Schlumberger

Economic Screening Tool Plugin

Evaluate revenues, cash flow, and economic indicators in your Petrel project

BENEFITS

- Perform complete uncertainty and optimization processes and evaluate the economic viability of your project with a simple, unified, and modifiable interface
- View easy-to-read results presented as charts, as well as grid tables
- Create pre-defined workflows and solutions which promote more consistent and accurate results

FEATURES

- Utilize the Merak* Peep economic evaluation software as the economic engine of the plugin and take advantage of its case templates to handle prices, operating costs, royalties, and taxes
- Modify investment amounts for individual Petrel* E&P software platform well and reservoir analysis software template cases within the plugin
- Export economic results/charts to Microsoft Excel, clipboard, or to a report
- Save the economic results/charts back to your Petrel project so users can compare or share results within your team

Offering an alternative to the various and disparate spreadsheets and tools reservoir engineers, geologists, and geophysicists use for evaluating the feasibility of the project, the Economic Screening Tool plugin provides an interface within the Petrel platform for evaluating revenues, cash flow, and economic indicators. Using the Merak Peep software as the economic calculation engine, the plugin calculates the economic indicators and cash flows for any selected Petrel platform or OFM* well and reservoir analysis software case. The economic results are presented as charts and grid tables, and can offer quick overview of the most common economic indicators.

Why use the Economic Screening Tool plugin?

- Total recoverable volumes are not necessarily the strongest indication or correlation to economic performance
- The production profile has significant impact on overall economic performance; the only way to determine this is via economic analysis
- The plugin offers quick evaluation for time value of money, variable costs, country tax and royalty profiles within the Petrel platform.

Benefits for reservoir engineers

Technologies implemented to address increasingly complex reservoir challenges are specialized and costly, making an economic analysis essential. The main areas in which the plugin can be applied are primary recovery, waterflooding, chemical injection, and thermal recovery.

Performing an economic analysis during the reservoir simulation process is not yet common practice. Despite significant interest from reservoir engineers, there lacks a single and simple tool that can interact with the reservoir simulator to produce an economic analysis. The Petrel platform has the capability to perform complete uncertainty and optimization processes and now, with the Economic Screening Tool plugin, engineers can employ an economics evaluation to determine the feasibility of each scenario in a single environment.

With tasks that are recurrent, it is important that supporting information and calculations are consistent and integrated in a single environment. Using the Economic Screening Tool plugin, OFM software data can be sent to the Petrel platform where all analysis and economic calculations are performed. This creates pre-defined workflows and solutions for more consistent and accurate results.



The economic results are presented as charts as well as grid tables. This tool provides a quick overview of the most common economic indicators within the Petrel software platform.

Economic Screening Tool Plugin for Petrel



The investment calculation has one of the biggest impacts when evaluating the project. The plugin allows users to add/update these amounts and re-run the economics evaluation.



Users can save multiple results (with different names and timestamp) within their Petrel project for comparison.



Compare data within the Petrel platform.

How the Economic Screening Tool works

The monthly production data input that the Economic Screening Tool uses can be imported from within the Petrel simulation or via an OFM software forecast. Any remaining data for the economic analysis is handled within the Merak Peep software. Users of the Petrel platform do not need to update the oil or gas prices, operating cost, royalties, or taxes for projects. The investment or capital can be entered and stored in the Merak Peep case templates, though the plugin has an interface that can modify and update these values.

There are three options for exporting the results of the economic evaluation:

1. Users can save all results within the Merak Peep case templates for detail verification.

2. Users can export the economic results and charts to a spreadsheet and clipboard.

3. Most crucially, users can save the results and charts back to the project within the Petrel platform. This enables users to compare or share results within the team.

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