



Our analytics  
Your advantage

**KYOS**

# How can we help you?

*Whether you need help with valuing your renewable investment project, PPAs, power plant, gas storage, - or you need price forecasting services or an ETRM system – KYOS has the tools and expertise. Our software is extremely robust and gives you the answers you need to make better decisions.*

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Our people have worked for decades in energy trading. We understand the needs of energy market players. Whether you deal with conventional generation assets or renewables, with power or natural gas, storage or transport, generation or consumption, or with all of these: we support you with excellent software and services, incorporating best-in-class financial modelling techniques.

In this brochure we outline our various software solutions for the energy sector, all embedded in the KYOS Analytical Platform. The Platform is a combination of an ETRM system and high-end financial analytics. Our Platform is in use by more than 50 corporate clients around the globe. While we are adding many new clients each year, the satisfaction of our clients is what matters to us most.

How can we help you? Let us know the challenges you are facing – we are looking forward to a fruitful discussion!



**Cyriel de Jong**  
Founder & CEO



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## Our team



Our core company values are reliability and responsibility. That is driving our contacts with colleagues, clients, society and the environment.

Our mission is to help clients take the right decisions based on accurate analysis, to accelerate the transition to a more sustainable use of our natural resources.

Since 2008, KYOS software has been built on knowledge, skill and commitment of our team. Our head office is an inspiring old building along a canal in the beautiful town of Haarlem, the Netherlands. Here we employ our talented team of quantitative developers and IT programmers.

With more than half of the employees coming from abroad we have an international mix of people to serve our clients. For overseas clients, we have dedicated teams and partnerships in Japan and the US.












The KYOS Analytical Platform is our flagship software solution, offered as a SaaS product. It contains an unrivalled range of top analytical modules for valuation, risk management and optimization in energy and commodity markets.

You can select the modules depending on your needs. Automated data feeds and calculations ensure you always have the latest information at your fingertips. The Platform can operate as your primary E/CTRM system, or communicate seamlessly with other systems using our APIs and Python custom programming interface.



# KYOS Analytical Platform



|                         |   |  |  |  |
|-------------------------|---|--|--|--|
| <b>Commodities</b>      |  <b>Power, Gas &amp; Energy</b>  |  <b>Multi-commodity</b>   |  |  |
| <b>Users</b>            |  Utilities & suppliers<br>Renewable & fossil generators<br>Power, gas & oil traders<br>Gas storage operators |  Industrial companies<br>Food processing companies<br>Soft commodity & metal traders<br>Commodity brokers |  |  |
| <b>Specific modules</b> |  Gas storage<br>Gas swing contracts<br>LNG contracts   |  Power plants<br>Solar, wind & PPAs<br>Batteries & storage  |  Cashflow forecasts<br>P&L attribution<br>Hedge accounting    |  Budgets<br>Accumulators<br>Inventories |
| <b>General modules</b>  |  ETRM<br>Price data management<br>Forward curve generator<br>Monte Carlo simulator                         |  Profit-at-Risk<br>Value-at-Risk<br>Stress tests<br>Option Greeks                                       |  CTRM<br>Option valuation<br>Mark-to-market<br>Risk reports |  |



## Our services



### Energy analytics software

A unique suite of models for valuation and optimization, using the latest methodologies and based on stochastic optimization. For power plants, gas storage, batteries, option and swing contracts, accumulators, solar & wind, and many more.



### Consultancy and training

Our experienced consultants and trainers are specialists in valuation, optimization and risk management in energy and commodity markets. We advise on the valuation of individual assets and contracts, help design hedging strategies or assist in M&As and arbitration cases.



### E/CTRM software:

Our fully integrated system offers a range of risk reports. It provides insight into positions, exposures, P&L, cash-flows and MtM. Drill down from portfolio level to book, counterparty or individual deal. Advanced at-Risk models complement our offering.



### Price Data services

Live or End-of-day market price forward curves are essential for trading, structuring and risk management. In addition, we also have a fundamental model for long-term (>30 year) power prices.

Analysis you can trust

**The KYOS Analytical Platform is a system with advanced analytics for energy and commodity markets. The Platform provides one solution for the primary functions of pricing, optimization and risk management.**

- A web-based system with a central database and superior analytics
- User friendly and intuitive user interface: clear workflows
- Smoothly moves from market prices, to price forward curves, to Monte Carlo simulation
- Stochastic optimization tools for plants, storage and transport

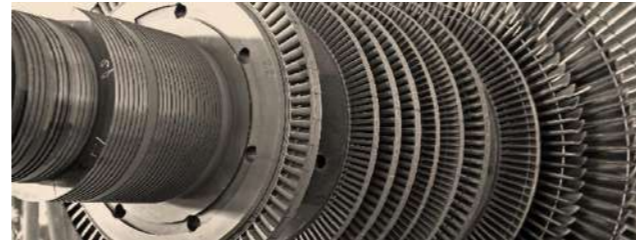
#### **Python and the KYOS analytical platform**

At KYOS, we have a team of quant developers to program our analytical models in MATLAB and Python, providing the platform with a solid mathematical framework. But sometimes you want to integrate your own model or need something very custom. To offer more flexibility, we have developed a 'Custom analytics' module, which embeds the Python open-source programming language in our software. You can develop new Python models or deploy existing ones, fully integrated with all the functions and data in the KYOS Platform. Use it to price complex non-standard contracts, process input and output data, or calculate specific risk metrics.

#### **Custom analytics with APIs**

For an easy integration between your own system and the KYOS Analytical Platform, you can use your own APIs. It works for both up- and downloading of data, for example of price data. Besides that, it is possible to start valuations of our KYOS modules and retrieve the results.

#1 in analytical software



## **Power**

Where are power prices going? What is the value of my power station or contract? How can I trade in the market to reduce electricity price risks? KYOS analytics provide answers.



## **Natural gas**

Natural gas portfolio management is about managing price and volume risks. KYOS helps to optimize a portfolio with natural gas storage and swing contracts. Trade in the markets to maximize the flexibility value and minimize risks!



## **Renewable energy**

For owners of renewable energy sources such as solar parks, on-shore or off-shore wind farm, battery storage or pumped hydro facility, we help you with setting a price for your resources, as well as valuing your (renewable) power purchase agreements (PPAs)



## **LNG**

We support you to value contracts along the full LNG value chain. We accompany you from valuing liquefaction or regas projects, LNG off-take agreements to LNG storage contracts.



## **Multi-commodity**

If you have to manage a variety of commodities with volatile prices, you need to understand the price risk to manage them effectively. With the KYOS commodity trade & risk management system (CTRM) you can easily manage your contracts, budgets, hedging, market price analysis and cash-flow forecasting.



This is just a brief overview of what we can offer you. Have a look at our website for more detailed information. Find under 'Events' an overview of the conferences where we will be present, and a list of our upcoming webinars.

Our knowledge center is a great resource for the latest news, where we publish interesting articles and reports.

Do not hesitate to contact us for more information, or ask for a short demonstration: [info@kyos.com](mailto:info@kyos.com)



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