

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

Why is energy critical to energy managers?

- **7** The Air Force spends more than \$1 billion on energy to power installations.
- As good stewards of taxpayer funds, energy professionals must do their part to increase savings from utility costs.
- Energy experts have the responsibility to the Air Force towards energy innovation and the opportunity to drive unique solutions that increase the Air Force's energy security.
- Every watt of electricity we save through efficiency is one less we need to reconstitute in the event of a disruption in supply.

What is the Air Force Doing?

- Air Force facility energy innovators have received 21 Federal Energy Management Program (FEMP) awards from the Department of Energy in the last four years more than all other Services combined.
- Meters, energy management control systems, occupancy- senors, lighting upgrades, building recommissions and other energy-efficient initiatives have helped reduce energy use 21% (\$350 M) since 2003. As part of 2012 Energy Action Month, facility energy managers at 80 bases around the world initiated training, held on-base energy events, posted signs and engaged Airmen to increase awareness and promote energy efficient behaviors.
- In 2012, 14 bases or Major Commands held competitions to raise awareness of the impact of energy to the mission and encourage Airmen to consider energy in all they do.

AIRMEN IN ENERGY



Capt. Reid Touchberry, Energy Manager, Misawa AFB

- Capt. Reid Touchberry transitioned transitioned Misawa AFB in Japan to a new lower level of energy usage following the March 2011 tsunami. Initiatives included:
 - Created the Base Energy Nerve Cell, a direct response to the tsunami recovery efforts, to restore power on the base.
 - Developed a long-term contingency plan to improve base resiliency through the ready activation of multiple source largescale mobile generator sets.
 - Established a real-time indoor climate regulation policy that balanced individual comfort, energy conservation, and operational needs.
 - His team's efforts saved 5.7 million kilowatt hours and \$1.4 million while ensuring the base was able to continue to support the mission

FORCE ACCOMPLISHMENTS



- The Energy Team at Dyess AFB (pictured) installed 63,000 sq. ft. of ceramic beading on roofs and walls of facilities on base, and installed 2,600 occupancy sensors to monitor lights and temperature settings in 84 buildings. Their efforts were recognized with a FEMP award in 2012 for saving \$1.8 million in FY2011 and additionally reducing greenhouse gases by 5,381 tons.
- Elizabeth Toftemark, utility engineer and energy manager at Scott AFB, led a base-wide energy awareness campaign which included dedicating a carpool lot to encourage ride sharing, and placing stickers on energy consuming items such as computers and light switches. The stickers read "It Makes "Cents" to Save Energy! An energy penny saved is a real penny earned," reminding Airmen to turn items off when they are not in use.



"The smart use of energy means flying our aircraft farther, transporting more cargo, and accomplishing our mission in a more efficient and effective way."

— Acting Secretary Eric Fanning; Letter to Airmen October 1, 2013

DO YOUR PART



Vandenberg AFB, California

Retrofit buildings on base with electric meters to monitor energy consumption levels. Work with the Energy Directorate at the Air Force Civil Engineer Center for meter requirements. **Energy managers at Vandenberg AFB installed over 500 electric meters that reduced energy intensity 16%**.

JB Elmendorf-Richardson AFB, Alaska

Survey facilities and repair leaks in water supply and distribution pipelines. JB Elmendorf-Richardson saved 48% in water usage in 3 years by replacing leaking water pipes.

Hill AFB, Utah

Replace outdated appliances with ENERGY STAR models and install efficient plumbing fixtures in dorms and facilities. **Hill AFB upgrades reduced** energy consumption 39% in 2011. Minot AFB, North Dakota Incorporate efficient technologies such as ground source heat pumps in lieu of aging central heatplants. Minot AFB saved 114 billion BTUs and 16 million gallons of water in F2009 by

installing ground source heat to 25 buildings.

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Maxwell AFB, Alabama

During Energy Action Month partner with your local utility and community to educate Airmen, staff and families on energy. In 2012, Maxwell AFB partnered with 3 utilities, state and local government to host an Energy Expo that garnered media attention.



Kirtland AFB, New Mexico

Set up a competition between dorms or facilities to see who can conserve the most energy. A dorm competition at Kirtland AFB resulted in a 15% reduction in consumption.

Kunsan AFB, South Korea Misawa AFB, Japan

Provide energy training as part of newcomer briefings. **Misawa and Kunsan AFB educated more than 300.**







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