

## Why use a live PFC builder?

It has become increasingly important for energy companies to have immediate access to live market prices. For several applications within energy trading and pricing, it may be good enough to use end-of-day market prices, but live prices (intraday) are especially critical for:

- pricing of power and gas contracts
- dispatch optimization of generation assets

For example, small margins in the energy supply business require companies to be on top of the market. When prices have moved with a few cents only, compared to the previous closing, this should be reflected in their price offers in order to avoid a direct loss.

## Fast and robust method for consistent live PFC

KYOS has an advanced model for the construction of hourly and daily price forward curves (PFC's). The model is called [KyCurve](#). It is widely used by energy market players, and also underlies the KYOS PFC data service (see [www.pricecurves.com](http://www.pricecurves.com)). It constructs forward curves with the right shaping factors, arbitrage-free to all available market prices (i.e. market-neutral). In principle, this model can be used with both end-of-day and intraday market prices. However, for intra-day pricing this is not the best solution. First of all, a full recalculation of the PFC intra-day may take too long. Secondly, a full recalculation may lead to larger intra-day PFC variations than is generally desirable.

For this reason, KYOS has developed a separate application for live PFC's. It takes the end-of-day PFC as a starting point and then adjusts it to the live market prices with the smallest changes possible. This is fast and robust.

## Automation and smooth processing of market data

The benefit of this separate application does not only lie in the methodology, but also in the usability and smooth processing of market data. At the end of each trading day, the KYOS Analytical Platform creates a PFC with settlement data, or reads such a curve from an external source. This is a completely automated process. This curve can be used for Mark-to-Market pricing of the portfolio, or for risk management.

During the day new price information becomes available. The new information consists of (i) traded contracts, (ii) live bids and (iii) live offers. The KYOS intraday application performs the following main steps:

1. Based on settlement data, an end-of-day curve is constructed. This can be done with the KyCurve model or another application.
2. During the day new information becomes available about trades, bids and offers. These prices may continuously be updated. Interfaces are available with e.g. Trayport and spot markets.
3. The end-of-day curve is quickly adjusted for all new price information, and the live curve can be used to price a contract or to optimize dispatch.
4. Automation is key in this process: prices can be imported automatically, and live forward curves can be exported to Excel or other applications for further processing.

## More information

Please contact KYOS at [info@kyos.com](mailto:info@kyos.com) or call +31 (0)23 5510 221 for more information about live price curves.