

KYOS offers a flexible web-based software package to effectively capture and risk manage PPAs.



Renewable PPA Valuation and Advisory

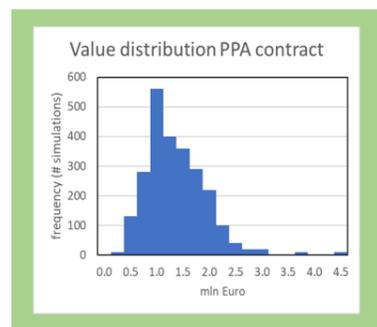
The KYOS PPA software model has a market price and forward curve database and uses an advanced Monte Carlo simulation engine – perfect to value all PPA characteristics. Add various reporting and risk management tools.

1 Provider of analytical solutions for valuing renewable assets

KYOS offers support to value renewable Power Purchase Agreements (PPA). We accompany you through the entire PPA life cycle, with pricing, risk analytics and dispute resolution. We help you in getting the best deal for your PPA!



“Analytics you can trust”



Renewable production risk management

The PPA module lets the user create and capture any type of renewable PPA. KYOS puts a lot of effort to find the right balance between offering a robust deal capture system and a fully flexible spreadsheet solution. We include standard PPA pricing mechanisms for certain countries and technologies.

Next to that we offer the unique feature that users can add their own pricing structures to the system. For this purpose, we offer an easy-to-use Python programming interface.

Advantages KYOS PPA

The KYOS PPA risk management system provides a complete picture of the electricity portfolio with renewable energy PPAs and related hedges. Reporting includes volumetric position, mark-to-market value, value-at-risk and earnings-at-risk.

- All market and forward price curves included
- Flexible deal capturing
- Assess your risk positions and adjust your hedges accordingly
- Extensive capture rate calculator

PPA Valuation

PPAs often include complex pricing structures, typically with price floors, risk sharing elements and specific reconciliation mechanisms. To value your assets, you need a system that is able to capture all this.

Our PPA module offers

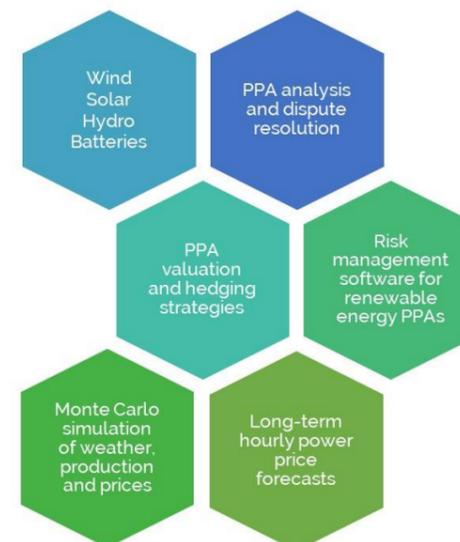
- A **fundamental power market model** to create long-term electricity price forward curves, important given the long duration of many PPAs.
- Software modules to **simulate price and volume risks**. These are necessary if you wish to assess the future earnings and hedging strategies.
- **Capture rate** is an important parameter for PPA valuations. Our system can calculate this using historical data or using long-term fundamental price forward curves. Alternatively, the user can define its own capture rate.

Use the KYOS PPA module in the following cases:

Deal valuation: KYOS performs the main valuation of the PPA for either buyer or seller. We can also provide advice in structuring the PPA to make it is aligned with your company's risk profile. This can be a one-off valuation request or under a framework agreement.

Second opinion: Use the KYOS valuations to benchmark your own, internal, valuations.

Dispute support: KYOS performs independent valuation of existing PPAs. Many PPAs have been concluded some years ago, and might include ambiguities which could lead to disputes between contract parties. We provide reliable support to settle such disputes in a fair way.



Data services

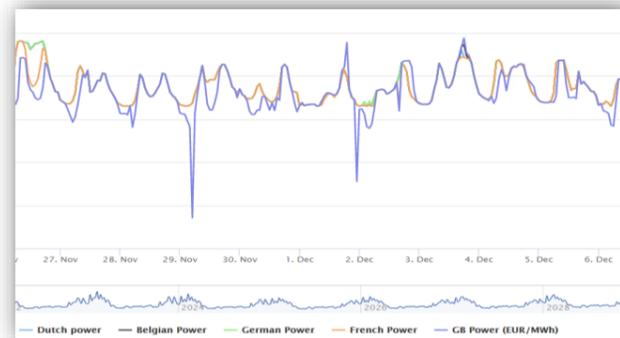


Software modules

Data Services

All data services can be delivered for one or more power markets in Europe, Turkey, and Japan

- Service A** daily:
Forward, futures and spot power market prices of relevant markets
- Service B**, daily:
Market-based hourly price forward curves up to end of 2023
- Service C**, monthly,
long-term fundamental hourly price forward curves for 2023 – 2035
- Service D**, monthly:
PPA valuation and risk metrics of a specific renewable asset



- Forward, futures and spot prices at your fingertips, with our price data management system.
- Automate price data imports.
- Built-in interfaces to most popular European exchanges.
- Access to analysis tools, spread calculator, etc.

Module A

- Forward curve builder KyCurve, to generate your own market-based hourly forward price curves.
- Create accurate arbitrage-free hourly forward price curves.
- Workflow can be fully automated, from price data import, curve creation and export for use in external systems.

Module B

- Fundamental power market model KyPF, including quarterly updated power plant datasets.
- This allows you to run your own merit order analysis, forecast power prices and perform what-if scenario analysis.
- It also provides forecasted capture rates of individual renewable generation assets and technologies

Module C

- PPA valuation software – intrinsic. Define your own PPA parameters, run our capture rate calculator and obtain a forecast of the future PPA cash-flows.
- Compare this with sourcing power directly from the market to assess profits or losses.

Module D

- PPA valuation and risk software – Monte Carlo. Generate Monte Carlo scenarios of future power prices and renewable generation volumes.
- You define future expected capture rates and the model ensures the volume and price scenarios are in line with those rates, incorporating the cannibalisation effect.

Module E

- Full portfolio and risk management system for all your power trades and PPA contracts.
- KYOS offers a uniquely complete and proven system to manage your portfolio.
- Whether you have just futures and forwards, or also complex PPA structures with price indexation, market-price clicks, caps and floors: the KYOS system manages your positions.

Module F

All modules are part of the KYOS Analytical Platform, a cloud-based software platform

