



For Immediate Release

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**New Solar+Storage Tool Capabilities Help Users Assess
Facility Resilience and Energy Cost Savings**

National Renewable Energy Laboratory's online solar+storage optimization tool, REopt Lite, includes new resilient power system design features.

Montpelier, VT – For the first time, building owners and energy managers will be able to easily evaluate the costs and benefits of solar photovoltaic and battery storage systems (solar+storage) to power critical building loads when grid outages occur, with the latest released features of the U.S. Department of Energy's National Renewable Energy Laboratory's (NREL) online solar+storage optimization tool, [REopt Lite](#). The tool now includes enhanced resilient design capabilities developed in collaboration with Clean Energy Group through its [Resilient Power Project](#) and supported with funding from The Kresge Foundation and the Department of Energy's Federal Energy Management Program and Solar Energy Technologies Office.

REopt Lite is a publicly available solar+storage optimization tool used to determine the sizing of resilient power technologies, which are designed to support critical services that are essential when the power goes out. Recent disasters in places such as Puerto Rico, where widespread outages contributed to devastating loss of life, underscore how important it is to give building owners and emergency planners straightforward tools to evaluate how to make buildings more resilient with solar and battery storage.

"The updated version of REopt Lite marks a big step in the evolution of solar+storage analysis," said Clean Energy Group Vice President Seth Mullendore. "It will help many of the organizations we work with every day – affordable housing developers, critical facilities managers, municipalities, and community groups – better understand the potential economic and resilience benefits that solar+storage could bring to their buildings, without having to rely solely on industry representatives and expensive consultants."

"REopt Lite is an exciting addition to the resilient power toolkit," said Jessica Boehland, senior program officer on the Kresge Foundation's Environment team. "This tool will help our grantees and others working across the country determine whether solar+storage makes sense for their facilities. Ultimately, it will enhance the health, safety, and resilience of communities, particularly in low-income areas where residents have limited options to stay secure during power outages. It also will help reduce the carbon emissions driving climate change and extreme weather events."

“While we have historically measured the benefits of solar+storage in terms of cost and energy savings, resilience is emerging as another critical value,” said Kate Anderson, senior engineer and manager of the Engineering and Modeling Group at NREL. “REopt Lite’s new expanded resilience capability allows users to compare systems designed for maximum economic benefit to systems designed to sustain critical loads during grid outages, and assess the cost-benefit tradeoffs of different options. It also allows users to consider how varying microgrid upgrade costs and avoided outage costs may impact the economics of their system. We hope this will be a useful tool for decision-makers who are considering resilient solar+storage systems.”

The majority of customer-sited solar+storage installations are designed to meet one of two goals: either to reduce electricity expenses or to increase energy resilience. Cost savings are a key concern for building owners and managers, which is why the economic benefits of solar+storage have made these projects increasingly popular for businesses, schools, nonprofits, and other entities facing significant demand-related charges on their electric bills.

In addition to reducing demand charges and time-of-use energy rates, solar+storage systems also deliver value by providing power to buildings when the grid goes down, whether by allowing a business to stay open or residents to shelter in place; or, in the case of facilities like medical clinics and emergency shelters, potentially preventing loss of life. The economic and social costs incurred due to increasingly more frequent and longer-duration power outages can be avoided with properly designed resilient solar+storage systems.

With REopt Lite’s newly expanded functionality, users of the tool will be able to compare and contrast economic and resilience goals in a publicly available, easy-to-use interface. By giving users the ability to assign and adjust a value for resilience benefits and view a side-by-side comparison between resilient system sizing and costs and a system designed to maximize savings, the new version of REopt Lite will help decision-makers identify potential cost gaps and balance what may at times be competing priorities.

On July 25th, Clean Energy Group will host a webinar on REopt Lite with Nick Laws, an engineer in energy systems modeling at NREL who worked closely on developing the new features. The webinar will walk through a real-world example of how the tool can be used to optimize and evaluate a resilient solar+storage installation and provide time to address questions from the audience. Learn more about the webinar and register at www.cleanegroup.org/webinar/simplifying-resilient-power-design-with-reopt-lite.

Clean Energy Group is also offering free REopt Lite training sessions and analysis support to nonprofit organizations interested in using the tool to evaluate solar+storage projects that would benefit disadvantaged communities.

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About Clean Energy Group

Clean Energy Group is a leading national, nonprofit advocacy organization working on innovative technology, finance, and policy programs in the areas of clean energy and climate change. Clean Energy Group also manages the Clean Energy States Alliance (CESA), a coalition of state and municipal clean energy funds. The Resilient Power Project, a joint initiative of Clean Energy Group and Meridian Institute, is designed to help states and municipalities with program and policy information, analysis, financial tools, technical assistance, and best practices to speed the deployment of clean, resilient power systems in their communities. For more information, visit www.cleaneenergy.org and www.resilient-power.org.

About The Kresge Foundation

The Kresge Foundation was founded in 1924 to promote human progress. Today, Kresge fulfills that mission by building and strengthening pathways to opportunity for low-income people in America's cities, seeking to dismantle structural and systemic barriers to equality and justice. Using a full array of grant, loan, and other investment tools, Kresge invests more than \$160 million annually to foster economic and social change. Kresge's Environment Program helps cities implement comprehensive climate-resilience approaches grounded in equity. For more information visit kresge.org.

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