

# Storage Revenue Optimisation Model (SROM)

FTI Consulting's energy experts have developed a SROM to help energy businesses understand the value and risks of achieving an optimal revenue stack for batteries of different sizes, configurations, and financial constructs.

## WHY FTI CONSULTING?

### Definitive expertise

Our multidisciplinary team can support you across the entire energy value chain.

### Comprehensive services

We provide an array of services addressing the strategic, financial, operational, reputational, regulatory and capital needs of our energy clients.

### Industry specialists

From major international projects in clean energy to new investments in Australia's National Electricity Market NEM, we work at the forefront of issues driving commercial and regulatory changes in the industry.

### Global team

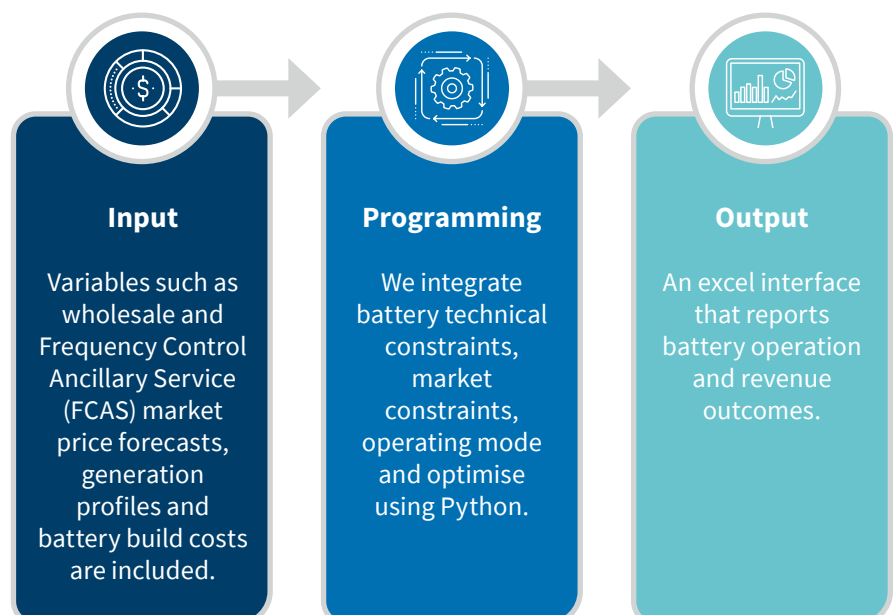
We seamlessly combine our global resources to support our energy clients where they need us most. We have advised on most of the major transmission projects in development across the NEM, locally and globally.

Bidding strategies for storage projects need to be carefully optimised to maximise revenue across different markets, minimise degradation and avoid operational conflict between competing revenue streams.

Considering the new 'integrated resource provider' "(IRP)" classification for energy storage, SROM enables interested parties to:

- **Estimate the value of both avoided technical and economic spill** – caused by binding network constraints and/or co-locating with renewable energy facilities
- **Consider the value of future revenue streams** – including fast frequency response, new financial products (virtual storage products) and virtual transmission lines
- **Understand the marginal benefit associated with DC-coupled batteries** – including the value of avoided clipping loss.

Our model has demonstrated considerable value for policymakers, market designers, regulators, and investors.



## SROM Capabilities



### Bidding strategy

- Energy market only
- FCAS participation
- Consider cycling costs
- Reduce economic spill.



### Co-Optimisation with renewables

Renewable generation can be added to optimising Battery Energy Storage System (BESS) that is co-located.



### Look-ahead period

Model will optimise profits for the current day + X days, look ahead and repeat over the model days.



### New market framework

Reflecting hybrid facilities under the new IRP category, including any key differences between standalone, DC-coupled or AC-coupled.



### Degradation / cycle costs

Cycle costs as a function of depth of discharge (DoD) calculated as \$/MWh based on the replacement cost of battery.



### Network constraints

Reflecting any value gained or lost from avoiding network constraints (Thermal or System Strength).

## Battery Portfolio Development Optimisation

### Our Role

FTI Consulting was appointed lead commercial advisor responsible for developing and implementing a regional battery portfolio management and development strategy for a multi-national utility company.

### Our Impact

We identified a project pipeline for renewable energy and storage projects based on technical, commercial and strategic assessment. We also identified existing developments where batteries add value to accelerate development.

## Wind Farm Simulation Model

### Our Role

FTI Consulting provided strategic advice to a global infrastructure corporation developing a wind farm project in Queensland. The corporation sought comprehensive insights into the available options to manage system strength following a newly introduced framework by the AEMC.

### Our Impact

We provided a technical analysis of system strength remediation strategies for the site and an economic analysis of the optimal site configuration for a co-located battery that will alleviate system strength issues.

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