

# Storage

## Solution overview

Structure, value, hedge and analyse the volumetric uncertainty presented by gas storage contracts, and optimise the use of storage facilities in order to maximise trading profitability.

Lacima's solution for storage provides operations, structuring and valuation teams with the ability to report intrinsic and extrinsic valuations of storage assets with key outputs that include distributions of values, injection/withdrawal levels and sensitivity analysis including deltas for hedging.

Select from the full range of valuation methods with the assurance that you're making decisions in a fully auditable environment.

## Business benefits and key functional features

- **Select from a range of valuation methods:** intrinsic, rolling intrinsic, spot optimisation and basket of calendar spread options
- **Calculate daily support decisions** for injection/ withdrawal and adjustment of rolling hedges
- **Price or mark-to-market** a single gas storage contract or a whole portfolio
- **Perform scenario analysis** for user-defined price profiles
- **Calculate full distributions** for revenues, profits and storage levels
- **Report** intrinsic, extrinsic, and full optimal value including single scenario and full distributions of outcomes
- **Calculate** delta hedging positions
- **Report** all optimal injection and withdrawal decisions as well as the critical prices to show the boundary between decisions on injection and withdrawal
- **Analyse full granularity** of injection, withdrawal, cost, revenue and profit outcomes
- **Implement with no costly replacements** of existing deal capture systems and databases
- **Achieve full transparency** with published analytics methods readily available
- **Value** utilising rolling intrinsic methods with optimal portfolio rebalancing
- **Utilise** inventory dependent injection and withdrawal rates (ratchets)
- **Manage fixed and proportional costs** on injection and withdrawal
- **Manage your reserve** level requirements

*Value and optimise the widest range of gas storage portfolios to maximise trading productivity.*

*Lacima's models are developed and implemented by peer recognised experts and allow the user to choose amongst a range of valuation methodologies.*

- **Specify** initial and final storage levels
- **Specify** any user defined intermediate capacity constraints
- **Take advantage** of extensive report building and processing capabilities

### Key systems features

- Integrate easily with any energy trading and risk management (ETRM) system and benefit from seamless data transfer and consolidated reporting
- Upload data (including market curves, historical data, valuations and previous runs) automatically and quickly
- Manage all your data – any previous results can be recreated as all data is saved
- Manage forward quotes and create forward curves
- Export results and analyse risk factors with ease
- Enjoy the flexibility of a spreadsheet within an application environment providing all the security and controls for good risk management practice and auditability

### Models and methodologies

Lacima's models are developed and implemented by peer recognised experts. All standard valuation methodologies are available.

- The full optimisation uses a lattice based optimisation model with seasonal and weekday forward curve profiling
- The rolling intrinsic method allows the user the choice of using a range of single factor and multi-factor models.
- The basket of calendar spread options methodology calculates equivalent delta positions
- All parameters and forward curves can be easily and efficiently managed
- All models can be auto-calibrated to historic spot or forward prices

*Storage is a solution in the Valuation & Optimisation Suite within Lacima Analytics – Lacima's groundbreaking application for energy risk management, valuation and optimisation. Each suite or single solution can be delivered individually or combined seamlessly with any other suite(s) and solution(s) in Lacima Analytics to create an answer tailored to your specific needs.*

### About Lacima

Lacima is a specialist provider of software and advisory services dedicated to valuation, optimisation and risk management for global energy markets. We help you to maximise your profit potential and make

more informed decisions by providing tools that yield more accurate valuations, hedging analysis and risk exposure analysis for portfolios of financial contracts and physical assets.

Clients of our software and services include structuring, valuation and risk teams in vertically integrated energy companies, energy retailers, financial institutions and large energy consumers in Europe, North America and Australasia.

Our software solutions have been developed and implemented by peer-recognised experts in energy analytics, offering an unparalleled level of expertise and personalised support.

For further information, visit [www.lacimagroup.com](http://www.lacimagroup.com)  
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