

# Advancing Health Center Resilience: Using Inflation Reduction Act Funds to Improve Energy Efficiency and Disaster Preparedness

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The Medical Society Consortium on  
**CLIMATE & HEALTH**



NATIONAL ASSOCIATION OF  
Community Health Centers®

**REWIRING  
AMERICA**

# Introduction: The Importance of Climate Resilience at Health Centers

Climate change is a threat to public health and presents dangers to the healthcare system. Floods, fires, storms, and extreme temperatures can limit a health center's ability to remain operational during an emergency.

Climate Threat	Vulnerable Populations	Health Outcomes
Heat waves	Infants, children, pregnant individuals, the elderly, incarcerated individuals, communities that have been marginalized or redlined	Heat stroke, death, premature labor
Wildfires	Children, pregnant individuals, the elderly, communities that have been marginalized or redlined	Respiratory illnesses (asthma, COPD), cardiovascular events, premature labor
Floods	Individuals with disabilities, the elderly, communities that have been marginalized or redlined	Trauma from displacement/ loss of home, injuries

However, on-site renewable energy, weatherproofing and other resiliency measures save money on energy bills, protect health centers against environmental threats, and help them stay open during and after disasters. Energy efficiency measures also create cleaner, greener health centers, leading the way to a sustainable future for patients within the community and beyond.

Existing funding from the Inflation Reduction Act can substantially reduce or even fully cover the cost of installation. While solar and weatherproofing measures can be a substantial amount of work, these resiliency measures, when implemented early on, can substantially reduce spending, employee workload, and energy usage in the event of an outage or climate-related disaster.

The [CHARGE partnership](#), a collaboration between the National Association of Community Health Centers, Capital Link, and Collective Energy, is designed to support health centers in accessing these dollars, working with FQHCs at every step of the process, and assessing each center's specific needs. CHARGE recognizes that each center is unique, and can support providers accordingly.

This toolkit:

- ✓ Outlines two potential resilience measures: electrification and weatherproofing
- ✓ Describes the associated financial benefits with resilience measures
- ✓ Points to the CHARGE partnership as a key resource in getting started



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# Climate and Disaster Resilience

## Electrification and Weatherproofing

Electrification and weatherproofing are two ways to increase energy efficiency. Energy efficient health systems mitigate future climate and health harms by reducing the burning of fossil fuels, and, in turn, preventing impact on the climate. In addition, short term exposure to fossil fuel pollution can cause respiratory diseases, low birth weight, and other health problems. In the long term, fossil fuels cause climate-related disasters like extreme heat and dangerous weather events.

Electrification and weatherproofing also support climate adaptation. By reducing dependency on the power grid, health systems can remain operational in case of damage to the electrical grid. Solar power, solar batteries, and microgrids can generate and store electricity on-site, while weatherproofing measures can keep indoor temperatures comfortable, and make the air safer to breathe.

Climate Mitigation	Climate Adaptation
<ul style="list-style-type: none"><li>• Limiting future harm to the climate and environment through preventative action</li><li>• Reducing fossil fuel emissions that make climate change worse, and limiting pollution to the air and water</li></ul>	<ul style="list-style-type: none"><li>• Preparing facilities to keep the lights on and be ready to treat more patients during climate threats</li></ul>



## Why Electrify?

Electrification is the process of moving off of fossil-fuel powered utilities, and onto electric ones. Moving away from fossil fuel use and towards more sustainable energy sources will help systems withstand emergencies and protect patient health. Many health centers who have electrified their clinics can now generate and store energy on site through solar panels and solar batteries.

### Health Benefits:

Electric-powered appliances and solar energy reduce indoor fossil fuel pollution.

By electrifying, health centers can:

- Store energy on site, supporting the ability to remain operational during a disaster.
- Eliminate the risk of fuel or carbon monoxide leaks.
- Receive the benefits of heat pump air filtration, limiting contaminants that trigger allergies and asthma.

## Why Weatherproof?

Weatherproofing (or weatherizing) helps buildings use energy more efficiently. Insulation, and fixes to doors and windows can help regulate temperatures during extremely hot or cold spells. Weatherproofing measures can also help save on energy costs in the long run.

