

MAON

Platform for Electricity System and Market Studies

Maon is a browser-based platform for electricity studies. The included electricity market model simulates the dispatch of all supply and demand in every European bidding zone. Browsers provide access to the simulation suite that derives electricity price and grid usage forecasts via user-friendly interfaces and time-efficient workflows.

WHAT IS MAON?

Maon is a **browser-based platform** for electricity studies.

The **optimization-based annual dispatch model** simulates the generation and consumption of every unit in Europe as well as the usage of interconnectors. It simulates thermal generation as well as renewable sources like hydro, wind and solar.

Maon enables studies **without installation of software or hardware**. The user interface reduces the manual workflow to a minimum. Calibrated input data sets for frequently used scenarios are available for immediate simulations.

WHAT CAN MAON?

Maon provides a simulation of all market results on an hourly basis: **power plant dispatch, exchanges and electricity prices**. It can be used for short term forecasts and long term scenario analysis.

Maon can assess the market value of plants via outputs like market revenue, load factor, fuel consumption, CO₂ costs or the number of starts. These results support **power plant investment** decisions.

Maon equally suits economic and technical assessments of transmission lines like ENTSO-E **Cost Benefit Analysis** or European analysis like the **Bidding Zone Study**.

WHAT IS UNIQUE?

Browser: mobile smartphone access, fast loading, editing and visualization.

All-in-One: high-performance computing, cloud, IBM CPLEX solver and simulation suite.

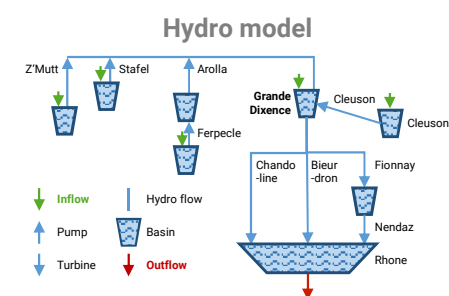
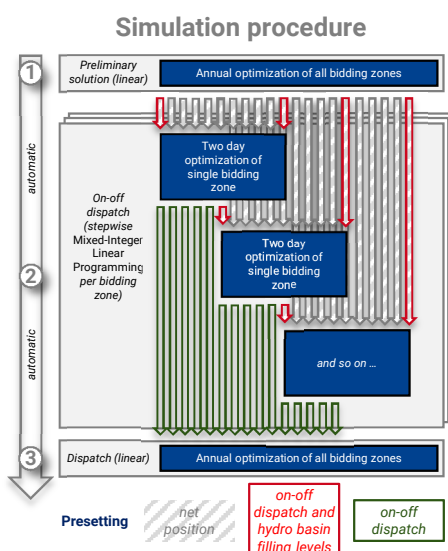
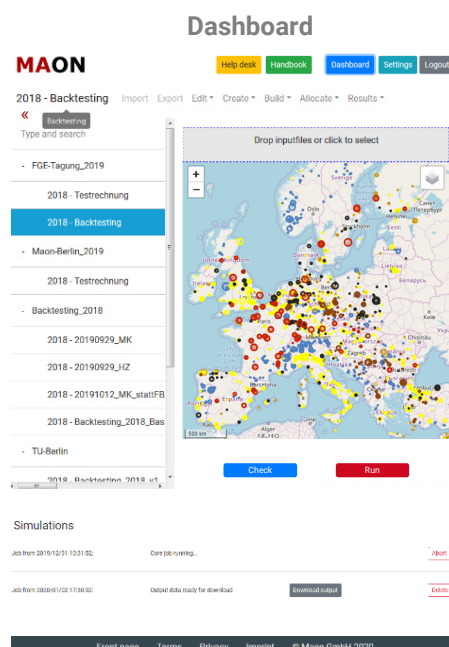
Scenario management: scenario tree handling, automated scenario generation by plant decommissioning, mothballing and new building.

Calculation: electricity market prices including start costs, social welfare indicators and power-flow simulation inputs.

Flow-Based Market Coupling: annual coupled simulation of current market implementation.

Thermal plants: minimum power, minimum on-off times, start-up cost and cogeneration.

