



# ***NET ZERO HEALTH CENTERS***

HOW SOLAR MICROGRIDS HELP CUT  
COSTS & BUILD CLIMATE RESILIENCE

## Health Center Stories

### Net Zero Health Centers | Completed Solar Installations

Capital Link is a non-profit organization and Health Resources and Services Administration (HRSA) National Training and Technical Assistance Partner dedicated to advancing the health and well-being of underserved communities through financial consulting and support for health centers. With a mission rooted in expanding access to quality healthcare, Capital Link offers a spectrum of services including financial and operational performance analyses, capital project planning, and securing financing. By leveraging its expertise in financial consulting, Capital Link empowers health centers to undertake capital expansion projects, thereby enhancing their capacity to serve communities in need.

In the face of growing environmental concerns and the urgent need for sustainable practices, health centers across the United States are at the forefront of a shift towards renewable energy. This case study delves into the pioneering journeys that four distinct health centers have embarked on to achieve renewable energy production. This is part of the overall, high-level goal of eventually reaching Net Zero—where the amount of energy used is equal to the amount of renewable energy created. In choosing a renewable energy source such as solar power and integrating advanced energy storage solutions, these health centers are not only addressing their environmental impact but are also enhancing their operational resilience, ensuring they can continue to serve their communities even in times of crisis.

The drive towards renewable energy in healthcare settings is not merely a response to the environmental imperative but also a strategic move to improve public health outcomes, particularly in communities disproportionately affected by pollution and climate change. These communities, often characterized by higher populations of people of color and/or individuals with limited income, face the brunt of the health impacts stemming from a reliance on fossil fuels. As such, the transition to renewable energy in health centers is both a matter of environmental justice and a practical approach to safeguarding the health and well-being of vulnerable populations.

## Understanding Net Zero

For health centers, striving towards Net Zero means adopting measures that enable them to produce as much renewable energy as they consume over the course of a year. This ambitious goal necessitates a combination of innovative energy production technologies and rigorous energy conservation practices.

At the heart of the Net Zero philosophy is the integration of renewable energy sources, notably solar power, which is harnessed through panels placed on roofs or carports. However, achieving Net Zero status goes beyond just installing solar panels. It encompasses a holistic approach to building design and energy management, including the adoption of high-performance fiberglass windows to minimize solar gain, the use of efficient lighting systems, the implementation of geothermal energy solutions, and the strategic deployment of battery storage systems to ensure energy reliability and continuity.

## The Case for Renewable Energy in Health Centers

For health centers, renewable energy ensures operational resilience and sustainability enabling them to provide uninterrupted services for their communities during power outages, natural disasters, and other emergencies. Coupled with battery storage, renewable systems like solar panels ensure continuous power, essential for critical medical services and emergency response. Financially, this shift offers predictability in energy costs, protecting health centers from the volatility of traditional energy markets and enabling long-term investment in community health programs.

The adoption of renewable energy in health centers also signifies a robust commitment to not only environmental and economic sustainability but also public health and equity. This strategic move towards sources like solar power is driven by the critical intersection of environmental justice and public health, particularly in underserved communities. These areas, often burdened by pollution from nearby industrial facilities and the overall reliance on fossil fuels, face increased health risks including respiratory and cardiovascular diseases. By transitioning to clean energy, health

centers can significantly reduce toxic pollutants, thereby promoting a healthier community aligned with their mission of public welfare.

Health centers adopting reliable and renewable energy also take on a community leadership role, serving as hubs for crisis response, and strengthening community ties. They also showcase the feasibility and benefits of clean energy, thus encouraging wider adoption. The journey towards Net Zero, marked by enhanced emergency preparedness, operational sustainability, and a significant role in mitigating climate change, embodies a comprehensive approach. It starts with assessing energy use and setting realistic goals, maximizing energy efficiency, adopting renewable technologies, exploring financing and incentives, and engaging the community in these efforts.

## Case Studies in Achieving Energy Resilience

The journey toward implementing renewable energy and striving towards Net Zero, exemplified by the experiences of four community health centers in the United States, demonstrates both the challenges and rewards of this ambitious goal. Each center employs a combination of solar panels and battery storage systems, though the extent of their energy independence varies. While all facilities have adopted clean energy technologies, not all are fully self-sufficient in energy production. Capital Link's mission, together with the Community Health Access to Resilient Green Energy (CHARGE) partnership, supports the transition to clean energy and, where feasible, complete power resilience and Net Zero. These case studies highlight the nuanced strategies and impacts across varying contexts, providing critical insights for other health centers considering similar clean energy initiatives.



