

California's electrical grid is at the center of our fight against climate change, with [aggressive goals](#) to decarbonize through renewable energy. But the grid is at risk as climate impacts become more severe, particularly from worsening wildfires. To help modernize the grid to be cleaner and more resilient, the state will need deployment of clean technologies such as distributed renewable generation, microgrids, energy storage, building energy management, and vehicle-grid integration.

Part of the vulnerability of the grid stems from its role in exacerbating climate impacts. Most prominently, power lines sparked many of the [record-setting wildfires](#) of 2017 and 2018, including the [Camp Fire](#) that destroyed the town of Paradise. To minimize this threat during high-risk weather conditions, California electric utilities and energy regulators have begun to implement [preemptive power shutoffs](#). In 2019, widespread PSPS events likely contributed to a safer wildfire season, but the days-long shutoffs also left some vulnerable communities and residents [without access](#) to essential health and safety services.

At the same time, many residents turn to fossil-fuel backup generators during grid shutoffs, which are both polluting (in terms of both greenhouse gases and locally harmful air pollutants) and unaffordable for many Californians. But the alternative—deploying clean, resilient distributed resources, such as home batteries, community solar, or microgrids—will require significant policy and financial support for grid managers, electric utilities, community choice aggregators, and local governments.

To address this need, CLEE and UCLA's Emmett Institute convened a group of California state energy regulators, local government leaders, grid experts, and clean energy advocates for a conversation on California's electrical grid of the future. CLEE and Emmett are today releasing a new report, [Clean and Resilient](#), based on this expert group's findings.

The report highlights the top policy solutions the group identified to address the financial, regulatory, and data barriers to clean, resilient grid deployment, including:

- Promoting [performance-based regulation](#) at the California Public Utilities Commission, to ensure that the public benefits and necessity of investments in reliable, carbon-free technology are fully accounted for.
- Reforming grid interconnection processes (including CPUC [Rules 2](#) and [21](#)) to create a presumption in favor of new microgrids and other distributed technologies and to equitably share the cost of associated grid upgrades.
- Initiating a new [energy data](#) collection and management process at the California Energy Commission to ensure communities, technology providers, and regulators have access to the data that will drive the grid of the future.

You can access the report and its full set of policy recommendations [here](#). Ultimately, developing the clean and resilient electrical grid California needs will rely on a suite of parallel initiatives, from building and vehicle electrification to advanced data and communications development, each of which will require additional support. Given the range of these interconnected efforts, and the urgency of our statewide need for a safe, reliable grid, developing coordinated policy processes to promote them is becoming increasingly essential.