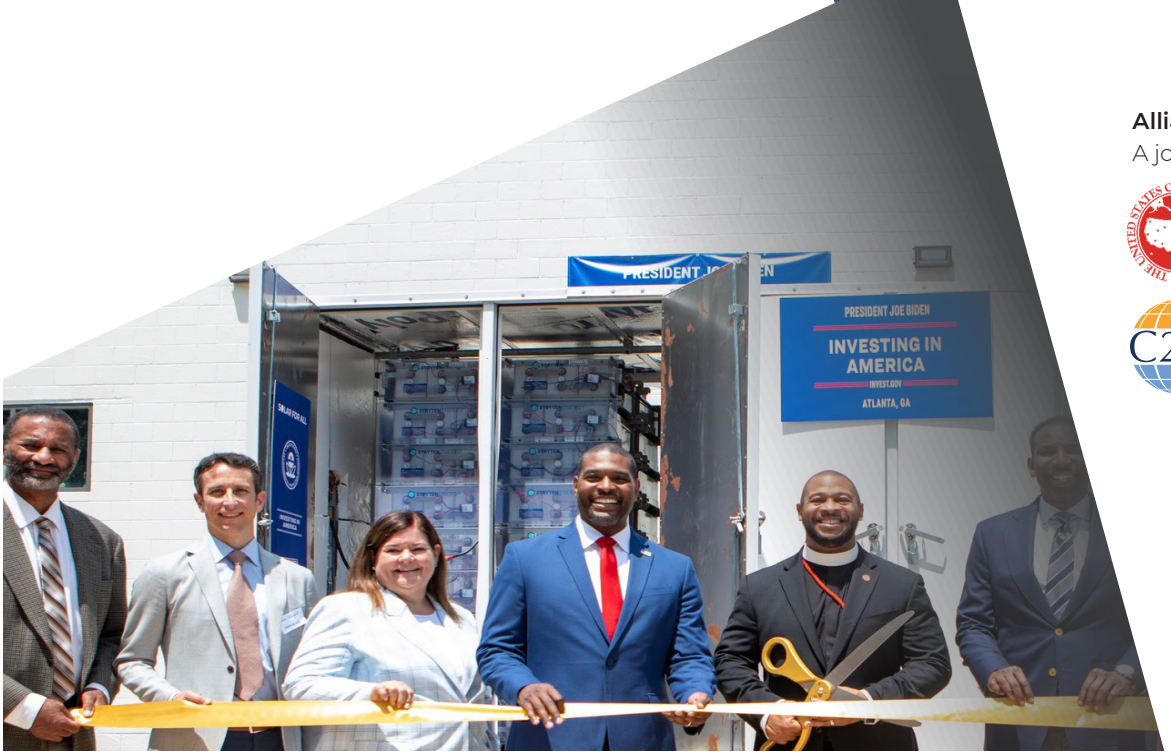
Building Community Resilience

How Local Leaders are Advancing Resilience Hubs and Bolstering Critical Infrastructure

January 2025



Alliance for a Sustainable Future
A joint effort by:

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Acknowledgement

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AECOM

Case Study 1:

The Vicars Community Center: Equity Centered Community Resilience

Atlanta, GA

Mayor Andre Dickens

OVERVIEW

In partnership with the City of Atlanta, Community Church Atlanta (CCA), Groundswell, and Stryten Energy, the Vicars Community Center Resilience Hub paves a new pathway forward toward building community resilience. Launched in late 2024, the community-owned resilience hub offers residents a trusted location to gather in the aftermath of an emergency, such as during sustained power outages and after severe weather events. Owned by Community Church Atlanta, the community center's solar installation and battery energy storage system allows it to generate up to three days of back-up power without additional sunlight.

As the fourth-highest-energy burdened city in the United States, the need for equitable solutions to the climate crisis in Atlanta is clear. Located near downtown in southwest Atlanta, the Vicars resilience hub promises to increase energy reliability and mitigate climate impacts for vulnerable communities, including people of color, low-income households, those experiencing homelessness, and the elderly.

Although any community can be threatened by the severe impacts of a rapidly changing climate, these groups are often most at risk and the least prepared to recover.

Led by Groundswell, a nonprofit focused on building community power through equitable solar projects and resilience centers, the Vicars resilience hub has been described as one of the first of its kind across the country. As one of the first community-owned projects in the nation to benefit from historic new clean energy tax credits from the Inflation Reduction Act (IRA), the Vicars resilience hub will serve as a blueprint for the City of Atlanta and others looking to build their own resilience hub projects.

