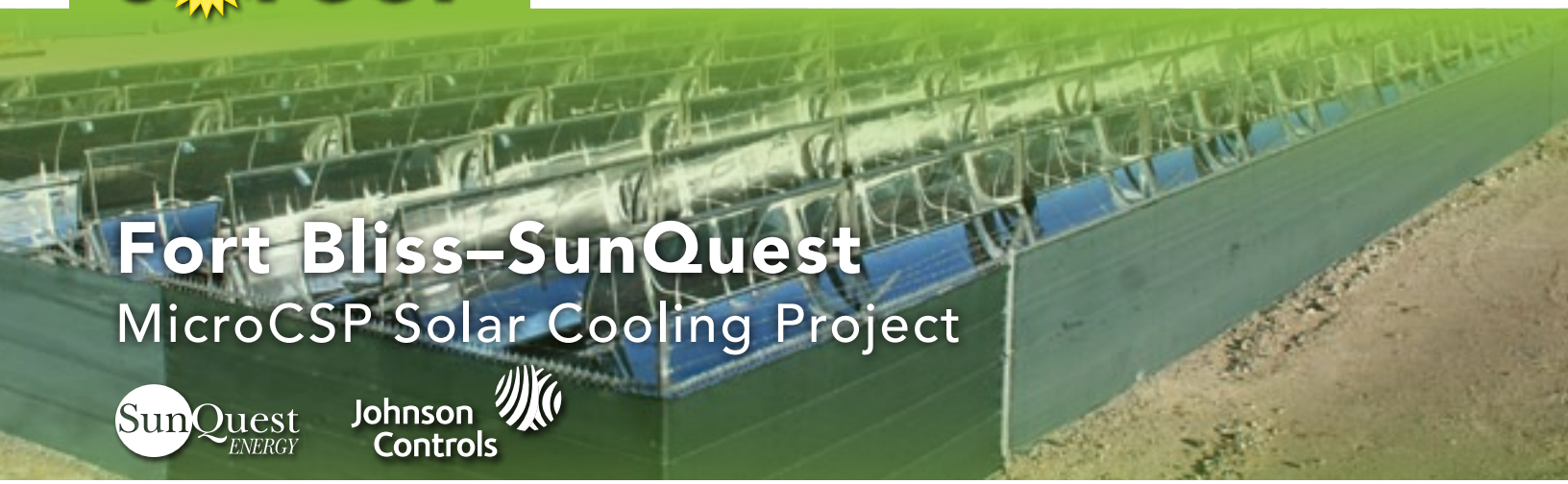

# Fort Bliss–SunQuest
## MicroCSP Solar Cooling Project

SunQuest ENERGY  Johnson Controls

## Project Overview

The Fort Bliss solar cooling project, located in El Paso, Texas, provides reliable solar-driven air conditioning to the Fort Bliss military dining facility and assists the Department of Defense to meet its energy security goals, reduce its greenhouse gas footprint, and decrease grid electricity consumption.

The initiative was implemented by Johnson Controls, a global diversified technology and industrial leader, as part of the Fort Bliss Energy Program's goal to demonstrate national leadership in energy to ultimately produce all energy consumed through renewable energy by 2025. The installation was carried out and maintained by SunQuest Energy, an energy efficiency and sustainability solutions enterprise.

The solar-driven air conditioning system includes Sopogy's MicroCSP parabolic trough collectors linked to a single-effect absorption chiller to provide a renewable source of cooling.

## Environmental Impact*

The 40 ton output of the MicroCSP solar cooling system at Fort Bliss will reduce $CO_2$ emissions by **2,580** metric tons of over the lifetime of the product. For perspective, the system's impact is equivalent to:

- Eliminating **6,000** barrels of oil consumed
- Removing **510** cars off the road
- Reducing **15,300** gallons of propane

*Source: EPA Greenhouse Gas Equivalencies Calculator
http://www.epa.gov/cleanenergy/energy-resources/calculator.html

### APPLICATION
40 ton single-effect solar air conditioning

### LOCATION
El Paso, Texas, USA

### PROJECT COMPLETION
May 2011

### THERMAL CAPACITY
219kW

### FOOTPRINT
8,568 sq. ft. / 796 m²

### PRODUCTS
- 84 SopoNova® parabolic trough collectors
- SopoTracker™ Field Controls

### HEAT TRANSFER FLUID
Water

### ESTIMATED ANNUAL SOLAR PRODUCTION
- 1,378 MMBTU
- 80,592 ton-hr of cooling

### OPERATING TEMPERATURE RANGE
Inlet - 190 °F / 87 °C
Outlet - 210°F / 98 °C




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