NEO®
NET ENERGY OPTIMIZER

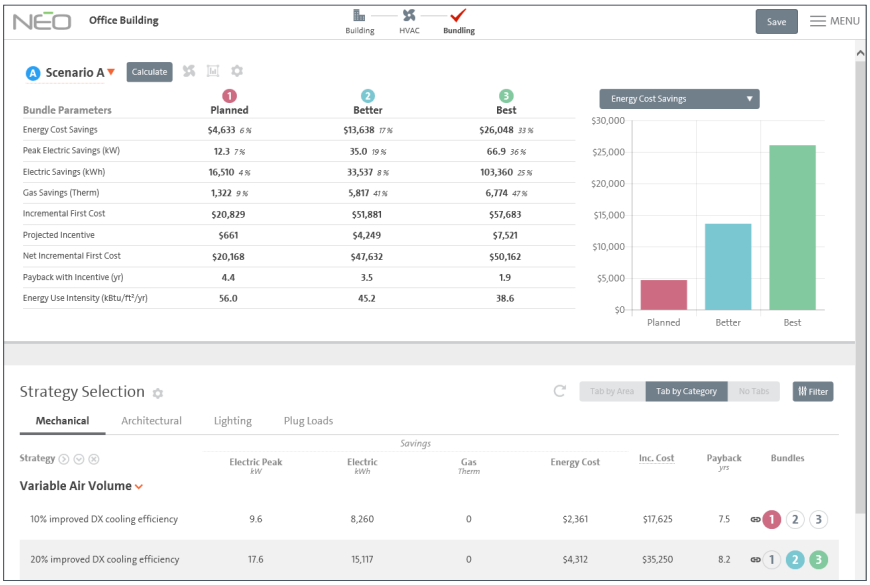
Automated Energy Modeling

NEO® helps owners and design teams make more energy-efficient decisions earlier in design than traditional energy modeling. Utilizing whole building energy modeling to calculate the cost savings, payback, and available utility incentives for alternative design solutions, NEO helps you determine which energy efficiency measures yield the best return on investment.

A Better Alternative for Energy Modeling

Energy-efficiency improvements are most cost effective if done during the schematic design or design development phase. Due to the time and costs associated with common methods of energy modeling, however, many project managers do not have energy modeling performed until later in the design process when there are limited opportunities to impact the design. Modeling is, therefore, often limited to a handful of options, more to confirm design decisions than explore alternatives that might improve the design.

NEO is a platform for building owners, design professionals, and consultants to quickly and easily test a range of integrated energy-saving measures. NEO uses algorithms developed over 20 years of modeling and consulting experience to set up each unique building project with a range of energy-saving bundles that cover architectural, mechanical, lighting, and plug-load strategies. The strategies are compared against the applicable state energy code. Design teams can combine individual strategies into bundles in real time in an interactive meeting and instantly see savings, paybacks and utility incentives.



Work More Efficiently

- Evaluate cost effective whole building energy efficiency options on buildings as small as 5,000 square feet
- Compare more options on buildings of every size
- Get results and optimize efficiency at the first meeting

Make Quicker Decisions

- Aggregate and present data for a wide range of building types
- Calculate incentives and paybacks
- Receive real-time feedback regarding potential energy conservation decisions

Contact

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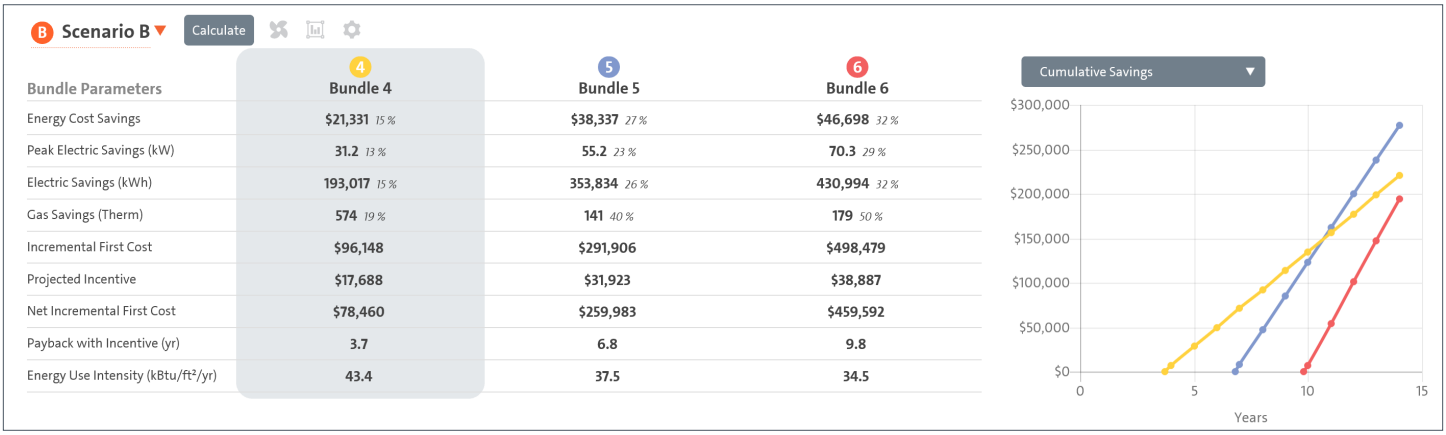
Faster Results

The standard practice for energy modeling is to use a program such as eQuest, Trane Trace, or EnergyPlus to create a baseline and energy model of the design by hand. Without NEO, most modelers can take hundreds of hours to set up and run their complete energy analysis with only a few design options. By automating the creation of the baseline energy model and bracketing design options, NEO allows a design team to quickly analyze a wide range of options in less than an hour with more comprehensive and consistent results.

More Refined Options

NEO builds hundreds of refinement options so design teams and owners can optimize their choices by selecting their specific building type and customizing the mix of space uses. NEO also has 18 different mechanical systems to choose from. Based on the selected space uses and mechanical systems, NEO creates energy models of 60 to 80 separate energy-efficiency measures for each space use. Results for each individual measure, three bundles and three selected HVAC scenarios, are presented to the design team to optimize. Using basic information such as building type, size, location, and proximate geometry, NEO fulfills the remaining required energy-modeling parameters using ASHRAE schedules, COMNET source loads, local weather and custom algorithms developed based on 20+ years modeling experience of dozens of trained and vetted energy modelers.



Eliminate Arbitrary Decisions

Many modelers take a “guess-and-check” approach when performing an energy analysis. NEO provides a standardized energy model building process to better compare and contrast options, ultimately enabling you to make better energy decisions about your project. NEO also allows design teams to combine individual energy-efficiency strategies into multiple bundles and compare alternative solutions for cumulative, whole-building impacts live in a decision-making meeting.

Powered by DOE-2

NEO builds on the proven DOE-2 energy simulation engine. It automatically creates a code-based energy model and dozens of energy-efficiency measure models based on a handful of building-specific inputs. NEO presents these stand-alone measures, as well as the combined impacts, in an online tool.