



## North Bay Community Resilience Initiative

### Creating a more robust and reliable energy system

#### The Clean Coalition and our impact

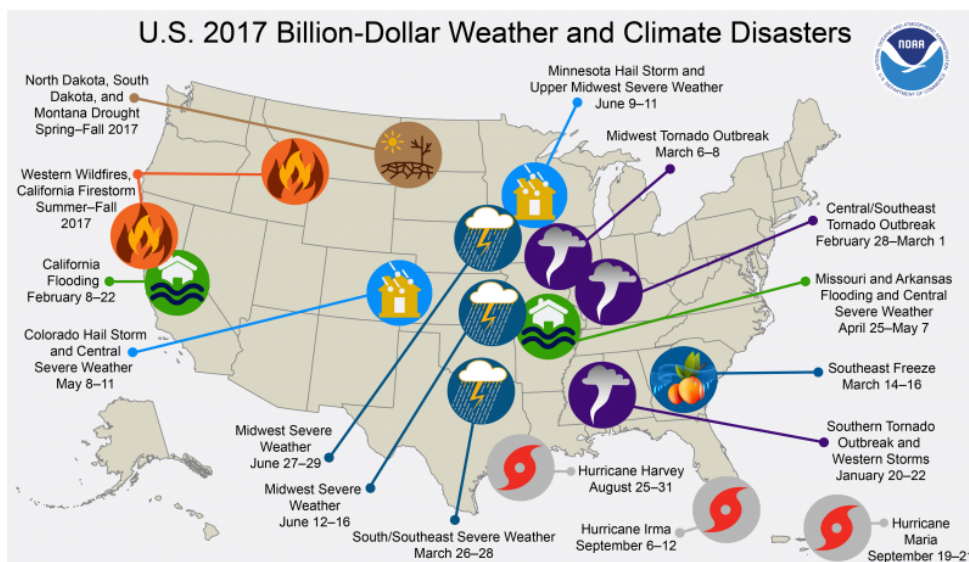
The Clean Coalition is a nonprofit organization whose mission is to accelerate the transition to renewable energy and a modern grid through technical, policy, and project development expertise. We work with policymakers, utilities, public interest groups, and other partners to develop smarter energy policies at the federal, state, and local levels. The Clean Coalition also designs and implements programs like Community Microgrids.

- We believe in expanding the use of renewable energy to address climate change and provide economic, environmental, and resilience benefits for communities.
- We focus on advancing wholesale distributed generation (WDG), a critical market segment that has been vastly overlooked.
- We help communities across America turn underused spaces – from rooftops to parking lots – into energy-generating powerhouses.

Since our founding in 2009, the Clean Coalition has significantly advanced the deployment of clean local energy. Through cutting-edge programs, policies, and initiatives, we have helped bring nearly 3 gigawatts of clean local energy online – enough to provide peak power to nearly 3 million American homes.

#### Providing resilience with Community Microgrids

Extreme weather events are occurring more frequently. From 2017 to 2018, the U.S. experienced 30 weather- and climate-related events that cost \$1 billion or more, and collectively caused damage totaling a record-breaking \$404 billion<sup>1</sup> – not including the loss of human life. The Clean Coalition is staging Community Microgrids to provide resilience in the face of these disasters.



<sup>1</sup>National Oceanic and Atmospheric Administration; <https://www.ncdc.noaa.gov/billions/events/US/2017-2018>

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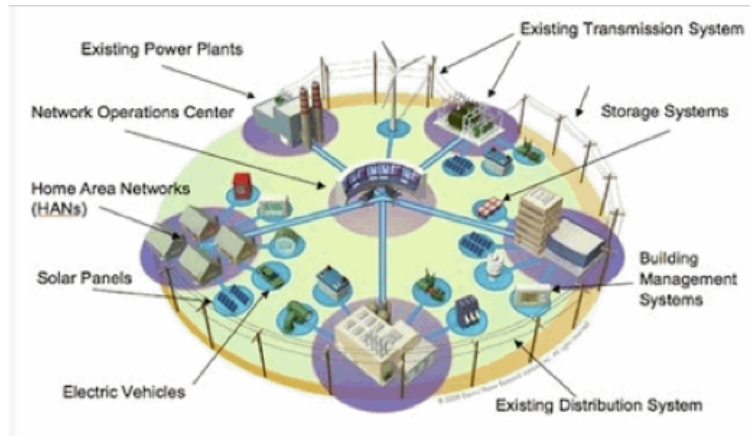
The North Bay region of the San Francisco Bay Area and other parts of California have experienced deadly wildfires in the last two years, with damages exceeding \$42 billion. The North Bay Community Resilience Initiative was developed in response to these tragic climate-related events to develop and promote community resilience with the following goals:

- Publicize and track energy efficiency and electrification incentives and policies to steer community rebuilding and future development efforts toward Community Microgrid-ready, resilient structures.
- Identify model structures with Community Microgrid-ready designs for new residential and commercial structures, as well as retrofits.
- Identify and stage Community Microgrid-ready pilot projects at local critical facilities.

## Community Microgrids as a resilient solution

### Features

- 1) "**Islanding**" from the grid.
- 2) **Solar** and other renewable energy; energy storage; demand response; and monitoring, communications, & control.
- 3) Optimal deployment of **distributed energy resources (DER)**.
- 4) Indefinite and **resilient** renewables-driven backup power for critical and prioritized loads, and eventually all community energy needs.
- 5) A solution that can be **replicated** throughout any utility service territory.
- 6) **Behind-the-meter** microgrids that can expand into larger Community Microgrid systems.



## Benefits of Community Microgrids

**Resilience** provided by solar+storage powering critical loads when the grid goes down

**Reduced operational costs** from lower energy bills and revenue from excess energy exports

**Reduced greenhouse gas emissions** by eliminating fossil fuels

**Clean local energy** using resources more efficiently, with less environmental impact from transmission infrastructure

**Electric vehicles** powered by renewables that can act as a grid asset

**Better indoor air quality** in all-electric buildings with "tighter" building envelopes

**Higher appraised property values**

**Local job growth** from investment in renewable energy installation and maintenance

**Safer communities** through energy security, self-reliance, and improved national security

Microgrid site that is both a community resilience asset and a **grid asset**

**Network of "prosumers"** generate and use electricity, share with the community, and earn revenue