DESIGN AND IMPLEMENTATION

LOCAL MARKET CONDITIONS AND DRIVERS

The Breaking Barriers initiative, a collaboration between the City of Atlanta, Groundswell, Partnership for Southern Equity, and the U.S Department of Energy's (DOE) National Renewable Energy Laboratory (NREL) initiated the project in 2019 to increase the energy reliability within the Atlanta University Center (AUC), specifically on the campus of four historically Black Colleges. Community organizers from Partnership for Southern Equity worked with Groundswell to host public outreach events, convene with community leaders, and work with city staff from the Mayor's Office of Sustainability and Resilience to review feasibility studies to determine the most appropriate site to develop a microgrid storage project for the campus.

Through this process, project leaders recognized that AUC-adjacent communities represented the most energy-burdened neighborhoods in the city and sought to develop an additional resilience center that would serve the residential neighborhoods just west of the AUC campus.

Building off of the work of the Breaking Barriers initiative and previous community outreach, the Vicars community center was identified as a trusted central location for a potential hub site. The city's Clean Energy Advisory Board, which had allocated a set number of seats for residents from high-burdened energy neighborhoods, had recommended the Vicars community center as a potential site. The site is optimal because it is well known by the community and served a number of vulnerable populations facing worsening climate impacts, such as increased power outages, flooding, extreme heat, severe storms, and air pollution.

The CCA's strong role in community engagement was also crucial in the site selection. As a trusted faith-based institution, the CCA already had strong preexisting community networks that could support the goals of a resilience hub. For example, the community center serves as a meeting site for groups such as the Concerned Black Clergy of Metropolitan Atlanta, the Girl Scouts of the USA, and one of the city's Neighborhood Planning Units.

Once the site was selected, the City of Atlanta worked with project leaders to determine implementation strategies and goals. This included sharing municipal emergency management strategies, making connections between the city's Office of Emergency Preparedness, and aiding with the permitting process. For example, cooling centers were already active across the city, so project leaders learned about the city's emergency management strategies to inform their community response plans. Additionally, city staff played a key role in updating various municipal departments on the project's progress, helping prioritize it as the city sought solutions for climate resiliency, energy burden reduction, and improved emergency management.

EMERGENCY OPERATIONS: SOLAR ARRAY AND BATTERY STORAGE SYSTEM

Equipped with a 34.1-kW DC solar installation connected to a 320-kWh lead-acid battery storage system, the resilience hub can provide backup power for at least three days, and potentially up to a week after a severe weather-related event has occurred. In the event of an extended power outage, the solar array will be able to charge the battery and keep the facility up and running for several weeks. In addition to providing a safe haven during extreme heat or cold weather events, the resilience hub provides reliable power for individuals who may depend on electric appliances to store food, medications, and charge communication devices. While not intended to serve as an overnight shelter, project leaders believe in an extreme situation they would be able to collect the necessary resources (e.g., beds and blankets) for overnight services to be accommodated.

Incorporating solar and battery storage components to the resilience hub served multiple functions. Primarily, it allows the facility to generate its own power without having to rely on the main grid, which may fail after a weather-related event. This independent energy system also supports local emergency management by allowing limited back-up power services to be prioritized for other critical infrastructure facilities, such as hospitals, fire stations, and shelters.

In addition to these benefits, the independent energy system also supports the community's broader public safety and sustainability goals. Facilities powered by renewable energy sources combined with storage capabilities reduces dependence on gas-generated back-up power. Additionally, a trusted faith-based institution adopting clean energy initiatives can serve as a strong inspiration for other community members to consider similar actions. Residents who see solar panels on their church may be more so inclined to consider solar improvements for their own households.

Groundswell project leaders led the outreach approach for identifying and connecting with technical partners. **Stryten Energy**, a Georgia-based energy storage solutions company, was responsible for the development, construction, and installation of the battery energy storage system, while **InterUrban Solar**, a Black-owned engineering firm, led the development and installment of the solar array. Project leaders from Stryten Energy noted that because the battery system and solar array are self-contained, very little utility coordination was needed for installation completion.

NON-EMERGENCY OPERATIONS: YEAR-ROUND RESILIENCE

During times of non-emergency, the Vicars Community Center Resilience Hub will continue to serve the needs of the community. By purchasing food from the Atlanta Food Bank and using local volunteers, the community center provides a food pantry serving 300–400 families once a week, a 500 percent increase in the number of families served compared to four years ago. The goal of distributed meals is to address food insecurity by providing families with a week's worth of groceries. Church leaders noted that over 90 percent of the people receiving these meals are not official members of the Church, reflecting a strong tie to the community that extends beyond congregational membership.