### Health Benefits:

Weatherproofing has been shown to:

- Keep out allergens, including mold and dust mites.
- Help prevent asthma attacks and other lung diseases.
- Protect against extreme cold and heat by keeping in cool air in the summer and warm air in the winter.



# Health Centers and Community Leadership:

Health Centers are already leaders in their communities, and serve as a trustworthy resource on health. By electrifying and weatherproofing, health centers can:



Model behavior that contributes to long-term community health.



Mitigate harm to the climate, and participate in a long term approach to protecting patients



Keep doors open for primary, behavioral and dental services during emergencies.



Provide residents with a central location during power outages for information and vital services, including cell phone charging, medicine storage, heating/cooling stations, and the powering of medical equipment.



Create energy cost savings that are reinvested into patient care.



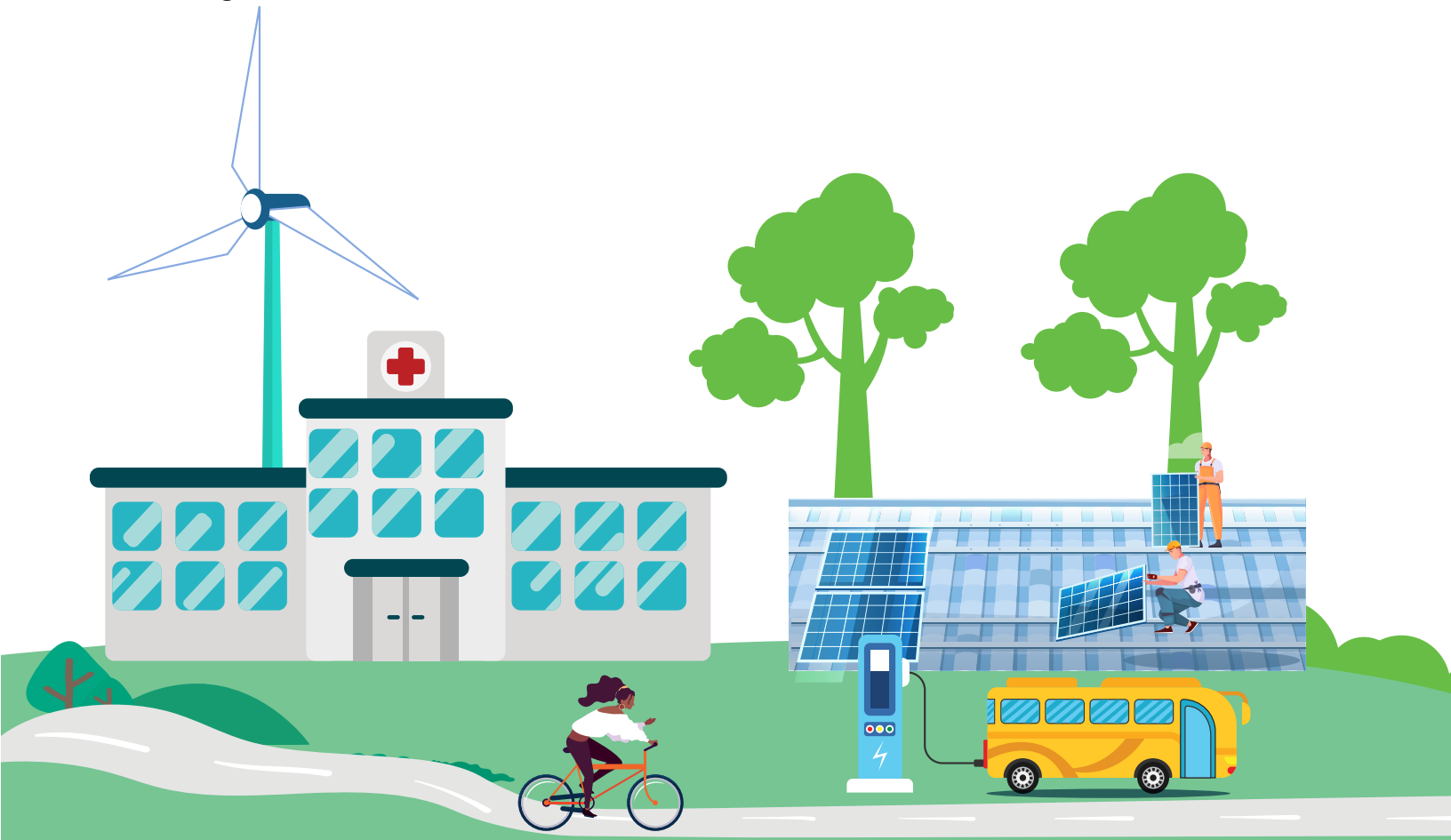
Contribute to the creation of green energy jobs and partnerships through trainings and contracts with local and regional businesses.

