

RIVACON Energy Asset Optimization Framework

The eao framework is a flexible and open-source library that facilitates the optimization of multi-commodity energy portfolios. Developed by RIVACON.

Scope

eao is designed to enable practitioners to pragmatically use, build and optimize energy and commodity trading portfolios. It is ready-to-use, providing an implementation of

- Gas or heat storage and batteries
- Power plants, CHP assets, P2x
- Simple or complex energy contracts such as PPAs
- New, user-specific assets seamlessly integrated
- Multi-commodity portfolios: power, gas, heat, hydrogen or other commodities
- Flexible portfolio setups incl. grid bottlenecks and transport

Our experience with the framework covers a wide range of use cases. For example: planning and hedging of heat portfolios; intraday BESS trading strategy; day-ahead and intraday power plant optimization; long-term LNG portfolio optimization; green power supply; valuation of BESS & PV co-location.

Philosophy: enabling the team with an open-source solution

Energy portfolios and market challenges constantly change. We believe it is key to enabling the team to manage the change. As an open-source solution, the eao framework facilitates adjusting existing or adding new asset classes, providing a solid foundation for seamless integration.

With the eao framework, the team will find a solution that applies to a wide range of problems and can be integrated seamlessly into existing processes and systems. It is fully implemented in python, making it accessible to most analysts and quants.

Delivered in a project, tailored to your needs

We believe that transparency and ownership are at the core of successful trading and risk management, knowing that not all companies can rely on a large quant team. Our experienced consultants will bring the eao framework to you in a consulting project, tailored to your needs – giving you a kick-start. The code stays with you.

Please feel free to reach out for more information or a free demonstration!

<https://rivacon.com/en/contact/>