

SolarInvert Energy Solutions

Large-scale independent energy storage financing model



Overview

How are financial and economic models used in energy storage projects?

Financial and economic modeling are undertaken based on the data and assumptions presented in Table 1. Table 1. Project stakeholder interests in KPIs. To determine the economic feasibility of the energy storage project, the model outputs two types of KPIs: economic and financial KPIs.

How can a financial model improve energy storage system performance?

The model may integrate more data about energy storage system operation as they have an impact the system lifetime. This will have an influence on the financial outcomes. The existing financial model may be enhanced by adding new EES technical details. There are various valuation methods for energy storage.

Are energy storage projects different than power industry project finance?

Most groups involved with project development usually agree that energy storage projects are not necessarily different than a typical power industry project finance transaction, especially with regards to risk allocation.

What economic inputs are included in the energy storage model?

The economic inputs into the model will include both the revenue and costs for the project. Revenue for the energy storage project will either be expressed as a contracted revenue stream from a PPA (Power Purchase Agreement), derived from merchant activity by the facility, or some combination thereof.

Is there a financial comparison between energy storage systems?

There is a scarcity of financial analysis literature for all energy storage technologies, and no explicit financial comparison exists between different energy storage systems. Current studies are simplistic and do not take into consideration important factors like debt term and financing sources.

What is energy storage project valuation methodology?

Energy storage project valuation methodology is over sector projects through evaluating various revenue and cost typical of p assumptions in a project economic model.

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