### 1. Pueblo Community Health Center, Pueblo, CO

Pueblo Community Health Center (PCHC) stands as a pioneering example of environmental and community health leadership. Facing the industrial legacy of Pueblo, CO, which had long relied on steel and mining, PCHC is committed to phasing out fossil fuels and transitioning to 100% renewable energy by 2035. In 2020, PCHC achieved a milestone by converting their East Side Clinic into the first Net Zero energy health center site in the United States. This was accomplished through a blend of high-performance windows, efficient lighting, geothermal energy, and solar panels on a carport.

The project had an initial cost of \$1.5 million. It currently saves PCHC an estimated \$45,000 a year, and due to rising energy costs, has an anticipated payback period of seven to eight years.



### [2. Clinicas del Camino Real, Ventura, CA](#)

Clinicas del Camino Real’s Fillmore Health Center clinic, located in a high wildfire-risk zone, serves a predominantly low-income and minority population. The clinic’s resilience was tested by multiple preemptive public safety power shutoffs during extreme fire conditions, highlighting the critical need for a reliable energy source. To address this, the clinic installed a carport solar array coupled with a battery backup storage system, fully funded through a state incentive program. This setup not only provides a sustainable energy source but also ensures operational continuity during outages, significantly mitigating revenue losses and preserving patient care. The health center had no upfront costs during installation and started saving money immediately on its electric bills.



### [3. CrescentCare Community Health Center, New Orleans, LA](#)

In New Orleans, CrescentCare faces the daunting challenges of climate change, including hurricanes and power outages that annually threaten the city’s infrastructure. The loss of over \$250,000 in medicines and vaccines during

Hurricane Ida prompted a reevaluation of their energy strategy. CrescentCare’s solution was to build solar microgrids and backup battery systems, transforming their St. Roch location into a resilience hub within the Community Lighthouse Project, a network of solar+storage resilience hubs at churches and community centers across southern Louisiana. This not only protected their patients and resources but also offered a refuge for the community, providing essential services during disasters.



#### [4. Mendocino Community Health Centers, Mendocino, CA](#)

The Hillside Health Center location of the Mendocino Community Health Clinic (MCHC), located in a high fire-threat zone, recognized the necessity for power resilience after experiencing extensive power shutoffs. By exploring state incentives and leveraging a rebate program designed for low-income residents in fire-prone areas, MCHC implemented a solar+storage solution that included solar carport panels. This initiative ensured that MCHC could maintain operations during power outages, safeguarding medications, and continuing patient care, demonstrating the critical role of renewable energy in emergency preparedness. Due to the system’s grid tie-in, the health center is saving over \$85,000 a year in utility costs alone.

### **Transition to Renewable Energy With the CHARGE Partnership**

Capital Link stands at the forefront of the health center movement, blending its rich history with innovative approaches to sustainability and resilience. This vision aligns with the broader [CHARGE](#) initiative, a partnership that aims to inform, educate, and assist health centers in adopting photovoltaic (PV) and solar panel systems to achieve resilience and, ultimately, Net Zero status. Capital Link, in partnership with the National Association of Community Health Centers, who conduct outreach and education, and Collective Energy for implementing tailored energy systems, provides health centers with the necessary tools and financing solutions to embark on this journey.

The process to realize a renewable transition begins with an inquiry to [chargepartnership.org](https://chargepartnership.org), initiating a conversation about the health center’s needs, the costs involved, and the potential for a renewable energy/Net Zero transformation. From designing systems, like solar carports, to securing quotes and hiring local installers, the partnership aims to streamline the transition to renewable energy without reallocating health center staff or resources. Collective Energy acts as the owner’s representative, ensuring the health center’s interests are prioritized throughout the process.

After the initial consultation with partners is realized, the focus shifts to financing. Innovative loan products and financial incentives play a significant role in facilitating this transition. The Inflation Reduction Act (IRA) offers a direct payment option for nonprofits, reducing system costs by an additional 30%, with further 10% adders for low-income

and fossil-fuel dependent communities. This benefit can reach up to 50% of the project cost. State energy offices, utility rebates, and foundations like Wells Fargo provide additional avenues for financial support, alongside upcoming opportunities through the EPA's Greenhouse Gas Reduction Fund.