# Case Study

## Solar Installation and Community Leadership at CrescentCare, New Orleans, Louisiana:

Hurricane Katrina and Hurricane Ida unleashed unprecedented devastation to New Orleans, destroying homes and businesses, and leaving much of the city without power. The power disruption also affected Community Health Centers in the area as they struggled to provide care to patients, many of whom are in Justice40 communities, or communities that have been systematically marginalized. CrescentCare Community Health Center lost over \$250,000 in medicines and vaccines because their gas-powered generators failed. Learning from what happened during Hurricane Ida, CrescentCare acknowledged that people experiencing poverty and communities of color are inequitably affected by climate change. The health center took steps to turn into a resilience hub to mitigate the effects of climate change and weather events.

In 2022, CrescentCare began the process of installing solar microgrids and batteries after receiving a grant from DirectRelief. “The number one reason for installing solar panels and backup batteries is to maintain service delivery and access for our vulnerable patients in the community,” said Reginald Vicks, Chief Operations Officer of CrescentCare. Now, the health center can serve as a refuge for nearby residents, allowing them to access necessities, such as cooling and charging stations, food, water, and other resources during disasters. CrescentCare is also expected to gain a large financial return due to energy savings and IRA tax credits.



# Financial Resilience

## Energy Savings and IRA Resources

Energy efficiency measures can boost financial savings by lowering overall energy costs. Electric HVAC Systems, solar energy and storage, and other resiliency measures can heat and cool for less money. In addition, the IRA, has made it easier for health centers and their patients to access funding that can be used towards electrification and weather-proofing. Tax credits, rebates, and grants help facilitate installation of greener, more efficient, and cost effective systems.

## Energy Savings:

Electric systems are often more cost effective, and allow health centers to generate more power for less money. By electrifying and weatherproofing, health centers can:

- Avoid costly downtime expenses during emergencies, including lost vaccines and medication, and revenue loss from missed patient visits.
- Save in the long run by using more efficient energy systems that lower energy bills.
- Eliminate dependency on fluctuating gas prices.



