



Portfolio management / CTRM

Does your company have a significant exposure to commodity prices? Then KYOS has a cost-effective solution for your daily management. The KYOS Portfolio & Risk Management System brings together your physical commodity positions with financial contracts.

This provides a complete picture of purchases and sales, and of the financial risks you are exposed to.

- ✓ Reduce costs and reduce the workload in contract management
- ✓ Get early warnings of potential losses
- ✓ Replace a large bulk of spreadsheets
- ✓ Get helicopter view for management, full details for analysts

Benefits

What is my contracted position?

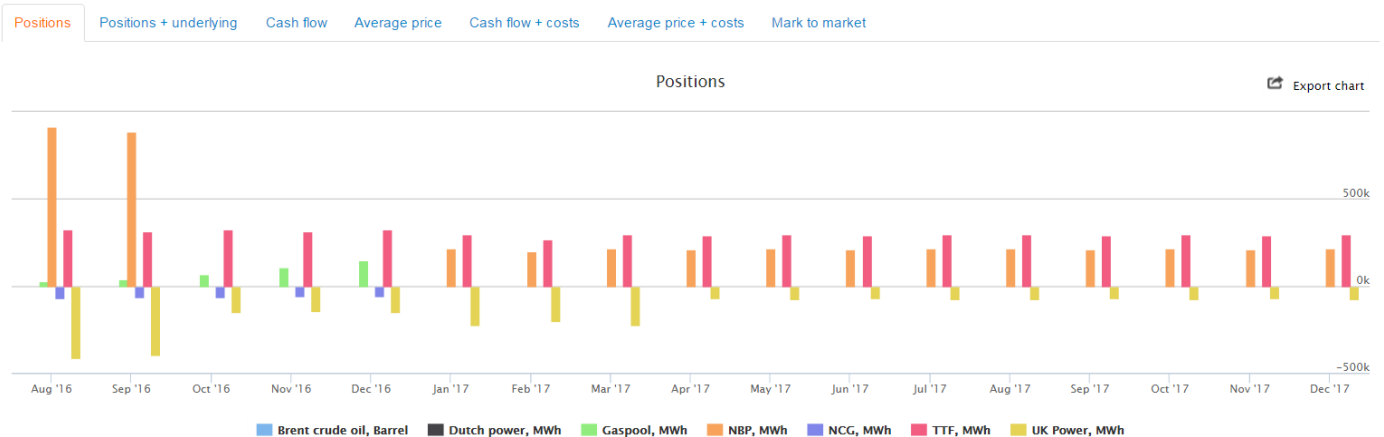
Each day the KYOS portfolio & risk management system will inform you about positions, cash-flows and risks of your complete contract portfolio. For senior management a helicopter report is made, whereas detailed information is available on analyst level. Replacing a bulk of spreadsheets avoids operational risks, lowers the costs, improves quality and increases transparency.

Bridge the gap between physical position and financial exposure

Your company risk is not limited to external obligations, but it also includes exposures arising from production processes. The KYOS portfolio & risk management system combines the physical exposures from production processes with external contracts and hedging strategies on commodity markets.

Expand CTRM with analytical modules

Finally, The KYOS portfolio & risk management system includes various analytical modules which help in assessing and managing company risks. With stress testing, cashflow implications are calculated based on user defined scenarios. VaR shows the market risk on a portfolio of contracts. Based on Monte Carlo price simulations, the Cashflow-at-Risk module calculates potential cashflow movements over the lifetime of contracts..

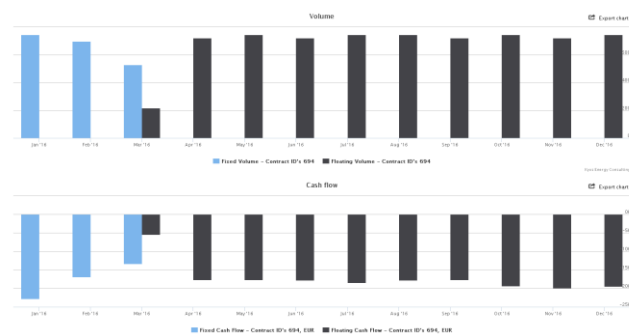


Features

The KYOS portfolio & risk management system is developed for the daily management of all positions, budgets and actual consumption.



It supports day-to-day commodity procurement, trading and hedging decisions. The system can be delivered together with a price data service, advanced analytical pricing models, training and consulting.



KYOS Analytical Platform

KYOS portfolio & risk management system is fully embedded in the KYOS Analytical Platform. With automated data feeds, up-to-date plant valuations are always available.

All KYOS Analytical models are developed in Matlab, and part of the KYOS Analytical Platform. Other software modules include:

- **KyPlant:** determine the value of a (portfolio of) power plants by quickly calculating the optimal dispatch,
- **KyStore:** optimize a gas storage and calculate values, delta positions and day-ahead trades
- **KySwing:** helps to generate most income from gas contracts by optimizing the contract flexibility
- **KyCurve:** create detailed hourly price forward curves for power, gas and other commodities
- **KySim:** generate Monte Carlo price simulations, relying on a hybrid approach of statistics and fundamentals
- **KyPF:** generate hourly price forecasts and simulations for one or more power markets.
- **AtRisk:** calculate both Cashflow and Earnings-at-Risk. Both metrics show the distribution of future results over longer horizons.

The KYOS Analytical Platform is developed in PHP. A MySQL or MS SQL database is used for data storage. Compiled Matlab models perform the analytical calculations.

Technical information

The Platform can run on a Windows and on a Linux environment. The platform is delivered by default as cloud solution, and it can also be installed on a local server.

The Platform can operate as a stand-alone software application. Automated price connections are possible and recommended. Connections to other systems for contract data and calculation results can be developed based on customer specifications and the XML protocol.

An installation on a local or cloud server is typically performed in one working day.

