# U.S. Army Garrison Fort Detrick, MD

# AMERESCO **Q**

Advanced Renewable Energy System Supports Army's Goal of Deploying One Gigawatt of Renewable Energy by 2025

### **Technology Type:**

Power Purchase Agreement (PPA) | Solar PV | Battery Energy Storage Systems (BESS)

**Solar Capacity** 

18.6 MW

Battery Energy Storage System

 $6 \, \text{MW} / 6 \, \text{MWh}$ 

Annual CO<sub>2</sub> Emissions Reduction

 $^{\sim}19,000$  metric tons

Campus Size

1,200 acres





# Summary

To enhance energy independence, sustainability, and potential for resiliency at U.S. Army Garrison Fort Detrick, the Defense Logistics Agency Energy, in coordination with the U.S. Army Office of Energy Initiatives selected Ameresco to develop an advanced renewable energy system. The two-phase project included an 18.6 MW solar facility and the installation of a 6 MW / 6MWh battery energy storage system.



## Solution

Supporting a broad spectrum of government agencies and military services, Fort Detrick is a hub for significant scientific and medical advancements. To support these critical operations, Ameresco designed, built, owns, operates, and maintains the battery energy storage system (BESS) that integrates seamlessly with the existing solar energy facility, which has been operational since 2016. The integration boosts the facility's capacity by improving power of



since 2016. The integration boosts the facility's capacity by improving power quality and correcting unintended fluctuations in generation. Fort Detrick purchases the renewable electricity from Ameresco through a 25-year PPA.

- 18.6 MW solar
- 6 MW / 6 MWh battery energy storage system
- Over 1.25 miles of new 4160 Volt distribution wiring to existing transmission line

The Army and industry partners like Ameresco share a common vision—to create a sustainable, resilient, and clean energy future. The 6 MWh energy storage system we are inaugurating at Fort Detrick complements the existing 18.6 MW (DC) solar installation and exemplifies cutting edge innovation and the success of partnerships. This win-win outcome benefits the Army, local Maryland communities, and many other stakeholders.

Honorable Rachel Jacobson Assistant Secretary of the Army for Installations, Energy, and Environment, U.S. Army



#### **Benefits**

Fort Detrick will consume all electricity supplied by the facility and will have the economic benefit of purchasing the renewable electricity below current and projected utility rates. The solar and BESS facility, designed to be microgrid compatible, will enhance energy security for Fort Detrick including the Medical Research and Development Command, the world's largest leading research campus for biological agents that require special containment.

- Electricity generated is the equivalent of powering ~2,720 homes per year
- Annual CO<sub>2</sub> emissions reduction of ~19,000 metric tons
- Provides essential backup power and supports the Army's mission-critical operations during potential outages
- Advances the base's energy resiliency and sustainability goals



Ameresco's team of energy experts can assist you in identifying the solution that fits your needs.

For more information about Ameresco and our full-range of energy efficiency and renewable energy solutions, please call **1-866-AMERESCO** or visit **ameresco.com**.