e·Opt Solutions

PRICEHUB

e·Curve
Forward Curves in Control

The PriceHub Suite

We are a specialized software house based in Mannheim, Germany.

Our flagship product, the **PRICEHUB** Suite, is an integrated set of tools that sits alongside your ETRM systems to fill in some of the critical gaps that exist in most mainstream systems.

Each **PRICEHUB** module addresses a specific challenge around:

- Price Data Management
- Compliance & Regulatory Reporting
- Energy Contract Pricing & Offer Management
- Intraday Optimization & Trading
- Scheduling & Nomination
- Interfacing to Exchanges and Brokers

Your Advantages

Relevant Commodities

Pan European Markets

Flexible Modeling

Just-in-Time Curves

e·Curve : Goodbye to Curve Crisis

Forward Curves are perceived as the Crown Jewels of a Trading Organization, and rightly so. However, seldom are these tools robust and flexible enough to evolve continuously with the market and consistently reflect the market changes. While many have great intellectual logic built into them, not all are able to deliver consistently due to either weak IT framework , or the need to make ad-hoc changes from time to time. This eventually leads to one or all of the following:

- *Delayed and incorrect price curves. Risk of Incorrect Pricing and Valuation.*
- *High incidence of after-the-event rework.*
- *Periodic adjustment to models to account for end of year, quarter, etc.*
- *Personnel Risk due to limited Knowledge dissemination.*

We have recognized this and after years of research in the behaviour of the Energy Markets, introduced **e·Curve**, as a fully configurable Forward Curve engine, set up for the European Energy markets. It has been designed to meet and exceed the most stringent requirements in terms of performance, accuracy and market coverage.

One of the most critical aspects of **e·Curve** is that it is not a black-box application and users have complete freedom to calibrate the models, as per their own views of the market. Each curve can be calibrated individually and formulae can be defined to generate dependent curves.

Although the models in **e·Curve** can be used in any market, they are configured to work best in the European context.

- **Power**   : DE (1h + ¼ h), UK (½ h), NL, FR, BE, AT, CH
- **Gas**   : TTF, NBP, NCG, GPL, ZEE, PEG, etc.
- **Fuels**   : API, BAFA, Brent, GO, HSL, HEL, FO, LSFO, etc.
- **Environment** : EUA, ERU, CER, EAA, EUAA, etc.
- **FX/IR**   : EUR, USD, GBP, CNY, AUD, etc.
- **Synthetic**   : Curves based on Formulae with time shifts etc.

Curves at native market granularity are generated, but can also be aggregated to higher or lower granularity. In conjunction with a e·PoolLive, a sub-module of e·Pool, **e·Curve** also enables automated generation of real-time Forward Curves. Market prices are received via Trayport feeds, or any other mechanism.

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PriceHub e·Curve : Forward Curves

Our References

e·Curve is a highly optimized Forward Curve engine, that allows just-in-time generation of Forward Curves. Using interfaces to downstream systems, curves can be directly published to downstream systems.

At the heart of the **e·Curve** modeling engine is a multi-parameter simulation algorithm, that combines historic data, user configuration and market prices, to give out Forward Curves that reflect the market as best as it is possible to do. Key features of **e·Curve** include:

▸ **Fast** Arbitrage-free Curve Generation. Any combination of Standard, Rolling or Quasi Products can be used to generate the Curves. Prices for illiquid tenors can be forecast based on well defined rules. Typically, building a 5 year Power curve takes about 45 s.

▸ Multiple Modes of Execution – **Intraday**, **EOD** or **Ad-hoc**. Back-dated Curves can also be generated to validate previously generated curves.

▸ Flexible **Curve Shaping**. Extent and weight of Historic Prices can be varied to get fine-grained control over the Curve shape. Impact of increasing Photovoltaics in the generation mix is also calculated and considered.

▸ Each curve is assigned a **Unique ID**, that links it to its source prices. All curves are archived in the database, and they can be retrieved at any time.

▸ **Price Envelopes** based on Volatility & Confidence Interval.

e·Curve can be fully integrated with our **e·Pool** module, so that a seamless price data process can be built - from external sources right up to downstream systems.

Forward Curves can also be consumed in Excel via PriceHub Excel Add-in, or any in other Third Party application using PriceHub WebServices or PriceHub COM and .NET APIs.

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"We have found e·Opt deliver outstanding value to us. They are willing to go beyond their obligations and our experience with PriceHub has been very positive."

Christian Mehl, Head of Trading
RheinEnergie Trading GmbH, Germany

RheinEnergie