N-SIDE

Electricity Price Forecast

Anticipate the Price dynamics on short-term electricity markets. Reduce your risks and take optimal decisions with our advanced Machine-Learning based forecasting tools.

Your challenge

The increase of renewable energy sources in the generation mix leads to an increasing volatility on the electricity markets with price spikes both upwards and downwards. In this context, it is more and more valuable for flexible asset owners and traders to take this volatility into account during the asset planning, hedging strategy definition and real-time activation in order to reduce risks and costs.

For utilities and traders, the significant volatility of short-term markets can be perceived as a risk of increased sourcing costs or reduced generation revenues. However, if properly anticipated close to real-time, the exposure to extreme Prices can be converted into an additional revenue stream by activating flexible assets at the right moment.

Utility   Trading desk

*Balance responsibility
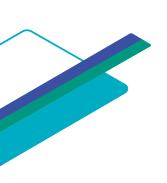Market exposure
flexible Assets*

Our solution

With the **N-SIDE Electricity Price Forecasts**, you will take optimal decisions from weekahead to real-time, in different electricity markets:

- ✓ Anticipate Day-ahead market price and optimize your hedging strategy through bilateral trading

- ✓ Anticipate extreme prices on Day-Ahead, Intraday and Imbalance markets and plan your energy flexibility accordingly to reduce your average electricity procurement and imbalance costs

- ✓ Increase the extrinsic value captured of your flexibility and storage assets through weekly, daily and real-time optimization

Our AI models, leveraging thousands of fundamentals data *(consumption, generation mix, renewable generation, weather data, etc.)* have been specifically developed and fine-tuned for short-term electricity markets, from week ahead up to real-time. The N-SIDE Electricity Price Forecast, leveraging machine learning and deep industry knowledge, provides high-accuracy forecasts for short-term electricity markets, able to promptly react to structural market changes.
On top of that, the N-SIDE forecasts come with a transparency toolbox that allows you to interpret the output of the models and to isolate the contribution of each input feature to the final result.

Up to 85%
of the theoretical potential captured

5€/MWh MAE
on D-1 price forecast

99% guaranteed availability

High Value, Low Effort

Based on cutting-edge **Machine Learning technologies**, such as boosted regression trees and deep neural networks, N-SIDE's Electricity Market Arbitrage Forecasts leverage **more than 500 data sources** and 50k free parameters to generate **high-quality forecasts**, making it a powerful tool to optimize your portfolio management and trading strategy.
Furthermore, our forecasts are delivered and **updated with the optimal resolution** in order to maximize the business value:

Update Frequency: from once a day, up to every minute
Granularity: from daily average price to 15 minutes granularity
Horizon: from 15 days in advance up to real-time

Finally, thanks to the N-SIDE unique combination of Electricity business expertise with the latest AI technologies, we always ensure the perfect alignment between the algorithm learning objective and the business end application, maximizing the value generated for our customers.

… EASY to ACCESS and INTEGRATE …

The N-SIDE Electricity Market Arbitrage Forecast is available on a user-friendly platform that gives you the possibility to adapt the tool in function of your own business and its specificities. You will also benefit from a clear visualization of your performances. The same platform is supporting all other forecasting applications of N-SIDE's, which enables you to access all your forecasters in one place.

GUI	API
The N-SIDE Forecasting platform benefits from a user-friendly graphical interface. It includes a live visualization of the forecaster, performances graphs, and exports functions *(xls and json)*.	Our forecast results are by default available through a secured API connection, making it super easy to integrate in your existing systems and operational processes.

INTEGRATION	ALERTING
The N-SIDE Forecasting platform is compatible with standard communication protocols *(e.g. http(s), ftp(s))* and standard formats *(csv, json, xml, xls, and so on)*. The connection with your existing systems is thus seamless.	Make the most of our alerting system and get notified directly in your mailbox of the relevant opportunities for your business. Our alerting system can be customized in order to reflect your business constraints. Define your thresholds, risk exposure levels, reactivity time, etc., and capture the value of the most critical situations.