

SOLAR PROJECT

Ron de Lugo Federal Building and Courthouse St. Thomas, U.S. Virgin Islands



OVERVIEW

Helios Energy was contracted to remove and replace the St. Thomas Ron de Lugo Federal Building and Courthouse PV system that was severely damaged during the 2017 hurricane season. Helios implemented a solar PV system that consists of two primary sections. The installation was part of an agency-wide initiative to expand energy efficiency and clean energy production measures at sites within the U.S.V.I. Further, the systems were built primarily in the evening to not disrupt building operations and during the COVID-19 pandemic, which presented unique supply chain, transportation, and labor challenges.

CHALLENGE

Design a value-engineered rooftop and carport solar PV solution for the GSA.

Need 1: Meet hurricane wind standards of 180 mph for all solutions, the first system to do so in the Caribbean

Need 2: Meet megawatt hour production goals

Need 3: Deliver high-quality solutions against budget targets

Need 4: Complete installation during the COVID-19 pandemic when global supply chain issues and labor shortages present unique, unprecedented challenges

SCOPE OF PROJECT

A rooftop mounted Solar PV rated at 206.5kW DC with 4 x 50kW Core 1 SMA PV Inverters mounted on the 4th floor mezzanine consisting of 25 strings of PV Modules totaling 523 modules and, a Carport Solar PV rated at 173kWdc with 3 x 50kW Core 1 SMA PV inverters consisting of 22 strings of PV Modules totaling 438 modules

Technology Specs:

- PV Modules are LG Chem 395Q1C-A6 rated 395W each
- All AC voltages are 480V three phase 60Hz
- All PV DC is rated at <1000Vdc
- The combined system has a DC rating of 380kW and a maximum AC rating of 350kW achieving a DC:AC ratio of 1.086 average

Application: Supply the daytime energy load for all Government buildings on the property, while offsetting the greenhouse gas emissions in accordance with environmental initiatives.



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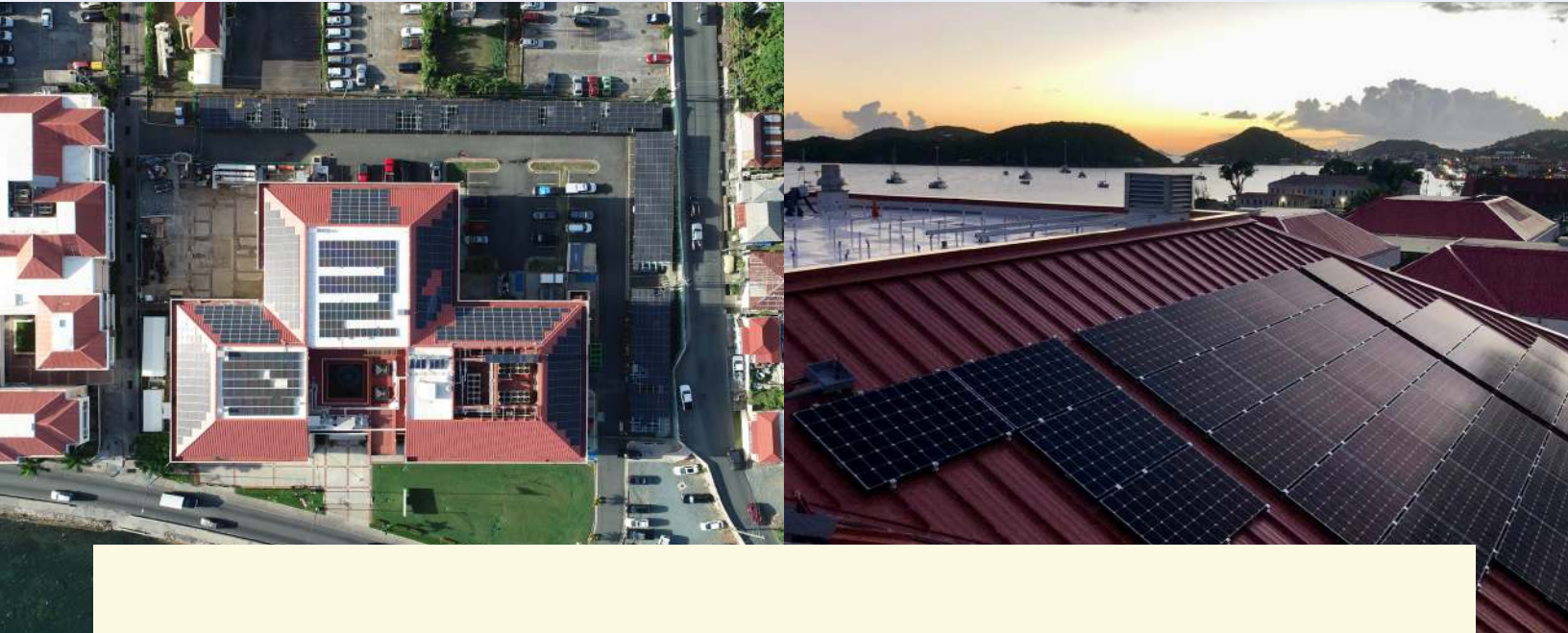
ENERGY MADE EASY