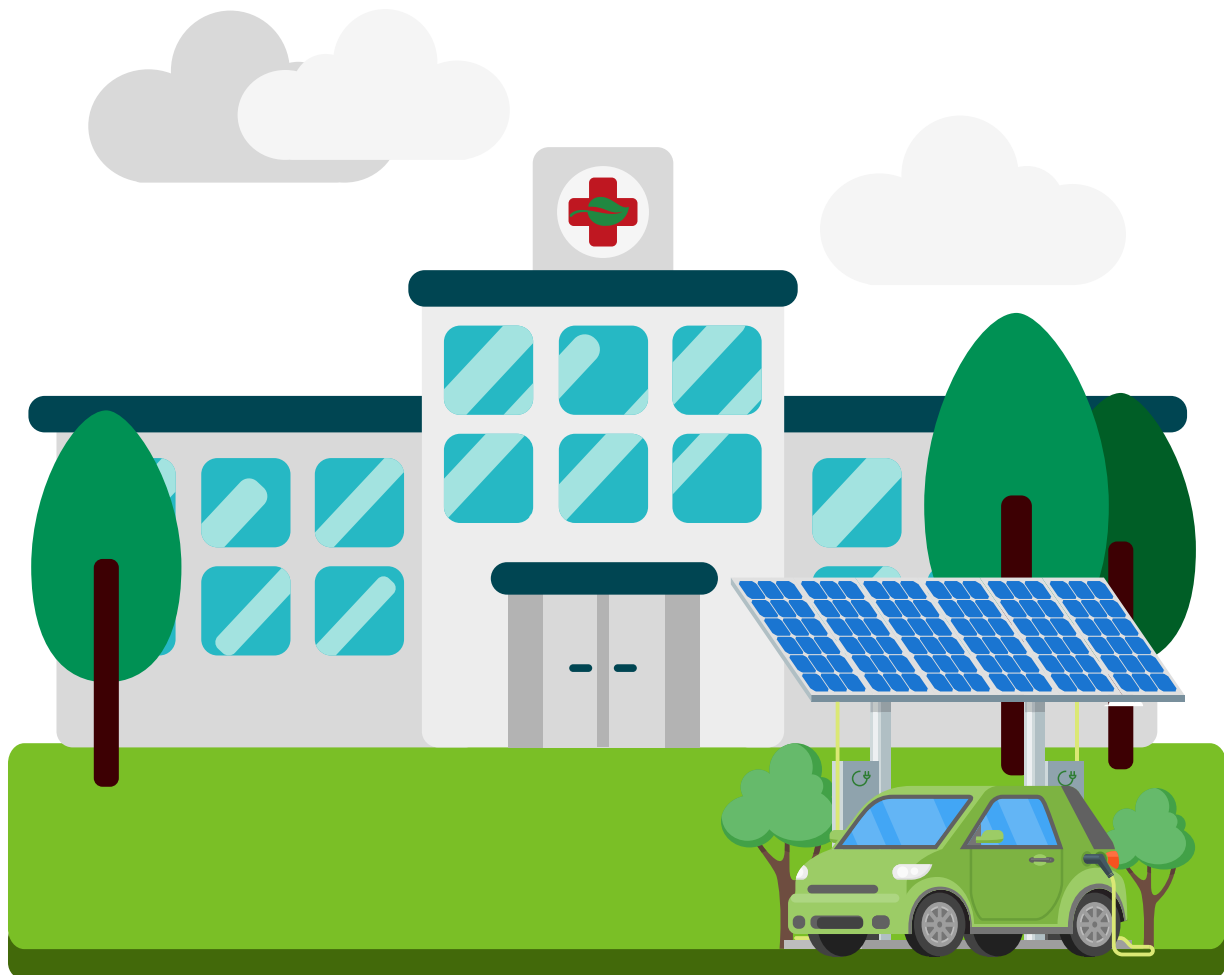


# Case Study

## Major Savings at Pueblo Community Health Center, Pueblo, Colorado

In 2020, Pueblo Community Health Center (PCHC) decided to turn the East Side Clinic into the first net-zero energy health center site in the United States. A zero-net energy building produces enough renewable energy to meet its own annual energy consumption requirements. A combination of high-performance fiberglass windows to reduce solar gain (or when the sun's rays increase the building temperature), efficient lighting, geothermal energy, and solar panels on the roof and parking lot carport have contributed to the East Side Clinic's zero-net energy status.

CEO Donald Moore shared that health centers considering solar should approach the idea from a cost-benefit analysis lens. The initial cost of the renewable energy systems for the East Side Clinic was about \$1.5 million; after initial installation, the payback rate was estimated to be 11-13 years. Rising energy costs have shortened the payback rate to a 7-8-year timeframe. In the first year of installation, East Side Clinic's total billed amount for utilities was \$26,557, which saved them \$67,848 in utility costs. The clinic will continue to save annually as it builds resilience to planned and climate-driven power outages.



# Accessing IRA Funding

Many Inflation Reduction Act investments can improve care and reduce costs. The IRA enables tax exempt entities to take advantage of certain clean energy tax credits through its elective pay provision (also known as direct pay). Elective pay allows health centers to treat the amount of certain credits as a payment against tax on their tax returns and, as a result, receive direct payments for certain clean energy tax credits.

## Applicable IRA Tax Credits

### Investment Tax Credit:

- Tax credits to support solar and battery storage power projects.
- Health centers can apply for direct pay reimbursement equal to the value of the tax credit.
- Also includes several “bonus credits,” which can significantly increase savings for projects serving low-income and underserved communities.
- Health centers may be eligible for bonus credits, especially if they are in energy communities or low-income communities, which could raise the value of the tax credits up to 70% of eligible installation costs. Most health centers will be eligible for between 30-50%

### Production Tax Credit for Electricity from Renewables

- Tax credits for production of electricity from eligible renewable sources, including wind, solar, small irrigation, hydropower, marine and hydrokinetic energy.

### Energy Efficient Commercial Buildings Deduction

- Tax deduction for energy efficiency improvements to commercial buildings, such as improvements to interior lighting; heating, cooling, ventilation, and hot water; and building envelope.

