



I AM AIR FORCE ENERGY: Your Role in Achieving an Assured Energy Advantage in Air, Space and Cyberspace

Power the Force. Fuel the Fight.



Why is Energy Security Important?

- The Air Force spent \$9.7 billion on fuel and electricity in 2011—the equivalent of 12 CV-22s, 12 C-17s, 36 MQ-9 drones and 25 F-22 fighters.
- The price of fuel is volatile and beyond the Air Force's control—increasing the strain on limited budgets. Every dollar we don't spend on energy allows us to invest that dollar into a high quality and ready force.
- There are risks to being solely dependent on traditional energy supplies. Reducing consumption reduces that risk and improves resiliency in the event of natural disasters, accidents, or attack.
- Energy is a critical component of all Air Force operations. Using energy in a smart way enables our warfighters, expands our operational effectiveness, and enhances national security.

What is the Air Force Doing?

- Through research and development efforts, the Air Force is identifying new technologies in engines, aircraft design and other areas to provide greater support to the warfighter and enhance combat capability while reducing fuel consumption.
- The Service is certifying its fleet to fly on three different alternative fuel blends.
- The Air Force has built 131 wind, solar and other renewable energy projects making it the second largest government purchaser of renewable energy.
- Through facility upgrades, more efficient processes and greater awareness of energy issues, the Service has reduced its energy intensity by 16% since 2003.

AIRMEN IN ENERGY

75th Logistics Readiness Squadron Fuels Management Flight

- The 75th Logistics Readiness Squadron Management Flight team provides 13.7 million gallons of fuel to 12,000 vehicles and aircraft at Hill AFB.
- They established new procedures to fuel aircraft based on specific mission requirements rather than just filling tanks to capacity—saving \$15,000 in fuel costs.
- The team also trained all staff on refueling best practices— saving 5,200 gallons of fuel and \$100,000 in environmental remediation costs.

AIRMEN ACCOMPLISHMENT



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Thunderbirds Fly on Biofuels:

- On May 20, 2011, the Thunderbirds performed a full flight demonstration at Joint Base Andrews, Maryland on a 50/50 blend of JP 8 and biofuel derived from plant oils
- As the first aerial demonstration that used biofuels, the aircraft showed no difference in performance from traditional petroleum fuel.
- The Thunderbirds flight demonstration was one of many "firsts" accomplished by Air Force in its testing and demonstration of the capabilities of alternative fuels. Other milestones included the first transcontinental flight, the first supersonic flight and the first aerial refueling using alternative fuel blends.

“Our Airmen are innovators. They have identified new policies, processes, and technologies to improve the ways we use energy. We will look to their continued creativity and focus on energy to obtain an assured energy advantage in air, space, and cyberspace.”

— Secretary Michael Donley; National Clean Energy Summit August 7, 2012

DO YOUR PART



Replace older lights with compact fluorescent lights (CFLs) or light-emitting diodes (LEDs).

CFLs use three-quarters of the electricity and last 10 times longer.

Use programmable thermostats to reduce heating and cooling when you are out and reach for thermostat settings of 69 degrees (winter) and 76 degrees (summer).

You save 2% on air conditioning costs for each one degree increase.

Use a power strip as a central “turn off” point to disconnect power to cell chargers, fans, and radios not in use.

10% of electricity use reduced.

Open blinds and curtains in the winter to gain heat and close them to reduce heat in the summer. At night, closed curtains and blinds can serve as insulation trapping heat.

Closing curtains could save up to 10 percent in heat loss.

Consolidate personal appliances from your workspace to shared spaces.

Wright Patterson AFB eliminated 810 personal appliances, including toasters, microwaves and coffeemakers, saving almost 1 million watts.

Switch off your computer monitor when not in use for more than 20 minutes. While we cannot always turn off our computers, log off at the end of the day so the computer enters energy-saving sleep mode.

If implemented across the service, this could save \$10 million a year.

Avoid bringing in space heaters or fans to work. Instead, inform your facility manager so the thermostat can be set correctly.

Using space heaters instead of adjusting the central temperature set-point could increase overall energy costs for heating by 70%.



Carpool, bike or use mass transit when commuting. If you drive, go the speed limit, accelerate and decelerate slowly and ensure your tires are properly inflated.

Carpooling one day a week, reduces your commuting gas consumption 20%.

Reduce the amount of time spent idling in your car.
Thirty minutes of idling burns 1 gallon of gas.