Ron de Lugo Federal Building and Courthouse

St. Thomas, U.S. Virgin Islands

The Helios Energy™ Impact

The U.S. General Services Administration (GSA) was seeking to substantially reduce energy consumption and install clean, solar energy production for the Ron de Lugo Federal Building and Courthouse, located in St. Thomas, U.S. Virgin Islands. Key to the success of this initiative was a value-engineered 380 kW system, comprised of rooftop and carport canopy solar PV, designed, and built by the Helios Energy Team in partnership with Schneider Electric. Further, the successful execution of this project during the COVID-19 pandemic exemplified an ability to creatively solve from solution design to site testing, product procurement to multifaceted installation.



The Helios Energy™ Advantage

When exploring partners to design, build, and employ the 380 kW DC solar system, Schneider Electric sought out previous partners with experience in the Caribbean. Further, with a Service-Disabled Veteran-Owned Small Business (SDVOSB) and tenured solar PV expertise, a partnership with Helios Energy became the logical next step. The Helios Energy Team is grateful to be delivering the solar PV solution to the deserving St. Thomas community. Additionally, Helios was proud to partner with local contractors Eleven Construction, Silver Sun Solar, and ATEC Energy BVI, and to have injected over 90% of the project labor budget into the local economy.



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ABOUT THE U.S. GENERAL SERVICES ADMINISTRATION (GSA)

GSA provides workplaces by constructing, managing, and preserving government buildings and by leasing and managing commercial real estate. GSA's acquisition solutions offer private sector professional services, equipment, supplies, and IT to government organizations and the military. GSA also promotes management best practices and efficient government operations through the development of governmentwide policies.

We provide centralized procurement for the Federal Government, offering billions of dollars' worth of products, services, and facilities that federal agencies need to serve the public. Our acquisition solutions supply federal purchasers with cost-effective, high-quality products and services from commercial vendors. We help federal agencies build and acquire office space, products, and other workspace services, and we oversee the preservation of historic federal properties. Our policies covering travel, property, and management practices promote efficient government operations.



ABOUT OUR PARTNER: SCHNEIDER ELECTRIC

At Schneider, we provide energy and automation digital solutions for efficiency and sustainability. We combine world leading energy technologies, real-time automation, software, and services into integrated solutions for Homes, Buildings, Data Centers, Infrastructure and Industries. We are committed to unleash the infinite possibilities of an open, global, innovative community that is passionate with our Meaningful Purpose, Inclusive and Empowered values. We are the most local of global companies; our unmatched proximity to you, enables us to better understand, anticipate and adapt with agility to support your business continuity with high ethical standards in everything we do.



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