

# FY17 AIR FORCE ENERGY



U.S. Air Force  
MISSION ASSURANCE THROUGH  
**ENERGY ASSURANCE**

## Enhancing Mission Assurance Through Energy Assurance

### FINANCIAL FACTS

# \$5.5B

Amount spent in FY17 to purchase electricity and fuel for Air Force operations

**4.5%** Portion of the Air Force budget spent on energy

### FACILITY ENERGY CONSERVATION

**10%** Reduction in facility energy consumption since FY11

# \$470M

Value of 3rd-party energy conservation contracts awarded by the Air Force since 2012

### ENERGY RESILIENCY

**5x** In FY17, installations reported 356 utility outages over 8 hours, a 5x increase over FY16

#### AIR FORCE ENERGY GOALS

Improve Resiliency  
Optimize Demand  
Assure Supply

### CLEAN ENERGY

# 183 MW

On-base renewable energy capacity. The Air Force has 356 renewable energy projects on 126 sites, either in operation or under construction

**6.7%** Percentage of total AF electricity from renewable sources in FY17

**4.3%** Percentage of total Air Force electricity usage from on-base clean energy sources in 2017 (481,432 MWH)

**5%** Increase in on-site renewable energy usage from FY16 to FY17

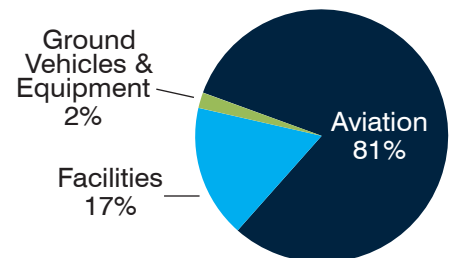
### WATER

**24.1%** Reduction in potable water intensity since FY 2007, exceeding the FY17 goal of 20%

# 14%

Met the non-potable industrial, landscaping and agricultural water FY17 goal

### FY17 ENERGY CONSUMPTION



AF used 260MM BTUs in FY17

### AVIATION FUEL

FY17 Aviation Fuel Consumption Breakdown

**54%** Mobility Air Forces    **30%** Combat Air Forces    **16%** Other Missions

**1.99 Billion Gallons** – Total Fuel Use

### FOR MORE INFORMATION

**Air Force Energy Program:** [safie.hq.af.mil/energy/](http://safie.hq.af.mil/energy/)

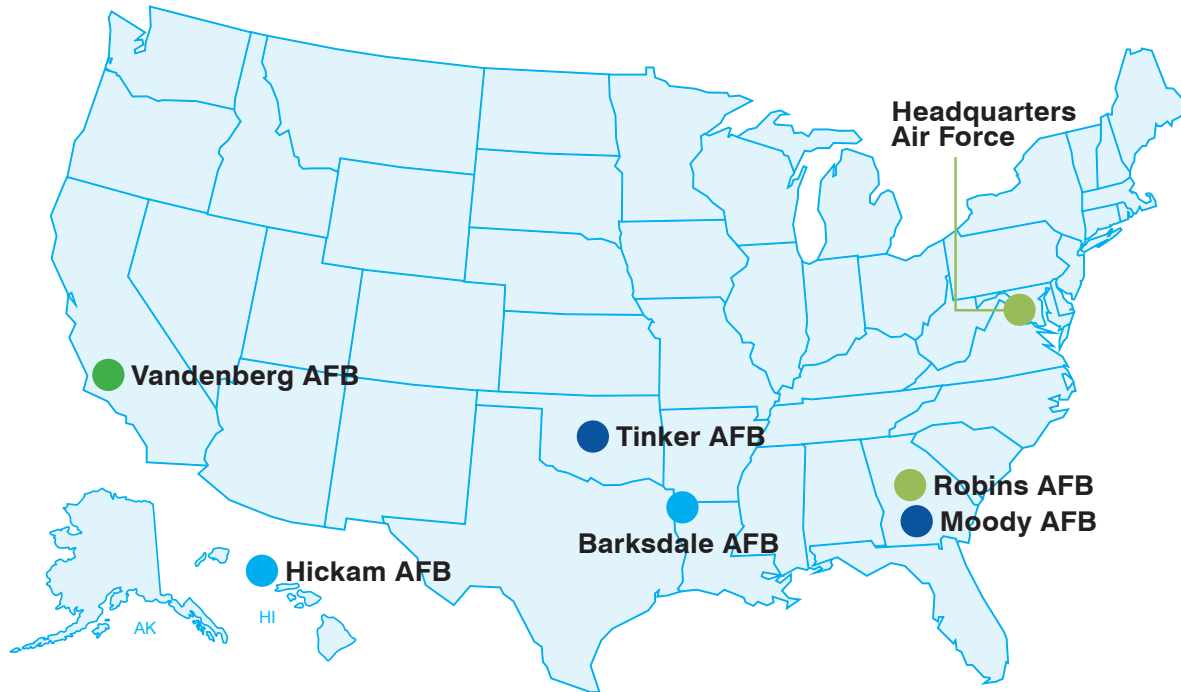
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### RESILIENT

#### Headquarters Air Force

Selected two pilot project sites at Altus AFB, OK and Hanscom AFB, MA to demonstrate how the Energy as a Service initiative envisions a realignment of USAF energy procurement and management functions through a contract for comprehensive energy solutions delivered by a single provider at an installation.

#### Robins Air Force Base, GA

Signed a Memorandum of Agreement to develop a 139 MW photovoltaic array to connect four substations on base to allow two Georgia Power-owned 80 MW combustion turbines to connect to the off base grid and power the base and local community during local or regional grid outages.

### OPERATIONAL

#### Hickam Air Force Base, HI

Demonstrated that flying F-22s faster (on intercontinental fighter movements requiring aerial refueling) not only reduced costly flight time by 10%, but decreased fuel use by 6%.

#### Barksdale Air Force Base, LA

Upgraded Claiborne Range communications equipment to be compatible with more aircraft. Because of its close proximity to many training bases, time spent traveling to more distant ranges was reduced, allowing more training time and reducing unnecessary transit.

### ENERGY EFFICIENCY

#### Oklahoma City Air Logistics Complex at Tinker AFB

Worked towards completing a \$262 million energy saving performance contract—the largest such contract in federal government history—which will modernize 50 buildings and help reduce energy usage at the complex by 641 BBTU and 35%.

#### Moody Air Force Base, GA

Completed a \$3.6 million LED repair and replace project, which improved the entire installation's exterior lighting, as part of the Department of Defense's Energy Resilience Conservation Investment Program.

### CLEAN ENERGY

#### Vandenberg Air Force Base, CA

Began construction on a 28-megawatt solar photovoltaic array in May 2017 which is expected to become operational in 2018.