Hydro plants: annual coupled simulation of hydro flows and cascades without aggregation.

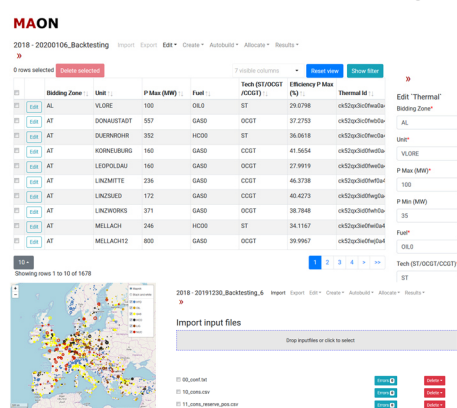


MAON

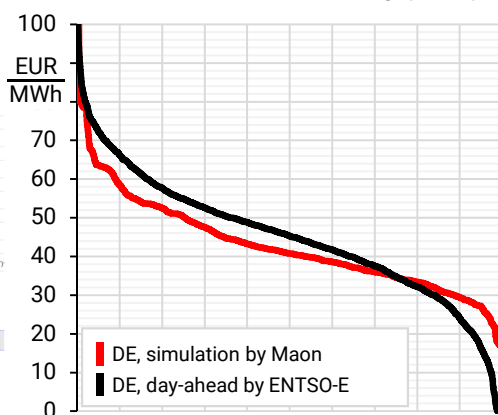
Platform for Electricity System and Market Studies

Maon is a browser-based platform for electricity studies. The included electricity market model simulates the dispatch of all supply and demand in every European bidding zone. Browsers provide access to the simulation suite that derives electricity price and grid usage forecasts via user-friendly interfaces and time-efficient workflows.

Browser-based scenario building



Prices: simulation vs. history (2018)



WHY MAON?

Browser: immediate start, no resource provision and short execution times.

Performance: all simulation models usable simultaneously.

Automated: high level of automation, integration and processing transparency.

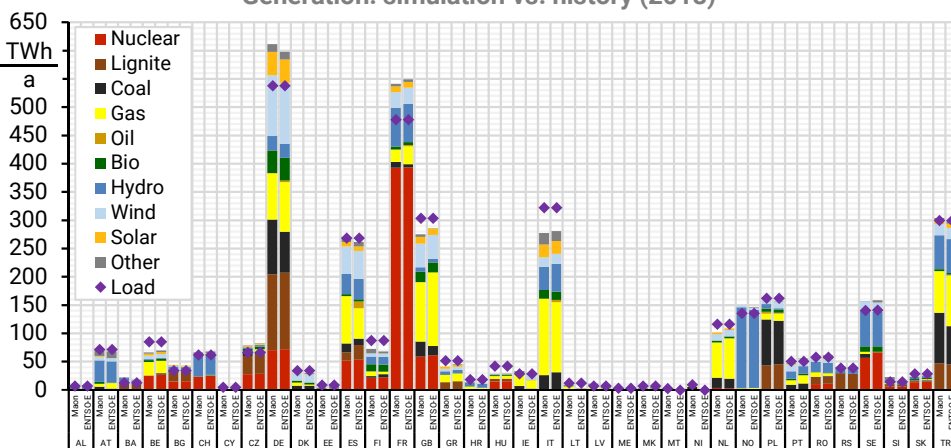
Data: ready-to-start historical data sets and future scenarios.

Trusted: close to reality backtesting results, gapless input and output data sets.

Professional: commercial, flexible, user-friendly and efficient platform.

Team: experts in automation, electricity markets, simulations, software and web applications.

Generation: simulation vs. history (2018)



Dariush Wahdany
Simulation



Fabian Pfannes
Cloud



Dr. Mihail Ketov
Simulation



Maon-Team

Nicolai Schmid
Cloud



Prof. Dr. Albert Moser
Sponsor



Prof. Dr. Kai Strunz
Mentor



CONTACT:

Maon GmbH
Hardenbergstraße 38
10623 Berlin
Germany

+49 (0)162 8025288
info@maon.eu

PLATFORM:

<https://www.maon.eu>