



Battery storage revenue forecast

A quarterly revenue forecast of battery storage assets in the UK market.

This is based on our two-stage storage optimisation service:



Power price forecasting: Prices are produced as part of our Benchmark Power Curve modelling using the industry standard PLEXOS model



Storage optimisation modelling: Our in-house model optimises the storage asset, determining the optimum revenue the battery can achieve based on the battery parameters and the market prices .

This modelling methodology has been used for investment and financial model support with prices updated on a quarterly basis.

This allows investors and developers to obtain revenue forecasts to allow them to regularly update financial models for battery storage portfolios.

Scenarios overview

Our analysis provides forecasts of prices across 12 scenarios.

Three regions	Scenarios for the assets in three regions – Scotland, North England and South England	Price curve	Modelled on the Cornwall Benchmark Power curve central price curves
Two durations	Scenarios for one hour and two hour batteries	Forecast period	Forecasts over a 15-year period
Two capacities	Scenarios will be for a transmission-connected 50MW asset and an EHV-connected 10MW asset. The actual price will be reflective on a £/kW basis for any battery size.		

Additional inputs (degradation rates, cycle limits etc) are based on our in-house view of the rates.



Revenue streams

The key revenue streams for a battery storage asset would be modelled for each scenario.
This would include:



Wholesale day ahead sales & purchases



Balancing Mechanism energy bids and offers



Dynamic Containment

Plus Dynamic Regulation and Dynamic Regulation in due course



Wholesale day intraday sales & purchases



Capacity Market T-1 and T-4 contracts



Network charges (TNUoS)

Monthly forecasts of each revenue stream would be provided, based on the optimisation process.

Benefits

Portfolio development	Provides a detailed forecast of key revenue streams for storage assets, allowing for initial assessment of wide portfolio of storage assets
Bankability	Our storage optimisation strategy has been used for a number of storage projects to obtain investment or as part of successful due diligence processes
Full optimisation	Instead of generic £/kW curves, each revenue stream is directly optimised based on the operating parameters of the battery asset
Financial model integration	Individual revenue stacks are provided in the results for easy integration into wider financial models



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