Capital Link's affiliate organization, Capital Fund, offers health centers the means to finance the acquisition and installation of renewable energy systems without undue financial strain. Capital Link, for its part, helps coordinate financing and navigate benefits and subsidies health centers can receive.

Once financing has been secured, Collective Energy begins coordination of construction of the solar microgrid. The entire process is designed to be as smooth as possible, with the CHARGE component organizations aiding health centers every step of the way.

## The Net Zero Transition: Looking Ahead

These case studies underscore the necessity and feasibility of transitioning to renewable energy within the health care sector. Each health center's journey reflects a deep commitment to sustainability, resilience, and community well-being, offering valuable blueprints for others to follow. The success stories of Pueblo Community Health Center, Clinicas del Camino Real, Crescent Care, and Mendocino Community Health Centers illuminate the path toward a sustainable and resilient healthcare infrastructure, highlighting the significant role that renewable energy plays in achieving these goals.

As the power grid faces increasing instability over the next decade, the imperative for health centers to pursue energy independence becomes paramount. Data centers and electric vehicles are slated to push up the demand for electricity, while permitting and supply chain issues delay large-scale commercial renewable energy project connections to the grid. Because of this, the risk of widespread blackouts is projected to increase over the next decade. The prospect of energy instability poses significant risks to operational continuity, patient care, and safety. In this context, the move towards the ambitious goal of Net Zero emerges not only as an environmental or ethical choice but as a strategic imperative to ensure energy independence and protect their critical operations against the backdrop of an increasingly unstable power grid.

By adopting renewable energy principles, health centers can leverage renewable energy technologies, such as solar and wind, coupled with energy storage solutions, to create a self-sustaining power ecosystem. This approach not only mitigates the risk of grid-related disruptions but also aligns with broader public health goals by reducing reliance on fossil fuels and minimizing the environmental footprint of healthcare operations in traditionally marginalized communities. Although not all health centers will immediately be able to meet Net Zero status, it stands as an aspiration for health centers adopting a proactive strategy to secure their energy future, enhance their resilience, and uphold their commitment to public health and safety in an era of uncertain energy landscapes.

## Comprehensive Resources for Health Centers Implementing Net Zero and Renewable Energy

The transition to clean energy with the goal of reaching Net Zero for health centers is supported by a wealth of knowledge, case studies, and guidance from leading organizations and publications. Below is a curated list of resources that provide insights, best practices, and practical tools for health centers aiming to achieve energy independence and sustainability:

**Building Resilient Health Centers:** Capital Link offers a comprehensive guide on how health centers can enhance their resilience through strategic investments in infrastructure and operations. [Explore the publication.](#)

**CHARGE Partnership Program:** This initiative focuses on guiding health centers through the process of implementing renewable energy solutions and achieving Net Zero status. The program offers training, resources, and direct assistance. [Learn more about the CHARGE Partnership.](#)

**NACHC Environmental Health:** This webpage details NACHC's work in environmental health, providing valuable information and resources for health centers looking to address environmental health challenges and opportunities. [Visit NACHC's Environmental Health page.](#)

**EPA Net Zero Strategies:** The EPA's Water Research program offers insights into achieving Net Zero in water and energy use, a crucial aspect for health centers aiming for sustainability. [Discover EPA's Net Zero strategies.](#)

**PubMed Central Article:** This research article provides evidence and discussions around the benefits and methodologies of achieving Net Zero, particularly in the context of public health and community well-being. [Read the full article on PubMed Central.](#)

**Net Zero America Webinar:** Hosted by the Clean Energy Group, this webinar explores the pathways and challenges to achieving Net Zero across America, offering insights that can be applied to the health sector. [Watch the webinar.](#)

**State Leadership in Clean Energy:** This webinar showcases how states like Alaska and Oregon are leading the charge towards Net Zero, providing models and lessons that health centers can emulate. [Access the webinar recording.](#)

**New York Times Article on National Grid Challenges:** This interactive article from the New York Times offers an in-depth look at the challenges the US national grid is facing, relevant to health centers considering their energy strategies. [Read the article here.](#)

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## About Capital Link

Capital Link is a national, non-profit organization that has worked with hundreds of community health centers and Primary Care Associations for 30 years to plan for sustainability and growth, access capital, improve and optimize operations and financial management, and articulate value. Established through the health center movement, Capital Link is dedicated to strengthening health centers—financially and operationally—in a rapidly changing marketplace. For more information, visit us at [www.caplink.org](https://www.caplink.org).

