Intelligently reduce demand charges



HOMER Grid optimizes the value of behind-the-meter, distributed generation systems anywhere in the world, especially when demand charges, resilience and energy arbitrage matter. With HOMER Grid, you can intelligently reduce the peak power you buy from the utility each month, determine the best mix of resources for the least-cost solution, design a system with the highest possible rate of return, and demonstrate the value of your behind-the-meter system.





Leverage powerful optimization, proven results

Combine value streams and understand economies

Only HOMER Grid combines economics, engineering, and multiple value streams and approaches in one model, then rapidly performs complex calculations to find the least-cost solution. You save energy costs by reducing demand charges and accurately understanding the savings possible from investing in your power system. Options for electric vehicle (EV) charging, demand response programs, incentives, resilience and reliability are all included.

All power systems are not equal

Specify your system choice in moments with thousands of preloaded equipment options including solar photovoltaic, storage, wind, combined heat and power, and generators. Choose from a library of utility tariffs, incentive programs, electric load profiles, and solar and wind resources, or import or create your exact specifications.

Earn confidence and win sales with insightful proposals

Quickly turn your analysis into a branded proposal that demonstrates costsavings to your customer. Present key aspects of a proposed system, offer clear cost comparisons and outline economic value streams. You can save time and earn customer trust with a professional proposal.





Comprehensive features demonstrate the value of your system design:



Demand charge reduction – Determine the best resource mix for the least-cost solution and highest rate of return.



Incentive and demand response programs – Include additional savings in your cost estimate when local incentive programs apply. Quickly understand the value of participating in demand response programs.



EV charging – Quickly and efficiently evaluate your options for an economically optimal EV charging system.



Resilience – Provide an additional value stream by proving the value of a hybrid/generator project in extended outages.



Understand and quantify risk – Easily compare scenarios to understand the potential impact of changes and uncertainties. Evaluate key indicators such as internal rate of return and break-even date for each possible system.



Value-stacking – Understand and demonstrate how value streams, including demand charge reduction, energy arbitrage, self-consumption and incentive programs can work together for the highest ROI.



Customer-facing proposals – Increase sales and improve communication with customized reports.



Powerful, proven optimization – See every combination of system type in a single run to find the best design.



Beyond solar and storage – Include combined heat and power, wind, and backup generators in your model and design to meet your specific needs.



Robust storage model – Accurately model battery life and performance for the duration of your project so you can depend on the results.



Cutting-edge dispatch strategy – HOMER Grid's proprietary approach picks the best economic options for serving your load at each time-step — based on tariffs, weather and available power components.



Dig deep into details – Thousands of options for graphical and tabular results show exactly how each potential system would operate.



Completely customizable – Tailor your design to specific projects with options including solar-plusstorage, generators, combined heat and power, wind, and EV charging.



Global resource data – Import solar data from the National Renewable Energy Laboratory (NREL) and NASA databases or upload your own measured or purchased resource data.



Accurate PV production data – Combine the power of solar modeling tools, like HelioScope or PVSyst, with HOMER Grid for increased modeling accuracy and more bankable results. Or use HOMER Grid's internal PV production calculator.

Put the power of HOMER to work

With the trusted HOMER simulation engine at its core, HOMER Grid is based on decades of experience in hybrid system optimization. HOMER software has enabled more than 200,000 users in over 190 countries to produce economic feasibility studies, system design, energy insight and energy cost savings. HOMER Energy by UL provides a strong foundation to empower people around the world with tools, services and information to accelerate the adoption of renewable and distributed energy sources.

Try HOMER Grid for free at homerenergy.com/trygrid or contact sales@homerenergy.com to learn more.





Empowering Trust®