

Onsite Energy Services - GreenStruxure Power

Real time May 3rd at 10:47 am EST

Solar
51 kW

Generator
0 kW



Improving Sustainability and Resiliency with an Innovative On-site Energy-as-a-Service Solar Microgrid

Scope 2 GHG Emissions

2023

Total scope 2 GHG emissions

177.833 tCO2e

Avoided emissions

-0.466 tCO2e

Animal Services and Adoption Center, Montgomery County MD

Case Study

GreenStruxure®



[Montgomery County Animal Services and Adoption Center](#) (MCASAC), a state-of-the-art critical facility in the Capital Region of Maryland, provides animal control, medical, and animal adoption services for homeless, abused, and neglected animals. As the county's only open-admission shelter, MCASAC opens its doors to all creatures, from farm animals and exotics to our beloved cats and dogs. Nestled in one of the wealthiest counties in the United States, Montgomery County takes a leadership role in combating climate change with ambitious plans to slash their greenhouse gas (GHG) emissions 80% by 2027 and 100% by 2035, benchmarked from 2017 GHG levels. MCASAC's top priority is providing top-notch animal care while aligning and benefiting with the county's sustainability goals. The county turned to [GreenStruxure®](#) for an innovative and sustainable energy solution to enhance the resiliency of the animal shelter during power outages and extreme weather events, ensuring the safety and protection of both animals and staff by keeping the essential services and medical equipment running 24/7.

GOALS

- Supply of renewable energy to help meet the county's ambitious decarbonization goals
- Mitigate the risk of increasing energy prices.
- Enhance the resiliency to keep the essential services running 24/7 during power outages

SOLUTION

- Energy Services Agreement to design, build, finance, operate and maintain on-site renewable microgrid
- Supply of onsite generated zero-carbon energy at an affordable price lower than the utility.
- Modular and standardized approach with no upfront capital, helping deliver the project ontime and budget

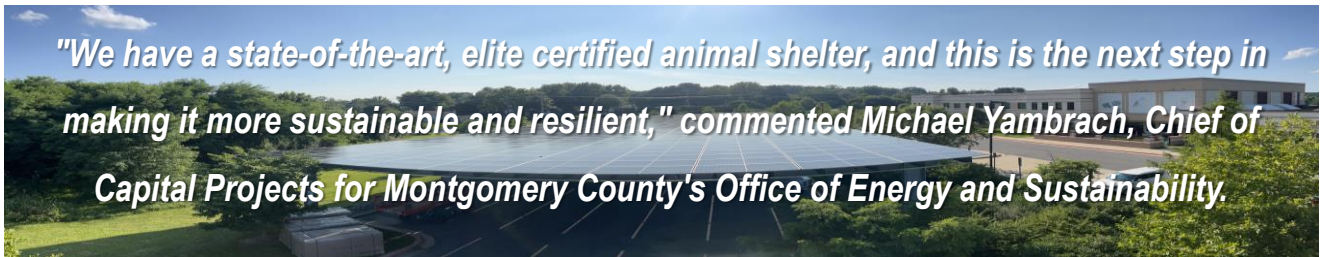
OUTCOMES

- 35% of facility's load served by onsite generated solar energy helping avoid energy costs starting year 1.
- Improved resilience to keep the essential services operating during utility outages
- Digital experience for full visibility and reporting on energy services.

GreenStruxure' Simple and Innovative Energy-as-a-Service

In 2022, Montgomery County entered into a game-changing energy services agreement with GreenStruxure®, a leading onsite Energy as a Service (EaaS) company. This partnership encompassed GreenStruxure® designing, financing, installing, operating, and maintaining the animal shelter's on-site solar microgrid through an energy services agreement, and the county pays monthly for the energy services, similar to the utility bill. The modern onsite Energy-as-a-Service model streamlines the adoption and scalability of microgrids, providing onsite-generated clean energy that is cost-effective and predictable over a fixed period without any upfront capital or project management hassles.

GreenStruxure's modular and standardized microgrid solution included 600KW solar rooftops and carports, 800KW genset, microgrid controller, BeyondtheGrid® AI digital platform, and essential electrical infrastructure - all without any upfront costs or operational risks for the county. The BeyondtheGrid® AI platform offers real-time and historical energy performance reports, complete visibility into the total energy supplied to and consumed by the site, seamlessly switching to backup power during outages, and automatically generating reports for climate disclosure and stakeholders.



Delivering the Promised Outcomes

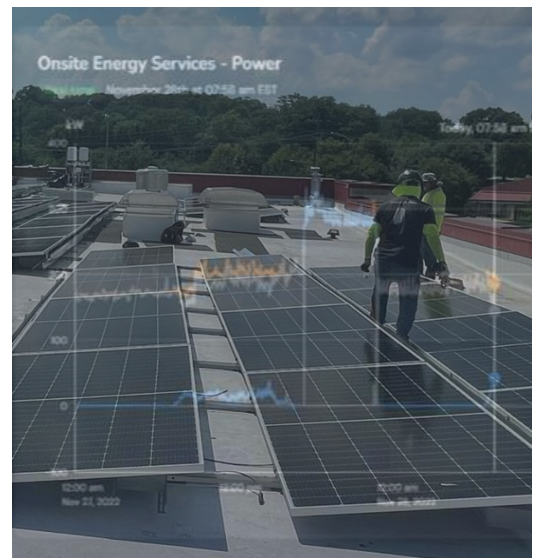
Commissioned on November 17, 2022, GreenStruxure® supplies zero-carbon solar energy generated onsite by the renewable energy microgrid, covering 35% of MCASAC's electricity demand. The solar microgrid has substantially strengthened MCASAC's sustainability and energy resiliency by protecting critical loads during power outages and extreme weather events. The on-site microgrid is used with backup generators to lower fuel consumption and extend the operating time of the facility during unexpected blackouts. In addition, other long-term benefits include predictable energy savings with locked-in electricity rates and avoiding expensive peak demand charges.

Ten days after the microgrid project was commissioned, a small plane crashed into nearby power lines, causing [widespread power outages](#) to 85,000 Montgomery County residents. The animal shelter's microgrid successfully delivered uninterrupted backup power to all of MCASAC's critical care operations, protecting the safety of their animals and staff during the three-hour power outage. MCASAC reported no problems at their site or impact on their business during the unforeseen event, proving this [acid test](#) (i.e., critical situation/scenario to evaluate the microgrid's success) was passed with 'flying' colors.

David Dise, Director of the Department of General Services at Montgomery County, advises other organizations on their net zero journey: "Stay current and take advantage of this industry and market. The two most important things are one, stay informed, and two, get an experienced partner. Montgomery County's leadership results from a staff of internal experts and great partners like GreenStruxure to develop our projects and turn dreams and visions into reality."

Building a Greener and Resilient Future

Montgomery County continues its collaboration with GreenStruxure®, exploring additional facilities for Energy-as-a-Service microgrid deployment to align with their aggressive decarbonization goals and ensure a sustainable, resilient, and affordable clean energy future for their one million residents.



[Contact our energy experts](#) today for more information on how GreenStruxure's cutting-edge On-site Zero Carbon Energy Services can support your business goals.

Your future, powered sustainably, starts here.

GreenStruxure®