In addition to the food pantry, the community center currently offers other services such as blood drives and health screenings, job fairs, social networking events, and child-centered services. During the COVID pandemic the community center was essential in providing residents with free masks, testing, vaccinations, and virtual ministry services. Project leaders are currently in the process of holding stakeholder engagement meetings with residents to inquire which programs and what types of resources the resilience hub should prioritize moving forward.

TIMELINE

- **2019:** Breaking Barriers Initiative began, led by Groundswell and in collaboration with NREL, AUC, the City of Atlanta, and the Partnership for Southern Equity.
- **March 2019:** The Atlanta City Council unanimously passed Resolution No. 17-R3510, adopting Clean Energy Atlanta, the city's 2035 clean energy goal.
- **August 2022:** Passage of the Inflation Reduction Act, allowing projects in service starting in 2023 to be eligible for direct pay.
- **January 2023:** Groundswell approaches Community Church Atlanta as a potential resilience hub site location.
- **February 2023:** Letter of Intent and Site Access Agreement signed with Groundswell by Community Church of God (CCG).
- **March 2023:** Project planning begins. Other stakeholders, including Stryten Energy and InterUrban Solar, join as project partners.
- **November 2023:** Facility Development Agreement signed between CCG and Groundswell.
- **April 2024:** Ground-breaking ceremony held.
- **May 2024:** Construction began.
- **July 2024:** Ribbon cutting of Vicars Community Center Resilience Hub with EPA and City of Atlanta.
- **December 2024:** Final inspection and utility (GA Power) approval for Permission to Operate (PTO).

KEY PARTNERS AND STAKEHOLDERS

The successful planning and implementation of the Vicars resilience hub resulted from extensive collaboration among local, community, private, and nonprofit partners. A short description of key partners and their roles are listed below:

City of Atlanta: The Mayor's Office of Sustainability and Resilience has been actively involved in the Vicars resilience hub since its inception. Staff were crucial in advocating for the project at the city level by providing guidance on municipal emergency management plans, supporting project partners through the permitting process, and prioritizing the project as a critical tool for advancing climate resilience and energy reliability.

Community Church Atlanta (CCA): Led by Senior Pastor Kevin Earley, CCA owns the community center where the resilience hub is sited. Located near downtown Atlanta, the church will be responsible for day-to-day operations of the resilience hub, as well as program implementation and emergency coordination with the city.

Groundswell: Nonprofit who led the design and implementation of the project. Groundswell builds community power through equitable community solar projects, clean energy programs that reduce energy burdens, and pioneering research initiatives that help light the way to clean energy futures for all.

Stryten Energy: A Georgia-based energy storage company that designed, constructed, and installed the battery storage system.

OTHER:

- General Motors
- SunCatch Energy
- Georgia Power
- Wells Fargo
- InterUrban Solar One LLC

Please note the list above does not reflect an exhaustive account of the full range of stakeholders and key partners involved in the project's planning and implementation.

RELEVANT POLICIES AND PROGRAMS

Clean Energy Atlanta: City of Atlanta's plan to achieve 100 percent clean energy by 2035. The plan identifies pathways that can make clean energy more available and more affordable. The call to form the city's Clean Energy Advisory Board, originated from this plan.

Inflation Reduction Act: Federal policy passed in August 2022 which invested nearly $370 billion in new funding to support climate mitigation and resiliency efforts. Through a new financial tool called direct pay, the law also gives cities and other traditionally non-taxpaying entities the opportunity to take advantage of these tax credits for the first time.

Community Resilience Hub at the City of Refuge, Baltimore, MD: Groundswell also built a resilience center located in the City of Refuge in Baltimore Maryland[7], which served as one of the inspirations for the Vicars Community Center Resilience Hub. Like the Vicars community center, this resilience hub also plans to be community owned and benefit from the IRA's direct pay provision.

COST AND FINANCING

DIRECT PAY AND LEVERAGING CLEAN ENERGY TAX CREDITS

With investments of nearly $370 billion dollars in new clean energy tax credits, the Inflation Reduction Act (IRA) provided the largest climate investment in U.S. history. Historic new grant opportunities representing billions of dollars in new programs will help push communities closer to reaching their environmental and sustainability goals.

7 https://groundswell.org/city-of-refuge-baltimore,-main-campus/

The IRA's historic direct pay provision also allows cities and nonprofits to take advantage of the clean energy tax incentives that were previously only available to traditional taxpaying entities.

