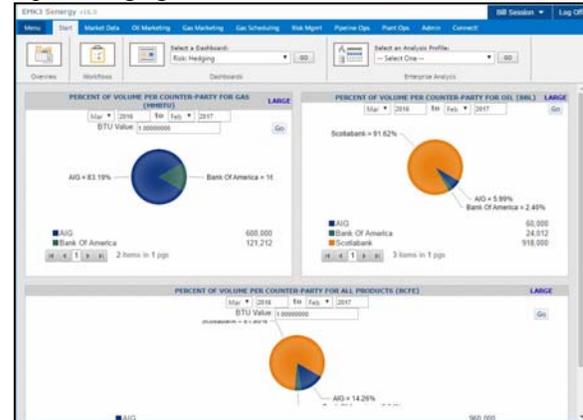


Fig. 2 - Swap Transaction Information

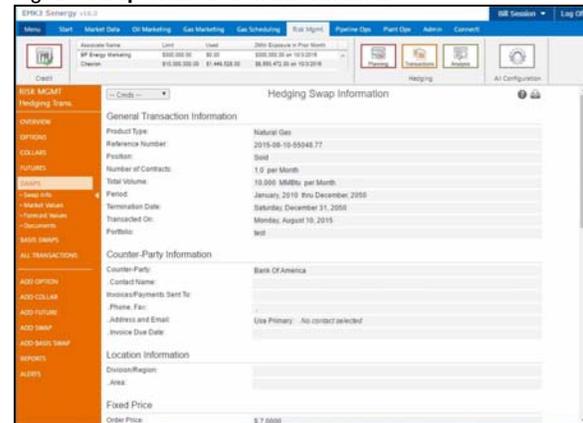


Fig. 3 - Hedging Price Report

Month	Derivative Type	Reference Number	Price (\$)	Volume (K)	Value (\$)	
October 2004	Collar	317	4.0000	23	92.00	
	Collar	213	3.9000	23	89.00	
	Collar	313	4.0000	15	60.00	
	Futures	66-116	6.8100	7	26.00	
	Futures	WC-116	4.6110	7	32.28	
	Swap	371	5.3300	13	69.29	
	Swap	369	5.1500	25	133.75	
	Swap	267	5.2500	11	57.75	
	MONTHLY TOTALS:			4.4190	122	538.12
				Options:		
			Collars:	3.6230	61	221.00
			Futures:	4.7773	12	57.33
			Swaps:	5.3222	49	260.79
November 2004	Collar	317	6.1500	23	141.45	
	Collar	213	7.1000	23	163.30	
	Collar	262	6.1000	13	105.30	
	Collar	313	6.1950	15	121.58	
	Futures	WC-116	4.6110	7	32.28	
	Swap	371	5.3300	13	69.29	
	Swap	369	5.1500	25	133.75	
	Swap	267	5.2500	11	57.75	
	MONTHLY TOTALS:			6.3438	130	824.69
				Options:		
			Collars:	7.1841	74	531.63
			Futures:	4.6110	7	32.28
			Swaps:	5.3222	49	260.79