

## PROJECT CASE STUDY

# MERITUS MEDICAL CENTER ROOFTOP SOLAR PV

### ENVOCORE SOLUTIONS

Meritus Medical Center sought to reduce rising energy costs while advancing its sustainability initiatives and strengthening its commitment to environmental stewardship. Envocore partnered with the hospital to design and implement a high-performance rooftop solar photovoltaic system capable of delivering significant on-site renewable energy generation. The project required careful coordination across multiple rooftop sections, structural constraints, and active hospital operations. Scope of services included:

- ◆ Detailed solar engineering and system design
- ◆ Structural and electrical integration with the existing hospital infrastructure
- ◆ Utility coordination and permitting
- ◆ Procurement of high-efficiency PV modules and inverters
- ◆ Construction management and installation
- ◆ System commissioning and performance validation

All construction activities were executed with zero disruption to critical hospital operations and patient care.

### BY THE NUMBERS



**934 kW**

Rooftop Solar System



**1.16M kWh**

Annual Energy Production



**\$128K+**

Annual Energy Savings

### PROJECT BACKGROUND

Envocore, in partnership with FESCO Energy, worked with Meritus Medical Center to design and install a 934 kW rooftop solar photovoltaic system at the hospital's main medical campus in Hagerstown, Maryland. The hospital provides comprehensive medical services including emergency care, surgical services, cancer treatment, cardiology, and specialized patient care programs. The project involved deploying 1,946 solar modules across multiple rooftop sections, carefully engineered to optimize solar production while maintaining compliance with structural, electrical, and healthcare facility requirements. Because healthcare facilities operate 24 hours a day and rely on highly reliable electrical infrastructure, Envocore ensured uninterrupted operations and seamless integration. The system now generates over 1.16 million kilowatt-hours of renewable energy annually, helping offset a significant portion of the hospital's daytime energy demand while reducing long-term operating costs.

**Fun fact:** The solar energy generated by the Meritus rooftop system each year is enough to power approximately 110 average homes for an entire year—demonstrating how healthcare facilities can play a meaningful role in advancing renewable energy adoption in their communities.