Project costs for the Vicars Community Center Resilience Hub totaled **$444,997**. The project funding is a mix between federal clean energy tax credits and private funds which covered the construction costs in full, with no debt incurred by the church. Additionally, with the solar array and battery energy storage system in place, the facility is expecting to save between **$6,000–$7,000 per year** on electricity costs. The saved costs are expected to go toward the expansion of new and existing programs to support the resilience hub.

Community ownership plays an essential role in Groundswell's approach toward resilience hubs, and as such the Vicars Community Church was advised to apply for the IRA's direct pay provision. The project qualifies for the solar investment tax credit and a low-income bonus tax credit, covering roughly **40 percent of total project costs**. As owner of the project, the Community Church will receive a direct payment in the form of a refund from its fiscal year 2025 tax returns. The remaining project costs are being covered by private grants through Wells Fargo and General Motors, with additional financial contributions made by Stryten Energy. Groundswell, alongside Wells Fargo, were instrumental in developing the financial model that supported leveraging direct pay, and both plan to provide on-going guidance to Church leaders as they navigate the application process.

OUTCOMES AND NEXT STEPS

The Vicars Community Center Resilience Hub became fully operational in December 2024. Moving forward, project leaders are considering several future adaptations to enhance the goals of the resilience hub including:

Workforce Development and Environmental Stewardship: Project leaders envision future programming of the resilience hub to include workforce development programming, such as training for the installation and repair of solar panels and battery energy storage systems. Additionally, the Vicars resilience hub is located only a mile from the West Atlanta Watershed Alliance and PatchWork City Farms. The hope is that future opportunities could include environmental education for youth, and that undeveloped land next to the community center could be utilized as an urban agricultural farm to support food security goals.

Sense of Community: Dangerous climate risks are often heightened for vulnerable and disconnected populations such as elderly, those who live alone, and individuals with disabilities. Project leaders are planning to facilitate opportunities for neighbors to meet each other prior to climate-related emergencies so residents can know to check in on people or help them reach resources when they may not be able to do it on their own.

Emergency Management Coordination: This includes plans to solidify resilient lines of communication with municipal emergency management officials so the resilience hub can serve as not only a place of refuge, but also as a coordination center where residents can receive updates about weather conditions, aid distribution, and response timelines.

Overall, the city envisions the Vicars Community Center Resilience Hub will be one location of many in a larger resilience hub network located throughout the greater Atlanta area. This network would include both municipal buildings as well as community-owned facilities. Through its planning work for upcoming federal grant opportunities, the city has already started asset mapping of its municipal buildings with a focus on siting future resilience hubs, potentially including libraries, schools, and fire stations.

LESSONS LEARNED AND STRATEGIES FOR REPLICATION

Although each resilience hub project will differ according to community needs, project partners offered several insights for both public and private entities considering a similar approach.

Climate Resilience and Public Safety Perspective: As the impacts of climate change continue to become more frequent and severe, more communities are looking toward resilience hubs to address these challenges. At the same time, we know political challenges may create barriers in supporting and implementing these types of strategies. Project leaders emphasized that reframing the conversation to include public safety, alongside climate concerns, has been key to building local support and collaboration. Regardless of cause, power outages represent dangerous health risks and serious public safety hazards, especially for vulnerable communities. By emphasizing that resilience hubs are not just a tool to solve the climate change crisis, but also about clean energy generation, reducing energy burdens, and making our communities safer, project leaders can help attract more diverse funding, broaden community engagement, and strengthen local support.

Engage Partners to Meet Project Needs: The successful implementation of the Vicars Community Center Resilience Hub has largely been attributed to the diverse range of partners involved. For example, with no certified public accountant on staff, church leaders were able to rely on Groundswell to provide financial planning and guidance. Other partners, such as Stryten Energy and InterUrban Solar, were crucial in proving the technical expertise needed for managing and installing solar-battery energy systems. City staff involvement was key in project visibility and prioritization.

Value Alignment: The City of Atlanta emphasized that Groundswell's successful track record and extensive background with working with other local governments was key in securing credibility and a sense of trust. Groundswell's service-focused values deeply resonated with the values of Vicars Community Church. This alignment of values between Groundswell and church leaders helped to streamline collaboration and ensure that the project served its long-term best interests. Once the project goals were clearly defined, it became easier to address the challenges that arose along the way. The shared values between all parties further reinforced a unified approach to solving issues and achieving success.

Leveraging Available Funding: This project relied on a significant amount of nonprofit guidance and private funding. Acknowledging this pathway is one of many that communities may consider in implementing resilience hub initiatives, project leaders strongly emphasized communities take advantage of new and existing federal grant opportunities and tax incentives. Without direct pay, church leaders stated the project would likely have been too cost prohibitive to proceed. Project leaders advised that barriers may arise for community-based entities responsible for covering the predevelopment costs, and partners should plan accordingly.