### Credit for Qualified Commercial Clean Vehicles

- Tax credit for buying qualified commercial clean vehicles, including passenger vehicles, buses, and ambulances.

## Grants

The IRA also provides grant funding towards resiliency measures. Unlike direct pay provisions, grants are not guaranteed to all qualified applicants. However, they do provide avenues towards renewable energy funding. You can find a list of grants [here](#).

# Getting Started

## The CHARGE Partnership

The **CHARGE** partnership is a collaboration between the National Association of Community Health Centers, Capital Link, and Collective Energy, and is designed to bring clean energy to community health centers. CHARGE provides energy options for health centers supporting communities that are vulnerable to grid outages and have patient populations disproportionately affected by chronic disease, poverty and racial and ethnic health inequities. With a little bit of information, CHARGE can create a step-by-step plan to help health centers save money, reduce emissions, and stay powered.



## Seven Reasons for CHARGE

1. Prevent patient health impacts because of closures due to power outages
2. Reduce avoidable ER utilization and billing to patients
3. Avoid lost revenue from closures and spoiled medications
4. Enable health centers to serve as resilience hubs during emergencies or crises
5. Provide long-term savings on electricity costs that facilities can use to put towards other services
6. Take advantage of Inflation Reduction Act Investments in clean energy for non profits serving disadvantaged communities
7. Offset thousands of tons of carbon emissions by moving to clean power

# Next Steps

## For Health Center Decision Makers:

Consider your organizational and energy goals.

### Are you interested in:

- Maintaining continuity of care
- Decreasing lost revenue from power outages
- Reducing or stabilizing electricity bills, and/or
- Reducing greenhouse gas emissions?

### If so:

1. Visit <https://chargepartnership.org/> to learn more about turnkey solar microgrid design, financing, and installation options for health centers, which are now more affordable than ever.
2. Share the Patient Resources Toolkit with your staff.
3. Connect with your communications team to share example social media posts provided in the Patient Resources Toolkit.



# Next Steps

## For Providers (clinicians, community health workers, and others offering direct patient care)

1. Review the Patient Resources Toolkit to learn about the financial tools available to your patients for electrification (such as electric stoves and heat pumps) and weatherization.
2. Use the Patient Resources Toolkit to talk to your patients.
3. Distribute the resources as handouts or flyers around the office.
4. Connect with your communications team to share example social media posts provided within the Patient Resources Toolkit.
5. Speak with your leadership personnel about improving operational resilience through solar microgrids. The CHARGE partnership can help your health center with design, financing, and installation. Use the talking points below to talk with these personnel.

Use the following talking points with your decision-maker and encourage them to learn more about the CHARGE Partnership



- **Resilience and Reliability:** In the event of power outages, especially during emergencies or natural disasters, solar panels can continue to generate power on and off the grid when paired with back-up batteries. This resilience protects medical equipment, refrigeration, electronic medical databases and more during adverse situations.



- **Cost-Savings:** By generating your own electricity through solar panels, health centers can see energy bill savings over time. These savings can be reprioritized towards upgrading medical equipment and improved patient care.



- **Community Benefits:** Health centers are community role models, and installing solar energy shows a dedication to reducing carbon emissions. Removing carbon emissions also improves patient health,

