# **MAON**

# Platform for Electricity System and Market Analysis

Maon is an integrated simulation environment for electricity system and market analysis. The electricity market model simulates the dispatch of all supply and demand in every bidding zone in Europe. Browsers provide full access to the solution that derives electricity price and grid usage forecasts via internet interfaces and fast workflows.

### WHAT IS MAON?

Maon is the world's first **browser-based platform** for system and market analysis.

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, renewables like hydro, wind and solar as well as cogeneration and electrolyzers.

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 starts.

**Demand, Grid and Plant Maps** 



# WHAT CAN MAON DO?

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, CO<sub>2</sub> cost, fuel consumption or the number of starts. These 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.

**Integrated Simulation Environment** 

Market Simulation
Data Management

Graphical User Interface
High-Performance Computing
CPLEX Solver

### MAON

Scenario Data
Visual Analysis Tools
Model Upgrades
Security Updates
Support

# WHAT IS UNIQUE?

**Browser:** multi-user solution and instant utilization.

**All-in-one:** solver, computing, storage and simulation.

**Data management:** scenario tree handling and generator.

**Visualizations:** spot prices, unit commitment or social welfare.

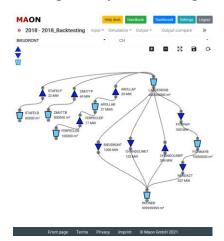
Flow-Based Market Coupling: closed annual simulation.

**Thermal plants:** minimum power, start-up cost and CHP.

**Hydro plants:** annual coupled simulation of hydro cascades.

**Sector couplings:** cogeneration or electrolyzers for hydrogen.

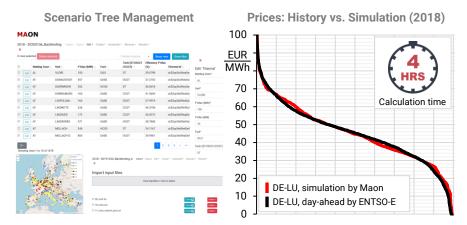
**Drag and Drop Model Building** 

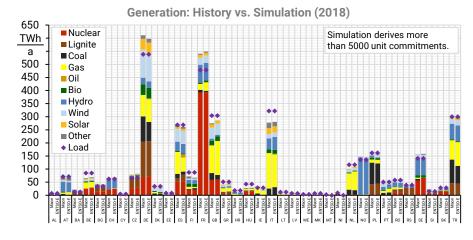


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# Dariush Wahdany Simulation Fabian Pfannes Front-end Nicolai Schmid Back-end

Prof. Dr. Albert Moser Sponsor

**Huangluolun Zhou**Consultant

# WHY MAON?

**Browser:** immediate start, no resource provision and cross-organizational teamwork.

**Performance:** all models simultaneously usable and fast-mode for preliminary results.

**Automated:** leading edge speed. Create and start sensitivities in 10 seconds.

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

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

**Professional:** fast, flexible, mobile, user-friendly and costefficient solution.

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

# **CONTACT:**

# Maon GmbH Bismarckstraße 10-12 10625 Berlin Germany

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

# **PLATFORM:**

https://www.maon.eu