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ADDITIONAL RESOURCES

- **Vicars Community Center Resilience Hub | Community Church**[8]
- **Vicars Community Center at Community Church Atlanta | Groundswell**[9]
- **The Mayor's Office of Sustainability and Resilience | Atlanta, GA**[10]
- **Stryten Energy Is Advancing Georgia's Clean Energy Industry with Innovative Battery Technologies**[11]
- **Direct Pay | Clean Energy | The White House**[12]

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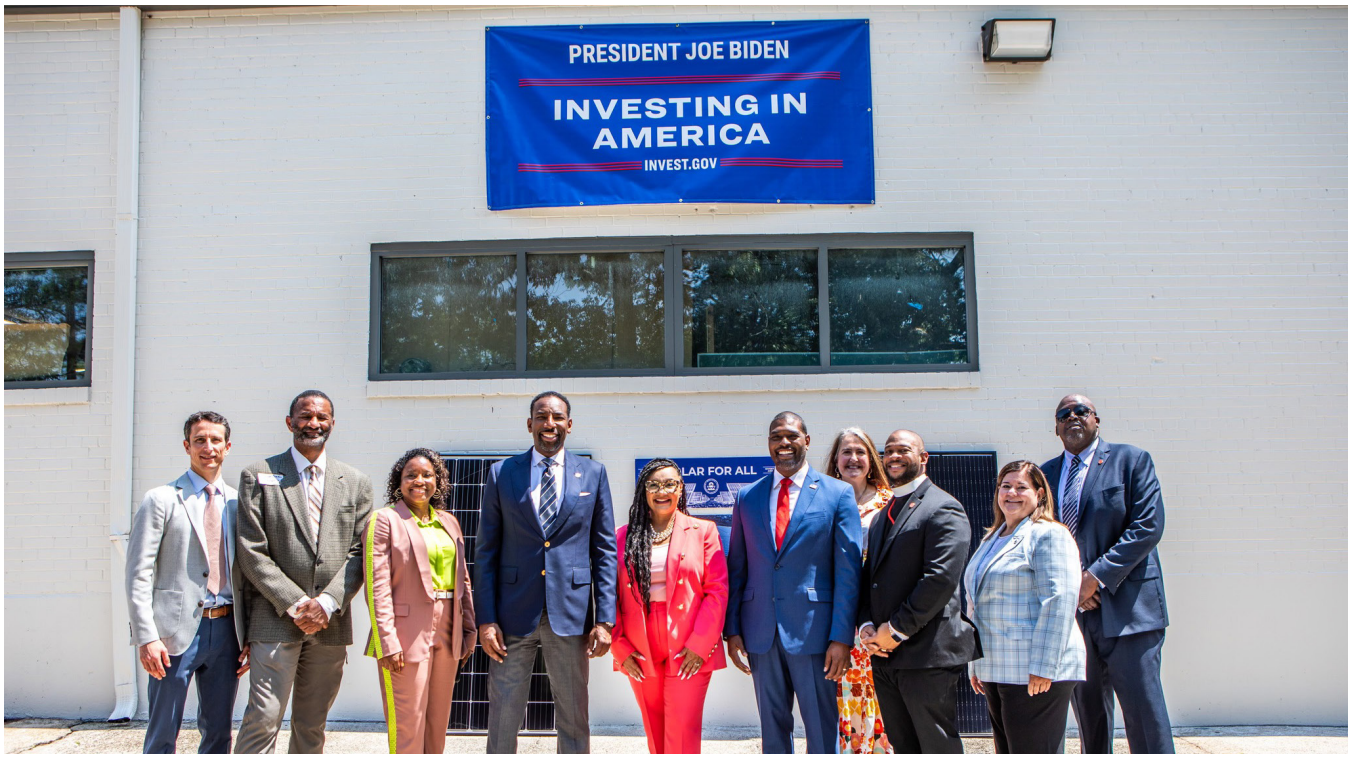

8 https://ccogatl.org/hub/

9 https://groundswell.org/project/vicars-community-center-atlanta/

10 https://www.atlantaga.gov/government/mayor-s-office/executive-offices/office-of-sustainability-and -resilience

11 https://www.stryten.com/stryten-energy-is-advancing-georgias-clean-energy-industry-with-innovative-battery-technologies/

12 https://webcf.waybackmachine.org/web/20250101161638/https://www.whitehouse.gov/cleanenergy/directpay/

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