# Climate Resilience Resources

- **Capital Link:** This resource explores the benefits, opportunities, challenges, and financing resources for FQHCs looking to install solar and storage microgrids. To help health centers better understand how this clean energy solution might benefit their work and the communities they serve, we highlight case studies of health centers that have successfully implemented solar and battery back-up systems and provide links to relevant resources. [https://caplink.org/images/Building\\_Resilient\\_Health\\_Center\\_Facilities.pdf](https://caplink.org/images/Building_Resilient_Health_Center_Facilities.pdf)
- **CHARGE Partnership FAQs:** Motivated by the urgent need to tackle issues at the intersection of health equity, climate change, environmental justice, and financial and operational resiliency, the CHARGE partnership provides energy options for health centers supporting communities most vulnerable to grid outages, disproportionately burdened by chronic disease, and most impacted by poverty and racial and ethnic health inequities. Their FAQs page answers common questions for health centers. <https://chargepartnership.org/faqs>
- **Climate and Environmental Justice Screening Tool:** This resource has an interactive map and uses datasets that are indicators of burdens in eight categories: climate change, energy, health, housing, legacy pollution, transportation, water and wastewater, and workforce development. The tool uses this information to identify communities that are experiencing these burdens. <https://screeningtool.geoplatform.gov/>
- **Climate Resilience for Frontline Clinics:** This toolkit provides useful resources for health care providers, patients and administrators at free clinics and community health centers to meet the challenges for health care from climate change <https://americares.org/climateclinics>
- **Climate Vulnerability Index:** To drive climate action and effective solutions, the CVI visualizes the cumulative impacts many communities are experiencing from decades of inequitable development and systemic disinvestment. The CVI allows users to search by location and view their overall climate vulnerability and the conditions that shape it – from quality of housing and access to supermarkets to proximity to toxic waste sites and number of deaths from air pollution. [https://map.climatevulnerabilityindex.org/map/cvi\\_overall/usa?mapBoundaries=Tract&mapFilter=0&reportBoundaries=Tract&geoContext=State](https://map.climatevulnerabilityindex.org/map/cvi_overall/usa?mapBoundaries=Tract&mapFilter=0&reportBoundaries=Tract&geoContext=State)
- **Harvard Energy & Environmental Law IRA resources:** This resource provides an overview of the environmental justice provisions within the Inflation Reduction Act <https://eelp.law.harvard.edu/2022/08/ira-ej-provisions/>
- **Health Care Without Harm:** Health Care Without Harm works to transform health care worldwide so that it reduces its environmental footprint, becomes a community anchor for sustainability and a leader in the global movement for environmental health and justice. <https://noharm.org/>



- **HHS Voluntary Health Sector Climate Pledge:** On Earth Day 2022, the White House and HHS launched the Health Sector Climate Pledge, a voluntary commitment to climate resilience and emissions reduction that includes cutting greenhouse gas emissions by 50 percent by 2030 and achieving net zero emissions by 2050. A group of 116 organizations representing 872 hospitals have signed the Pledge as of April 12, 2023. Organizations can sign the Pledge at any time <https://www.hhs.gov/climate-change-health-equity-environmental-justice/climate-change-health-equity/actions/health-sector-pledge/index.html>
- **National Integrated Heat Health Information System:** Heat related illnesses and death are largely preventable with proper planning, education, and action. Heat.gov serves as the premier source of heat and health information for the nation to reduce the health, economic, and infrastructural impacts of extreme heat. <https://www.heat.gov/>
- **Office of Climate Change and Health Equity (OCCHE) Quickfinder for Leveraging the Inflation Reduction Act for the Health Sector:** The Quickfinder for Leveraging the Inflation Reduction Act (IRA) for the Health Sector is meant to help health stakeholders take advantage of the opportunities for resilience and emissions reduction. It provides a list of tax incentives and grants. <https://www.hhs.gov/climate-change-health-equity-environmental-justice/climate-change-health-equity/quickfinder-ira/index.html>
- **Practice Greenhealth:** Practice Greenhealth helps members access resources and tools to prepare for the impacts of the changing climate and build community resilience. It's a valuable resource for information, tools, data, and expert technical support on sustainability initiatives that help hospitals and health systems meet their health, financial, and community goals. <https://practicegreenhealth.org/topics/climate-and-health/resilience>
- **Rewiring America:** Rewiring America is the leading electrification nonprofit, focused on electrifying our homes, businesses, and communities. They develop accessible, actionable data and tools, and build coalitions and partnerships to make going electric easier for households and communities. <https://www.rewiringamerica.org/>
- **White House Climate Resilience Guide:** This document outlines the Administration's policies towards climate resilience and outlines key investments and legislation. <https://www.whitehouse.gov/wp-content/uploads/2023/09/National-Climate-Resilience-Framework-FINAL.pdf>
- **Clean Energy Group:** Clean Energy Group (CEG) provides innovative technical, economic, and policy solutions to enable communities to participate equitably in the clean energy transition. CEG fills a critical resource gap by advancing new energy initiatives and serving as a trusted source of technical expertise and independent analysis in support of communities, nonprofit advocates, and government leaders working on the frontlines of climate change. <https://www.cleanenergygroup.org/>



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